

# **POTTSVILLE MS4 WORK PLAN AND SCHEDULE**

## **MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PA SMALL MS4 PROGRAM**

**CITY OF POTTSVILLE  
SCHUYLKILL COUNTY, PENNSYLVANIA**

**PREPARED FOR**

**CITY OF POTTSVILLE  
401 NORTH CENTRE STREET  
POTTSVILLE, PA 17901**

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# TABLE OF CONTENTS

SECTION	PAGE
1. INTRODUCTION .....	1
2. MCM #1 PUBLIC EDUCATION & OUTREACH ON STORM WATER IMPACT.....	7
3. MCM#2 PUBLIC INVOLVEMENT/PARTICIPATION .....	10
4. MCM#3 ILLICIT DISCHARGE DETECTION AND ELIMINATION .....	12
5. MCM#4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL.....	19
6. MCM#5 POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENTS.....	21
7. MCM#6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS.. .....	23

## APPENDICES

### A. PERMITS/ORDERS

A.1. ADMINISTRATIVE ORDER 05/29/2014

A.2. AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) PAG-13 (4/2012)

A.3. PAG-13 AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) (5/2016)

A.4. NOV LETTER 12/6/2017

### B. CORRESPONDENCE

### C. MCM #1 PUBLIC EDUCATION & OUTREACH

C.1. MCM #1 BMP #1 PUBLIC EDUCATION AND OUTREACH DOCUMENTS

- C.2. MCM #1 BMP #2 TARGET AUDIENCE LIST
- C.3. MCM #1 BMP #3 NEWSLETTERS/LINKS/WEBSITES
- C.4. MCM #1 BMP #4 OUTREACH DISTRIBUTION LOGS/MINUTES
- D. MCM #2 PUBLIC INVOLVEMENT/ PARTICIPATION
  - D.1a OPPORTUNITIES FOR PUBLIC PARTICIPATION AND REPORTING ACTIVITIES
  - D.1b ANNUAL MS4 REPORTS
  - D.2. MCM #2 BMP #2 MS4 ORDINANCES – POTTSVILLE
  - D.3. MCM #2 BMP #3 ANNUAL MS4 MEETING MINUTES
- E. MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION
  - E.1. MCM #3 BMP #1 PROGRAM UPDATES
  - E.2. MCM #3 BMP #2 MS4 OUTFALL MAPS
  - E.3. MCM #3 BMP #3 MS4 OUTFALL FOCUS MAPS
  - E.4. MCM #3 BMP #4 DRY WEATHER OUTFALL REPORTS AND ENFORCEMENT LOGS
  - E.5. MCM #3 BMP #5 POTTSVILLE STORMWATER ORDINANCE – SEE D.2
  - E.6. MCM #3 BMP #6 EDUCATIONAL OUTREACH - SEE C.4 AND POLLUTION REPORTING
- F. MCM #4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL
  - F.1. MCM #4 BMP #1 BUILDING PERMIT TRACKING FORM
  - F.2. MCM #4 BMP #2 – BUILDING PERMIT REPORT FORM - SEE F.1
  - F.3. MCM #4 BMP #3 –STORMWATER ORDINANCE – SEE D.2
- G. MCM #5 POST-CONSTRUCTION STORMWATER MANAGEMENT
  - G.1. MCM #5 BMP #1 POST-CONSTRUCTION STORMWATER ORDINANCE – SEE D.2
  - G.2. MCM #5 BMP #3 ENCOURAGE LID – SEE D.2
  - G.3. MCM #5 BMP #3 ENSURE O&M OF PERMITTED BMPs
    - G.3a PCSM O&M PROGRAM UPDATE LOG

G.3b INVENTORY & TRACKING OF PCSM BMPs & LID PROJECTS SINCE 3/10/2003

H. MCM #6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

H.1. MCM #6.1 INVENTORY OF CITY FACILITIES AND ACTIVITIES (EXPANDED)

H.2. MCM #6.2 CITY O&M PROGRAM

H.3.1. MCM #6.3A CITY EMPLOYEE TRAINING PROGRAM

H.3.2. MCM #6.3B LOG OF ANNUAL CITY EMPLOYEE TRAINING



## 1. INTRODUCTION

The purpose of this document is to provide the plan and schedule to document the six (6) minimum control measures (MCMs) and the specific best management practices (BMPs) required by the MS4 permit. This document was initially developed to provide additional documentation for the 2010 and 2011 implementation as requested in the 5/29/2014 EPA Administrative Order. The work plan has been revised to reflect the current efforts by the City and the requirements of the March 16, 2018 NPDES MS4 permit renewal. See *Appendix A. Permits/Orders*. The six (6) MCMs along with BMPs are described below.

### **MCM #1 Public Education and Outreach on Storm Water Impacts**

BMP #1: Develop, implement and maintain a written Public Education and Outreach Program. The City of Pottsville will review this work plan annually and will revise as necessary.

BMP #2: Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees. The City of Pottsville will review and update the target list annually.

BMP #3: The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a description of the permittee's SWMP, and/or information about the permittee's stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., DEP and EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives: ● Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP; ● Publish educational and informational items including links to DEP's and EPA's stormwater websites on the permittee's website. The City of Pottsville will maintain education and information on its website and will be reviewed and updated annually for each year of the permit cycle.

BMP #4: Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, presentations, conferences, meetings, fact sheets, giveaways, and storm

drain stenciling. The City of Pottsville will utilize two distribution methods annually and will document method used for each permit year.

## **MCM #2 Public Involvement/Participation**

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input. The City of Pottsville will review this work plan annually and will revise as necessary.

BMP #2: The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP: ● Stormwater Management Ordinances (for municipalities); ● Standard Operating Procedures (SOPs) (for non-municipal entities); and ● Pollutant Reduction Plans (PRPs), including modifications thereto. The City of Pottsville will advertise and solicit public input as required by this BMP and the Third Class City Code. The City of Pottsville does not currently have a Pollutant Reduction Plan requirement as part of their permit.

BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP. The City of Pottsville will advertise and conduct at least one public meeting per year. The Mayor will highlight the efforts to implement the SWMP in his annual State of the City address to the public.

## **MCM #3 Illicit Discharge Detection and Elimination (IDD&E)**

BMP #1: The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4. The program shall include the following: ● Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems; ● Procedures for screening outfalls in priority areas. The program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources; ● Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall. ● Procedures for eliminating an illicit discharge; ● Procedures for assessing the potential for illicit discharges caused by the

interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems; • Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants) and for investigating illicit connections and discharges; • Procedures for program documentation, evaluation and assessment. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program; • Procedures for addressing information or complaints received from the public. The City of Pottsville will continue to implement the IDD&E program and will evaluate it annually.

**BMP #2:** The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s). The City of Pottsville will update and maintain the map(s) annually during each permit year.

**BMP #3:** In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly owned components. The City of Pottsville will update and maintain the map(s) annually during each permit year.

**BMP #4:** The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this General Permit. The City of Pottsville will screen each MS4 outfall at least once during each permit cycle. For areas with past problems reported or known sources of dry weather flows, the outfalls shall be screened annually.

BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4. The City of Pottsville enacted the DEP's 2022 Model Stormwater Ordinance on October 9, 2017.

BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges. The City of Pottsville will maintain appropriate educational material on their website concerning illicit discharges. The City has established an active complaint form on their website and will respond to all complaints received.

#### **MCM #4 Construction Site Storm Water Runoff Control**

The City of Pottsville will utilize the PADEP regulatory program through for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM#4. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.

BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable. The City of Pottsville enacted the DEP's 2022 Model Stormwater Ordinance on October 9, 2017.

#### **MCM #5 Post Construction Storm Water Management (PCSM) In New Development And Redevelopment**

The City of Pottsville will utilize the PADEP regulatory program through for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM#5. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects,



including sanctions for non-compliance. The City of Pottsville enacted the DEP's 2022 Model Stormwater Ordinance on October 9, 2017. The City of Pottsville enacted the DEP's 2022 Model Stormwater Ordinance on October 9, 2017, which satisfies the requirement of this BMP.

**BMP #2:** Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. The City of Pottsville enacted the DEP's 2022 Model Stormwater Ordinance on October 9, 2017, which satisfies the requirement of this BMP.

**BMP #3:** Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The City of Pottsville will maintain its current inventory of PCSM BMPs during the permit coverage. The City will inspect new BMP's during construction and inventory and track and periodically inspect BMP's built since March 10, 2003.

#### **MCM #6 Pollution Prevention/Good Housekeeping For Municipal Operations**

**BMP #1:** Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.). The City of Pottsville will identify and document all facilities and activities that are owned or operated by City that have the potential for generating storm water runoff to the regulated MS4 and will review and update that inventory annually.

**BMP #2:** Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or

conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following: • Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall consider eliminating maintenance area discharges from floor drains and other drains if they have the potential to discharge to storm sewers; • Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach the regulated small MS4s; • Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES General Permit for Stormwater Discharges Associated with Industrial Activity; • Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris. The City of Pottsville will review and update the O&M program annually as needed.

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements. The City of Pottsville will conduct training annually.

**2. MCM #1 PUBLIC EDUCATION & OUTREACH ON STORM WATER IMPACT**

<b>MCM #1 Public Education &amp; Outreach on Storm Water Impacts – Schedule for Year <u>2018-2023</u></b>					
<b>Permit Year</b>		<b>1<sup>st</sup> Qtr</b>	<b>2<sup>nd</sup> Qtr</b>	<b>3<sup>rd</sup> Qtr</b>	<b>4<sup>th</sup> Qtr</b>
1-5	BMP 1 Review and revise the written Public Education and Outreach program. This program is detailed in the report text and appendices	Review and update			
1-5	BMP 2 Review and revise list of target audience groups. Build on each group as indicated.	Review and update			
1-5	BMP 3 Maintain City website with links to DEP/EPA web site	Update City webpage			
1-5	BMP 4 Distribute storm water education materials	State of the City Address		Watershed group mtg.	

## **MCM #1 Public Education & Outreach on Storm Water Impacts**

### **A. BMP 1 Develop Written Public Education And Outreach Program.**

Materials consist of PADEP standard slides, brochures, and signs including:

Carwash poster

Fertilize poster

Oil slick poster

Pet wash poster

Rain-drain brochure

Other city initiatives such as yard waste clean-up, electronics and household clean-up.

Program – Provide a targeted message with the above posters and brochures to all identified as well as additional interested parties. Make available at City Hall and on the City's web site. See *Appendix C.1. MCM #1 BMP #1 Public Education and Outreach Documents*.

Program messages to deliver to target audiences:

1. Land owners, businesses, developers, contractors – Protect our streams from polluted runoff from our properties. Plant and maintain vegetative buffers along stream banks and near storm systems.
2. Public, environmental groups, & schools – Protect our streams from runoff in our yards, our driveways, and our streets. When it rains, it drains.

### **B. BMP 2 Develop List Of Target Audience Groups**

Municipal Employees: City Hall office (Mayor, Council, Administrator, Code, Fire, Health, Tax, Treasurer), Police, Maintenance, Fire, Staff

Residents/ Schools: Citizens, John S. Clarke Elementary, DHH Lengel Middle, Pottsville Area High School, Gillingham Charter, McCann School of Business, Nativity BVM High School, Assumption BVM.

Developers: Engineers, Contractors, Businesses – Benesch, WJP, Lehigh, Entech, Miller Brothers, City Trash Hauler, and other businesses.

Watershed/Environmental Groups – Schuylkill Headwaters, Trout Unlimited, Schuylkill Conservation District. See *MCM #1.2 Appendix C.2. Target Audience List*

**C. BMP 3 Publish/Maintain website, Links To DEP/EPA Web Site**

The City will review and maintain a webpage with MS4 related information, including documenting compliance with the MS4 permit requirements.

See *Appendix C.3. MCM #1.3 NEWSLETTERS/ LINKS/ WEBSITES* .

**D. BMP 4 Distribute Storm Water Education Materials**

The City will contact the Schuylkill Headwaters Association, the Schuylkill Conservation District, and Trout Unlimited with an effort to promote pollution prevention of our storm water discharges through supported and partnered education programs for the City. One school or club program will be addressed through this effort each year. Additional education materials will be distributed to the affected school(s)/clubs. The Mayor will continue to highlight the City's efforts in compliance with the MS4 Permit as part of the State of the City Address. Outreach documentation can be found in *Appendix C.4. MCM #1 BMP #.4 OUTREACH DISTRIBUTION LOGS/MINUTES*.

### 3. MCM#2 PUBLIC INVOLVEMENT/PARTICIPATION

MCM #2 Public Involvement/Participation – Schedule for Year <u>2018-2023</u>					
Permit Year		1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr
1-5 1-5 1-5	BMP 1 Review and update public Involvement and participation program with opportunities for public involvement/decision making. Plan, coordinate, hold an annual MS4 meeting. Prepare an annual report and post to web and at City Hall.	Develop PIPP Annual Mtg Post Annual Report		Prepare Annual Report	
1	BMP 2 Advertise and provide opportunities for input of existing and proposed storm water ordinance. Done in 2017.	Discuss ordinance at above meeting.			
1-5	BMP 3 Solicit public involvement and participation from the target audience groups. Include stenciling, screening, and other activities.	State of the City Address		Community project	

## **MCM #2 Public Involvement/Participation**

### **A. BMP 1 Develop Written Public Involvement And Participation Program (PIPP).**

Program – The PIPP will include planning an annual meeting to promote participation activities related to maximizing clean MS4 discharges to receiving streams including public reporting of suspected illicit discharges. The format of the meeting will be to review the MS4 permit, review the mapping and dry weather monitoring activities, and to introduce/reinforce the education and outreach messages. It will also include interacting with the audience to support the following activities:

1. Opportunities for the public to participate include reporting of suspected illicit discharges, decisions related to planning and holding public meetings (minimum according to the schedule above), and updating other programs and activities. Initial activities include storm inlet stenciling and dry weather illicit discharge monitoring. See *Appendix D.1 a. MCM #2 BMP#1a OPPORTUNITIES FOR PUBLIC PARTICIPATION & REPORTING ACTIVITIES.*

2. Expand a contact list of emails and addresses including: Engineers, Developers, Public Agencies, businesses, schools, and environmental groups. Provide routine communication to each group annually and prior to meetings and MS4 public involvement and participation activities. Use emails, phone, and other notifications. A MS4 Outreach Contact was added to the City of Pottsville MS4 website.

3. Make annual and other reports of plans, activities and actions taken, available to the public on the City's website and office for view upon request. See *Appendix D.1.b ANNUAL MS4 REPORTS.*

### **B. BMP 2 Advertise And Provide Opportunities For Input Of Existing And Proposed Storm Water Ordinance. This task was completed in 2017.**

Ordinance 862 adopted at a public meeting held on October 9, 2018. See *Appendix D.2.MCM #2.2 MS4 ORDINANCES - POTTSVILLE*

### **C. BMP 3 Solicit Public Involvement And Participation From The Target Audience Groups.**

Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. See *Appendix D.3.ANNUAL MS4 MEETING MINUTES.*

#### 4. MCM#3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION – Schedule for Year <u>2018-2023</u>					
Permit Year		1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr
1	BMP 1 Develop a written program for the detection, elimination, and prevention of illicit discharges into the City’s regulated MS4s.			_____	
2-5	Implement & enforce the program – see BMP 4 below.	Enforce	1 <sup>st</sup> Screening	Enforce	2 <sup>nd</sup> Screening
1-4	BMP 2 Develop a map of regulated small MS4 outfalls.				_____
5	Update and maintain the map – see BMP 3 below.		_____		_____
2-5	BMP 3 Update mapping to include the entire storm sewer collection system including roads, inlets, piping, swales, catch basins, channels, basins and watershed boundaries.	_____	_____	_____	_____
1-5	BMP 4 Perform dry weather outfall screening per plan. Remove or correct illicit discharges.	Enforce	1 <sup>st</sup> Screening	Enforce	2 <sup>nd</sup> Screening
1+	BMP 5 Enact storm water management ordinance – done 2013. Update if needed.				
1+	BMP 6 Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials – See MCM #1	Establish Online Complaint Form			
1-5	Setup and promote a storm water pollution reporting mechanism and respond to all complaints.		Respond & document.	Respond & document.	Respond & document.



## MCM #3 Illicit Discharge Detection And Elimination

### A. BMP 1 Develop and Implement a Written Program for the Detection, Elimination, And Prevention of Illicit Discharges into the City's Regulated MS4s

#### **Purpose of the Illicit Discharge Detection and Elimination (IDD&E) Program**

The purpose of the IDD&E program is to establish a procedure to identify, detect and eliminate illicit discharges into the MS4 service area.

#### **Illicit Discharges defined**

The General Permit defines an illicit discharge as “any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except non-stormwater discharges as described in the “Discharges Authorized by this General Permit” section of this General Permit. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-stormwater waste into a municipal separate storm sewer system. Illicit discharges can be accidental or intentional.

#### **Non-Stormwater Discharges authorized by the General Permit and Ordinance 862**

The following discharges are authorized unless they are determined cause or to be significant contributors of pollution to the MS4 or to the waters of the Commonwealth:

- Discharges or flows from firefighting activities.
- Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
- Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
- Diverted stream flows and springs.
- Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
- Non-contaminated HVAC condensation and water from geothermal systems.
- Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
- Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

### **Procedure for Identifying Priority Areas**

The City of Pottsville MS4 system consists of several areas that were part of Greater Pottsville Area Sewer Authority's combined sewer overflow system. Over the past several decades, different areas have been separated and the stormwater collection and outfalls have become part of the City's MS4 permit. Dry weather screening in these areas is a priority area to identify if there is any sewage sources connected to the old "combined" lines.

### **Procedure for prioritization for screening outfalls**

Dry weather screening of each outfall will occur at least once during the permit period. For outfalls and areas with known past problems or known sources of dry weather flows, the outfalls shall be screened on an annual basis. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet. Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is defined as illicit, the actions taken to identify and eliminate the illicit flow also shall be documented. The City will make every feasible effort to trace the illicit flow in the storm system and including a method to stop the illicit discharge.

### **Procedure for screening outfalls in Priority Areas**

The City of Pottsville will screen all MS4 outfalls at least once during the permit coverage or an average of one every five years whichever is greater for "suspect" flows. If an MS4 outfall has past problems or known sources of "suspect" dry weather flow (no rain within 72 hours), the outfall will be screened annually.

For each outfall, if the screening reveals dry weather flow, the discharge from the outfall and the area around the outfall shall be inspected visually for "suspect" flow. "Suspect" flow is defined as flow with abnormal color, odor, turbidity, sheen, floating or submerged solids; or adverse effects on plants or animals in proximity to the outfall. If the outfall produces any suspect odor, or if the visual inspection shows any indication that the discharge may contain pollutants, then samples of the discharge shall be collected for field and/or lab testing of selected chemical and biological parameters as part of a process to determine if the dry weather flow is illicit. Common parameters include pH, conductivity, E. Coli bacteria, fecal coliform bacteria, metals, suspended solids, dissolved solids, oils, ammonia, surfactants; chlorine; and fluoride. The based engineering judgment, following concentrations will be used by the City of

Pottsville as “action levels” to determine if further investigation of illicit discharges is warranted. The “action levels” will not be used to preclude further investigation of non-stormwater discharges from an outfall.

- pH - less than 6 S.U. or greater than 9 S.U.;
- Conductivity- greater than 750 µmhos/cm (µSiem);
- Fecal Coliform - greater than 2,000/100 ml;
- Heavy Metals - ten (10) times the applicable water quality standard in 25 Pa. Code Chapter 93;
- COD - 100 mg/L;
- BOD5 - 50 mg/L;
- TSS - 100 mg/L;
- TDS - 500 mg/L;
- Oil and Grease - 30 mg/L;
- TRC - 0.5 mg/L;
- Ammonia-Nitrogen - 1.0 mg/L.

The results of outfall inspections and actions taken to remove or correct illicit discharges shall be summarized in the annual reports.

Thirty-Seven (37) Outfalls have been identified on the MS4 Outfall mapping. Dry weather testing of these outfalls was conducted in 2014, 2016, and 2018. Outfall screening is prioritized based on the results of previous screening or lack thereof as follows. A cumulative of 100% of outfalls have been screened to date. Additional outfall screenings will be completed as new outfalls are identified during the mapping updates.

1. Outfalls not yet inspected previously inspected only once with no discharges, follow up for two screenings in current five (5)-year permit cycle.
2. Outfalls previously inspected with illicit discharges, follow up with abatement and/or enforcement activities, and additional screening each year until eliminated.

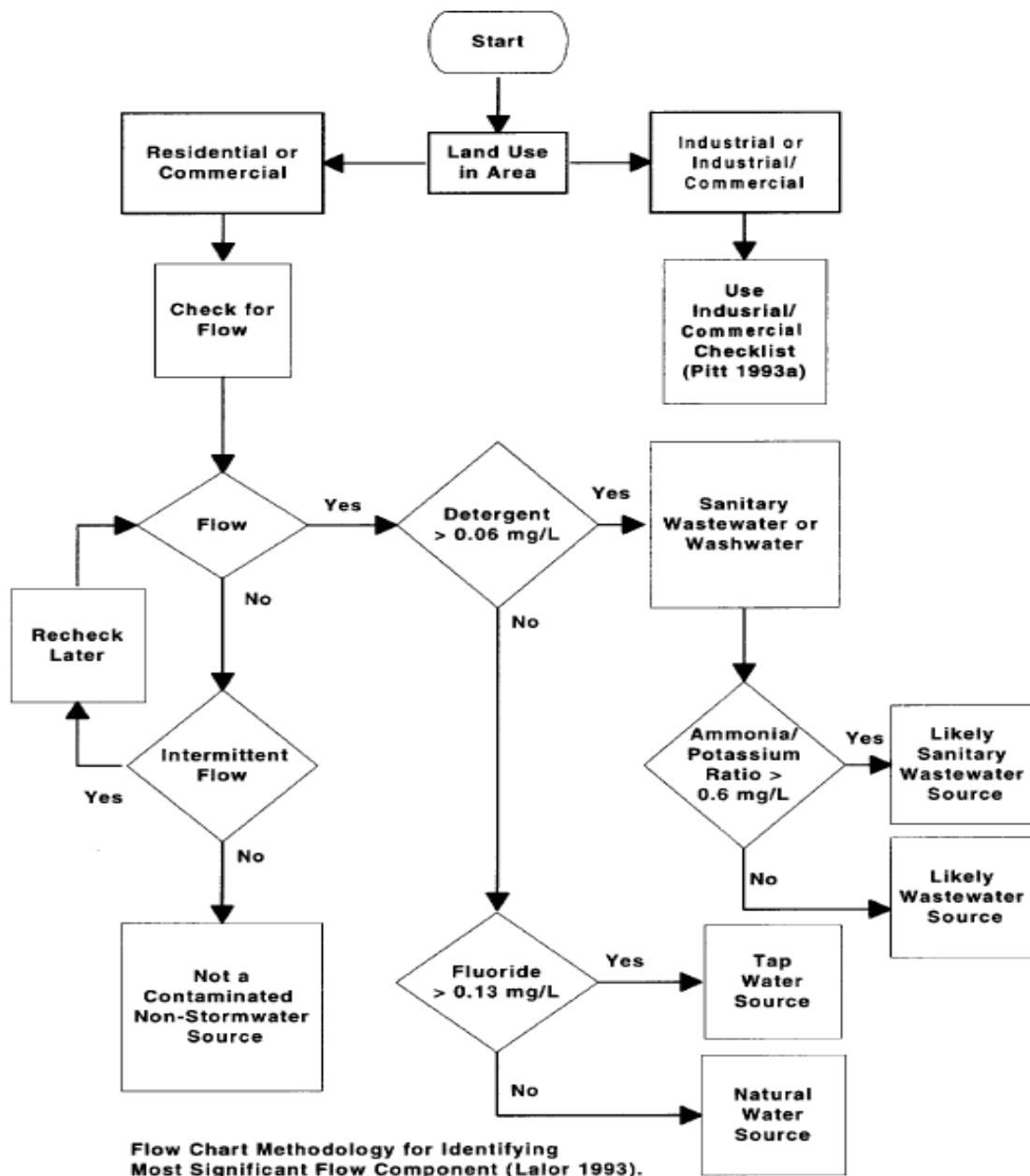
**Procedure for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.**

Outfall Screening and water quality results are reviewed and summarized. See Figure 1 for typical flow chart to identify significant illicit discharge sources. The following indicators can also be used to identify sources of an illicit discharge from stormwater outfall:

- Foam: indicator of upstream vehicle washing activities, or an illicit discharge.
- Oil sheen: result of a leak or spill.

- Cloudiness: indicator of suspended solids such as dust, ash, powdered chemicals and ground up materials.
- Color or odor: Indicator of raw materials, chemicals, or sewage.
- Excessive sediment: indicator of disturbed earth of other unpaved areas lacking adequate erosion control measures.
- Sanitary waste and optical enhancers (fluorescent dyes added to laundry detergent): indicator of the cross-connection of a sewer service.
- Orange staining: indicator of high mineral concentrations, ie AMD source.

**Figure 1: Flow chart to Identify Significant Contaminating Sources**



If the dry weather flows exceed an action level for non-stormwater discharges as listed above, or if the dry weather screening show indicators of an illicit discharge, the City of Pottsville will identify the service area of the individual outfall based on the latest mapping and will initiate an investigation using various methods including but not limited to, dye testing, smoke testing, closed circuit television inspection.

#### **Procedure for eliminating an illicit discharge**

The primary method used to eliminate any illicit discharge will be to identify and eliminate the source of the illicit discharge. When an illicit discharge originates within the City, necessary corrective actions will be done to eliminate the discharge source. Follow-up inspection will be conducted to ensure the discharge has been eliminated. Completed actions will be documented and maintained on file. If the source originates outside of the City, the neighboring municipality and PA Department of Environmental Protection will be notified.

#### **Procedure for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems with storm drain systems.**

Priority areas with suspected or confirmed illicit discharges for sanitary sewage will be referred to the Greater Pottsville Area Sewer Authority for further investigation. In addition, the City will enforce the appropriate provisions City Code Chapter 180: Sewers.

#### **Mechanisms for gaining access to private property to inspect outfalls and for investigating illicit connections and discharges.**

The City Code provides the authorization for the City or its designated agent(s) to enter at reasonable times upon any property within the City to inspect the condition of stormwater structures and facilities.

#### **Procedures for program documentation, evaluation and assessment.**

IDDE program documentation will be tracked as part of this work plan. See Appendix E.1.MCM #3 BMP #1 PROGRAM UPDATES

#### **Procedures for addressing information or complaints received from the public.**

The City website has been updated with a complaint form for stormwater related complaints. All complaints received will be logged and tracked using the Program Updates form.

**B. BMP 2 Develop And Maintain A Map Of Regulated Small MS4 Outfalls.**

Update the map with information including a map legend, receiving waters, regulated BMPs, and provide a written description of each outfall location and access conditions. See *Appendix E.2.MCM #3 BMP #2 MS4 OUTFALL MAPS*.

**C. BMP 3 Update Mapping To Include The Entire Storm Sewer Collection System Including Roads, Inlets, Piping, Swales, Catch Basins, Channels, Basins And Watershed Boundaries.**

Continue to update maps with additional details including roads, inlets, piping, swales, catch basins, channels, basins and watershed boundaries. See *Appendix E.3.MCM #3 BMP #3 MS4 OUTFALL FOCUS MAPS*.

**D. BMP 4 Perform Dry Weather Outfall Screening Per Plan.**

1. Outfalls not yet inspected previously, follow up for one screening in current 5-year permit cycle – See Appendix E.4
2. Outfalls previously inspected with illicit discharges, follow up with abatement and/or enforcement activities, and additional screening each year until eliminated. See *Appendix E.4.MCM #3 BMP #4 DRY WEATHER OUTFALL REPORTS AND ENFORCEMENT LOGS*.

**E. BMP 5 Enact Storm Water Management Ordinance**

The City of Pottsville enacted the most recent model Stormwater Management Ordinance in 2017. Update as required. See *Appendix E.5.MCM #3 BMP #5 STORMWATER ORDINANCE*.

**F. BMP 6 Provide Educational Outreach**

Provide educational outreach to public employees, business owners and employees, property owners, the general public, and elected officials (i.e., target audiences). Let them know/remind them about the on-line complaint form. This is to be included as part of the MCM#1 outreach program. See *Appendix C.4*.

Promote a storm water pollution reporting mechanism and respond to all complaints. Include a separate extension with recorded messages for illicit discharge reporting. Use the on-line complaint form for reporting and following up on each message. See *Appendix E.6.MCM #3 BMP #6 EDUCATIONAL OUTREACH (C.4) AND POLLUTION REPORTING*

## 5. MCM#4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

MCM #4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL – Schedule for Year <u>2018-2023</u>					
Permit Year		1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr
1-5	BMP 1 The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.	Hold building and land development permits until DEP/CCD NPDES permits are obtained for > 1 acre disturbances.			
1-5	BMP 2 A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.	Notify DEP/CCD within 5 days of receipt of application with > 1 acre disturbance.			
1-5	BMP 3 Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.	City of Pottsville Enacted DEP 2022 Model Ordinance in October 2017. Updated as required by DEP/EPA.			

## MCM #4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

- A. BMP 1 The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.**

The City relies on DEP's NPDES permitting. Therefore, all requirements are met for MCM #4. The City further requires that the Schuylkill County Conservation District reviews and approves the Erosion and sedimentation control plan before the City approves the plan for construction. The City will not issue a building or other permit or final approval for any activity requiring a NPDES permit unless the applicant has a valid NPDES permit.

- B. BMP 2 A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.**

The City of Pottsville will notify DEP/CCD within 5 days of receipt of an application for a permit involving and earth disturbance of one acre or greater.

- C. BMP 3 Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.**

The City of Pottsville enacted the DEP 2022 Model Ordinance in October 2017. Copies are attached to this report under separate appendices.



## 6. MCM#5 POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENTS

MCM #5 POST CONSTRUCTION STORM WATER MANAGEMENT– Schedule for Year <u>2018-2023</u>					
Permit Year		1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr
1-5	BMP 1 Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.	City of Pottsville Enacted DEP 2022 Model Ordinance in October 2017. Updated as required by DEP/EPA.			
1-5	BMP 2 Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP’s MS4 website, <a href="http://www.dep.pa.gov/MS4">www.dep.pa.gov/MS4</a> . Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP’s 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.	City of Pottsville Enacted DEP 2022 Model Ordinance in October 2017. Updated as required by DEP/EPA.			
1-5	BMP 3 Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Inventory and update new PCSM BMPs since 3/10/2003.	Inspect SW BMPs - Annually, 1 <sup>st</sup> 5 years. - Every 3 years after that. - And, after each 10-year storm - Document each BMP inspection/violation Assess sanctions and penalties according to City Code Chapter 193			

## MCM #5 POST CONSTRUCTION STORM WATER MANAGEMENT

- A. BMP 1 Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.**

The City of Pottsville enacted the DEP 2022 Model Ordinance in October 2017. Copies are attached to this report under separate appendices.

- B. BMP 2 Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, [www.dep.pa.gov/MS4](http://www.dep.pa.gov/MS4). Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.**

The City of Pottsville enacted the DEP 2022 Model Ordinance in October 2017. Copies are attached to this report under separate appendices.

- D. BMP 3 Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.**

The City of Pottsville will update and maintain its current inventory of PCSM BMPs approved since March 10, 2003.

Program: Inspect SW BMPs

- Annually, 1st 5 years.
- Every 3 years after that.
- And, after each 10-year storm
- Document each BMP inspection/violation
- Assess sanctions and penalties according to Ordinance 193

Utilizing the BMP 5 inventory of existing project BMPs, schedule one on-site inspection each year for the first 5 years, every three years after that, and after every 10-year storm.

See *Appendix G.3 MCM #5 BMP #3a PCSM O&M Program Update Log*

Develop and maintain/update an inventory of PCSM BMPs by permittees. See *Appendix G.3 MCM #5 BMP #3b INVENTORY & TRACKING OF PCSM BMP's & LID PROJECTS SINCE 3/10/2003*.

**7. MCM#6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

<b>MCM #6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS– Schedule for Year <u>2014-2018</u></b>					
<b>Permit Year</b>		<b>1<sup>st</sup> Qtr</b>	<b>2<sup>nd</sup> Qtr</b>	<b>3<sup>rd</sup> Qtr</b>	<b>4<sup>th</sup> Qtr</b>
1	BMP 1 Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4.				Make List _____
1	BMP 2 Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1.				Develop program _____
1-5	BMP 3 Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s.	Annual training program _____			Document training _____

## **MCM #6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

### **A. BMP 1 Identify And Document All Facilities And Activities That Are Owned Or Operated By The Permittee And Have The Potential For Generating Stormwater Runoff To The Regulated Small MS4.**

Facilities - City Hall; City garage buildings, recycle center, salt storage, mulch storage, vehicle parking; 15 playgrounds/parks including JFK Pool/courts/parking, Garfield Square, Rotary Field/courts, Henry Clay monument and others; other storage areas, City owned storm basins; 42 miles of City owned streets, 5.6 miles of State owned streets; 8 fire companies.

Activities – garbage collection, snow removal/deicing, street sweeping disposal, inlet cleaning, lawn care, storm sewer inspections, vehicle cleaning/maintenance, leaf/yard debris pickup/disposal, maintenance of riparian buffers, new construction, curbside recycling. See *Appendix H.1 MCM #6 BMP #1 INVENTORY OF CITY FACILITIES AND ACTIVITIES*.

### **B. BMP 2 Develop, Implement And Maintain A Written Operation And Maintenance (O&M) Program For All Municipal Operations And Facilities That Could Contribute To The Discharge Of Pollutants From The Regulated Small MS4s, As Identified Under BMP #1.**

See *Appendix H.2 MCM #6 BMP #2 POTTSVILLE MUNICIPAL OWNED MS4 O&M MANUAL*.

### **C. BMP 3 Develop And Implement An Employee Training Program That Addresses Appropriate Topics To Further The Goal Of Preventing Or Reducing The Discharge Of Pollutants From Municipal Operations To Your Regulated Small MS4s.**

See training program *Appendix H.3 MCM #6 BMP #3a CITY EMPLOYEE TRAINING PROGRAM* and *Appendix H.3 MCM #6 BMP #3b LOG OF ANNUAL CITY EMPLOYEE TRAINING PROGRAM*.

## APPENDICES



## A. PERMITS/ORDERS





**A.1. ADMINISTRATIVE ORDER 05/29/2014**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

MAY 15 2014

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Thomas Palamar  
City Administrator  
Pottsville City  
401 North Centre Street  
Pottsville, Pennsylvania 17901

Re: Docket No. CWA-03-2014-0185 DN  
Administrative Order for Compliance and Request for Information

Dear Mr. Palamar:

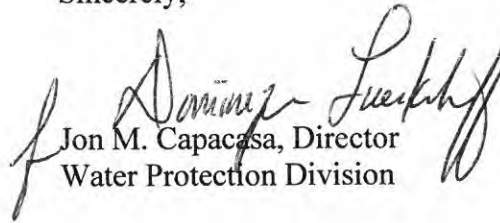
The United States Environmental Protection Agency ("EPA") has reviewed the 2010 and 2011 Annual Reports that Pottsville City submitted to the Pennsylvania Department of Environmental Protection (PADEP) to assess compliance with PADEP's General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems, PAG-13 ("General Permit"). Based on the information disclosed in the Annual Reports, EPA has determined that Pottsville City is in violation of Federal regulations at 40 C.F.R. § 122.34 and the General Permit because it: a) failed to adequately implement the minimum control measures required by the General Permit; and/or b) failed to adequately document compliance in the Annual Reports as required by the terms of the General Permit.

Enclosed with this letter is a document entitled Findings of Violation and Administrative Order for Compliance ("Findings and Order") issued pursuant to Section 309(a) of the Federal Clean Water Act ("Act"), 33 U.S.C. §§ 1319(a). This document contains findings that Pottsville City has violated Section 301 of the Act, 33 U.S.C. § 1311, and requires Respondent to provide additional evidence of compliance and to submit a work plan and schedule upon EPA's request. You should carefully read the contents of the enclosed Findings and Order, and communicate to each responsible official, agent or employee the actions which each such person must take to ensure compliance with its terms. Failure to comply with the terms of the Order and Request may result in further enforcement action being taken, including a civil suit for penalties and injunctive relief that may be required to comply with the permit.



If you require any information or assistance regarding this matter, please contact Mr. Peter Gold, NPDES Permits and Enforcement Branch, 215-814-5236.

Sincerely,

  
Jon M. Capacasa, Director  
Water Protection Division

Enclosure

cc: Mike Brunamonti, PADEP  
Sean Furjanic, PADEP



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*Customer Service Hotline: 1-800-438-2474*

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029**

REGIONAL HEARING CLERK  
EPA REGION III, PHILA. PA

2014 MAY 29 PM12:01

RECEIVED

In the Matter of:	:	Proceeding Under Section 309(a) of the
City of Pottsville	:	Clean Water Act, 33 U.S.C. § 1319(a)
401 North Centre Street	:	Docket No. CWA-03-2014-0185 DN
Pottsville, PA 17901	:	
Respondent.	:	FINDINGS OF VIOLATION
	:	AND
	:	ORDER FOR COMPLIANCE

**I. STATUTORY AUTHORITY**

The following Findings of Violation and Order for Compliance (“Order”) are issued under the authority vested in the United States Environmental Protection Agency (“EPA”) by Section 309(a) of the Clean Water Act, 33 U.S.C. § 1319(a) (“CWA” or “the Act”). The Administrator has delegated this authority to the Regional Administrator of EPA Region III who in turn has redelegated it to the Director of the Water Protection Division of EPA Region III.

**II. FINDINGS**

**A. NPDES and MS4 Programs**

1. Section 301(a) of the Act, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant (other than dredged or fill material) from a point source into waters of the United States except in compliance with a permit issued pursuant to the National Pollutant Discharge Elimination System (NPDES) program under Section 402 of the Act, 33 U.S.C. § 1342.

2. Section 402(a) of the Act, 33 U.S.C. § 1342(a), provides that the Administrator of EPA may issue permits under the NPDES program for the discharge of any pollutant from a point source to the waters of the United States. The discharges are subject to specific terms and conditions as prescribed in the permit.

3. “Discharge of a pollutant” includes “any addition of any pollutant or combination of pollutants to waters of the United States from any point source.” 40 C.F.R. § 122.2.

4. “Storm water” is defined as “storm water runoff, snow melt runoff and surface runoff and drainage.” *Id.* § 122.26(b)(13).

5. The term “municipal separate storm sewer system” or “MS4” includes, *inter alia*, “a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains): (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.” 40 C.F.R. § 122.26(b)(8)(i).

6. The term “small municipal separate storm sewer system” or “small MS4” means “all separate storm sewers that are: (i) Owned or operated by the United States, a State, city, town, borough . . . or other public body (created by or pursuant to State law) having jurisdiction over disposal of . . . storm water. . . .; [and] (ii) Not defined as ‘large’ or ‘medium’ municipal separate storm sewer systems.” 40 C.F.R. § 122.26(b)(16).

7. Small MS4s are regulated pursuant to Section 402(p) of the Act, 33 U.S.C. § 1342(p) and the regulations promulgated thereunder. Pursuant to 40 C.F.R. §122.26(a)(9)(i), small MS4s require an NPDES permit if they are required to be regulated pursuant to 40 C.F.R. § 122.32.

#### B. Pennsylvania’s Small MS4 Program

8. Pursuant to Section 402(b) of the Act, 33 U.S.C. § 1342(b), EPA authorized the Commonwealth of Pennsylvania to issue NPDES permits in 1978. In 1991, EPA authorized PA to issue General NPDES Permits.

9. On December 2, 2002, PADEP published a guidance document entitled “Municipal Separate Storm Sewer System (MS4) Stormwater Management Program Protocol,” 3900-PM-WM0100h (Dec. 2, 2002), <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-54734/3900-PM-WM0100h.pdf> (“the Protocol”).

10. On March 9, 2003, PADEP issued a NPDES Permit for Stormwater Discharges to Pottsville City (“the Permit”). The Permit expired on March 9, 2008, and was reissued/administratively extended.

11. The 2003 MS4 Permit, Part A.2, required permittees to implement a Stormwater Management Program meeting the following Minimum Control Measures: (1) Public Education and Outreach on Stormwater Impacts, (2) Public Participation and Involvement, (3) Illicit Discharge Detection and Elimination, (4) Construction Site Runoff Control, (5) Post-Construction Stormwater Management in New Development and Redevelopment, and (6) Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance.



12. Further, the 2003 MS4 Permit, Part A.3., required Permittees to either: (a) implement the Protocol; or (b) develop and implement their own stormwater management program.

13. The 2003 MS4 Permit, Part A.3., additionally provided that for Permittees that chose to implement the Protocol, the Protocol and its underlying requirements became incorporated into the 2003 MS4 Permit.

14. The 2003 MS4 Permit, Part C.2., also required permittees to submit Annual Reports to PADEP to report on stormwater management activities performed during the permit year. The Permit further required the Annual Reports to be in the format required by the Department, see <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-73109/03%203930-PM-WM0100u%202009%20Form.pdf>. The Annual Report Form was incorporated into the Permit.

15. The 2003 MS4 Permit, Part B.3.a, required permittees to “comply with all terms and conditions of this Permit.”

### C. Respondent

16. The City of Pottsville, Pennsylvania (“Respondent”) is a “municipality” within the meaning of Section 502(4) of the Act, 33 U.S.C. § 1362(4).

17. Respondent is therefore a “person” within the meaning of Section 502(5) of the Act, 33 U.S.C. § 1362(5).

18. At all times relevant to this Order, Respondent owned and/or operated a regulated small MS4, located in Pottsville City, Schuylkill County, Pennsylvania (hereinafter, Pottsville City MS4).

19. Pursuant to 40 C.F.R. § 122.32(a)(1), the Pottsville City MS4 is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census, and accordingly requires an NPDES permit.

20. Therefore, the Pottsville City MS4 is a “small MS4” within the meaning of 40 C.F.R. § 122.26(b)(16).

21. The Pottsville City MS4 discharges stormwater to Schuylkill River and its associated tributaries.

22. The Schuylkill River and its associated tributaries, to which storm water flows and, at all times relevant to this Order, has flowed from the Pottsville City MS4, are each a “water of the United States” as that term is defined at 40 C.F.R. § 122.2.

23. On or about July 6, 2004, Respondent submitted a signed Notice of Intent (“NOI”) to PADEP for coverage under the 2003 MS4 Permit, after which PADEP notified and approved the respondent for coverage under the Permit.

24. The 2003 MS4 Permit authorizes discharges of storm water from the Pottsville City MS4 to the Schuylkill River and its tributaries, but only in accordance with the conditions of the Permit.

25. Upon information and belief, Respondent chose to implement the Protocol.

26. Therefore, the Protocol and its underlying requirements were incorporated into the 2003 MS4 Permit coverage for Pottsville City MS4.

27. On March 4-7, 2013, duly-authorized EPA representatives conducted a review of the Pottsville City MS4 program's annual report (hereinafter referred to as "the Review").

### **III. VIOLATIONS**

#### **Minimum Control Measure #1: Public Education and Outreach**

28. Federal regulations at 40 C.F.R. § 122.34(b)(1), the 2003 MS4 Permit (Part A.2) and the Protocol (pp. 4-7) require the Respondent to develop, implement and enforce a program for public education and outreach, including reviewing its education and outreach plan and providing new information about target audiences and their communication channels.

29. The Review revealed that Respondent had failed to comply and/or to document its compliance with Federal regulations and the 2003 MS4 Permit (including the Protocol), by not developing and/or implementing and/or enforcing a program for public education and outreach.

30. Respondent's failure to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit by failing to develop and/or implement AND/OR enforce a program for public education and outreach violates the 2003 MS4 Permit and Section 301 of the Act, 33 U.S.C. § 1311.

#### **Minimum Control Measure #4: Construction Stormwater Runoff Management**

31. Federal regulations at 40 C.F.R. § 122.34(b)(4), the 2003 MS4 Permit (Part A.2) and the Protocol (pp. 20-26) require the Respondent to reduce pollution in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre through, *inter alia*, the following activities: enacting, implementing and enforcing a stormwater control ordinance; requiring review and approval of Erosion and Sediment (E&S) Control Plans; and distributing educational materials to land developers.

32. The Review revealed that Respondent had failed to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by not reducing pollution in stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre through, *inter alia*, the following activities: enacting, implementing and/or enforcing a stormwater control ordinance; and/or requiring review and approval of E&S Control Plans; and/or distributing educational materials to land developers.



33. Respondent's failure to comply or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by failing to implement and/or enforce a program to reduce pollution in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre violates the 2003 MS4 Permit and Section 301 of the Act, 33 U.S.C. § 1311.

Minimum Control Measure #5: Post-Construction Stormwater Runoff Management

34. Federal regulations at 40 C.F.R. § 122.34(b)(5), the 2003 MS4 Permit (Part A.2) and the Protocol (pp. 23-26) require the Respondent to implement and enforce a program to reduce pollution in any stormwater runoff to the MS4 from new development and redevelopment that result in a land disturbance of greater than or equal to one acre through, *inter alia*, the following activities: enacting, implementing and enforcing a stormwater control ordinance using DEP model language; coordinating the review and approval of post-construction BMPs; and ensuring long-term operation and maintenance of BMPs.

35. The Review revealed that Respondent had failed to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by not implementing and enforcing a program to reduce pollution in any stormwater runoff to the MS4 from new development and redevelopment that result in a land disturbance of greater than or equal to one acre through, *inter alia*, the following activities: enacting and/or implementing and/or enforcing a stormwater control ordinance using DEP model language; and/or coordinating the review and approval of post-construction BMPs; and/or ensuring long-term operation and maintenance of BMPs.

36. Respondent's failure to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by failing to implement and enforce a program to reduce pollution in any stormwater runoff to the MS4 from new development and redevelopment through post-construction controls violates the Permit and Section 301 of the Act, 33 U.S.C. § 1311.

Minimum Control Measure #6: Pollution Prevention/  
Good Housekeeping For Municipal Operations

37. Federal regulations at 40 C.F.R. § 122.34(b)(6) and the 2003 MS4 Permit (Part A.2) and the Protocol (pp. 27-31) require the Respondent to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations through, *inter alia*, the following activities: developing and implementing a comprehensive pollution prevention program for municipal operations, focusing particularly on vehicle maintenance, fueling and washing, maintenance of stormwater facilities and employee training; and an operations and maintenance training program for municipal employees.

38. The Review revealed that Respondent had failed to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by not implementing an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations through,

*inter alia*, the following activities: implementing a comprehensive pollution prevention program for municipal operations, focusing particularly on vehicle maintenance, fueling and washing, maintenance of stormwater facilities and employee training; and/or an operations and maintenance training program for municipal employees.

39. Respondent's failure to comply and/or to document its compliance with the Federal regulations and the 2003 MS4 Permit, including the Protocol, by failing to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations violates the 2003 MS4 Permit and Section 301 of the Act, 33 U.S.C. § 1311.

#### **IV. ORDER FOR COMPLIANCE**

Section 309(a) of the Act, 33 U.S.C. § 1319(a), provides, *inter alia*, that whenever on the basis of any information available to him the Administrator finds that any person is in violation of any condition or limitation which implements section 1342 of the Act, he shall issue an order requiring such person to comply with such condition or limitation.

Therefore, this 29<sup>th</sup> day of May, 2014, Respondent is hereby ORDERED, pursuant to Section 309(a) of the Clean Water Act, 33 U.S.C. § 1319(a), to conduct the following activities:

Within thirty (30) days of receipt of this Order, Respondent shall:

- a. Within 30 days of the effective date of this Order, provide additional evidence of compliance absent from the Annual Report to the extent that inadequate documentation is alleged in this Order; and
- b. Within 30 days of EPA's request, submit a work plan and schedule to achieve compliance with all Minimum Control Measures and/or Best Management Practices which are noncompliant in terms of the Federal regulations and Permit as alleged in this Order. Respondent shall submit the additional compliance evidence work plan and/or schedule to:

Peter Gold  
NPDES Enforcement Branch (3WP42)  
Water Protection Division  
U.S. Environmental Protection Agency  
1650 Arch St, Philadelphia, PA 19103

#### **V. GENERAL PROVISIONS**

40. Issuance of this Order shall not be deemed an election by the EPA to forego any administrative, civil, or criminal action to seek penalties, fines, or any other appropriate relief under the Act for the violations cited herein. EPA reserves the right to seek any remedy available under the law that it deems appropriate for the violations cited.

41. Respondent's compliance with the terms of this Order shall not constitute compliance with the Clean Water Act or any other Federal, State or local law, regulation ordinance or permit. Nor does this Order constitute a waiver or modification of the terms or conditions of any issued permit.

42. Violation of the terms and conditions of this Order constitutes an additional violation of the Act, and may result in a civil action for injunctive relief and/or a penalty not to exceed \$37,500 per day of such violation, pursuant to Sections 309(b) and (d) of the Act, 33 U.S.C. § 1319(b) and (d). In addition, Section 309(c) provides criminal sanctions for knowing or negligent violations of the Act including imprisonment and fines of up to \$50,000 per day of violation.

#### **VI. JUDICIAL REVIEW**

Respondent may seek federal judicial review of the Order for compliance pursuant to Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706. Section 706, which is set forth at <http://uscode.house.gov/download/pls/05C7.txt>, states the scope of such review. Respondent is free to seek counsel from an attorney regarding its response.

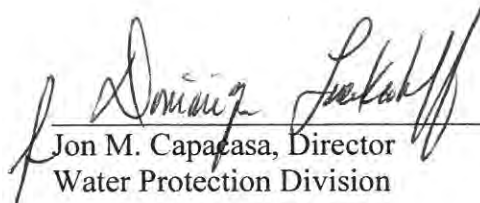
#### **VII. OPPORTUNITY TO CONFER**

Respondent is invited to confer with the Agency about the findings and conclusions reflected in this Order and Request and the terms and conditions contained herein. Any such conference can be in person or by electronic means. Respondent may also submit any written material it believes to be relevant to the Agency's determinations. If such a conference is desired, Respondent should contact Peter Gold at (215) 814-5236.

#### **VIII. EFFECTIVE DATE**

The effective date of this Order shall be the date it is received by the Respondent.

Date:                     MAY 29 2014                    

  
\_\_\_\_\_  
Jon M. Caparasa, Director  
Water Protection Division



**A.2. AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) PAG-13 (4/2012)**







COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

**AUTHORIZATION TO DISCHARGE**

**UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)  
PAG-13**

**GENERAL PROVISIONS:**

Dischargers of stormwater from regulated small municipal separate storm sewer systems (small MS4s), as defined in 40 CFR § 122.26(b)(16), are required under the federal stormwater regulations (40 CFR Part 122) and state regulations incorporating those federal requirements by reference (25 Pa. Code § 92a.3), to submit an application and obtain a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater into surface waters of the Commonwealth of Pennsylvania.

This General Permit authorizes stormwater discharges subject to the provisions of the Clean Water Act, 33 U.S.C. Sections 1251 *et seq.*, Pennsylvania's Clean Streams Law, *as amended*, 35 P.S. Sections 691.1 *et seq.*, and 25 Pa. Code Chapter 92a.

Municipalities operating under this general permit have been either automatically designated as regulated by EPA pursuant to 40 CFR § 122.32(a)(1) or designated as regulated by DEP under 40 CFR § 122.32(a)(2).

The authorization to discharge stormwater is subject to the terms and conditions set forth in Parts A, B and C herein. This permit authorizes discharges from regulated small MS4s, as defined herein, to surface waters of the Commonwealth, when such discharges are composed entirely of stormwater as defined in this General Permit, except as otherwise provided herein. The permittee is required to submit reports to document the implementation of the Stormwater Management Program (SWMP), as set forth in Appendix A hereto, designed to reduce the discharge of pollutants from the regulated small MS4 to the Maximum Extent Practicable (MEP); and when required, progress with the development, implementation, and enforcement of an MS4 TMDL Plan consistent with an applicable wasteload allocations in an approved TMDL; and when required, progress with the development, submission to DEP for approval, and ensuring implementation of a Chesapeake Bay Pollutant Reduction Plan.

**THE AUTHORITY GRANTED BY THIS GENERAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:**

1. DEP may, upon written notification, require any permittee authorized by this General Permit to apply for and obtain an Individual NPDES MS4 Permit. The notice from DEP shall include the following: (1) a brief statement of the reasons for this action, (2) an application form, (3) a statement setting a deadline for the permittee to file the application and (4) a statement that on the effective date of the individual NPDES permit, coverage under this General Permit shall automatically terminate. If a permittee fails to submit, in a timely manner, an Individual NPDES MS4 Permit application required by DEP under this paragraph, then the applicability of this permit to the permittee is automatically terminated at the end of the day specified for submittal of the application. Any interested person may petition DEP to take action under this paragraph.
2. Any permittee authorized to discharge by this General Permit may be excluded from the coverage of this General Permit by applying for an Individual NPDES MS4 Permit. The permittee shall submit to DEP an Individual NPDES MS4 Permit application on approved Pennsylvania Individual NPDES MS4 Permit application forms.
3. When an Individual NPDES MS4 Permit is issued to an owner or operator of a regulated small MS4 otherwise subject to this General Permit, the applicability of this General Permit to the Individual NPDES MS4 Permit is automatically terminated on the effective date of the Individual NPDES MS4 Permit.
4. This General Permit may be modified or revoked and reissued by DEP.
5. This General Permit shall expire 5 years from the date of its issuance. DEP shall publish a notice in the *Pennsylvania Bulletin* of the draft, renewed or reissued General Permit or of any amendments to this General Permit, and after a comment period, notice of the final, renewed, reissued or amended General Permit shall be published in the *Pennsylvania Bulletin*. The permittee shall be responsible for complying with the final renewed, reissued or amended General Permit

6. An NOI for renewal of coverage under this General Permit shall be received by DEP at least 180 days prior to the Coverage Expiration Date on the Approval for Coverage (unless written permission has been granted by DEP for submission at a later date). A request for renewal of coverage is to be made using the NOI form provided by DEP.
7. Permittees who submit a timely renewal application in accordance with paragraph 6 may continue to operate pursuant to the terms and conditions of this permit until this General Permit is renewed, modified or revoked and reissued.
8. DEP shall publish a notice in the Pennsylvania Bulletin of the draft renewed, modified or revised General Permit before it expires. After a comment period specified in the notice of draft permit, a notice of final renewal, modification, or reissuance of the General Permit shall be published in the Pennsylvania Bulletin.
9. No condition of this General Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations.
10. Approval of coverage under this General Permit may be revoked by DEP if monitoring data indicate one or more toxic pollutants are, or are expected to be, discharged by the permittee. If there is evidence indicating potential or realized adverse impacts on water quality due to any stormwater discharge from a regulated small MS4 covered by this permit, the operator of such a discharge may be required to obtain an individual NPDES MS4 permit.
11. Timely submission of the Notice of Intent (NOI) and, if applicable, the MS4 TMDL Plan.
12. By agreeing to participate in this General Permit, the permittee agrees to enact and implement; either an appropriate MS4 Stormwater Management Ordinance; an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.
13. By agreeing to participate in this General Permit, the permittee agrees to fully implement and enforce to the Maximum Extent Practicable the Stormwater Management Program (outlined in Part A, Section 2 below), and if required an MS4 TMDL Plan (outlined in Part C below) consistent with the conditions, assumptions and any applicable Waste Load Allocation defined in TMDLs, that is designed to reduce the discharge of pollutants from the permittee's regulated small MS4 to meet applicable requirements, to protect water quality, and to satisfy the appropriate water quality requirements of the federal Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.

#### **GENERAL PERMIT ELIGIBILITY:**

This permit authorizes the discharge of stormwater from eligible small MS4s defined at 40 CFR §122.26(b)(16). This includes small MS4s designated as regulated under 40 CFR §122.32(a)(1) and 40 CFR §122.32(a)(2). The operator of the regulated small MS4 is eligible to discharge under this permit if all of the following conditions are met:

1. The regulated MS4 is not large or medium MS4s as defined in 40 CFR §122.26(b)(4) or (7);
2. The regulated MS4 is located fully or partially in an urbanized area as determined by the latest Decennial Census by the Bureau of Census at the time this General Permit is issued;
3. The permittee submits an administratively complete and acceptable Notice of Intent and obtains written authorization from the Department.
4. The permittee is not implementing a local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR § 122.44(s). Permittees currently operating under this general permit that wish to propose a QLP shall submit a complete written application for an Individual NPDES MS4 Permit together with complete documentation of their proposed Qualifying Local Program.
5. The permittee has no discharges from its regulated small MS4s to or is not located in waters of the Commonwealth, including wetlands, that have an existing or designated use that is classified as "Special Protection" under 25 Pa. Code Chapter 93 of DEP's regulations.
6. The regulated MS4 does not, and shall not, discharge hazardous pollutants, toxics or any other substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population or pose a substantial present or future hazard to human health or the environment when discharged into waters of the Commonwealth.



7. Individually, or in combination with other similar discharges, the regulated MS4 does not, and shall not, have the potential to be contributors to pollution which DEP determines is more appropriately controlled under an individual permit to ensure compliance with the Clean Water Act, the Clean Streams Law or regulations promulgated thereunder.

**GENERAL PERMIT COVERAGE AND LIMITATIONS:**

1. The following are authorized discharges:
  - a. Stormwater discharges. This permit authorizes stormwater discharges to surface waters of the Commonwealth from regulated small MS4s, except as excluded in Section 2 below.
  - b. Non-stormwater discharges. The following categories of non-stormwater discharges or flows are authorized by this permit unless the permittee or DEP has identified them as significant contributors of pollutants to the regulated small MS4 or its discharges:
    - i. discharges or flows from fire fighting activities;
    - ii. discharges from potable water sources including dechlorinated water line and fire hydrant flushing;
    - iii. irrigation water and landscape drainage;
    - iv. diverted stream flows;
    - v. uncontaminated pumped ground water;
    - vi. uncontaminated water from foundation and footing drains;
    - vii. air conditioning condensation;
    - viii. springs;
    - ix. water from crawl space pumps;
    - x. water from lawn watering;
    - xi. individual residential car washing;
    - xii. flows from riparian habitats and wetlands; and
    - xiii. dechlorinated swimming pool discharges. (clean, no filter backwash)
2. Limitations on Coverage: This permit does not authorize any of the following:
  - a. Discharges that are mixed with sources of non-stormwater unless such non-stormwater discharges are in compliance with a separate NPDES permit, or are determined not to be a significant contributor of pollutants to surface waters of the Commonwealth (as per section 1(b) herein).
  - b. Stormwater discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi).
  - c. Stormwater discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or 40 CFR §122.26(b)(15).
  - d. Stormwater discharges currently covered under another NPDES permit.
  - e. Discharges that contain hazardous pollutants, toxics or any other substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population or pose a substantial present or future hazard to human health or the environment when discharged into waters of the Commonwealth.
  - f. Discharges that, individually or in combination with other similar discharges, are or have the potential to be, a contributor to pollution, which is more appropriately controlled under an individual permit.
  - g. MS4 systems where any portion of the discharges would be to impaired waters with an applicable and approved TMDL wasteload allocation (WLA) unless the permittee has an approved MS4 TMDL Plan.
  - h. Discharges that are not, or shall not be, in compliance with the terms or conditions of this General Permit.
  - i. Discharges where the applicant has failed and continues to fail to comply, or has shown a lack of ability or intention to comply, with a regulation, permit, schedule of compliance, or order issued by DEP.

- j. Discharges that do not, or shall not, result in compliance with applicable effluent limitations or water quality standards.
- k. Discharges from an MS4 which DEP determines require an individual NPDES permit to ensure compliance with the Clean Water Act, the Clean Streams Law or regulations promulgated there under.
- l. Discharges that may adversely affect a Pennsylvania or federal endangered or threatened species, or its critical habitat.
- m. Discharges from an MS4 where an NPDES permit has been terminated or denied.

**COVERAGE UNDER** THIS GENERAL PERMIT (PAG # 13) IS ISSUED: 3/16/13, AND SHALL EXPIRE ON: 3/15/18.

**STORMWATER  
NPDES GENERAL PERMIT  
(PAG-13) ISSUED BY**



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**DIRECTOR  
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT**

## PART A

### STORMWATER MANAGEMENT PROGRAM

The Stormwater Management Program is contained at Appendix A hereto, which is incorporated by reference herein. The permittee shall implement, enforce and report on such activities related to the Stormwater Management Program which is designed to reduce the discharge of pollutants from its regulated small MS4 to the Maximum Extent Practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the federal Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.

The Stormwater Management Program in Appendix A requires enactment and implementation of one of the following: (1) adoption of the MS4 Stormwater Management Ordinance; (2) adoption of an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or (3) an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

#### 1. DEFINITIONS

**Applicant:** Refers to the owner or operator of a regulated small municipal separate storm sewer system seeking to discharge under, and pursuant to, the terms of this General Permit.

**Best Management Practices (BMPs):** Schedules of activities, prohibitions of practices, structural controls (e.g., infiltration trenches), design criteria, maintenance procedures, and other management practices to prevent or reduce pollution to the waters of the Commonwealth. BMPs include Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, MS4 TMDL Plans, Stormwater Management Act Plans, and other treatment requirements, operating procedures and practices to control runoff, spillage or leaks, sludge or waste disposal, drainage from raw material storage, and methods to reduce pollution, to recharge groundwater, to enhance stream base flow and to reduce the threat of flooding and stream bank erosion.

**Better Site Design (BSD):** An approach to residential and commercial development that, when properly conducted, can simultaneously reduce pollutant loads, conserve natural areas, save money, and increase property values. BSD promotes three main goals for new development sites: (1) to reduce the amount of impervious cover, (2) to increase the amount of natural lands set aside for conservation, and (3) to better integrate stormwater treatment systems on-site. Green Infrastructure techniques like green roofs, rain gardens, and vegetated swales can be used in BSD to manage stormwater runoff and increase the amount of local green space. Also, reducing the overall scale of streets, driveways, setbacks, parking spaces, and lot sizes are effective methods of reducing impervious cover.

<http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary>

**Clean Water Act:** The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 U.S.C. §§ 1251, et. seq.

**Control Measure:** As used in this permit refers to any BMP in the MS4 Stormwater Management Program, the MS4 TMDL Plan or any other method used to prevent or reduce the discharge of pollutants to waters of the Commonwealth.

**Consistent with the TMDL:** Implementing measures as soon as practicable to make measurable progress in substantially reducing the applicable pollutant loads specified in the applicable WLA of the TMDL, and ultimately achieving the pollutant reductions required in the WLA through implementation of measures in accordance with an implementation timeline contained in the MS4 TMDL Plan.

**Department:** The Department of Environmental Protection (DEP)

**Designated uses:** Those uses specified in 25 Pa. Code §§ 93.4(a) and 93.9a – 93.9z for each water body or segment whether or not they are being attained.

**Director:** The Secretary of the Department of Environmental Protection or any authorized employee thereof.

**Dry Weather:** For required outfall inspections, dry weather is a continuous time interval without stormwater producing events that immediately follows an initial 48 hour period with no stormwater producing events. (**NOTE:** For additional information regarding dry weather, see Chapter 11 of *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* [CWP, October 2004]. <http://cfpub.epa.gov/NPDES/stormwater/idde.cfm>.)

**Existing uses:** Those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

**Illicit Connection:** Any physical connection to a separate stormwater drainage system that conveys illicit discharges into the system and/or is not authorized or permitted by the local authority.

**Illicit Discharge:** Any discharge (or seepage) to a municipal separate storm sewer that is not composed entirely of stormwater. This does not refer to discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the regulated small MS4); certain allowable non-stormwater discharges described in the EPA regulations, NPDES MS4 permit or the MS4 permittee's ordinance; and discharges resulting from fire fighting activities. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-stormwater waste into a separate stormwater drainage system. Illicit discharges can be accidental or intentional.

**Load Allocation (LA):** The portion of a surface water's loading capacity that is assigned or allocated to existing and future nonpoint sources and natural quality (25 Pa Code § 96.1).

**Low Impact Development (LID):** A set of site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site. <http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm#glossary>

**Maximum Extent Practicable (MEP):** A technology-based discharge standard established in the CWA at §402(p)(3)(B)(iii) that requires NPDES MS4 permittees to optimize reductions in stormwater pollutants on a location-by-location basis by minimizing pollutant loads in stormwater discharges and maximizing technically achievable and cost-effective water quality improvements. MEP as used in this program also includes the requirement under the Pennsylvania Clean Streams Law to prevent pollution from changes in stormwater rate, volume, and temperature associated with alteration of the land. The MEP standard requires the development, implementation, and enforcement of measures including BMPs, control techniques, system design, engineering methods, and other provisions that DEP determines to be appropriate for the control of such pollutants. MEP is an iterative, dynamic, flexible standard that the permittee shall evaluate and update continuously, as necessary, to better tailor or expand the program based on its effectiveness in reducing pollutant discharge load.

**Measurable Goals:** Best Management Practice design objectives or goals that quantify the progress of program implementation and the performance of the chosen BMPs. They are objective markers or milestones that can be used to track the progress and effectiveness of BMPs in reducing pollutants to the MEP.

**Municipal Separate Storm Sewer:** A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), which is all of the following:

- (1) owned or operated by a state, city, town, borough, township, county, district, association or other public body (created under state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater or other wastes,
- (2) designed or used for collecting or conveying stormwater,
- (3) not a combined sewer, and
- (4) not part of a Publicly Owned Treatment Works as defined at 40 CFR § 122.2.

**Municipal Separate Storm Sewer System (MS4):** All separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to 40 CFR §§ 122.26(b)(18), or designated as regulated under 40 CFR § 122.26(a)(1)(v).

**Municipality:** Any county, city, borough, town, township, school district, or any institution or any authority created by one or more of the aforementioned.

**MS4 TMDL Plan:** A plan that is required for a regulated small MS4 that discharges stormwater into a waterbody with an approved applicable wasteload allocation (WLA) in a TMDL. The MS4 TMDL Plan shall detail measures that will be implemented to make measurable progress in substantially reducing the applicable pollutant loads specified in the applicable WLA of the TMDL, as soon as practicable, consistent with the TMDL. In addition, the MS4 TMDL Plan shall include a timeline, with milestones, that specifies when the pollutant load reductions set

forth in the WLA will be attained. Implementation of the MS4 TMDL Plan may be phased, in accordance with the timeline, and can be adaptive, iterative and dynamic. The MS4 TMDL Plan shall be evaluated and updated by the permittee continuously, as necessary. The term "implement" includes any action that may be necessary for the permittee to ensure the proper operation and maintenance of all pollutant control measures identified in, or associated with, the MS4 TMDL Plan.

**National Pollutant Discharge Elimination System (NPDES):** A permit issued under 25 Pa. Code Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) for the discharge or potential discharge of pollutants from a point source to surface waters.

**New Permittee:** Any municipality that has been designated as a regulated small MS4 and has not previously obtained coverage under PAG-13 or obtained an Individual NPDES MS4 Permit.

**NOI:** The Notice of Intent for Coverage under the NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems.

**Non-structural BMP:** Actions that involve management and source controls such as: (1) Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; (3) education programs for developers and the public about minimizing water quality impacts; (4) other measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, maintenance, and spill prevention.

**Outfall:** A "Point Source" as defined by 40 CFR § 122.2 is the point where an MS4 discharges stormwater to other surface waters of this Commonwealth. This does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream and are used to convey waters of the Commonwealth (40 CFR § 122.26 (b) (9)).

**Owner or operator:** The owner or operator of any "facility" or "activity" subject to regulation under the NPDES program.

**Permittee:** Refers to the owner or operator of a regulated small municipal separate storm sewer system seeking to discharge under, and pursuant to, the terms of this General Permit, and thereby agreeing to fully comply with all terms set forth therein. Permittees assume all responsibility for meeting conditions of coverage under this General Permit.

**Point Source:** As defined by 25 Pa. Code § 92a.2, any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated aquatic animal production facility, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged.

**Pollutant:** Any contaminant or other alteration of the physical, chemical, biological, or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of The Clean Streams Law, 35 P.S. § 691.1.

**Pollution:** Shall be construed to mean contamination of any waters of the Commonwealth such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, including but not limited to such contamination by alteration of the physical, chemical or biological properties of such waters, or change in temperature, taste, color or odor thereof, or the discharge of any liquid, gaseous, radioactive, solid or other substances into such waters. The department shall determine when a discharge constitutes pollution, as herein defined, and shall establish standards whereby and wherefrom it can be ascertained and determined whether any such discharge does or does not constitute pollution as herein defined. The Clean Streams Law, 35 P.S. § 691.1.

**Regulated Small MS4:** Any small MS4 that is covered by the federal Phase II stormwater program, either through automatic nationwide designation under 40 CFR § 122.32(a)(1) (via the Urbanized Area criteria) or by designation on a case-by-case basis by DEP pursuant to 40 CFR § 122.32(a)(2). "Regulated small MS4s" are a sub-set of "small MS4s."



**Riparian Forest Buffer (Riparian Buffer):** An area of permanent vegetation consisting of native trees, shrubs, forbs and grasses along surface water that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and buffer land use activities from surface waters.

**Section 303(d) Listed Waters:** Stream segments placed on a list when, based on existing and readily available data and/or information, the technology-based effluent limitations required by the federal Clean Water Act, more stringent effluent limitations, and other pollution control requirements are not sufficient to implement an applicable water quality standard and a TMDL is needed.

**Small Municipal Separate Storm Sewer System (Small MS4):** All separate storm sewers that are:

- (1) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity.
- (2) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR §§122.26(b)(4) and (7), or designated under 40 CFR § 122.26(a)(1)(v).
- (3) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares.

**Storm Sewershed:** The catchment area that drains into the storm sewer system based on the surface topography in the area served by the storm sewer.

**Stormwater:** Runoff from precipitation, snow melt runoff and surface runoff and drainage. "Stormwater" has the same meaning as "Storm Water."

**Stormwater Management Program (SWMP):** A comprehensive program prepared by the applicant and approved by DEP to manage the quality of stormwater discharged from the municipal separate storm sewer system. Permittees are required to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the regulated small MS4s to the MEP, to protect water quality and quantity, and to satisfy the appropriate water quality requirements of the Pennsylvania Clean Streams Law and the CWA and regulations promulgated thereto. Permittees using the NPDES MS4 General Permit (PAG-13) are required to implement the SWMP in Appendix A of the Authorization to Discharge.

**Structural BMP:** Storage practices including, but not limited to, wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches.

**Surface Waters:** Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds and constructed wetlands used as part of a wastewater treatment process.

**Total Maximum Daily Load (TMDL):** The sum of individual wasteload allocations for point sources, load allocations for nonpoint sources, a margin of safety, and natural background. TMDLs can be expressed in terms of mass per time, toxicity or other appropriate measures.

**Urbanized Area (UA):** Land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the United States Bureau of the Census and as determined by the latest available decennial census. The UA outlines the extent of automatically regulated areas. UA maps are available at: <http://www.epa.gov/npdes/stormwater/urbanmaps> or at: <http://www.epa.gov/enviro/html/em/index.html>

**Wasteload Allocation (WLA):** The portion of a surface water's loading capacity that is allocated to existing and future point source discharges.

**Water Quality Criteria:** Numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses.

**Water Quality Standards:** The combination of water uses to be protected and the water quality criteria necessary to protect those uses.

**Waters of the Commonwealth:** Any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

## 2. EFFLUENT LIMITATIONS AND OTHER REQUIREMENTS FOR PAG-13

- a. The permittee shall implement, enforce and report on the Stormwater Management Program (SWMP) as set forth in Appendix A, designed to reduce the discharge of pollutants from the regulated small MS4s to the MEP, to protect water quality and quantity, and to satisfy the appropriate water quality requirements of the Clean Water Act, the Pennsylvania Clean Streams Law, and regulations promulgated thereto.
- b. The SWMP shall include Best Management Practices (BMPs) to comply with the following six minimum control measures (MCMs) in the following areas:
  1. Public Education and Outreach on Stormwater Impacts
  2. Public Involvement/Participation
  3. Illicit Discharge Detection and Elimination
  4. Construction Site Stormwater Runoff Control
  5. Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities
  6. Pollution Prevention/Good Housekeeping for Municipal Operations
- c. The SWMP as set forth in Appendix A of this permit contains DEP's approved approach for satisfying each of the six MCMs. The SWMP in Appendix A describes each MCM and the permit requirements, including BMPs and measurable goals. Permittees operating under this General Permit shall implement the SWMP in Appendix A in its entirety. Any permittee that chooses not to use the SWMP in Appendix A shall submit an Individual NPDES MS4 Permit application that contains a proposed written SWMP that meets the regulatory requirements.
- d. New permittees shall enact and implement within the first year of permit coverage, either an appropriate MS4 Stormwater Management Ordinance; an Ordinance from an applicable Act 167 Stormwater Management Plan approved by DEP in 2005 or later; or an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. The permittee must satisfy these requirements in accordance with the information provided by the permittee in the Notice of Intent.  
  
Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.
- e. The permittee shall ensure that its SWMP, including its stormwater management ordinance(s), is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharges from its regulated small MS4s (40 CFR 122.4(i) and 40 CFR 122.44(d)(1)).
- f. The permittee shall develop and maintain adequate legal authorities to implement all parts of this general permit, including the attached SWMP.
- g. The permittee shall maintain adequate funding and staffing to implement and manage all provisions of the attached SWMP.
- h. Sharing responsibility
  1. Implementation of one or more of the minimum control measures may be shared with another entity, or the other entity may fully take over implementation of the measure. Because the permittee is responsible for meeting all permit conditions regardless of its delegations to other entities, the permittee should take steps to ensure that:
    - i. The other entity, in fact, implements the control measures in the regulated small MS4 area;
    - ii. The particular control measures as implemented by the other entity, or components of control measures, are at least as protective of water quality as the corresponding permit requirement.
    - iii. The other entity agrees to implement the control measures on behalf of the permittee. The agreement between the parties shall be documented in writing and retained by the permittee with the SWMP and records for this general permit.

2. The permittee shall perform reasonable oversight and the permittee remains responsible for compliance with the obligations of this General Permit if any other entity fails to implement any of the control measures (or any components thereof).
  - i. The permittee shall submit reports to the Department as described in Part B, Section 3.d. below.



## PART B

### STANDARD CONDITIONS

#### 1. RESPONSIBILITIES

- a. **Duty to Comply.** The permittee shall comply with all terms and conditions of this General Permit. Any permit non-compliance constitutes a violation of the Pennsylvania Clean Streams Law and the federal Clean Water Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification or denial of a permit or permit renewal. Financial distress does not relieve the permittee of the terms and conditions of this General Permit.
- b. **Penalties for Violations of Permit.** The permittee may be subject to criminal and/or civil penalties for violations of the terms and conditions of this General Permit under Section 602 and 605 of the Clean Streams Law, 35 P.S. Sections 691.602 and 691.605, and under the Clean Water Act as specified in 40 CFR Sections 122.41(a)(2) and (3).
- c. **Need to Halt or Reduce Activity Not a Defense.** The permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this General Permit.
- d. **Penalties and Liability.** Nothing in this General Permit may be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA (33 U.S.C. §1321) or Section 106 of the Comprehensive Environmental response, Compensation, and Liability Act, 42 U.S.C. § 9606.
- e. **Periodic report (periodic reports, periodically report):** First term permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit all required information in annual reports. Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall provide all required information in periodic progress reports submitted in permit years one (1), three (3), and with the renewal NOI or renewal application in year five (5) (also see Part B.3.d).
- f. **Property Rights.** The issuance of this General Permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- f. **Severability.** The provisions of this General Permit are severable. If any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.
- g. **Other Laws.** Nothing in this General Permit may be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.
- h. **Right of Entry.** Pursuant to Sections 5(b) and 305 of the Pennsylvania Clean Streams Law (35 P.S. §§ 691.5(b) and 691.305), 25 Pa. Code Chapter 92a, section 1917-A of the Administrative Code, section 308 of the CWA and 40 CFR § 122.41 (i), the permittee shall allow an authorized representative of EPA or DEP, upon the presentation of credentials and other documents, as may be required by law, to:
  - i. Enter upon the permittee's premises where a regulated activity is located or conducted or where records must be kept under the conditions of this General Permit;
  - ii. Have access to and copy at reasonable times, any records that must be kept under the terms and conditions of this General Permit;
  - iii. Inspect any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required under this General Permit;
  - iv. Sample or monitor any substances or parameters, including the discharge of stormwater, at any location within the regulated small MS4.
- i. **Penalties for Falsification of Reports.** Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other

document submitted or required to be maintained under this General Permit, including reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years or by both. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§ 4903-4904.

- j. **Penalties for Falsification of Monitoring Systems.** The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this General Permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the Clean Water Act. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§ 4903-4904.
- k. **Test Procedures.** With the exception of the field screening conducted under the Illicit Discharge Detection and Elimination measure, wherever monitoring or sampling may be required, it shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the Authorization to Discharge or have been approved by DEP in writing.
- l. **Removed Substances.** Solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters or drinking water, implementation of BMPs, or operating or maintaining the regulated small MS4, shall be managed and disposed of in accordance with the requirements of the Solid Waste Management Act, 35 P.S. § 6018.101, *et seq.*, and the Clean Streams Law, 35 P.S. §§ 691.1 *et seq.*, and in a manner such as to prevent any pollutant in such materials from adversely affecting the environment.
- m. **BMP Implementation and Facilities Construction, Operation and Maintenance.** The permittee shall properly design, build, operate, and maintain all facilities and systems of treatment and control, including BMPs and any stormwater pollution prevention or management plans, which are installed or used by the permittee to achieve compliance with the conditions of this General Permit. The permittee shall ensure that BMPs are planned, designed, implemented, and maintained to minimize or eliminate the impacts of stormwater runoff to the maximum extent practicable for BMPs associated with the Stormwater Management Program and to reduce the discharge of pollutants consistent with applicable TMDLs for BMPs associated with approved MS4 TMDL Plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures and requires the operation of backup or auxiliary facilities, BMPs, or similar systems, installed or implemented by a permittee only when necessary to achieve compliance with the conditions of this General Permit.
- n. **Adverse Impact.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this General Permit that has a reasonable likelihood of adversely affecting human health or the environment.
- o. **Monitoring Requirement.** The Department may require monitoring of an individual discharge as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources. If the permittee is required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan pursuant to Condition C.1. herein, the permittee shall conduct monitoring of the BMPs and other measures undertaken pursuant to such section in order to demonstrate that measurable progress toward meeting the pollutant load reductions is being achieved consistent with the TMDL.

## 2. MANAGEMENT REQUIREMENTS

### a. **Permit Modification, Termination, or Revocation and Reissuance**

1. This General Permit may be modified, suspended, revoked, reissued, or terminated during its term for any of the causes specified in 25 Pa. Code Chapters 92a and 102, as applicable.
2. The Department may modify, revoke, suspend, or terminate previously issued coverage under this General Permit and require the stormwater discharger to apply for and obtain an Individual NPDES MS4 Permit in accordance with 25 Pa. Code Chapters 92a and 102, as applicable.
3. The filing of a request by the permittee or co-permittee for a permit or coverage modification, revocation, reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not eliminate any existing permit conditions.
4. Permit modification or revocation shall be conducted according to 25 Pa. Code Chapters 92a and 102, as applicable.

**b. Duty to Provide Information**

1. The permittee shall furnish to DEP, within a reasonable time, any information that DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Permit or coverage approved under this General Permit or to determine compliance with this General Permit.
2. The permittee shall furnish to DEP, upon request, copies of records that are required to be kept under the conditions of this General Permit.
3. When the permittee becomes aware of a failure to submit any relevant facts; of the existence of incorrect information in the Notice of Intent, or in any other report to DEP; the permittee shall promptly submit documents to correct such facts or information.
4. The permittee shall give advance notice to DEP of any planned physical alterations or additions to the regulated small MS4 which could, in any way, substantially affect the quality and/or quantity of stormwater discharged from the regulated small MS4.

- c. Operation and Maintenance Requirements.** The Stormwater Management Program (Appendix A), MS4 stormwater management ordinance(s), and MS4 TMDL Plan, if required, shall include provisions to ensure that proper operation and maintenance is performed on all stormwater BMPs and all pollutant reduction BMPs that discharge through the regulated small MS4. The requirement to perform proper operation and maintenance of BMPs that discharge through the regulated small MS4s applies to the owners and operators of all such BMPs, including the permittee.

**3. MONITORING, REPORTING, AND RECORD KEEPING**

The permittee shall evaluate program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals.

- a. Records of field investigations.** When the permittee conducts monitoring of illicit discharges pursuant to MCM #3, samples and measurements taken shall be representative of the monitored activity. Records of monitoring information shall include:

1. The date, exact place, and time of sampling, measurements, or observations;
2. The name(s) of the individual(s) who performed the sampling, measurements, or observations;
3. The date(s) when sample analyses were performed;
4. The names of the individuals who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analysis.

- b. Retention of Records.** The permittee shall retain copies of the documentation related to the SWMP developed in accordance with this General Permit for a minimum of three years, and until at least one year after coverage under this General Permit terminates. The permittee shall retain all records of all monitoring information, copies of all reports required by this General Permit, and records of all data used to complete the NOI until at least one year after coverage under this General Permit terminates. In addition, the permittee shall retain on site, at all times, a complete copy of the NOI, this General Permit, and any authorizations received from DEP pursuant to this General Permit, until at least one year after coverage under this General Permit terminates. This period may be explicitly modified by alternative provisions of this General Permit or extended by request of DEP at any time.

**c. Signatory Requirements**

1. All reports and NOI applications required by the permit and other information requested by DEP shall be signed and certified by a principal executive officer or ranking elected official or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - i. The authorization is made in writing by a person described above and submitted to DEP with the reports.
  - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall

responsibility for environmental matters for the organization. (A duly authorized representative may be either a named individual or any individual occupying a named position).

2. **Changes in Authorized Individuals or Positions.** If an authorization for an individual or a position to submit reports to DEP is no longer accurate because a different individual or position has responsibility for the overall operation of the regulated small MS4, a new authorization satisfying the above requirements shall be submitted to DEP prior to, or together with, any reports, information, or applications to be signed by the newly authorized representative.

3. **Progress Reports Shall Include the Following Signed and Dated Certification:**

"I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**d. Periodic Reports (Annual Reports and Progress Reports)**

1. New permittees and all permittees with any portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit annual reports to DEP reporting on SWMP activities, Chesapeake Bay Pollutant Reduction Plan activities, and MS4 TMDL Plan activities performed during the preceding permit year. The report shall be in the format provided by the Department. Report Forms are available on DEP's website at <http://www.dep.state.pa.us/>, Keyword: Stormwater.
2. Renewal permittees with no portion of a regulated small MS4 discharging stormwater into the Chesapeake Bay Watershed shall submit Progress Reports to DEP documenting the SWMP and MS4 TMDL Plan activities that were performed during the preceding reporting time interval.
3. Permittees shall submit the appropriate report form, available on the DEP's website.
4. The reports shall include information regarding (but not limited to):
  - i. Status of compliance with the conditions of this General Permit and progress towards meeting the measurable goals of each MCM;
  - ii. Status of progress towards achieving the statutory requirements of reducing the discharge of pollutants to the MEP and complying with water quality standards.
  - iii. Assessment of the appropriateness of the BMPs;
  - iv. Steps to be taken to address any deficiencies in the BMPs or other aspects of the SWMP developed by the permittee;
  - v. Results of information collected and analyzed during the reporting period;
  - vi. Summary of stormwater activities planned during the next reporting cycle;
  - vii. Any proposed changes to the permittee's SWMP, including changes to BMPs, measurable goals, or responsible parties;
  - viii. Notices, intergovernmental agreements, and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations;
  - ix. Progress with implementation of the MS4 TMDL Plan, including a summary of implementation and monitoring data of all control measures and of all BMPs implemented in connection with the MS4 TMDL Plan;
  - x. For new permittees, a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to the first year report certifying the enactment of either an ordinance from an Act 167 Plan approved by the Department in 2005 or later; enactment of the appropriate MS4 Stormwater Management Ordinance; or enactment of an ordinance(s) that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.
5. All Reports shall be submitted to the appropriate DEP Regional Office.
6. The deadlines for submission of Annual Reports and Progress Reports are as follows:
  - a. Annual Reports no later than 90 days following the end of each permit year.
  - b. Progress Reports no later than 60 days following the end of permit years one (1) and three (3). In

year five (5) the report shall be submitted with the NOI for renewal of this general permit or with an application for renewal in the case of individual permits.

#### 4. TRANSFER OF OWNERSHIP OR CONTROL

This General Permit is not transferable to any person except after notice to DEP.

- a. In the event of any pending change in control or ownership of the regulated small MS4 from which the authorized discharges emanate, the permittee shall notify DEP by letter of such pending change at least 30 days prior to the change in ownership or control. The letter shall be accompanied by the NOI and a written agreement between the existing permittee and the new owner or operator stating that the existing permittee shall be liable for violations of the General Permit up to and including the date of coverage transfer and that the new owner or operator shall be liable for permit violations under the General Permit after that date.
- b. After receipt of the required documentation, DEP shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer. Such requests shall be deemed approved unless DEP notifies the applicant otherwise within 30 days.
- c. DEP may require the new operator to apply for and obtain an Individual NPDES MS4 Permit.

#### 5. TERMINATION OF COVERAGE

- a. **Notice of Termination.** Where all stormwater discharges from a regulated small MS4 that are authorized by this General Permit are eliminated, the operator of the regulated small MS4 may submit a letter that is signed in accordance with Part B.3.c. (signatory requirements) of this General Permit certifying that:

"Under penalty of law, I hereby certify that all MS4 discharges that are authorized by this NPDES General Permit have been eliminated. I understand that by submitting this notice of termination I am no longer authorized to discharge stormwater from the regulated small MS4 under this General Permit, and that discharging stormwater or pollutants to surface waters of the Commonwealth is unlawful under the Clean Water Act and Clean Streams Law where the discharge is not authorized by an NPDES MS4 permit."

- b. **Addresses.** All letters certifying discharge termination are to be sent to the appropriate regional office of DEP.



## PART C

### OTHER CONDITIONS

#### 1. TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS:

If the regulated small MS4 discharges stormwater into any portion of a receiving water with applicable wasteload allocations (WLAs) in approved TMDLs, the permittee shall implement an approved MS4 TMDL Plan that is designed to achieve pollutant reductions consistent with the applicable wasteload allocations (WLAs) in the TMDLs. When an MS4 TMDL Plan is required, that MS4 TMDL Plan must be implemented according to the schedule in the approved plan.

For each regulated small MS4 that discharges stormwater into any portion of a receiving water with applicable wasteload allocations in approved TMDLs, permittees shall develop, submit to DEP for approval, and ensure implementation of a written MS4 TMDL Plan that is designed to achieve pollutant reductions consistent with the conditions and assumptions of the applicable wasteload allocations in the approved TMDLs. An MS4 TMDL Plan consists of two components: an MS4 TMDL Strategy and MS4 TMDL Design Details. The MS4 TMDL Strategy must include a narrative discussion of how the MS4 TMDL Plan will satisfy the requirements in Subsections a through c below. MS4 TMDL Design Details must be submitted to DEP within one year of the effective date of the approval of coverage under this permit for written approval by DEP. The complete MS4 TMDL Plan must satisfy the requirements in Subsections a through d below, including final design details for the BMPs that will be implemented during the term of this permit. MS4 TMDL Plans must include a timeline (schedule) with milestones and upon approval the plan must be implemented as soon as practicable, and no later than according to the approved timeline.

##### a. MS4 TMDL Plan for Impaired Waters with a TMDL

The MS4 TMDL Plan must be consistent with the conditions and assumptions of any applicable waste load allocation(s) (WLAs) in approved TMDLs, and it must include implementation of pollutant control measures that reduce pollutants in discharges from the regulated small MS4s as required by the wasteload allocations in the TMDLs. (Note: The MS4 TMDL Plan is in addition to the Stormwater Management Program (SWMP) in Appendix A required to satisfy the six mandatory MCMs).

The permittee's progress with implementation of the MS4 TMDL Plan must be fully described in every periodic report (see Part B.3.d of the Authorization to Discharge).

##### b. MS4 TMDL Plan, Required Contents

The MS4 TMDL Plan shall reduce pollutants in discharges from the regulated small MS4 as required by applicable wasteload allocations in approved TMDLs. The permittee must develop, submit to DEP for approval, and ensure implementation of the MS4 TMDL Plan in accordance with the approved timeline.

MS4 TMDL Plans shall include:

- i. The Title of TMDL or TMDL(s);
- ii. A list of the watershed name(s) and the eight-digit Hydrologic Unit Code (HUC) for the areas that discharge through the regulated MS4s to water bodies with TMDLs;
- iii. A list of the pollutant(s) and Waste Load Allocations (WLAs) assigned to each regulated small MS4 in each municipality covered by the NOI;
- iv. For each applicable TMDL, a list all of the municipalities subject to the TMDL within the area of the same eight digit HUC;
- v. For each applicable TMDL, a list of all the counties subject to the TMDL within the area of the same eight digit HUC;
- vi. Allocated pollutant loadings established in each applicable TMDL;
- vii. Reductions in pollutant loads (pounds or percent) necessary to meet each applicable TMDL or WLA;
- viii. For each regulated small MS4 outfall that discharges to waters with TMDLs, and for each TMDL, list all of the control measures and BMPs that will be implemented and reported to meet the TMDL.

Include a brief analysis to explain and justify the control measures and BMPs that were selected for implementation.

- ix. Permittees must include an analysis to show that implementation of the MS4 TMDL Plan, including the selected control measures and BMPs, will reduce the pollutant loads consistent with the applicable WLAs established in approved TMDLs. Permittees must include a timeline with milestones. Implementation of the MS4 TMDL Plan may be phased, in accordance with the timeline, and can be adaptive, iterative, and dynamic to show measurable progress toward meeting pollutant load reductions. Permittees must evaluate and update MS4 TMDL Plans as necessary, based on effectiveness in reducing pollutant discharge loads to meet approved TMDLs and applicable WLAs. MS4 TMDL Plans must include a process for evaluating control measures and BMPs, implementation efforts undertaken to date, and any changes made to the control measures or BMPs to obtain greater reductions in pollutant loadings from the outfalls of the regulated MS4s.
- x. Additional information deemed necessary by DEP or by the permittee for addressing the TMDL.

Information for TMDLs (including HUC numbers) can be found at [www.depweb.state.pa.us](http://www.depweb.state.pa.us), keyword: TMDL.

**c. Signature and Seal by Professional Engineer for MS4 TMDL Plans**

MS4 TMDL Strategies and an MS4 TMDL Plans must be signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State.

**d. Implementation Requirements**

Permittees shall develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan that is consistent with the applicable WLAs in approved TMDLs and that is designed to achieve the pollutant reductions established by applicable WLAs in the TMDLs. The term “implement” includes any action that may be necessary for the permittee to ensure the proper operation and maintenance of all pollutant control measures identified in, or associated with, the MS4 TMDL Plan. Permittees shall report on implementation of the MS4 TMDL Plan in each periodic report submitted under this General Permit. All pollutant control measures needed to reduce the pollutant load consistent with the TMDL shall be implemented as soon as practicable, in accordance with the MS4 TMDL Plan’s timeline, to make measurable progress in substantially reducing the applicable pollutant loads. Implementation of all measures can be adaptive, iterative, and dynamic. The MS4 TMDL Plan shall be evaluated and updated by the permittee as necessary, based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4s.

The MS4 TMDL Plan shall demonstrate that the required pollutant load reductions will be achieved, consistent with the TMDL, and the Plan must be implemented as soon as practicable. The MS4 TMDL Plan can demonstrate this by showing how measurable implementation progress will be made in substantially reducing applicable pollutant loads specified in the WLA, in accordance with the implementation timeline, including attainment of applicable milestones, along with the proposed end date for ultimate attainment of the pollutant load reductions set forth in the WLA.

Permittees shall report on progress with implementation of the MS4 TMDL Plan in all periodic reports and in the final report submitted with the next renewal application. Permittees must include the reductions in pollutant loads attained by implementation of control measures or BMPs, broken down measure by measure or BMP by BMP. Permittees must have physical pollutant removal measures installed on-the-ground in time for their successful operation to be documented in the periodic report or the progress report submitted at the end of the third year of coverage under this permit. Additional measurable substantial progress with installation of physical pollutant removal measures must be documented in the reports submitted with the next successive renewal NOI or application for a renewal permit.

**2. DISCHARGES TO IMPAIRED WATERS WITHOUT A TMDL:**

For each regulated small MS4 that discharges stormwater into any portion of a receiving water that is impaired, but does not have an approved TMDL, permittees shall ensure that new discharges from the permittee’s regulated small MS4s do not cause or contribute to exceedances of water quality standards. Permittees must:

- a. identify outfalls that discharge to impaired waters;
- b. identify additional or modified BMPs in the SWMP to ensure that new discharges do not cause or contribute to the impairment; and

- c. implement such BMPs and report on the status of each.

Permittees shall report on progress with implementation of the additional or modified BMPs in the each periodic report.

### 3. CHESAPEAKE BAY POLLUTANT REDUCTION PLANS:

Permittees with regulated small MS4s located in and discharging to receiving watersheds draining to the Chesapeake Bay:

- a. Shall within 12 months of the effective date of your Approval of General Permit Coverage, develop and submit to the Department for approval a Chesapeake Bay Pollutant Reduction Plan, including a schedule, to implement BMPs to reduce nitrogen, phosphorus, and sediment associated with existing stormwater discharges into regulated small MS4s discharging to receiving waters tributary to the Chesapeake Bay;
- b. The Chesapeake Bay Pollutant Reduction Plan required under this permit shall include a narrative description of the estimated area, including impervious cover, draining to the regulated small MS4, which may be based upon existing documents or data, such as zoning maps. This narrative description should identify areas where municipal infrastructure upgrades are planned and include an evaluation of the suitability for incorporation of green infrastructure, ESD, or LID BMPs into the planned municipal infrastructure upgrades. Where feasible, such practices should be incorporated into the municipal infrastructure upgrades and the included in the Chesapeake Bay Pollutant Reduction Plan BMP implementation schedule.
- c. The Chesapeake Bay Pollutant Reduction Plan required under this permit shall include BMPs that are designed to achieve reductions of nitrogen, phosphorus, and sediment consistent with the goals and objectives of the Pennsylvania Chesapeake Watershed Implementation Plan and must be signed and sealed by a professional engineer holding a valid license in good standing from the Pennsylvania Department of State;
- d. In the development of the Chesapeake Bay Pollutant Reduction Plan, the permittee shall evaluate and incorporate into the plan a combination of TMDL control measures listed in Section II.F of the NOI Instructions;
- e. Upon approval by DEP, the permittee shall ensure implementation of the Chesapeake Bay Pollutant Reduction Plan consistent with the approved schedule; and
- f. In the annual report to the Department required under Part B of this permit, the permittee shall include a list of BMPs implemented and associated reductions and a narrative description of the progress with development, submission to DEP for approval, and ensuring implementation of the Chesapeake Bay Pollutant Reduction Plan.
- g. Where the permittee is required to develop, submit to DEP for approval, and ensure implementation of an MS4 TMDL Plan to meet a WLA for nitrogen, phosphorus, or sediment as described in Part C(1) of this permit, the permittee may rely on and incorporate the portions of such MS4 TMDL Plan that address nitrogen, phosphorus, and sediment associated with existing stormwater discharges into the Chesapeake Bay Pollutant Reduction Plan.





## PAG-13 Appendix A Stormwater Management Program

This Appendix A contains the specific Best Management Practices (BMPs) and Measurable Goals that make up each permittee's Stormwater Management Program (SWMP) and that are required for the permittee to comply with this NPDES Municipal Separate Storm Sewer System (MS4) General Permit. There are six Minimum Control Measures (MCMs), which are required by Federal Regulations. Within each MCM, Pennsylvania is requiring the implementation of several BMPs under this General Permit. Associated with each BMP are Measurable Goals, which represent the means by which the permittees' accomplishments shall be reported and evaluated. For supplemental information on the six MCMs, permittees are encouraged to refer to [www.depweb.state.pa.us](http://www.depweb.state.pa.us), keyword: Stormwater. For a national perspective on guidance for setting measurable goals, please refer to EPA's publication "Measurable Goals Guidance for Phase II Small MS4s," available from EPA's website: <http://cfpub.epa.gov/npdes/stormwater/measurablegoals/index.cfm>.

Permittees implementing an approved local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR 122.44(s) are not eligible to use General Permit (PAG-13). Permittees currently operating under this General Permit who wish to propose a local or tribal QLP shall submit a complete written application for an Individual NPDES MS4 Permit together with complete documentation of their proposed local or tribal QLP.

### **MCM #1: Public Education and Outreach on Stormwater Impacts**

The following are the requirements for MCM #1 that are included in the Federal Regulations:

- *Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff (40 CFR Part 122.34(b)(1)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

**BMP #1:** Develop, implement and maintain a written Public Education and Outreach Program.

Measurable Goal: For new permittees a Public Education and Outreach Program (PEOP) shall be developed and implemented during the first year of coverage under this General Permit and shall be re-evaluated each permit year thereafter and revised as needed. For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

Recommendation: Refer to the EPA document, "[Getting In Step, A Guide for Conducting Watershed Outreach Campaigns](#)" (EPA 841-B-03-002, December, 2003), for guidance on developing and implementing the PEOP.

**BMP #2:** Develop and maintain lists of target audience groups that are present within the areas served by your regulated small MS4s. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.

Measurable Goal: For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually.

Recommendation: Utilize databases or spreadsheets to record and track this information and to allow for easy identification and creation of mailing lists easily retrievable.

**BMP #3:** You must annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a web site that includes general stormwater educational information, a general description of your Stormwater Management Program, and/or information about your stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., PA DEP and US EPA stormwater websites, and any other sources that will be helpful to readers). You must implement at least one of the following alternatives:

- a. Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
- b. Publish educational and informational items including links to DEP's and EPA's stormwater websites on your municipal website.

Measurable Goals: For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.

Recommendation: There are numerous example educational resources available from the sources listed at: [www.depweb.state.pa.us](http://www.depweb.state.pa.us), keyword: Stormwater. Periodically you should review and consider distributing or republishing stormwater information available from DEP, EPA and other sources. Your stormwater materials can be published in print format or electronically on the internet. Permittees can partner with other MS4s to meet this BMP.

**BMP #4:** Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, storm drain stenciling.

Measurable Goal: All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMPs #3 and #4.

Recommendations: Abundant educational resources and examples are available from numerous sources (see [www.depweb.state.pa.us](http://www.depweb.state.pa.us), keyword: Stormwater) that can be adapted for use, including the DEP brochure titled "When It Rains, It Drains." Since school districts frequently cross MS4 boundaries, seek out watershed groups or other qualified service providers to help assist and/or implement school education on behalf of the group of permittees. Permittees also can partner with other permittees to jointly arrange for school education.

## **MCM #2: Public Involvement / Participation**

The following are the requirements for MCM #2 that are included in the Federal Regulations:

- *Comply with applicable state and local public notice requirements when implementing a public involvement / participation program (40 CFR Part 122.34(b)(2)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved by MS4 permittees in Pennsylvania:

**BMP #1:** Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input.

Measurable Goal: New permittee's PIPP shall be developed and implemented during the first year of coverage under this General Permit. All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to:

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
- c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.

**BMP #2:** Prior to adoption of any ordinance required by this General Permit, provide adequate public notice and opportunities for public review, input, and feedback.

Measurable Goal: Advertise any proposed MS4 Stormwater Management Ordinance, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response.

**BMP #3:** Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implementation of your SWMP.

Measurable Goals: Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in the implementation of your SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

### **MCM #3: Illicit Discharge Detection and Elimination (IDD&E)**

The following are the requirements for MCM #3 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to detect and eliminate illicit discharges into the MS4 (40 CFR Part 122.34(b)(3)(i)).*
- *Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all surface waters of the Commonwealth that receive discharges from those outfalls (40 CFR Part 122.34(b)(3)(ii)(A)).*
- *To the extent allowable under State or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into your storm sewer system and implement appropriate enforcement procedures and actions (40 CFR Part 122.34(b)(3)(ii)(B)).*
- *Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to your system (40 CFR Part 122.34(b)(3)(ii)(C)).*
- *Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste (40 CFR Part 122.34(b)(3)(ii)(D)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

**BMP #1:** You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources. The program shall include the following:

- Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.
- Procedures for screening outfalls in priority areas during varying seasonal and meteorological conditions.
- Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.
- Procedures for eliminating an illicit discharge.
- Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.
- Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants).
- Procedures for program documentation, evaluation and assessment.

Measurable Goal: For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter. For renewal permittees, the existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.

Recommendation: For information on development and implementation of an IDD&E program, refer to: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* (CWP, October 2004). <http://cfpub.epa.gov/NPDES/stormwater/idde.cfm>

**BMP #2:** Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.

Measurable Goals: For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4<sup>th</sup>) year of permit

coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.

**BMP #3:** In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.

Measurable Goals: For new permittees, develop the map(s) by the end of the fourth (4<sup>th</sup>) year of coverage under the permit and update and maintain the map(s) as necessary each year of permit coverage thereafter. For renewal permittees, update and maintain the map(s) as necessary during each year of permit coverage.

**BMP #4:** Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.

Measurable Goals: For new permittees, all of the identified regulated small MS4 outfalls shall be screened during Dry Weather on at least two different occasions during the permit coverage term. In each permit coverage year, at least forty percent of the total number of outfalls should be screened.

For renewal permittees, each of the identified regulated small MS4 outfalls shall be screened at least once during each permit coverage term. For areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls shall be screened annually.

For each outfall, if the screening reveals dry weather flow, the discharge from the outfall and the area around the outfall shall be inspected visually for color, turbidity, sheen, floating or submerged solids; for adverse effects on plants or animals in proximity to the outfall; and for odor. If the outfall produces any odor, or if the visual inspection shows any indication that the discharge may contain pollutants, then samples of the discharge shall be collected for field and / or lab testing of selected chemical and biological parameters as part of a process to determine if the dry weather flow is illicit. Common parameters include pH, conductivity, E. Coli bacteria, fecal coliform bacteria, metals, suspended solids, dissolved solids, oils, ammonia, surfactants; chlorine; and fluoride.

You shall implement the IDD&E plan that you developed to address any non-storm water discharges. If an outfall does not have any dry weather flow, then sampling and testing are not needed.

For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet (attached below) excerpted from the *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* (CWP, October 2004). Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.

The results of outfall inspections and actions taken to remove or correct illicit discharges shall be summarized in periodic reports.

Recommendation: All permittees should consider conducting some outfall screenings during varying seasonal and meteorological conditions since it is possible for illicit discharges/connections to occur during different times of the year and during or just after rain events. Seasonal outfall screenings conducted during periods of both low and high groundwater conditions can be beneficial in identifying illicit discharges that can occur during these times.

**BMP #5:** Enact a stormwater management ordinance to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management

Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist.

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.

Measurable Goal: New permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit. Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to the Department.

**BMP #6:** Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

Educational outreach should include:

- Distribution of brochures and guidance for target audiences including schools;
- Programs to encourage and facilitate public reporting of illicit discharges;
- Organizing volunteers to locate and visually inspect outfalls and to stencil storm drains; and
- Implement and encourage recycling programs for common wastes such as motor oil, antifreeze and pesticides.

Measurable Goals: During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.



## **MCM #4: Construction Site Stormwater Runoff Control**

If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this MCM #4 and under BMPs #1 through #3 of MCM #5; therefore, all requirements are met for both this MCM #4 and BMPs #1 through #3 of MCM #5.

If you checked Option MCM #4.B in Section E(4)-(5) of the NOI, you are not relying on DEP's QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy this MCM #4 and BMPs #1 through #3 of MCM #5; therefore, you must implement and achieve all of the requirements in this MCM #4 and all of the requirements in MCM #5, including the Best Management Practices (BMPs) and the Measurable Goals.

The following are the requirements for MCM #4 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that equals one acre or more (40 CFR Part 122.34(b)(4)(i)).*
- *Develop and implement an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law (40 CFR Part 122.34(b)(4)(ii)(A)).*
- *Require construction site operators to implement appropriate erosion and sediment control best management practices (BMPs) (40 CFR Part 122.34(b)(4)(ii)(B)).*
- *Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. These wastes can include discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste (40 CFR Part 122.34(b)(4)(ii)(C)).*
- *Develop and implement procedures for site plan review which incorporate consideration of potential water quality impacts (40 CFR Part 122.34(b)(4)(ii)(D)).*
- *Develop and implement procedures for receipt and consideration of information submitted by the public (40 CFR Part 122.34(b)(4)(ii)(E)).*
- *Develop and implement procedures for site inspections and enforcement of control measures (40 CFR Part 122.34(b)(4)(ii)(F)).*

Under 25 Pa. Code, Chapter 102 of Department regulations issued under the authority of the Pennsylvania Clean Streams Law, the permittee (a municipality or a county) may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring a DEP permit until the DEP has issued an individual NPDES Permit, or DEP or a delegated county conservation district (CCD) has approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities.

**BMP #1:** Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. Your program shall provide for construction stormwater permitting, construction inspection, and enforcement of installation and maintenance of the necessary E&S control measures. Your program shall describe clearly how your program will be coordinated with DEP's NPDES Construction Stormwater Permitting program.

**Measurable Goals:** For new permittees, the written program for this MCM shall be developed during the first year of permit coverage; nevertheless, you are responsible for implementation of this MCM during entire term of this permit, including the time you are developing your program.

For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in

accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.

Recommendation: Develop a tracking system that summarizes your actions to comply with this BMP (e.g., number of active construction sites, inspections, enforcement actions, etc.) and which can be described in a summary report format.

**BMP #2:** The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance. (If Box 4A is checked, this is not required of those MS4s?)

Measurable Goal: Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit.

Measurable Goal: Permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment and implementation of a stormwater management ordinance that meets all requirements of this permit.

**BMP #3:** Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.

Measurable Goal: New permittees shall establish requirements to address this BMP by the end of the first year of permit coverage. Renewal permittees shall continue to implement existing requirements and update as necessary. This could be implemented by written municipal ordinance/code provisions, by standard notes on the site plans, by any other written format that accomplishes the objectives of this BMP, or by any combination of these measures. The goal of this BMP shall be communicated to construction site operators during pre-construction meetings. This BMP shall be implemented during each year of the MS4 permit. Permittees must prepare and maintain records of site inspections, including dates and results and you must maintain these records in accordance with the Retention of Records requirements in this Permit.

Recommendation: Verification of proper waste handling procedures can be determined at the same time that site E&S control inspections are conducted under BMP #1, described above.

**BMP #4:** Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.

Measurable Goal: Permittees shall establish and implement a tracking system to keep a record of any submitted public information as well as your response, actions, and results. This BMP shall be implemented during each year of coverage under this General Permit and information should be submitted with the each periodic report.

Recommendation: Develop a tracking system that can keep a record of information submitted by the public as well as your responses to such public inquiries. The tracking system should be capable of producing periodic summary reports.



## **MCM #5: Post-Construction Stormwater Management (PCSM) in New and Re-Development Activities**

If you checked Option MCM #4.A in Section E(4)-(5) of the NOI, then you are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under BMPs #1 through #3 of this MCM #5; therefore, all requirements are met for BMPs #1 through #3 of this MCM #5 and for all requirements under MCM #4.

If you checked Option MCM #4.B in Section E(4)-(5) of the NOI, you are not relying on DEP's QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy the requirements in BMPs #1 through #3 of this MCM #5; therefore, you must implement and achieve all of the requirements in this MCM #5 and all of the requirements in MCM #4, including the Best Management Practices (BMPs) and the Measurable Goals.

The following are the requirements for MCM #5 that are included in the Federal Regulations:

- *Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program shall ensure that controls are in place that would prevent or minimize water quality impacts (40 CFR Part 122.34(b)(5)(i)).*
- *Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community (40 CFR Part 122.34(b)(5)(ii)(A)).*
- *Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law (40 CFR Part 122.34(b)(5)(ii)(B)).*
- *Ensure adequate long-term operation and maintenance of BMPs (40 CFR Part 122.34(b)(5)(ii)(C)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

Note: Please refer to the definitions section of this PAG-13 permit for clarification of terms used in this MCM. In the following language, the term "**BMPs**" refers to **post-construction stormwater management controls and best management practices**.

**BMP #1:** Develop a written procedure that describes how the permittee shall address all required components of this MCM. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual. This plan shall include the following components:

- Minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment;
- Criteria for selecting and standards for sizing stormwater BMPs;
- Implementation of an inspection program to ensure that BMPs are properly installed;

**Measurable Goal:** The written procedure shall be developed by the end of the first year of permit coverage and be reviewed and updated every permit year thereafter, as needed. The intent of BMP #1 is for the permittee to describe how the listed tasks will be accomplished.

**BMP #2:** Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of this General Permit.

**Measurable Goal:** All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking

system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.

**BMP #3:** Ensure that controls are installed that shall prevent or minimize water quality impacts.

Measurable Goal: All qualifying development or redevelopment projects shall be inspected during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly). Permittees not relying on DEP's statewide QLP to satisfy requirements under this BMP shall summarize construction inspections and results in periodic reports. See BMP #6 for requirements related to post-construction inspection and tracking of PCSM BMPs to ensure that the operation and maintenance plan is being implemented.

**BMP #4:** The permittee shall enact, implement, and enforce an ordinance or other regulatory mechanism to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.

Measurable Goal: Within the first year of coverage under this permit, new permittees shall enact and implement a stormwater management ordinance that meets the requirements of this General Permit.

Measurable Goal: All permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this General Permit.

**BMP #5:** Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.

Measurable Goal: In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices and for each project list and track the BMPs that were used.

Measurable Goal: Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.

Recommendations: The U.S. EPA website provides publications on LID, including Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices Publication Number EPA 841-F-07-006, December 2007 at <http://www.epa.gov/owow/nps/lid/costs07/>. The Pennsylvania Standards for Residential Site Development, Pennsylvania Housing Research/Resource Center, The Pennsylvania State University, April 2007 at <http://www.engr.psu.edu/phrc/>.

**BMP #6:** Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).

Measurable Goal: Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.

Measurable Goal: An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include:

- all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
- the exact location of the PCSM BMP (e.g., street address);

Appendix A

- information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
- the type of BMP and the year it was installed;
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- the actual inspection/maintenance activities for each BMP;
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements

Recommendation: Develop a single system that supports recording and tracking the information specified in BMPs #3, #4 and #5.

## **MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations**

The following are the requirements for MCM #6 that are included in the Federal Regulations:

- *Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations (40 CFR Part 122.34(b)(6)(i)).*
- *Provide employee training to prevent and reduce stormwater pollution from activities such as parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance (40 CFR Part 122.34(b)(6)(i)).*

The following requirements, Best Management Practices (BMPs) and Measurable Goals are to be implemented and achieved:

**BMP #1:** Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).

**Measurable Goal:** By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.

**BMP #2:** Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good housekeeping measures, contain site-specific information, and address the following areas:

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.

**Measurable Goal:** During the first year of permit coverage, new permittees shall develop and implement a written O&M program that complies with BMPs #1 and #2. Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.

Guidance: Permittees may develop a single all encompassing written O&M program or they may develop separate programs for their stormwater system and for their vehicles.

**BMP #3:** Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee's overall stormwater management program that could affect municipal operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

Measurable Goal: During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.

Measurable Goal: Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

Guidance: The training requirements of this BMP can be met in various ways. Training can be:

- formal or informal;
- conducted on-site or off-site;
- conducted on-the-job or during dedicated training periods;
- conducted one-on-one or in a group setting (including with staff from other MS4s);
- conducted by municipal staff or consultants/volunteers;
- conducted via oral presentations/instructions and/or via written materials (e.g., SOP's, guidance manuals, tests).

Recommendation: For efficiency and cost savings, you may wish to arrange and schedule joint training events with other nearby operators of regulated small MS4s.



**OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



### Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oil <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

**A.3. PAG-13 AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER  
DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)  
(5/2016)**





**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

April 17, 2018

Thomas Palamar  
Pottsville City  
401 North Centre Street  
Pottsville, PA 17901-1330

Re: PAG-13 General Permit Approval  
Pottsville City MS4  
NPDES Permit No. PAG132276  
Authorization ID No. 1199560  
Pottsville City, Schuylkill County

Dear Mr. Palamar:

The Department of Environmental Protection (DEP) has reviewed your Notice of Intent (NOI) to operate under the PAG-13 General NPDES Permit and has determined that you are eligible for coverage under the statewide General Permit. Your permit is enclosed.

The statewide General Permit expires on March 15, 2023. **However, your coverage under the General Permit does not expire unless your coverage is revoked by DEP. A Notice of Intent (NOI) to renew your coverage is no longer required.** When the statewide General Permit is renewed, the permit will be published in the Pennsylvania Bulletin. Following publication of the final renewed General Permit, you must comply with the terms and conditions of the renewed General Permit or otherwise submit an application for an individual NPDES permit. You may submit an application for a waiver to DEP anytime during the term of your General Permit coverage if, due to changing circumstances, you become eligible for a waiver.

The General Permit contains numerous scheduled requirements that may apply to you. Please review DEP's "Summary of Scheduled Requirements" document, available at [www.elibrary.dep.state.pa.us](http://www.elibrary.dep.state.pa.us) (select "Permit and Authorization Packages", "Clean Water", and "PAG-13 MS4 General Permit").

The submission of Annual MS4 Status Reports is required by the General Permit. You must submit the annual reports to the DEP office that approved your General Permit coverage by September 30<sup>th</sup> of each year to describe activities conducted under the General Permit during the period of July 1 – June 30. You must also submit the annual installment payment of \$500 to DEP's Bureau of Clean Water by September 30<sup>th</sup> of each year. The first annual report and annual payment is due by September 30, 2018. The first annual report will cover the period from the end of your last reporting period under the previous PAG-13 General Permit until June 30, 2018.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S.

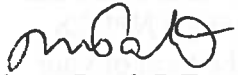
Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please contact Brian Burden at 570.826.2331 or brburden@pa.gov.

Sincerely,

  
Bharat Patel, P.E.  
Environmental Program Manager  
Clean Water Program

Enclosures

cc: N.E. Monitoring & Compliance  
Central Office, Division of Operations  
David L. Horst, P.E. – Alfred Benesch & Company  
File





**PAG-13**  
**AUTHORIZATION TO DISCHARGE UNDER THE**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**GENERAL PERMIT FOR STORMWATER DISCHARGES FROM**  
**SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**  
**APPROVAL OF COVERAGE**

**NPDES PERMIT NO. PAG132276**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

**Pottsville City**  
**401 North Centre Street**  
**Pottsville, PA 17901-1330**

is authorized to discharge from a regulated small municipal separate storm sewer system (MS4) located in **Pottsville City, Schuylkill County** to the **Schuylkill River, an Unnamed Tributary to the Schuylkill River, and West Branch Schuylkill River** in Watershed(s) **3-A** in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

**APPROVAL OF COVERAGE TO DISCHARGE UNDER THIS GENERAL NPDES PERMIT IS AUTHORIZED BEGINNING ON APRIL 17, 2018. WHEN THE GENERAL PERMIT IS RENEWED, REISSUED OR MODIFIED, THE FACILITY OR ACTIVITY COVERED BY THIS APPROVAL FOR COVERAGE MUST COMPLY WITH THE FINAL RENEWED, REISSUED OR MODIFIED GENERAL PERMIT.**

The authority granted by coverage under this General Permit is subject to the following further qualifications:

1. The permittee shall comply with the effluent limitations and reporting requirements contained in this General Permit.
2. Following initial coverage under this General Permit, the submission of Annual MS4 Status Reports in accordance with Part A III.D of the General Permit shall constitute the permittee's Notice of Intent (NOI) for continued coverage under the General Permit. The permittee shall be responsible for complying with the final renewed, reissued or amended General Permit. If the permittee is unable to comply with the renewed or amended General Permit, the permittee must submit an application for an individual NPDES permit within 90 days of publication of the final General Permit.
3. The NOI and its supporting documents are incorporated into this approval of coverage. If there is a conflict between the NOI or its supporting documents and the terms and conditions of this General Permit, the terms and conditions of this General Permit shall apply.
4. Failure to comply with the terms, conditions, or effluent limitations of this General Permit is grounds for enforcement action, permit termination or revocation.

**This approval of coverage is authorized by:**

\_\_\_\_\_  
**Bharat Patel, P.E.**  
**Environmental Program Manager**  
**Northeast Regional Office**  
**Department of Environmental Protection**



**PAG-13**  
**AUTHORIZATION TO DISCHARGE UNDER THE**  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**GENERAL PERMIT FOR STORMWATER DISCHARGES FROM**  
**SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*, the Department of Environmental Protection (DEP) hereby authorizes, by this General Permit, the discharge of stormwater from regulated small municipal separate storm sewer systems (MS4s) to surface waters in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Eligible dischargers who wish to be covered under this General Permit must submit a Notice of Intent (NOI) to DEP in accordance with the requirements of this General Permit, using the NOI form provided by DEP.

No new discharge may be commenced under this General Permit until the applicant complies with all of the following:

1. The applicant has submitted a complete Notice of Intent (NOI) in accordance with the requirements of this General Permit, using a NOI form provided by DEP.
2. The applicant has received a signed copy of the Approval of Coverage from DEP that authorizes coverage under the PAG-13 General Permit.

DEP may deny coverage under the PAG-13 General Permit and require submission of an application for an individual permit based on a review of the NOI or other relevant information, including monitoring data.

Once coverage is approved under the PAG-13 General Permit, coverage will continue when the PAG-13 General Permit is reissued, unless the permittee is otherwise notified by DEP. The submission each year of the Annual MS4 Status Report in accordance with Part A III.D of the General Permit shall constitute the permittee's NOI for continued coverage under the General Permit unless DEP notifies the permittee in writing that the submission of a new NOI is required.

## **SCOPE**

The PAG-13 General Permit is intended to provide NPDES permit coverage to regulated small MS4s for discharges of stormwater to surface waters. Permittees operating under this General Permit have been either automatically designated as regulated by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR § 122.32(a)(1) or designated as regulated by DEP under 40 CFR § 122.32(a)(2).

## **NOI REQUIREMENTS**

### **Deadlines for NOI**

MS4 permittees with existing NPDES permit coverage, MS4s that previously have been waived by DEP, and MS4s newly designated as a result of the 2010 census that are seeking coverage under this PAG-13 General Permit or a waiver must submit and DEP must receive an administratively complete and acceptable NOI by September 16, 2017. MS4s authorized to discharge under an individual NPDES permit who are seeking coverage under this General Permit may continue to discharge in accordance with the individual permit while their NOI and associated documents are being reviewed by DEP.

### **Contents of the NOI**

The NOI shall be signed in accordance with the signatory requirements of this General Permit and shall contain the information required in the NOI form.



## Where to Submit the NOI

An NOI is to be submitted to the regional office of DEP that has jurisdiction over the county where the MS4 is located.

## DISCHARGES AUTHORIZED BY THIS GENERAL PERMIT

Except where specifically prohibited under the “Discharges Not Authorized by this General Permit” section, this General Permit authorizes the discharge of stormwater to surface waters from regulated small MS4s. In addition, the following non-stormwater discharges are authorized by this General Permit as long as such discharges do not cause or contribute to pollution as defined in Pennsylvania’s Clean Streams Law:

1. Discharges or flows from firefighting activities.
2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
4. Diverted stream flows and springs.
5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
6. Non-contaminated HVAC condensation and water from geothermal systems.
7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.

In the event existing outfall(s) are identified during the term of General Permit coverage that were not identified on maps submitted as part of the NOI (where required), the permittee shall identify the outfall(s) in the subsequent Annual MS4 Status Report that is submitted to the DEP office that approved permit coverage. In the event new stormwater outfalls are proposed, the permittee shall submit written notification to the DEP office that approved permit coverage at least 60 days prior to commencing a discharge, unless such discharges would meet one or more of the criteria specified in the “Discharges Not Authorized By This General Permit” section, in which case an individual permit application must be submitted and an individual permit obtained prior to commencing a discharge.

## DISCHARGES NOT AUTHORIZED BY THIS GENERAL PERMIT

The following discharges are not authorized under the PAG-13 General Permit, and DEP may deny coverage under the General Permit when one or more of the following conditions exist:

1. The discharge, individually or in combination with other similar discharges, is or has the potential to be a contributor of pollution, as defined in the Pennsylvania Clean Streams Law, which is more appropriately controlled under an individual permit.
2. The discharger is not, or will not be, in compliance with one or more of the conditions of the General Permit.
3. The applicant has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, schedule of compliance or order issued by DEP.
4. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
5. Categorical point source effluent limitations are promulgated by the EPA for those point sources covered by the General Permit.
6. The discharge is not, or will not, result in compliance with an applicable effluent limitation or water quality standard.

7. Other point sources within the MS4 require issuance of an individual permit, and issuance of both an individual and a General Permit for the facility would constitute an undue administrative burden on DEP.
8. The discharge from the regulated small MS4 is or would be to a surface water classified as a High Quality (HQ) or an Exceptional Value (EV) water under 25 Pa. Code Chapter 93 (relating to Water Quality Standards).
9. The discharge contains toxic or hazardous pollutants, or any other substance which, because of its quantity, concentration or physical, chemical or infectious characteristics, may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into surface waters.
10. The discharge individually or cumulatively has the potential to cause significant adverse environmental impact or have been determined by DEP to have caused impairment to the surface waters receiving the discharge(s).
11. The discharge would adversely affect a listed endangered or threatened species or its critical habitat.
12. The MS4 is covered by an individual permit, and coverage under this General Permit would result in less stringent effluent limitations or terms and conditions.
13. DEP determines that the denial of coverage is necessary for any other reason to ensure compliance with the Federal Clean Water Act, the Pennsylvania Clean Streams Law or DEP regulations.
14. The regulated MS4 is a large or medium MS4 as defined in 40 CFR §§ 122.26(b)(4) or (7).
15. The permittee is implementing a local or tribal Qualifying Local Program (QLP) pursuant to 40 CFR 122.44(s) that is not the state's program as outlined in 25 Pa. Code Chapter 102.
16. The regulated small MS4 is assigned a wasteload allocation (WLA) (either specific to the MS4 or general) in a Total Maximum Daily Load (TMDL) approved by the U.S. Environmental Protection Agency (EPA) for local surface waters, where the pollutant(s) of concern are nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation or total suspended solids), and the MS4 is identified in the "MS4 Requirements Table" (see definitions) as needing to complete a TMDL Plan.
17. The regulated small MS4 1) discharges to waters impaired for nutrients and/or sediment without an EPA-approved TMDL or discharges to the Chesapeake Bay watershed; 2) is identified in DEP's "MS4 Requirements Table"; and 3) has not developed and submitted a Pollutant Reduction Plan (PRP) with the NOI to reduce pollutant loading for the cause(s) of impairment.
18. The discharge will be commingled with sources of non-stormwater unless such non-stormwater discharges are identified in the "Discharges Authorized by this General Permit" section of this General Permit or are in compliance with a separate NPDES permit and do not cause or contribute to pollution.
19. Stormwater discharges associated with industrial activity as defined in 40 CFR §§ 122.26(b)(14)(i)-(ix) and (xi).
20. Stormwater discharges associated with construction activity as defined in 40 CFR § 122.26(b)(14)(x) or 40 CFR § 122.26(b)(15).

**THE AUTHORITY GRANTED BY THIS GENERAL PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:**

1. If the permittee submits a timely NOI for coverage under this General Permit (i.e., received by DEP on or before September 16, 2017) and the previous General Permit expires, the permittee is authorized to continue discharging under the terms and conditions of this General Permit. The permittee must comply with all terms and conditions in this General Permit with the exception of requirements that do not take effect until DEP's approval of coverage, as specified in this General Permit.
2. DEP may require a permittee with discharge(s) authorized by this General Permit to apply for and obtain an individual permit by notifying the permittee in writing that an individual permit application is required. Any interested person may petition DEP to take action under this paragraph.

DEP's notice will include the following:


- A brief statement of the reason(s) for this decision;
- An individual permit application form;
- A deadline for the owner or operator to submit the application; and
- A statement that on the effective date of the individual permit, coverage under this General Permit shall automatically terminate.

If a permittee fails to submit an individual permit application required by DEP under this paragraph in a timely manner, then the applicability of this General Permit to the permittee is automatically terminated at the end of day specified for submission of the application.

3. Any person authorized to discharge by this General Permit may request to be excluded from the coverage of this General Permit by applying for an individual permit.
4. When an individual permit is issued to a person whose discharge(s) are covered by this General Permit, the applicability of this General Permit is automatically terminated on the effective date of the individual permit. When an individual permit is denied to a person whose discharge(s) are covered by this General Permit, the person may continue discharging if all eligibility requirements under this General Permit are met.
5. This General Permit will expire 5 years from the date of its issuance. DEP will publish a notice in the *Pennsylvania Bulletin* of the draft reissued General Permit or of any amendments to this General Permit. After a comment period, notice of the final reissued or amended General Permit will be published in the *Pennsylvania Bulletin*. The permittee shall be responsible for complying with the final renewed, reissued or amended General Permit. If the permittee is unable to comply with the renewed, reissued or amended General Permit, the permittee must submit an application for an individual permit within 90 days of publication of the final renewed, reissued or amended General Permit.
6. If DEP decides to administratively extend this General Permit, DEP will publish a notice in the *Pennsylvania Bulletin*. The terms and conditions of the General Permit will continue during the period of administrative extension. Permittees with existing coverage under the General Permit will continue to have coverage, unless otherwise notified by DEP. DEP will not approve new coverage under the General Permit during the period of administrative extension.
7. Following approval of coverage under this General Permit, if the permittee encounters a condition affecting eligibility under this General Permit as identified above ("Discharges Not Authorized by this General Permit") and does not provide a remedy to correct that condition, coverage under this General Permit may be revoked in writing by DEP, and DEP may require the permittee to obtain an individual permit. Coverage under this General Permit may be revoked if there is evidence indicating potential or actual adverse impacts to water quality as a result of the permittee's discharge(s).
8. No condition of this General Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations or local ordinances.
9. Following initial coverage under this General Permit, the submission of an Annual MS4 Status Report in accordance with Part A III.D of the General Permit shall constitute the permittee's Notice of Intent (NOI) for continued coverage under the General Permit. The permittee is authorized to discharge in accordance with the terms of the General Permit immediately upon submission of the Annual MS4 Status Report.
10. The permittee shall comply with the requirements of this General Permit in accordance with the schedules contained herein. A summary of the scheduled requirements contained in this General Permit is available (see Document ID No. 3800-PM-BCW0100I).

General Permit  
(PAG-13) Issued

By



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Lee A. McDonnell, P.E.  
Director  
Bureau of Clean Water

Effective: March 16, 2018

Expires: March 15, 2023

## PART A

### EFFLUENT LIMITATIONS, REPORTING AND RECORDKEEPING REQUIREMENTS

#### I. EFFLUENT LIMITATIONS

- A. This General Permit establishes effluent limitations in the form of implementation of a Stormwater Management Program (SWMP), as specified in Part C I of this General Permit, to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable. The permittee shall comply with Minimum Control Measures (MCMs) and best management practices (BMPs) in Part C I of this General Permit, which constitutes compliance with the standard of reducing pollutants to the maximum extent practicable.
- B. All discharges from regulated small MS4s must comply with all applicable requirements established in accordance with 25 Pa. Code Chapters 91-96, 102, and 105 of DEP's rules and regulations. For all MS4s covered under this General Permit, DEP may, upon written notice, require additional BMPs or other control measures to ensure that the water quality standards of the surface waters receiving stormwater discharges are attained.

#### II. DEFINITIONS

*Best Management Practices (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce pollutant loading to surface waters of this Commonwealth. The term includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

*Clean Water Act (CWA)* means the Federal Water Pollution Control Act, as amended, 33 U.S.C.A. §§ 1251 - 1387.

*Cleaning Agent* means any product, substance or chemical other than water that is used to clean the exterior surface of vehicles.

*Designated Uses* are those uses specified in 25 Pa. Code §§ 93.4(a) and 93.9a – 93.9z for each water body or segment whether or not they are being attained. (25 Pa. Code § 93.1)

*Dry Weather* means a condition in which there are no precipitation, snowmelt, drainage or other events producing a stormwater discharge for more than 48 consecutive hours.

*Existing Permittee* means any entity that has been designated as a regulated small MS4 and has previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

*Existing Uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards. (25 Pa. Code § 93.1)

*Illicit Connection* means any physical connection to a municipal separate storm sewer system that can convey illicit discharges into the system and/or is not authorized or permitted by the permittee.

*Illicit Discharge* means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except non-stormwater discharges as described in the "Discharges Authorized by this General Permit" section of this General Permit. Examples of illicit discharges include dumping of motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, animal wastes, or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-stormwater waste into a municipal separate storm sewer system. Illicit discharges can be accidental or intentional.

**Impaired Waters** means surface waters that fail to attain one or more of its designated uses under 25 Pa. Code Chapter 93 and as listed in Categories 4 and 5 of Pennsylvania's Integrated Water Quality Monitoring and Assessment Report.

**Integrated Water Quality Monitoring and Assessment Report** means the report published every other year by DEP to report on the conditions of Pennsylvania's surface waters to satisfy sections 305(b) and 303(d) of the CWA.

**Intermittent Stream** means a body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges. (25 Pa. Code § 92a.2)

**Load Allocation** means the portion of a surface water's loading capacity that is assigned or allocated to existing and future nonpoint sources and natural quality. (25 Pa. Code § 96.1)

**Low Impact Development (LID)** means site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.

**MS4 Requirements Table** is a compilation of information regarding Pennsylvania MS4s, surface waters that receive stormwater discharges from MS4s, surface water impairments and TMDLs that is posted to DEP's website, [www.dep.pa.gov/MS4](http://www.dep.pa.gov/MS4). The MS4 Requirements Table has been assembled by DEP to assist MS4 permittees in determining applicable requirements for the development of plans and implementation of BMPs, as well as eligibility for the PAG-13 General Permit. In general, the MS4 Requirements Table will be updated prior to each renewal of this General Permit based on DEP's latest published Integrated Water Quality Monitoring and Assessment Report.

**Municipal separate storm sewer** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(8))

**Municipal Separate Storm Sewer System (MS4)** means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to 40 CFR §§ 122.26(b)(4), (b)(7), and (b)(16), respectively, or designated under 40 CFR § 122.26(a)(1)(v). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(18))

**Municipality** means a city, town, borough, county, township, school district, institution, authority or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes or other wastes. (25 Pa. Code § 92a.2)

**New Permittee** means any entity that has been designated as a regulated small MS4 and has not previously obtained permit coverage under the PAG-13 General Permit or obtained an Individual NPDES MS4 Permit.

**NOI** means the Notice of Intent for coverage under the NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems.

**Non-Municipal Permittee** means a regulated small MS4 that is not a municipality, e.g., military bases, large hospital or prison complexes, and highways and other thoroughfares.

**Non-Structural BMPs** means actions that involve management and source controls such as: (1) policies and ordinances that provide requirements and standards to direct growth to identified areas, promote redevelopment, protect areas such as wetlands and riparian areas, maintain and/or increase open space, provide buffers along water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) education programs for developers and the public about minimizing water quality impacts; (3) measures such as minimizing the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, street sweeping, and source control measures such as good housekeeping, maintenance, and spill prevention; and other BMPs as referenced in Chapter 5 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

**Ordinance** means a law enacted by the government of a municipality.

**Outfall** means a point source as defined by 40 CFR § 122.2 at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(9))

**Owner or Operator** means the owner or operator of any “facility” or “activity” subject to regulation under the NPDES program. (25 Pa. Code § 92a.3(b)(1) and 40 CFR § 122.2)

**Permittee** means the owner or operator of a regulated small MS4 authorized to discharge under the terms of this General Permit.

**Point Source** means a discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, Concentrated Aquatic Animal Production Facility (CAAP), Concentrated Animal Feeding Operation (CAFO), landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. (25 Pa. Code § 92a.2)

**Pollutant** means any contaminant or other alteration of the physical, chemical, biological, or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of the Pennsylvania Clean Streams Law, 35 P.S. § 691.1. (25 Pa. Code § 92a.2)

**Qualifying Development or Redevelopment Project** means an earth disturbance activity that requires an NPDES permit for stormwater discharges associated with construction activity per 25 Pa. Code Chapter 102.

**Regulated Small MS4** means any small MS4 that is covered by the federal Phase II stormwater program, either through automatic nationwide designation under 40 CFR § 122.32(a)(1) (via the Urbanized Area criteria) or by designation on a case-by-case basis by DEP pursuant to 40 CFR § 122.32(a)(2). “Regulated small MS4s” are a subset of “small MS4s” as defined in this section.

**Riparian Forest Buffer** means an area of permanent vegetation consisting of native trees, shrubs, forbs and grasses along surface water that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and buffer land use activities from surface waters.

**Small Municipal Separate Storm Sewer System (Small MS4)** means an MS4, as defined in this section, that is not a large or medium MS4 pursuant to 40 CFR §§ 122.26(b)(4) and 122.26(b)(7). The term small MS4 includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.26(b)(16))

**Standard Operating Procedure (SOP)** means a policy or set of procedures that are enacted by a non-municipal permittee to implement a stormwater management program.

**Storm Sewershed** means the land area that drains to an individual MS4 outfall from within the jurisdiction of the MS4 permittee. The term “combined storm sewershed” means the drainage areas of all MS4 outfalls that discharge to a specific surface water or to waters within the Chesapeake Bay watershed.

**Stormwater** means runoff from precipitation, snow melt runoff and surface runoff and drainage. “Stormwater”



has the same meaning as “storm water.” (25 Pa. Code § 92a.2)

**Structural BMPs** means stormwater storage and management practices including, but not limited to, wet ponds and extended detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; infiltration practices such as infiltration basins and infiltration trenches; and other BMPs as referenced in Chapter 6 of the Pennsylvania Stormwater BMP Manual (363-0300-002).

**Surface Waters** means perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds and constructed wetlands used as part of a wastewater treatment process. (25 Pa. Code § 92a.2)

**Total Maximum Daily Load (TMDL)** means the sum of individual waste load allocations for point sources, load allocations for nonpoint sources and natural quality and a margin of safety expressed in terms of mass per time, toxicity or other appropriate measures. (25 Pa. Code § 96.1)

**Urbanized Area (UA)** means land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the United States Bureau of the Census and as determined by the latest available decennial census. The UA outlines the extent of automatically regulated areas.

**Wasteload Allocation (WLA)** means the portion of a surface water’s loading capacity that is allocated to existing and future point source discharges. (25 Pa. Code § 96.1)

**Water Quality Criteria** means numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses. (25 Pa. Code § 93.1)

**Water Quality Standards** means the combination of water uses to be protected and the water quality criteria necessary to protect those uses. (25 Pa. Code § 92a.2)

### III. MONITORING, REPORTING AND RECORDKEEPING

A. Where samples are collected and analyzed or measurements are taken under this General Permit, the permittee shall assure:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(1))
2. Records of monitoring information shall include (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(3)):
  - a. The date, exact place, and time of sampling or measurements.
  - b. The individual(s) who performed the sampling or measurements.
  - c. The date(s) analyses were performed.
  - d. The individual(s) who performed the analyses.
  - e. The analytical techniques or methods used.
  - f. The results of such analysis.
3. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(j)(4))

B. Records Retention – All records of monitoring activities and results, copies of all plans and reports required by this General Permit, and records of all data used to complete the application for this General Permit shall be retained by the permittee for at least 5 years from the date of the sample measurement, report or application. Such records must be submitted to DEP upon request or as required for annual reports. The permittee must make records available to the public at reasonable times during regular business hours. (25 Pa. Code § 92a.3(c), 40 CFR §§ 122.34(g)(2) and 122.41(j)(2))

C. Proper Operation and Maintenance (O&M) – The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including stormwater BMPs, that are installed or used by the permittee to achieve compliance with the conditions of this permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(e))

D. Reporting Requirements

1. The permittee shall submit a complete Annual MS4 Status Report using DEP's annual report template (3800-FM-BPNPSM0491) to the DEP regional office that issued General Permit coverage approval by September 30 of each year.
  - a. For existing permittees, the first annual report submitted to DEP under this General Permit shall have a reporting period starting from the end of the latest annual or progress report period (under the previous General Permit) to June 30, 2018. The first annual report is due by September 30, 2018. For new permittees, the first annual report is due by September 30 following the first year of General Permit coverage.
  - b. Following the first annual report, the reporting period shall thereafter be July 1 - June 30, and the report shall be due by September 30.
2. In addition to the Annual MS4 Status Report submitted to the DEP regional office, a check or money order in the amount of \$500.00, which is an installment of the NOI fee, shall be submitted to DEP's Central Office, made payable to "Commonwealth of Pennsylvania." The fee shall be submitted by September 30 of each year to the following address:

PA Department of Environmental Protection  
Bureau of Clean Water  
Rachel Carson State Office Building  
400 Market Street, PO Box 8466  
Harrisburg, PA 17105-8466

For existing permittees, the first fee is due by September 30, 2018. For new permittees, the first fee is due by September 30 following the first year of General Permit coverage.

3. The permittee shall submit the Annual MS4 Status Report and fee to DEP electronically upon receipt of written notification from DEP.
4. Unanticipated Non-Compliance or Potential Pollution Reporting
  - a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b) listed below:
    - (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.
    - (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
    - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

- b. The permittee shall report any non-compliance which may endanger health or the environment in accordance with the requirements of 40 CFR § 122.41(l)(6). These requirements include the following obligations:
- (i) 24 Hour Reporting - The permittee shall orally report any non-compliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances.
  - (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any non-compliance which may endanger health or the environment. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.
  - (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(6)(iii))

5. Other Non-Compliance

The permittee shall report all instances of non-compliance not reported under paragraph D.4 of this section or specific requirements of compliance schedules, at the time Annual Reports are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph D.4.b.(ii) of this section. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(7))

6. Signatory Requirements

- a. Completed Annual Reports and all other reports, NOIs, and information submitted to DEP shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:
- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
  - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
  - For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.
- b. If signed by a person other than the above, the person must be a duly authorized representative of the permittee. A person is a duly authorized representative only if:
- The authorization is made in writing by a person described in paragraph a., above, and submitted to DEP.
  - The authorization specifies either an individual or a position having responsibility for the operation of the regulated system, facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- c. Changes in Signatory Authorization - If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the system or facility, a new authorization satisfying the requirements of paragraphs 6.a and 6.b, above, must be submitted to DEP prior to or together with any reports, information or NOI to be signed by an authorized representative.

**PART B**  
**STANDARD CONDITIONS**

**I. MANAGEMENT REQUIREMENTS**

A. Compliance

The permittee must comply with all conditions of this General Permit. Any permit non-compliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(a))

B. Permit Modification, Termination, or Revocation and Reissuance

1. Permit coverage may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code §§ 92a.72 and 92a.74 and 40 CFR § 122.41(f).
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any General Permit condition. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(f))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating coverage under this General Permit, or to determine compliance with this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(h))
3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to DEP, it shall promptly submit the correct and complete facts or information. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l)(8))
4. The permittee shall give advance notice to the DEP office that approved permit coverage of any planned physical alterations or additions to the regulated small MS4. Notice is only required when: 1) the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29(b), or 2) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(l))

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(d))

## II. PENALTIES AND LIABILITY

### A. Violations of Permit Conditions

1. Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR § 122.41(a)(2).
2. Any person or municipality, who violates any provision of this General Permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

### B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or non-compliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A. § 4904 and 40 CFR §§ 122.41(j)(5) and (k)(2).

### C. Liability

1. Nothing in this General Permit shall be construed to relieve the permittee from civil or criminal penalties for non-compliance pursuant to Section 309 of the CWA or Sections 602, 603 or 605 of the Clean Streams Law.
2. Nothing in this General Permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the CWA and the Clean Streams Law.

### D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(c))

## III. OTHER RESPONSIBILITIES

### A. Right of Entry

Pursuant to Section 5(b) of Pennsylvania's Clean Streams Law (35 P.S. § 691.5(b)), 25 Pa. Code Chapter 92a and 40 CFR § 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(1))
2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this General Permit; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(3))
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph B.2 of this section, permit coverage may be transferred by the permittee to a new owner or operator only if this General Permit coverage has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(a))
  2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
    - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(1))
    - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(2))
    - c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue coverage under this General Permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (25 Pa. Code § 92a.3(c) and 40 CFR § 122.61(b)(3))
    - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any non-compliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)
  3. In the event DEP does not approve transfer of coverage under this General Permit, the new owner or controller must submit a new NOI.
- C. Property Rights - The approval of coverage under this General Permit does not convey any property rights of any sort, or any exclusive privilege. (25 Pa. Code § 92a.3(c) and 40 CFR § 122.41(g))
- D. Duty to Reapply - The submission of the Annual MS4 Status Reports (3800-FM-BPNPSM0491) in accordance with Part A III.D of this General Permit constitutes the submission of an NOI for continued coverage under the General Permit. In addition, the permittee must submit an NOI (3800-PM-BCW0100b) to continue coverage under this General Permit when notified by DEP in writing.
- E. Severability – The provisions of this General Permit are severable. If any provision of this General Permit or the application of any provision of this General Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this General Permit shall not be affected.

## PART C

### SPECIAL CONDITIONS

#### I. STORMWATER MANAGEMENT PROGRAM (SWMP)

A. The permittee must develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and Pennsylvania Clean Streams Law, as described in paragraph B, below. There are six Minimum Control Measures (MCMs) that comprise the SWMP. Specific BMPs are identified under each MCM. The permittee shall demonstrate compliance with the SWMP through the submission of Annual MS4 Status Reports due by September 30 each year.

#### B. Minimum Control Measures (MCMs)

1. **MCM #1:** Public Education and Outreach on Stormwater Impacts. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(1))

The permittee shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

- a. **BMP #1:** Develop, implement and maintain a written Public Education and Outreach Program.

- (1) For new permittees, a written Public Education and Outreach Program (PEOP) shall be developed and implemented within one year following approval of coverage under this General Permit, and shall be re-evaluated each year thereafter and revised as needed.

- (2) For existing permittees, the existing PEOP shall be reviewed annually and revised as necessary.

The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

- b. **BMP #2:** Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4. In most communities, the target audiences shall include residents, businesses (including commercial, industrial and retailers), developers, schools, and municipal employees.

- (1) For new permittees, the lists shall be developed within one year following approval of coverage under this General Permit, and reviewed and updated as necessary every year thereafter.

- (2) For existing permittees, the lists shall continue to be reviewed and updated annually.

- c. **BMP #3:** The permittee shall annually publish at least one issue of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a description of the permittee's SWMP, and/or information about the permittee's stormwater management activities. The list of publications and the content of the publications must be reviewed and updated at least once during each year of permit coverage. Publications should include a list of references (or links) to refer the reader to additional information (e.g., DEP and EPA stormwater websites, and any other sources that will be helpful to readers). The permittee must implement at least one of the following alternatives:

- Publish and distribute in printed form a newsletter, a pamphlet or a flyer containing information consistent with this BMP.
- Publish educational and informational items including links to DEP's and EPA's stormwater websites on the permittee's website.



- (1) For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage.
- (2) In subsequent years, and for existing permittees, the list of items published and the content in these items shall be reviewed, updated, and maintained annually.

The permittee's publications shall contain stormwater educational information that addresses one or more of the six MCMs.

- d. **BMP #4:** Distribute stormwater educational materials and/or information to the target audiences using a variety of distribution methods, including but not limited to: displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements (e.g., at bus and train stops/stations), bill stuffers, presentations, conferences, meetings, fact sheets, giveaways, and storm drain stenciling.

All permittees shall select and utilize at least two distribution methods annually. These are in addition to BMP #3, above.

2. **MCM #2:** Public Involvement / Participation. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(2))

The permittee shall comply with applicable state and local public notice requirements when implementing a public involvement / participation program.

- a. **BMP #1:** Develop, implement and maintain a written Public Involvement and Participation Program (PIPP) which describes various types of possible participation activities and describes methods of encouraging the public's involvement and of soliciting the public's input.

The PIPP for new permittees shall be developed and implemented within one year following approval of coverage under this General Permit. All permittees shall reevaluate the PIPP annually and make revisions as necessary.

The PIPP shall include, at a minimum:

- (1) Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- (2) Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or surface waters receiving the permittee's discharges.
- (3) Making Annual MS4 Status Reports and all other plans, programs, maps and reports required by this General Permit available to the public on the permittee's website, at the permittee's office(s), or by mail upon request.

- b. **BMP #2:** The permittee shall advertise to the public and solicit public input on the following documents prior to adoption or submission to DEP:

- Stormwater Management Ordinances (for municipalities);
- Standard Operating Procedures (SOPs) (for non-municipal entities); and
- Pollutant Reduction Plans (PRPs), including modifications thereto.

- (1) For Ordinances and SOPs, the permittee shall provide notice to the public; provide opportunities for public comment; document and evaluate the public comments; and document the permittee's responses to the comments prior to finalizing the documents. The permittee shall provide this documentation to DEP upon request.

- (2) For PRPs, public participation requirements are specified in Appendices D and E of this General Permit.

- c. **BMP #3:** Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods. This shall include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement the SWMP.
- (1) The permittee shall solicit public involvement and participation from target audience groups on the implementation of the SWMP. The solicitation can take the form of public meetings or other events. The public shall be given notice in advance of each meeting or event. During the meetings or events, the permittee should present a summary of progress, activities, and accomplishments with implementation of the SWMP, and the permittee should provide opportunities for the public to provide feedback and input. The presentation can be made at specific MS4 events or during any other public meeting. Existing permittees shall conduct at least one public meeting that includes information on SWMP implementation by March 15, 2023; new permittees shall conduct at least one public meeting within 5 years following approval of General Permit coverage.
  - (2) The permittee shall document and report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in the community.
  - (3) The permittee shall also document and report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.
3. **MCM #3:** Illicit Discharge Detection and Elimination (IDD&E). (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(3))

The permittee shall develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's regulated small MS4.

- a. **BMP #1:** The permittee shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4. The program shall include the following:
- Procedures for identifying priority areas. These are areas with a higher likelihood of illicit discharges, illicit connections or illegal dumping. Priority areas may include areas with older infrastructure, a concentration of high-risk activities, or past history of water pollution problems.
  - Procedures for screening outfalls in priority areas. The program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.
  - Procedures for identifying the source of an illicit discharge when a contaminated flow is detected at a regulated small MS4 outfall.
  - Procedures for eliminating an illicit discharge.
  - Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems (e.g., on-lot septic systems, sanitary piping) with storm drain systems.
  - Mechanisms for gaining access to private property to inspect outfalls (e.g., land easements, consent agreements, search warrants) and for investigating illicit connections and discharges.

- Procedures for program documentation, evaluation and assessment. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.
  - Procedures for addressing information or complaints received from the public.
- (1) For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter.
  - (2) For existing permittees, the IDD&E program shall continue to be implemented and evaluated annually.
- b. **BMP #2:** The permittee shall develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).
- (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- c. **BMP #3:** In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.
- (1) For new permittees, the map(s) must be developed and submitted to DEP as an attachment to an Annual MS4 Status Report by September 30, 2022 or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit, whichever is later.
  - (2) For existing permittees, the existing map(s) shall be updated and maintained as necessary during each year of coverage under this General Permit.
- d. **BMP #4:** The permittee shall conduct dry weather screenings of its MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, in accordance with Part A III.D.4 of this General Permit.
- (1) For new permittees, all of the identified regulated small MS4 outfalls shall be screened during dry weather at least twice within the 5-year period following approval of coverage under this General Permit.
  - (2) For existing permittees, each of the identified regulated small MS4 outfalls shall be screened during dry weather at least once by March 15, 2023. For areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls shall be screened annually during each year of permit coverage.
  - (3) If a discharge is observed from any outfall during dry weather screenings, the discharge shall be inspected for color, odor, floating solids, scum, sheen, and substances that result in observed

deposits in the surface waters. In addition, the discharge cannot contain substances that result in deposits in the receiving water or produce an observable change in the color, odor or turbidity of the receiving water.

If the discharge exhibits any of the above characteristics, or contains any other pollutants or causes an observed change in the surface waters, the permittee shall sample the discharge(s) for field and/or laboratory analysis of one or more common IDD&E parameters in order to determine if the dry weather flow is illicit. Possible parameters include, but are not limited to: pH, Conductivity, Fecal Coliform bacteria, Heavy Metals, Chemical Oxygen Demand (COD), 5-day Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Oil and Grease, Total Residual Chlorine (TRC) and Ammonia-Nitrogen. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. The permittee shall retain sample results with the inspection report in accordance with Part A III.B of this General Permit.

- (4) Each time an outfall is screened, the permittee shall record outfall observations, regardless of the presence of dry weather flow. All outfall inspections shall be documented on the MS4 Outfall Field Screening Report form (3800-FM-BCW0521), or equivalent. The report must be signed by the inspector and be maintained by the permittee in accordance with Part A III.B of this General Permit. If an outfall flow is determined by the permittee to be illicit, the actions taken to identify and eliminate the illicit flow shall also be documented.
  - (5) The permittee shall summarize the results of outfall inspections and actions taken to remove or correct illicit discharges in Annual MS4 Status Reports.
  - (6) If the permittee determines that an outfall cannot be accessed due to safety or other reasons, the permittee shall establish an "observation point" at an appropriate location prior to the outfall where outfall field screening shall be performed. If observation points are established by the permittee, such points shall be identified on the map required under BMP #2 of this section.
  - (7) Permittees must ensure that outfalls are properly maintained in accordance with Part C I.B.6.b of this General Permit.
- e. **BMP #5:** Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.
- (1) Municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances (non-municipal permittees and counties) shall develop and adopt an SOP that prohibits non-stormwater discharges consistent with this General Permit, and shall submit a copy of the SOP as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (3) Notice must be provided to DEP of the approval of any waiver or variance by the permittee that allows an exception to non-stormwater discharge provisions of an ordinance or SOP. This notice shall be submitted in the next Annual MS4 Status Report following approval of the waiver or variance.
- f. **BMP #6:** Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.
- (1) During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1.

The permittee shall establish and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of General Permit coverage for the public to use to notify the permittee of illicit discharges, illegal dumping or outfall pollution. The permittee shall respond to all complaints in a timely and appropriate manner. The permittee shall document all responses, including the action taken, the time required to take the action, and whether the complaint was resolved successfully.

- (2) Educational outreach may include: distribution of brochures and guidance for target audiences including schools; programs to encourage and facilitate public reporting of illicit discharges; organizing volunteers to locate and visually inspect outfalls and to stencil storm drains; and implement and encourage recycling programs for common wastes such as motor oil, antifreeze and pesticides.

4. **MCM #4:** Construction Site Stormwater Runoff Control. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(4))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #4. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

- a. **BMP #1:** The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.
- b. **BMP #2:** A municipality or county which issues building or other permits shall notify DEP or the applicable county conservation district (CCD) within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.
- c. **BMP #3:** Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.
  - (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of E&S control BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of E&S control BMPs by September 30, 2022 (existing permittees) or the first Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).

5. **MCM #5:** Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(5))

Permittees with coverage under the PAG-13 General Permit must rely on DEP's program for issuing NPDES permits for stormwater discharges associated with construction activities to satisfy MCM #5. In addition to relying on the state NPDES permit program for stormwater discharges associated with construction activities, the permittee shall implement the BMPs identified below.

- a. **BMP #1:** Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

- (1) Municipal permittees shall enact, implement, and enforce an ordinance to require the implementation of PCSM BMPs, including sanctions for non-compliance. All municipal permittees shall submit a copy of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) as an attachment to an Annual MS4 Status Report by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
  - (2) Permittees that lack the authority to enact ordinances shall develop, implement and enforce an SOP to require the implementation and maintenance of PCSM BMPs and submit the SOP to DEP by September 30, 2022 (existing permittees) or the fourth (4<sup>th</sup>) Annual MS4 Status Report following approval of coverage under this General Permit (new permittees).
- b. **BMP #2:** Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Guidance on implementing LID practices may be found on DEP's MS4 website, [www.dep.pa.gov/MS4](http://www.dep.pa.gov/MS4). Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Submission of an ordinance that is consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) will satisfy this BMP.
  - c. **BMP #3:** Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

An inventory of PCSM BMPs shall be developed by new permittees by the end of the first year of General Permit coverage and shall be continually updated during the term of coverage under the General Permit as development projects are reviewed, approved, and constructed. Existing permittees shall update and maintain its current inventory during the term of coverage under the General Permit. The permittee must track the following information in its PCSM BMP inventory:

- All PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
  - The exact location of the PCSM BMP (e.g., latitude and longitude, with street address).
  - Information (e.g., name, address, phone number(s)) for BMP owners and entities responsible for BMP O&M, if different from BMP owners.
  - The type of BMP and the year it was installed.
  - Maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources.
  - The actual inspection/maintenance activities conducted for each BMP.
  - An assessment by the permittee if proper O&M has occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.
6. **MCM #6:** Pollution Prevention / Good Housekeeping. (25 Pa. Code § 92a.32(a) and 40 CFR § 122.34(b)(6))

The permittee must develop and implement an O&M program that includes a training component and has the ultimate goal of preventing and reducing pollutant runoff from operations, facilities and activities under the control of the permittee (collectively, "operations"). The program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

- a. **BMP #1:** Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building

maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).

- (1) New permittees shall create an inventory of all operations and land uses that may contribute to pollution in stormwater runoff within areas of operations that discharge to the regulated small MS4 by the end of the first year of General Permit coverage, and review and update the inventory annually thereafter.
  - (2) All permittees must review and update the inventory each year of General Permit coverage, as necessary.
- b. **BMP #2:** Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4. The written O&M program shall stress pollution prevention and good housekeeping measures, contain site-specific information, and include the following:
- Management practices, policies, and procedures shall be developed and implemented to reduce or prevent the discharge of pollutants to the regulated small MS4s. The permittee shall consider eliminating maintenance area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
  - Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach the regulated small MS4s.
  - Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, salt / sand (anti-skid) storage locations and snow disposal areas. Controls for solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety must be consistent with the BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES General Permit for Stormwater Discharges Associated with Industrial Activity.
  - Procedures for the proper disposal of waste, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, street sweepings, and other debris.
- (1) New permittees shall develop and implement a written O&M program by the end of the first year of General Permit coverage and review and update the program each year thereafter.
  - (2) All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.
- c. **BMP #3:** Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. All relevant employees and contractors shall receive training (i.e., public works staff, building, zoning, and code enforcement staff, engineering staff, police and fire responders, etc.). Training topics shall include operation, inspection, maintenance and repair activities associated with any of the operations identified under BMP #1. Training must cover all relevant parts of the permittee's overall stormwater management program that could affect operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.



- (1) New permittees shall develop and implement a training program that identifies the training topics that will be covered and what training methods and materials will be used by the end of the first year of General Permit coverage.
- (2) All permittees must review and update the training program each year of General Permit coverage, as necessary.
- (3) Employee training shall occur at least annually and shall be documented in writing and reported in Annual MS4 Status Reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

## II. POLLUTANT CONTROL MEASURES AND POLLUTANT REDUCTION PLANS

Permittees with coverage under this General Permit that discharge to impaired waters are required to implement Pollutant Control Measures (PCMs) and Pollutant Reduction Plans (PRPs), as applicable. Permittees are encouraged to consult DEP's MS4 Requirements Table, available at [www.dep.pa.gov/MS4](http://www.dep.pa.gov/MS4), to determine the applicability of PCMs under Appendices A, B, and C and PRPs under Appendices D and E of this General Permit.

- A. PCMs are activities undertaken by the MS4 permittee to identify and control pollutant loading to impaired waters from MS4s, regardless of whether a TMDL has been approved. PCMs are BMPs and other strategies that are in addition to the permittee's SWMP identified in Part C I of this General Permit. PCMs must be implemented where the permittee 1) has at least one stormwater outfall that discharges to impaired waters, and 2) the "cause of impairment" is one or more of the causes listed in paragraphs A.1 through A.3, below.
  1. Where surface waters are impaired for metals (e.g., Iron, Manganese and Aluminum) and/or pH associated with Abandoned Mine Drainage (AMD), the permittee shall implement the PCMs identified in **Appendix A** of this General Permit, in accordance with the schedule therein.
  2. Where surface waters are impaired for Pathogens (e.g., Fecal Coliform), the permittee shall implement the PCMs identified in **Appendix B** of this General Permit, in accordance with the schedule therein.
  3. Where surface waters are impaired for Priority Organic Compounds (e.g., Polychlorinated Biphenyls (PCBs), pesticides, or other organic compounds), the permittee shall implement the PCMs identified in **Appendix C** of this General Permit, in accordance with the schedule therein.
- B. A PRP is a planning document prepared by the permittee which guides the selection and implementation of specific BMPs to reduce pollutant loading to surface waters. The objective of a PRP is to improve the condition of surface waters such that the waters eventually attain water quality standards and its designated and existing uses in accordance with 25 Pa. Code Chapter 93. A PRP shall be developed and submitted to DEP with the NOI if one or more of the following criteria are met:
  1. At the time of the NOI submission, the permittee has at least one MS4 outfall that discharges to surface waters within the Chesapeake Bay watershed, or otherwise has at least one discharge to storm sewers owned or operated by a different entity within the Chesapeake Bay watershed. Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix D** of this General Permit.
  2. At the time of the NOI submission, the permittee has at least one stormwater outfall that discharges to waters impaired for nutrients (i.e., nitrogen and/or phosphorus) and/or sediment (i.e., siltation), and a TMDL has not been approved for such waters, or a TMDL has been approved but no wasteload allocation (WLA) has been assigned by the TMDL for the permittee's discharge(s). Upon DEP's written approval of General Permit coverage, permittees shall implement the PRP in accordance with **Appendix E** of this General Permit.

## III. OTHER REQUIREMENTS

- A. Screenings and other solids collected by the permittee shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land

application, composting, processing, and storage of residual waste), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments.

- B. DEP may require monitoring of stormwater discharge(s) as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.
- C. The permittee shall ensure that its SWMP, including its Stormwater Management Ordinance(s) or SOPs, is designed to prevent increased loadings of pollutants and to not cause or contribute to a violation of water quality standards by any discharge from its regulated small MS4.
- D. The permittee shall develop and maintain adequate legal authorities, where applicable, and shall maintain adequate funding and staffing to implement this General Permit, including the SWMP contained in Part C I of this General Permit.
- E. In accordance with 40 CFR § 122.35, the permittee may rely on another entity to satisfy NPDES permit obligations to implement a minimum control measure if: (1) the other entity, in fact, implements the control measure; (2) the particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and (3) the other entity agrees to implement the control measure on the permittee's behalf. The permittee must specify in Annual MS4 Status Reports that it is relying on another entity to satisfy some of its NPDES permit obligations. The permittee remains responsible for compliance with permit obligations if the other entity fails to implement the control measure (or component thereof).



**A.4. NOV LETTER 12/6/2017**



**NOTICE OF VIOLATION**

December 6, 2017

**CERTIFIED MAIL NO. 7017 1450 0000 2190 1598**

Thomas Palamar  
Pottsville City  
401 N. Centre St.  
Pottsville, PA 17901-1330

Re: Failure to Provide Required Documentation  
Pottsville City MS4  
NPDES Permit No. PAG132276  
Pottsville City, Schuylkill County

Dear Mr. Palamar:

The Department of Environmental Protection (DEP) received your MS4 General Permit renewal application on September 21, 2017. After reviewing the application and other documentation submitted to DEP in the past, it's been determined that Pottsville City is in violation of the conditions of their permit.

Several requirements of the permit have not been met by Pottsville City, including the submission of:

- All documentation outlined in the Work Plan and Schedule from the letter Pottsville City sent to the U.S. EPA on February 8, 2016 (regarding the Administrative Order for Compliance and Request for Information)

Within 15 days of the date on this letter, please submit to DEP a schedule of compliance that will resolve the deficiencies noted above. The schedule of compliance shall include milestones intended to bring Pottsville City into compliance with the previously issued permit within 60 days of the date on this letter.

The failure to submit required permit documentation constitutes violations of 25 Pa. Code § 92a.41(8) and Section 5 of the Pennsylvania Clean Streams Law, 35 P.S. § 691.5; and may subject the permittee to civil penalties under Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

This notice of violation is neither an order nor any other final action of DEP. It neither imposes nor waives any enforcement action available to DEP under any of its statutes. If the DEP determines that further enforcement action is appropriate, you will be notified of the action.

If you have any questions concerning this notice, please contact me at 570.826.2331 or [brburden@pa.gov](mailto:brburden@pa.gov).

Sincerely,



Brian Burden, E.I.T.  
Project Manager  
Clean Water Program

cc: **Michael S. Hummel, P.E.** – Alfred Benesch & Company  
File

DEC 11 2017

BY: .....



**B. CORRESPONDENCE**



City Hall  
401 North Centre Street  
P.O. Box 50  
Pottsville, PA 17901



Telephone: 570-622-1234  
Facsimile: 570-628-4222  
[www.city.pottsville.pa.us](http://www.city.pottsville.pa.us)  
[mayor@city.pottsville.pa.us](mailto:mayor@city.pottsville.pa.us)

JAMES T. MULDOWNEY  
Mayor

February 8, 2016

Mr. Peter Gold  
NPDES Enforcement Branch (3WP42)  
Water Protection Division  
U.S. Environmental Protection Agency  
1650 Arch St.  
Philadelphia, PA 19103

**Subject: Docket No. CWA-03-2014-0185 DN  
Administrative Order for Compliance and Request for Information  
Project No. 30619.02**

Dear Mr. Gold:

The City of Pottsville is in receipt of the subject letter and Administrative Order for Compliance and Request for Information of May 29, 2014. We have submitted Annual Reports for the permit term 2008-2012. As you note, our reports indicate we have not met all of the six minimum controls (and added BMP's) for MCM #1, #4, #5, and #6 for years 2010 and 2011.

In 2011, we did indicate that we met MCM #4 and MCM #5 through an ordinance that requires developers of land over one acre to comply with E&S and PCSM requirements, that the developments must have letters of approval from the Schuylkill County Conservation District indicating such compliance in the plans, and that the City's Planning Commission and City Council will not approve plans until such approval is obtained. In addition, the City has enforced this ordinance/program for approval throughout 2010 and 2011. After further review in 2011 of the existing ordinance, we determined that it is in compliance with MCM #1 requirements. A copy of that ordinance is attached for your use.

Since receiving the Administrative Order, the City has developed a Work Plan and Schedule. One copy of this plan and schedule is enclosed for your consideration. One hard copy is maintained by the Pottsville City Administrator, and one is being sent to PADEP. The report will be made available on the Pottsville City web site in the near future. It will be updated in that format moving forward. Currently all the documents are available for the next 30 days on our engineer's FTP site accessible as follows:

Mr. Peter Gold  
NPDES Enforcement Branch (3WP42)  
Water Protection Division  
U.S. Environmental Protection Agency  
1650 Arch St.  
Philadelphia, PA 19103  
February 8, 2016  
Page 2

<http://www.benesch.com/ftp/logon.aspx>  
Password is: PottsMS4

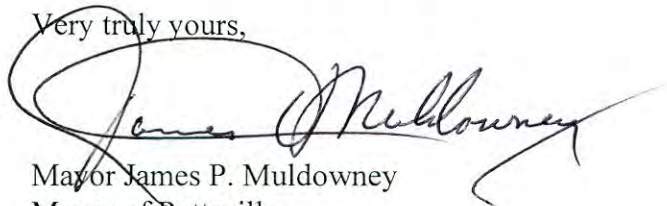
The intent of this plan is to guide the City into the appropriate actions and to document their actions to fully comply with the current MS4 permit cycle for 1/2/2014-1/1/2018. We anticipate being able to report full compliance to the maximum extent possible as we implement this updated plan.

Schuylkill County has not yet fully developed their Act 167 Stormwater Management Plan. We anticipate that we may make additions and/or refinements to this plan as we implement it and as the County's plan may develop in the future. We will submit revisions and provide plan and implementation documentation as requested.

The City has a goal of preventing point source pollution to the Commonwealth waters originating within the City as well as to provide further education and outreach to our citizens, our employees, developers, and interested groups to support this effort. We welcome your input and assistance in our efforts.

Thank you for your time and consideration in this matter. If you have any comments concerning the above, please contact our office.

Very truly yours,

A handwritten signature in black ink, appearing to read "James P. Muldowney". The signature is written in a cursive style with a large, looping initial "J".

Mayor James P. Muldowney  
Mayor of Pottsville

Attachments

cc: Mr. Michael S. Hummel, P.E., Alfred Benesch & Company  
Mr. Thomas Palamar, City of Pottsville

## Horst, David L.

---

**From:** Tiffany Reedy <treedy@pottsville.k12.pa.us>  
**Sent:** Tuesday, September 26, 2017 10:59 AM  
**To:** Hummel, Michael S.  
**Subject:** Fwd: Permission Request: Storm Drain Art at the High School

FYI

Sent from my iPhone

Begin forwarded message:

From: Virginia Vassalotti <vvassalotti@delawareestuary.org<mailto:vvassalotti@delawareestuary.org>>  
Date: September 26, 2017 at 10:49:59 AM EDT  
To: Tiffany Reedy <treedy@pottsville.k12.pa.us<mailto:treedy@pottsville.k12.pa.us>>  
Subject: Re: Permission Request: Storm Drain Art at the High School

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Please let me know if you have any more questions!

Thanks,  
Virginia

[Virginia Vassalotti, Schuylkill Action Network Coordinator at the Partnership for the Delaware Estuary | (302) 655-4990, x121]<<http://www.delawareestuary.org>>

[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikM3g1VXJtZWtxU28&revid=0B3h8gJtX8XikNSs1N3E0WE9iNHVTNTM4SUyYbWpvdIQ2N2JFPQ>] <<https://www.facebook.com/DelawareEstuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikZm1BZzNJVFFPS0k&revid=0B3h8gJtX8Xikem14bXRWaHRWTS94QWdLTENIYWNZVzdjUzVVPQ>] <<https://www.linkedin.com/company/delaware-estuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikdEtpOXhkSjBqLTg&revid=0B3h8gJtX8XikMnhEeE9JUXZmblg0d1JrLzAvY3VNUWF2c05jPQ>] <<https://twitter.com/delawareestuary>>

On Thu, Sep 7, 2017 at 3:34 PM, Tiffany Reedy <treedy@pottsville.k12.pa.us<mailto:treedy@pottsville.k12.pa.us>> wrote:  
Great! Thanks.

Tiffany L. Reedy  
Principal  
Pottsville Area High School  
16th Street and Elk Avenue  
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(570) 621-2960<tel:(570)%20621-2960>

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[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikZm1BZzNJVFPS0k&revid=0B3h8gJtX8Xikem14bXRWaHRWTS94QWdLTENIYWNZVzdjUzVVPQ>] <<https://www.linkedin.com/company/delaware-estuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikdEtpOXhkSjBqLTg&revid=0B3h8gJtX8XikMnhEeE9JUXZmblg0d1JrLzAvY3VNUWF2c05jPQ>] <<https://twitter.com/delawareestuary>>

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From: Virginia Vassalotti [mailto:vvassalotti@delawareestuary.org<mailto:vvassalotti@delawareestuary.org>]  
Sent: Wednesday, August 30, 2017 3:04 PM  
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Subject: Permission Request: Storm Drain Art at the High School

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There is a storm drain on the corner of Elk Ave & N. 16th St. Would the school be interested in having Kevin's artwork there to beautify the sidewalk, while educating students, teachers, and parents about where storm drains go?

The school would not have to do anything for the installation or maintenance. Attached is more details from the contest and the installation process. Please let me know if you have any questions.

Thanks and I look forward to hearing back from you, Virginia

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[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikdEtpOXhkSjBqLTg&revid=0B3h8gJtX8XikMnhEeE9JUXZmblg0d1JrLzAvY3VNUWF2c05jPQ>] <<https://twitter.com/delawareestuary>>

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## Horst, David L.

---

**From:** Hummel, Michael S.  
**Sent:** Tuesday, September 26, 2017 11:30 AM  
**To:** Tom Palamar (cityadministrator@city.pottsville.pa.us); Tom Whitaker (street-parks@city.pottsville.pa.us)  
**Cc:** Horst, David L.  
**Subject:** FW: Permission Request: Storm Drain Art at the High School

Tom, please see below - FYI. Please add documentation to our MS4 web site docs. Dave can help find the best location/appendix. Thanks.

Mike

Michael S. Hummel, P.E. | Project Manager Alfred Benesch & Company P 570-622-4055 / Ext: 3109: Direct: 570-624-4268

-----Original Message-----

From: Tiffany Reedy [mailto:treedy@pottsville.k12.pa.us]  
Sent: Tuesday, September 26, 2017 10:59 AM  
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WE9iNHVTNTM4SUyYbWpvdIQ2N2JFPQ] <<https://www.facebook.com/DelawareEstuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikZm1BZzNJVFPS0k&revid=0B3h8gJtX8Xikem14bXRWaHRWTS94QWdLTENIYWNZVzdjUzVVPQ>] <<https://www.linkedin.com/company/delaware-estuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikdEtpOXhkSjBqLTg&revid=0B3h8gJtX8XikMnhEeE9JUXZmblgOd1JrLzAvY3VNUWF2c05jPQ>] <<https://twitter.com/delawareestuary>>

On Thu, Sep 7, 2017 at 3:34 PM, Tiffany Reedy <[treedy@pottsville.k12.pa.us](mailto:treedy@pottsville.k12.pa.us)<<mailto:treedy@pottsville.k12.pa.us>>> wrote:  
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Principal  
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(570) 621-2960<[tel:\(570\)20621-2960](tel:(570)20621-2960)>

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[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikZm1BZzNJVFPS0k&revid=0B3h8gJtX8Xikem14bXRW aHRWTS94QWdLTENIYWNZVzdjUzVVPQ>] <<https://www.linkedin.com/company/delaware-estuary>>  
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## Horst, David L.

---

**From:** Rebecca Trefsger <rtrefsger@city.pottsville.pa.us>  
**Sent:** Monday, September 18, 2017 10:12 AM  
**To:** Hummel, Michael S.  
**Cc:** Horst, David L.  
**Subject:** RE: Permission Request: Storm Drain Art at the High School

Mike and Dave-the city approved this storm drain artwork. We have already let Virginia know. She is the person that submitted the request to us. Thanks.

Rebecca Trefsger  
Assistant to the City Administrator  
Project Coordinator  
401 North Centre Street  
Pottsville, PA 17901  
Phone: 570.622.1234 ext 346  
Fax: 570.628.4418

-----Original Message-----

From: Hummel, Michael S. [mailto:mhummel@benesch.com]  
Sent: Thursday, September 07, 2017 7:48 AM  
To: Horst, David L.; Tom Palamar (cityadministrator@city.pottsville.pa.us); Tom Whitaker (street-parks@city.pottsville.pa.us)  
Subject: FW: Permission Request: Storm Drain Art at the High School

Dave, Tom, Tom, please see the Storm Drain Art request below. If the City approves this, it can be documented and included in the MS4 Public Outreach and Participation portion of this year's requirements. Dave can help with the online documentation if needed. Please keep us updated on the City's decision.

Tom, we can review the remaining items necessary for the permit with the City as well so all gets done. Dry weather flow monitoring, annual meeting, municipal training, and outreach to the listed organizations comes to mind. Dave can help with the specifics. Thanks.

Mike

Michael S. Hummel, P.E. | Project Manager Alfred Benesch & Company P 570-622-4055 / Ext: 3109: Direct: 570-624-4268

From: Tiffany Reedy [mailto:treedy@pottsville.k12.pa.us]  
Sent: Thursday, September 07, 2017 7:06 AM  
To: Hummel, Michael S. <mhummel@benesch.com>  
Subject: FW: Permission Request: Storm Drain Art at the High School

Maybe you could use this for MS4...

Tiffany L. Reedy  
Principal  
Pottsville Area High School  
16th Street and Elk Avenue  
Pottsville, PA 17901

(570) 621-2960

From: Virginia Vassalotti [mailto:vvassalotti@delawareestuary.org]  
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To: Tiffany Reedy <treedy@pottsville.k12.pa.us<mailto:treedy@pottsville.k12.pa.us>>  
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Thanks and I look forward to hearing back from you, Virginia

[Virginia Vassalotti, Schuylkill Action Network Coordinator at the Partnership for the Delaware Estuary | (302) 655-4990, x121]<<http://www.delawareestuary.org>>

[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikM3g1VXJtZWtxU28&revid=0B3h8gJtX8XikNSs1N3EOWE9iNHVTNTM4SUYYbWpvdIQ2N2JFPQ>] <<https://www.facebook.com/DelawareEstuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikZm1BZzNJVFFPS0k&revid=0B3h8gJtX8Xikem14bXRWaHRWTS94QWdLTENIYWZVzdjUzVVPQ>] <<https://www.linkedin.com/company/delaware-estuary>>  
[<https://docs.google.com/uc?export=download&id=0B3h8gJtX8XikdEtpOXhkSjBqLTg&revid=0B3h8gJtX8XikMnhEeE9JUXZmblg0d1JrLzAvY3VNUWF2c05jPQ>] <<https://twitter.com/delawareestuary>>

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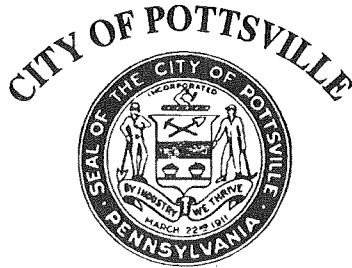
This email has been scanned for spam and viruses by Proofpoint Essentials. Click here<[https://us3.proofpointessentials.com/index01.php?mod\\_id=11&mod\\_option=logitem&mail\\_id=1504782373-PCU-kyUlhJa5&r\\_address=mhummel%40benesch.com&report=1](https://us3.proofpointessentials.com/index01.php?mod_id=11&mod_option=logitem&mail_id=1504782373-PCU-kyUlhJa5&r_address=mhummel%40benesch.com&report=1)> to report this email as spam.

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401 North Centre Street  
P.O. Box 50  
Pottsville, PA 17901



Telephone  
570-628-4417  
FAX  
570-628-4222

March 28, 2018

THOMAS A. PALAMAR  
City Administrator

CLEAN WATER PROGRAM  
COUNTY: \_\_\_\_\_  
MUNIC.: \_\_\_\_\_

APR 02 2018

FACILITY NAME: \_\_\_\_\_  
PERMIT#: \_\_\_\_\_  
FILE TYPE: \_\_\_\_\_

Mr. Brian Burden, EIT  
Clean Water Program  
Pennsylvania Department of Environmental Protection  
Northeast Regional Office  
2 Public Square  
Wilkes-Barre, PA 18701-1915

**Subject: City of Pottsville MS4  
NPDES Permit No. PAG132276  
Project No. 30799.20**

Dear Mr. Burden:

The City of Pottsville is in receipt of the Notice of Violation letter dated December 6, 2017 which requires to the City to submit all documentation outlined in the Work Plan and Schedule from the letter Pottsville City sent to the U.S. EPA on February 8, 2016. Much of the required documentation was sent previously to the PADEP either as part of the February 8, 2016 Work Plan and Schedule, the September 15, 2017 Notice of Intent for Coverage Under NPDES General Permit Application and the November 17, 2017 letter which transmitted the 2014-2015 and 2015-2016 progress reports. Listed below are the items identified in the Work Plan and Schedule and the present documentation of each item. We are only providing additional documentation that wasn't previously provided. The City will be working to update the Work Plan appendices on their website (<http://www.ci.pottsville.pa.us/ms4/>) so that all the documentation is available to the Department and the public in one single location.

- MCM #1 Public Education & Outreach on Stormwater Impacts – Schedule for 2014-2018
  - BMP 1 Develop written Public Education and Outreach program – **Pottsville MS4 Work Plan and Schedule contains the written program text and is detailed in the appendices. The Work Plan and Schedule will be updated in 2018 to reflect new permit requirements.**
  - BMP 2 – Develop list of target audience groups. Build on each group as indicated. **The Target Audience List is provided in Appendix C.2 of the Pottsville MS4 Work Plan and Schedule. The list is reviewed annually and updated accordingly.**
  - BMP 3 – Publish one newsletter, links to DEP/EPA - **The Newsletter is provided in Appendix C.3 of the Pottsville MS4 Work Plan and Schedule. The work plan is being updated to remove the newsletter and Public Access TV notification as the City has been updating and maintaining an active webpage in order to comply with the requirements of BMP #3.**
  - BMP 4 – Distribute Storm water education materials – **The Outreach Distribution Log is provided in Appendix C.4 of the Pottsville MS4 Work Plan and Schedule. An updated**

**log is attached as part of this letter as well as supporting documentation of the City's efforts.**

- **MCM #2 Public Involvement and Participation – Schedule for 2014-2018**
  - **BMP 1 – Develop written public involvement and participation program with opportunities for public involvement/decision making. Pottsville MS4 Work Plan and Schedule contains the written program text and is detailed in the appendices. The Work Plan and Schedule will be updated in 2018 to reflect new permit requirements.**
  - **BMP 2 – Advertise and provide opportunities for input of existing and proposed storm water ordinances. The City of Pottsville adopted a stormwater ordinance in 2013 as part of the 2014-2018 permit cycle. The Ordinance was duly advertised and a copy was previously provided to the PADEP. As part of the permit renewal process, the PADEP 2022 Model Ordinance was adopted by the City of Pottsville. The most recent Stormwater Ordinance was duly advertised and legally adopted by the City at their October 9, 2017 meeting. A copy was provided to DEP as part of the permit renewal and has since been added to the City's webpage.**
  - **BMP 3 – Solicit public involvement and participation from target audience groups. Include stenciling, screening, and other activities. The annual meetings for 2016, 2017 and 2018 are documented in the log for MCM #1, BMP#4.**
  
- **MCM #3 Illicit Discharge Detection and Elimination – Schedule for 2014-2018**
  - **BMP 1 – Develop a written program for the detection, elimination, and prevention of illicit discharges into the City's Regulated MS4s. Pottsville MS4 Work Plan and Schedule contains the written program text and is detailed in the appendices.**
  - **BMP 2 – Develop a map of regulated small MS4 outfalls. The map was developed previously and the updated map was provided to PADEP as part of the permit renewal submission on September 15, 2017.**
  - **BMP 3 – Update mapping to include the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, Basins and watershed boundaries. The mapping details including the required information have been updated and provided to the PADEP as part of the permit renewal submission on September 15, 2017. The City intends to continue to add detail to the mapping throughout the upcoming permit cycle by identifying and mapping stormwater features not yet shown.**
  - **BMP 4 – Perform Dry Weather Outfall Screening – Outfall screenings were performed for all outfalls at least once this past permit cycle. Additional screening was done for outfalls with dry weather flows in addition to water samples. The screenings were completed in 2014 and 2016 and copies of the screenings and the summary reports were provided to the PADEP as part of the progress reports for those years respectively. The City will complete the screening for this current permit year prior to the June 30, 2018 period end date.**


- **BMP 5 - Enact Stormwater Maintenance Ordinance - The City of Pottsville adopted a stormwater ordinance in 2013 as part of the 2014-2018 permit cycle. The Ordinance was duly advertised and a copy was previously provided to the PADEP. As part of the permit renewal process, the PADEP 2022 Model Ordinance was adopted by the City of Pottsville. The most recent Stormwater Ordinance was duly advertised and legally adopted by the City at their October 9, 2017 meeting. A copy was provided to DEP as part of the permit renewal and has since been added to the City's webpage.**
- **BMP 6 – Provide Education Outreach – Public Education Activities for 2016, 2017 and 2018 are documented in the log for MCM #1, BMP#4. In addition Stormwater Pollution Reporting is provided in Appendix E.6 of the Pottsville MS4 Work Plan and Schedule. The City has not received any complaints within the permit period. The City's website includes a stormwater complaint form and a contact number to call.**
- **MCM #4 Construction Site Stormwater Runoff Control – The City is relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges associated with Construction Activities to satisfy the requirements of this MCM.**
- **MCM #5 Post Construction Stormwater Management – Schedule for Year 2014-2018**
  - **BMP 1 - Develop a written procedure that describes how the permittee shall address all required components of this MCM. The City is relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges associated with Construction Activities to satisfy the requirements of this BMP.**
  - **BMP 2 - Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. The City is relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges associated with Construction Activities to satisfy the requirements of this BMP.**
  - **BMP 3 - Ensure that controls are installed that shall prevent or minimize water quality impacts. The City is relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges associated with Construction Activities to satisfy the requirements of this BMP.**
  - **BMP 4 - BMP 4 Enact, implement, and enforce an ordinance or other regulatory mechanism to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law. The City of Pottsville adopted a stormwater ordinance in 2013 as part of the 2014-2018 permit cycle. A copy was previously provided to PADEP.**
  - **BMP 5 - Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment projects. As part of the permit renewal process, the PADEP 2022 Model Ordinance was adopted by the City of Pottsville. The**

Mr. Brain Borden  
Clean Water Program  
March 28, 2018  
Page 4

- model ordinance meets the LID requirements of the MS4 permit. A copy was provided to DEP as part of the permit renewal and has since been added to the City's webpage.**
- **BMP 6 - Ensure adequate operation and maintenance of all post-construction storm water management BMPs installed at all qualifying development or redevelopment projects. The BMP Tracking and Reporting forms are provided Appendix G.6.a and G.6.b of the Pottsville MS4 Work Plan and Schedule. They have not been updated yet, but will be completed prior to the June 30, 2018 period end date.**
  - **MCM#6 Pollution Prevention/Good House Keeping for Municipal Operations 2014-2018**
    - **BMP 1 - Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. The List of City Facilities and Activities is included in Appendix H.1.of the Pottsville MS4 Work Plan and Schedule.**
    - **BMP 2 - Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. The written Operation and Maintenance plan is included in Appendix H.2.of the Pottsville MS4 Work Plan and Schedule.**
    - **BMP 3 - Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The Employee Training Program details and tracking forms are provided in Appendix H.3.a and H.3.b of the Pottsville MS4 Work Plan and Schedule. The updated tracking form is attached to this letter. The Training for Recognizing and Reporting Illicit Discharges will be completed prior to the June 30, 2018 period end date.**

We trust the enclosed information satisfies the documentation requirement of the permit. We welcome your input and assistance in our efforts. Thank you for your time and consideration in this matter. If you have any comments concerning the above, please contact our office.

Very truly yours,



Thomas Palamar  
City Administrator

Attachments

cc: Mr. Michael S. Hummel, P.E., Alfred Benesch & Company  
Mr. Paul Grella, PADEP

LT.Burden.032218

**C. MCM #1 PUBLIC EDUCATION & OUTREACH**





**C.1. MCM #1 BMP #1 PUBLIC EDUCATION AND OUTREACH DOCUMENTS**





**WHEN YOU'RE WASHING YOUR CAR IN  
THE DRIVEWAY, REMEMBER YOU'RE  
NOT JUST WASHING YOUR CAR  
IN THE DRIVEWAY.**



All the soap, scum, and oily grit runs along the curb. Then into the storm drain and directly into our lakes, streams and into coastal waters including the Chesapeake Bay. And that causes pollution which is unhealthy for fish. So how do you avoid this whole mess? Easy. Wash your car on grass or gravel instead of the street. Or better yet, take it to a car wash where the water gets treated and recycled.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office.  
For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit [www.dep.state.pa.us](http://www.dep.state.pa.us).  
Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.







**WHEN YOU'RE FERTILIZING THE LAWN,  
REMEMBER, YOU'RE NOT JUST  
FERTILIZING THE LAWN.**



You fertilize the lawn. Then it rains. The rain washes the fertilizer along the curb, into the storm drain, and directly into our lakes, streams and into coastal waters including the Chesapeake Bay. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use sparingly.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit [www.dep.state.pa.us](http://www.dep.state.pa.us). Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.







**WHEN YOUR CAR'S LEAKING OIL ON  
THE STREET, REMEMBER IT'S NOT JUST  
LEAKING OIL ON THE STREET.**



Leaking oil goes from car to street. And is washed from the street into the storm drain and into our lakes, streams and into coastal waters including the Chesapeake Bay. Now imagine the number of cars in the area and you can imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit [www.dep.state.pa.us](http://www.dep.state.pa.us). Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.







**WHEN YOUR PET GOES ON THE LAWN,**

**REMEMBER IT DOESN'T JUST**

**GO ON THE LAWN.**



When our pets leave those little surprises, rain washes all that pet waste and bacteria into our storm drains. And then pollutes our waterways. So what to do? Simple. Dispose of it properly (preferably in the toilet). Then that little surprise gets treated like it should.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office.  
For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit [www.dep.state.pa.us](http://www.dep.state.pa.us).  
Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.



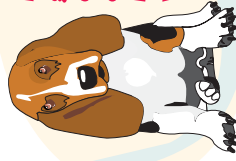


## What is Storm Water?

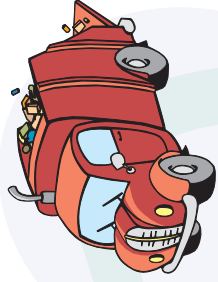
Storm water is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground or drains into what we call storm sewers. These are the drains you see at street corners or at low points on the sides of streets. Collectively, the draining water is called storm water runoff.

## Why is Storm Water “Good Rain Gone Wrong?”

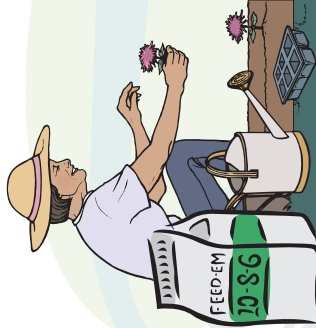
Storm water becomes a problem when it picks up debris, chemicals, dirt, and other pollutants as it flows or when it causes flooding and erosion of stream banks. Storm water travels through a system of pipes and roadside ditches that make up storm sewer systems. It eventually flows directly to a lake, river, stream, wetland, or coastal water. All of the pollutants storm water carries along the way empty into our waters, too, because storm water does not get treated!



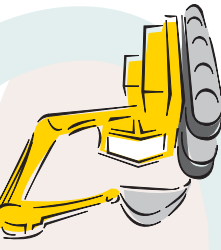
**Pet wastes left on the ground get carried away by storm water, contributing harmful bacteria, parasites and viruses to our water.**



**Vehicles drip fluids (oil, grease, gasoline, antifreeze, brake fluids, etc.) onto paved areas where storm water runoff carries them through our storm drains and into our water.**



**Chemicals used to grow and maintain beautiful lawns and gardens, if not used properly, can run off into the storm drains when it rains or when we water our lawns and gardens.**



**Waste from chemicals and materials used in construction can wash into the storm sewer system when it rains. Soil that erodes from construction sites causes environmental degradation, including harming fish and shellfish populations that are important for recreation and our economy.**

## Where To Go To Continue the Information Flow

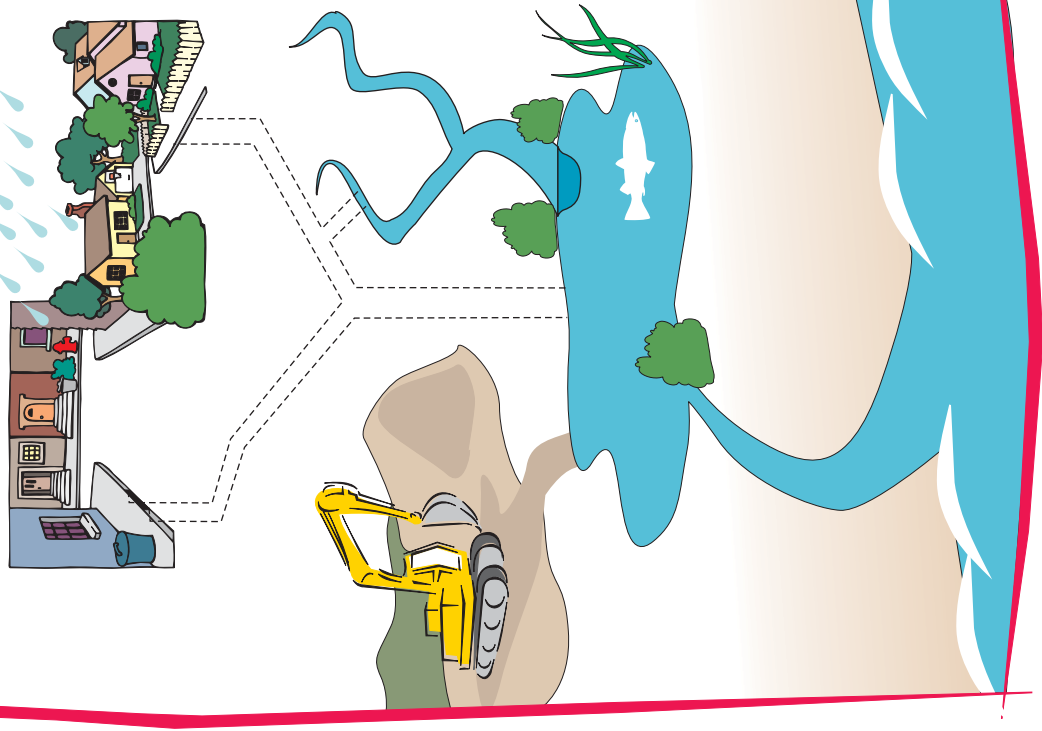
Your community is preventing storm water pollution through a storm water management program. This program addresses storm water pollution from construction, new development, illegal dumping to the storm sewer system, and pollution prevention and good housekeeping practices in municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our water is . . . water! Contact your community's storm water management program coordinator or the Pennsylvania Department of Environmental Protection for more information about storm water management.



Pennsylvania Department of Environmental Protection  
[www.dep.state.pa.us](http://www.dep.state.pa.us)

# When It Rains, It Drains

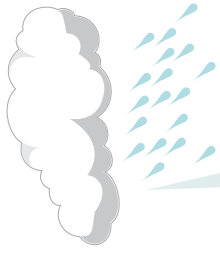
**Understanding Storm Water  
and How It Can Affect  
Your Money, Safety, Health,  
and the Environment**



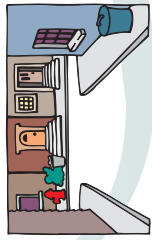
## Answers to Test Your Storm Sewer System Savvy:

- 1. Ditch** – Part of the storm sewer system. Most people think that the system is just a series of underground pipes. It can also include ditches used to convey storm water from the land to a receiving lake, river, or stream.
- 2. Fire Hydrant** – Not part of the storm sewer system. Water sprayed from fire hydrants is not storm water; but is allowed by law to enter the storm sewer system.
- 3. Curb with Storm Drain Inlet** – Part of the storm sewer system. Many people do not realize that this is an opening leading to the storm sewer system. Anything going into this inlet (e.g., trash, leaves, improperly disposed of hazardous materials) travel directly to a receiving lake, river, or stream, without being treated first. Many communities stencil storm drains with "Do Not Dump" messages to let people know.
- 4. Storm Sewer Outfall** – Part of the storm sewer system. An outfall is where storm water drains from the storm sewer system into a receiving lake, stream, or river. If there is a flow from an outfall when it isn't raining, there could be a problem with the system or someone has used a storm drain for illegally disposing of materials.
- 5. Toilet** – Not part of the storm sewer system. Wastewater from sinks and toilets in houses and businesses travel through a sewer system constructed to carry sanitary wastes. In some instances, older communities may have a combined sewer system designed to carry both storm water and sanitary waste.
- 6. Septic System** – Not part of the storm sewer system. Homeowners use septic tanks to manage sanitary wastes on-site. Improperly maintained septic systems can leak and contribute pollutants to the storm sewer system, as well as directly to lakes, rivers, and streams.
- 7. Roads and Other Paved Areas** – Not part of the storm sewer system. Roads and other hardened surfaces such as parking lots and sidewalks can accumulate pollutants (e.g., oil, grease, dirt, leaves, trash, pet wastes) that storm water eventually washes into the storm sewer system.
- 8. Storm Drain Inlet** – Part of the storm sewer system. This is another example of what a storm drain may look like. Like the storm drain inlet shown in picture #3, anything that enters this drain will go directly to streams, rivers, and lakes without being treated first. It is important to recognize this as a storm drain to prevent it from being used as a trash can.

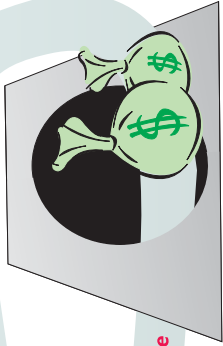
## What Happens when It Rains?



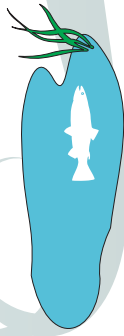
Rain is an important part of nature's water cycle, but there are times it can do more damage than good. Problems related to storm water runoff can include:



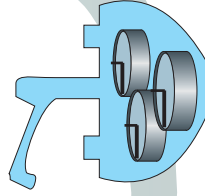
**Flooding caused by too much storm water flowing over hardened surfaces such as roads and parking lots, instead of soaking into the ground.**



**Increases in spending on maintaining storm drains and the storm sewer system that become clogged with excessive amounts of dirt and debris.**



**Decreases in sportfish populations because storm water carries sediment and pollutants that degrade important fish habitat.**



**More expensive treatment technologies to remove harmful pollutants carried by storm water into our drinking water supplies.**



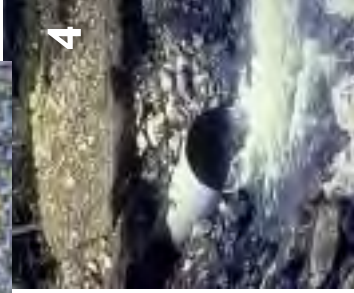
**Closed beaches due to high levels of bacteria carried by storm water that make swimming unsafe.**

We can help rain restore its good reputation while protecting our health and environment while saving money for ourselves and our community. Keep reading to find out how...

## Test Your Storm Sewer System Savvy!



What does the storm sewer system look like in your community? See if you can identify which pictures are part of the storm sewer system. (Answers are on the back.)



## Restoring Rain's Reputation: What Everyone Can Do To Help

Rain by nature is important for replenishing drinking water supplies, recreation, and healthy wildlife habitats. It only becomes a problem when pollutants from our activities like car maintenance, lawn care, and dog walking are left on the ground for rain to wash away. Here are some of the most important ways to prevent storm water pollution:

- Properly dispose of hazardous substances such as used oil, cleaning supplies and paint—never pour them down any part of the storm sewer system and report anyone who does.
- Use pesticides, fertilizers, and herbicides properly and efficiently to prevent excess runoff.
- Look for signs of soil and other pollutants, such as debris and chemicals, leaving construction sites in storm water runoff or tracked into roads by construction vehicles. Report poorly managed construction sites that could impact storm water runoff to your community. (See the back of this brochure for contact information.)
- Install innovative storm water practices on residential property, such as rain barrels or rain gardens, that capture storm water and keep it on site instead of letting it drain away into the storm sewer system.
- Report any discharges from storm water outfalls during times of dry weather—a sign that there could be a problem with the storm sewer system.
- Pick up after pets and dispose of their waste properly. No matter where pets make a mess—in a backyard or at the park—storm water runoff can carry pet waste from the land to the storm sewer system to a stream.
- Store materials that could pollute storm water indoors and use containers for outdoor storage that do not rust or leak to eliminate exposure of materials to storm water.

**C.2. MCM #1 BMP #2 TARGET AUDIENCE LIST**





## APPENDIX C.2 TARGET AUDIENCE LIST – REVIEWED/REVISED 4/19/2018

<b>Project:</b>	Pottsville MS4 Public Outreach on Stormwater Impacts	Year 2018 – 2023 Permit Cycle
<b>Facilitator:</b>	City Administrator	570-628-4417

Name, Title (optional)	Company	Mailing Address	Phone	E-Mail (preferred)	Group
Michael Hummel, P.E.	Alfred Benesch & Company	400 One Norwegian Plaza, Pottsville, PA 17901	570-624-4268	mhummel@benesch.com	Engineer
Tom Palamar	City of Pottsville	401 North Centre St., Pottsville, PA 17901	570-628-4417	tpalamar@city.pottsville.pa.us	Municipal Employee
Rebecca Trefsger	City of Pottsville	401 North Centre St., Pottsville, PA 17901	570-628-4417	rtrefsger@city.pottsville.pa.us	Municipal Employee
Tom Whittaker	City of Pottsville	401 North Centre St., Pottsville, PA 17901	570-640-0164	tomwhit@verizon.net	Municipal Employee
Tiffany Reedy	Pottsville Area High School	1600 Elk Avenue, Pottsville, PA 17901	570-621-2962	treedy@pottsville.k12.pa.us	School
William Reichert	Schuylkill Headwaters	PO Box 1385, Pottsville, PA 17901	570-622-3742 ext 118	wreichert@co.schuylkill.pa.us	Environmental Group
Christy Zulli	Schuylkill County Conservation District	1206 AG Center Drive, Pottsville, PA 17901-9733	570-622-3742 ext 114	czulli@co.schuylkill.pa.us	Environmental Group
James L. Miller	Miller Bros. Construction, Inc.	950 East Main Street Schuylkill Haven, PA 17972	570-385-1662	info@millerbros.com	Developer
Jared Gerace, Principal	John S. Clarke Elementary Center	601 North 16 <sup>th</sup> Street, Pottsville, PA 17901	570-621-2945	jgerace@pottsville.k12.pa.us	School
Michael Maley, Principal	D.H.H. Lengle Middle School	1541 West Laurel Boulevard, Pottsville, PA 17901	570-621-2924	mmaley@pottsville.k12.pa.us	School
David L. Horst, P.E.	Alfred Benesch & Company	400 One Norwegian Plaza, Pottsville, PA 17901	570-622-4055	dhorst@benesch.com	Engineer
	Entech Engineering	500 N. Centre Street Pottsville, PA 17901	570-628-5655		Consultant
Rodd J. White, P.E.	Lehigh Engineering, LLC	200 Mahantongo Street, Pottsville PA 17901	570-622-2612	roddw@lehighengineer.com	Consultant
Alfred Ty Leineweber, P.E.	Lehigh Engineering, LLC	200 Mahantongo Street, Pottsville PA 17901	570-622-2612	tyl@lehighengineer.com	Consultant
William J. Parulis, P.E., P.L.S.	WJP Engineers	1406 Laurel Boulevard Pottsville, PA 17901	570-622-4550	bparulis@wjpengineers.com	Consultant
Richard N. Yutko, P.E.	WJP Engineers	1406 Laurel Boulevard Pottsville, PA 17901	570-622-4550	ryutko@wjpengineers.com	Consultant
Dorothy A. Sterner, P.E.	WJP Engineers	1406 Laurel Boulevard Pottsville, PA 17901	570-622-4550	dsterner@wjpengineers.com	Consultant
Lynn Sabol	Nativity BVM High School	One Lawtons Hill Pottsville, PA 17901	570-622-8110	lsabol@nativitybvm.net	School
Teresa Keating	Assumption BVM School	112 South 7 <sup>th</sup> Street Pottsville, PA 17901	570-622-0106	tkeating@assumptionbvm.school.net	School





### **C.3. MCM #1 BMP #3 NEWSLETTERS/LINKS/WEBSITES**



**PREVENTING WATER POLLUTION IN POTTSVILLE**

**<http://www.city.pottsville.pa.us/ms4/>**

**PADEP Municipal Stormwater**

**<http://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater/Pages/default.aspx>**

**EPA's NPDES Stormwater Program**

**<https://www.epa.gov/npdes/npdes-stormwater-program>**

**EPA Green Infrastructure**

**<https://www.epa.gov/green-infrastructure#guide>**

**Stormwater PA**

**<http://www.stormwaterpa.org/>**

**Schuylkill Action Network**

**<https://www.schuylkillwaters.org/>**

**Delaware River Basin Commission**

**<http://www.state.nj.us/drbc/>**

**Schuylkill Conservation District**

**<https://www.schuylkillcd.com/>**

**Schuylkill Headwaters Association**

**<http://schuylkillheadwaters.org/>**



**C.4. MCM #1 BMP #4 OUTREACH DISTRIBUTION LOGS/MINUTES**





## APPENDIX C.4 MCM #1 OUTREACH DISTRIBUTION LOGS/MINUTES

<b>Project:</b>	Pottsville MS4 Public Outreach on Stormwater Impacts	Year 2018 – 2023 Permit Cycle
<b>Facilitator:</b>	City Administrator	570-628-4417
<b>Edited</b>	DLH	<b>Date</b> April 20, 2018

Outreach Contact Name, Title	Company	Outreach Date	Phone	E-Mail (preferred)	Group
Michael Hummel, P.E.	Alfred Benesch & Company	PO Box 1090, Pottsville, PA 17901	570-624-4268	mhummel@benesch.com	Engineer
Outreach documents sent. Log/minutes of contact activity: Developed Plan and Schedule. Submitted to EPA and PADEP on 2/8/2016.					
City Officials – Jim Muldowney, Tom Palamar, Rebecca Tresfger, Tom Whitaker	City of Pottsville	2/26/2016	(570) 622-3524 (570) 628-4417 (570) 628-4417 (570) 617-5042	<a href="mailto:tpalamar@city.pottsville.pa.us">tpalamar@city.pottsville.pa.us</a> ; <a href="mailto:rtresfger@city.pottsville.pa.us">rtresfger@city.pottsville.pa.us</a> <a href="mailto:street-parks@city.pottsville.pa.us">street-parks@city.pottsville.pa.us</a>	Municipal Employee
Log/minutes of contact activity: Held a meeting in City Hall. Presented MS4 Plan and Schedule. Discussed outreach activities and ideas. Answered questions.					
David L, Horst, P.E. & Michael Hummel, P.E.	Alfred Benesch & Company	12/15/2016	(570) 622-4055	<a href="mailto:dhorst@benesch.com">dhorst@benesch.com</a> <a href="mailto:mhummel@benesch.com">mhummel@benesch.com</a>	Engineer
Log/minutes of contact activity: Held Meeting at City Hall with public and PAHS Ecology Club. Reviewed powerpoint presentation. Answered Questions. Pottsville Republican published article.					
Mayor Jim Muldowney	City of Pottsville	2/23/2017	(570) 622-1234	Click here to enter text.	City Mayor
Log/minutes of contact activity: Shared City's effort in Stormwater Management as part of Annual State of the City Public Address.					
Schuylkill Action Network	Click here to enter text.	10/16/2017	302-655-4990	Click here to enter text.	Watershed Group
Log/minutes of contact activity: Schuylkill Street Art Contest – Winner Kevin Devine PAHS – Winning Artwork was enlarged and stenciled to an inlet at 16 <sup>th</sup> and Elk Avenues by the High School.					
David L. Horst, P.E.	Alfred Benesch & Company	2/12/2018	570-622-4055	dhorst@benesch.com	Engineer
Log/minutes of contact activity: Spoke at City of Pottsville Council meeting regarding current MS4 permit status and permit renewal. Provided opportunity for Council and public to comment on current plan efforts.					
Mayor Jim Muldowney	City of Pottsville	3/1/2018	570-622-1234	Click here to enter text.	City Mayor
Outreach documents sent. Log/minutes of contact activity: Shared City's effort in Stormwater Management as part of Annual State of the City Public Address.					
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Choose an item.
Log/minutes of contact activity:					



## Meeting Minutes

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Current Date: March 26, 2016  
Project: **Pottsville MS4 Plan and Schedule, Schuylkill County**  
Project No.: 30693.02  
Date/Time: February 26, 2016/9:00 AM  
Place: City Hall  
Attendees: See Attached Sign-In Sheet

---

The purpose of this meeting was to present the newly developed and submitted MS4 Plan and Schedule to the responsible City staff and officials. The following items were reviewed:

1. EPA 5/29/2014 MS4 Permit violation Administrative Order for Compliance and Request for Information letter. This general permit is for Discharges of Storm water from Small Municipal Separate Storm Sewer Systems, abbreviated to MS4. The letter stated the City failed to adequately implement or to document its compliance with the permit, as documented in the 2010 and 2011 annual reports.
2. Handouts included the Plan and Schedule Table of Contents and Appendices for the six minimum controls as well as the Schedule of activities by quarter for the current permit 2014-2018. The City also had a complete hard copy.
3. Discussed several appendices that contained new forms to support documentation of activities and attendees.
4. Tom Palamar stated documentation can be sent to him in any form as needed for filing.
5. Mike Hummel stated we can transition responsibilities to City staff to minimize engineering costs as the staff becomes more familiar with the activities and responsibilities.
6. Tom Palamar stated the outreach activities should include funny, eye catching type posters. Prizes could be offered for coloring or poster type activities for children to help them gain awareness.
7. Tom Palamar stated his desire to create an ordinance to allow and to promote Low Impact Development (LID) standards.
8. Tom Palamar stated Sharp Mountain PCSM BMP's associated with the growing greener projects will be maintained by the City.
9. Tom Whitaker led a discussion on washing, salt and ash storage, and similar activities at the City garage. Mike Hummel discussed the need to eliminate illicit City wash drainage to receiving waters.

10. Mike Hummel suggested the City periodically make public references to the MS4 Plan and Schedule and all the resources developed. These resources will be copied to the City web page. Tom Palamar indicated the City is likely to be revamping the web site soon. Mike Hummel submitted the initial PDF Plan and Schedule documents electronically to the City.
11. The implementation activities will be ongoing. Mike Hummel will help coordinate this work and the transition of activities from Benesch led to City administered as needed. A task has been setup in the retainer for this work.

All Attendees are requested to review the above minutes for corrections and/or comments. If no comments are received within ten (10) business days, these minutes will become the basis for all official action.

Respectfully submitted,



Michael S. Hummel, P.E.  
Project Manager

cc:

X:\30600s\30693.02 Pottsville 2016 Retainer\Office\_Docs\Correspondence\Meeting\_Minutes\MM.MS4 Presentation to City.022616.docx

2/26/16 Potts MSY. Sign in

Name	Position	email
Mike Hommel	benesdy-engineer	mhwmmel@benesdy.com
Rebecca Trefsgar	<del>Assistant</del> to CA	rtrefsgar@city.pottsville.pa.us
Tom Whitaker	Superintendent	tomwhit@verizon.net
Tom Polmar	City Admin	cityadministrator@city.pottsville.pa.us
Jim Muldowney	Mayor	mayor@city.pottsville.pa.us





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## Meeting Minutes

Project: Pottsville MS4 Annual Meeting

MS4 Permit: March 16, 2013 to March 15, 2018

Date/Time: December 15, 2016, 3:30 pm

Place: Pottsville City Hall, 2<sup>nd</sup> Floor Meeting Room

Attendees: Michael Hummel, P.E., Alfred Benesch & Company, Consulting Engineer  
David Horst, P.E., Alfred Benesch & Company  
Thomas Palamar, Pottsville City Administrator  
(See sign-in sheet for additional attendees)

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The purpose of the meeting was to promote participation activities related to maximizing clean MS4 discharges to receiving streams including public reporting of suspected illicit discharges. The format of the meeting included a review the MS4 permit, review the mapping and dry weather monitoring activities, and to introduce/reinforce the education and outreach messages.

The meeting included information related to opportunities for the public to participate include reporting of suspected illicit discharges, decisions related to planning and holding public meetings, and updating other programs and activities.

The meeting included a sign-in sheet to further develop the contact list of emails and addresses including Engineers, Developers, Public Agencies, businesses, schools, and environmental groups to facilitate routine communication to each group annually and prior to meetings and MS4 public involvement and participation activities.

The following minutes have been prepared to document the discussions/concerns.

1. The MS4 education presentation was utilized with posters and an interactive discussion to present the material. It covered an overview of Pottsville's Storm Water Management Program.
2. It included storm water education, the collection system, sources of pollution, benefits of reducing pollution and the effects of urbanization. Illicit discharges were discussed.
3. The City's storm water permit was also discussed. The plan and schedule was presented and there were questions about future permitting including changes to discharge of pool water.
4. Participation programs in 2016 and 2017 including stenciling, dry weather monitoring, posters, and outreach art contests were discussed.
5. The City's MS4 mapping and outfalls were displayed during the presentation and on boards.
6. Dry weather monitoring results were presented.
7. A local land development storm water BMP's were presented and discussed.
8. The City's new MS4 web site was presented and discussed. It is accessed from the City's web site. Further information regarding the City's, PADEP's and EPA's storm water resources was discussed.
9. The local newspaper reporter was present and he wrote an article for the Pottsville Republican Herald.

**Follow-up:**

1. New contacts will be added to the outreach list.
2. Contacts will be made for the next participation and/or meeting.

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The above meeting notes reflect a summary of the information presented and the comments received at the meeting.

Respectfully submitted,

*Michael S. Hummel*

Michael S. Hummel, P.E.  
Project Manager

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# Pottsville engineers talk to students about stormwater system

BY STEPHEN J. PYTAK / PUBLISHED: DECEMBER 16, 2016

In 2018, people who own swimming pools in Pottsville will have some new rules to consider.

A group of students from Pottsville Area High School got some insights Wednesday when they attended a public meeting at City Hall regarding the city's stormwater system.

"For people who have seasonal swimming pools, years ago you just dumped it into the storm drain. It's still under our city ordinance as something that is allowed. But what can possibly be harmful about dumping somebody's swimming pool water in there?

What kind of chemicals do people put in their swimming pools?" asked Michael S. Hummel, a project manager for Alfred Benesch & Co., Pottsville, the engineering firm the city contracts.




"Chlorine," said a few of the students, who are members of the high school's Ecology Club.


"You're asking the right group here," Adrian Portland, the group's adviser, said.

"Chlorine's the biggest one, right? So, before they should be able to dump their pool they should dechlorinate the water. In fact, in the next round of permitting, pool water will no longer be allowed to be dumped into municipal storm systems because DEP and

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### POLL

Should the U.S. deport more Russian diplomats?

- Yes  
 No

Show results

This poll is not scientific and is meant for entertainment purposes.

Soda Ash pH Neutralizer for p...	\$899.10
Pelican PF6 Fluoride System...	\$1,458.90

the EPA have recognized that, in addition to chlorine, people use all kind of other types of reagents," Hummel said.

"The 2018 General Permit removes dechlorinated swimming pool discharges from the list of authorized nonstormwater discharges. DEP's policy as presented in its fact sheet, 'Swimming Pool Water Discharge Guidelines' (3800-FS-DEP4251), calls for disposal of dechlorinated swimming pool water to sanitary sewers or otherwise infiltration to the subsurface but not discharge to streams or storm sewers," according to a state Department of Environmental Protection fact sheet available online at [www.elibrary.dep.state.pa.us](http://www.elibrary.dep.state.pa.us).

"So when it changes, how will you notify people with pools who do that?" Angela Eckert, junior at Pottsville Area, said.

"That's a good question. That's part of our public education and outreach," Hummel said.

"One of the things that we do is if you want to put a pool in your yard, you have to come in and get a permit for it. Right now, we just tell them all the legal requirements and all the code requirements about your pool. But at that point in time, we'll also have to let them know the endgame with the pool as well. And we'll have to let them know what their alternatives will be," City Administrator Thomas A. Palamar said.

The city manages miles of underground tunnels and pipes that carry stormwater from inlets to the Schuylkill River, the West Branch of the Schuylkill River and several tributary streams, according to a slideshow presentation.

DEP gave the city its first MS4 permit on Sept. 30, 2004, according to the newspaper's archives.

In late 2011, DEP released an updated set of MS4 permit requirements. They included public education and outreach, public involvement and participation, and illicit discharge detection and elimination.

So, on Wednesday, the city brought in representatives from Alfred Benesch to give a public presentation about the system in council chambers.

"When you're washing your car in the driveway, remember you're not just washing your car in the driveway. And when you're fertilizing your lawn, you're not just fertilizing the lawn. You're fertilizing the river," David L. Horst, who is also a project manager with Benesch, said.

"So, what about actual car washes?" Eckert asked.

"Most commercial car washes probably have some kind of recyclable use of the water and what doesn't get recycled probably goes into the sewer system where it will be

treated," Hummel said, referring to the combined stormwater and sewer system managed by the Greater Pottsville Area Sewer Authority.

Other students there included juniors Sadie Michel, Brady Kokitus, Emma Walinsky, Max Kelly, Abby Wiederhold and Morgan Guers.

Also present was Tiffany Reedy, principal of Pottsville Area High School.

For more information about the city's stormwater system, visit [www.city.pottsville.pa.us/ms4](http://www.city.pottsville.pa.us/ms4).

This Week's Circulars



We welcome user discussion on our site, under the following guidelines:

To comment you must first create a profile and sign-in with a verified DISQUS account or social network ID. Sign up here.

Comments in violation of the rules will be denied, and repeat violators will be banned. Please help **police the community by flagging offensive comments for our moderators to review.** By posting a comment, you agree to our full terms and conditions. Click here to read terms and conditions.

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## When It Rains, It Drains

An Overview of  
The City of Pottsville's  
Storm Water  
Management Program



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## Clean Water

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## Let's Talk About. . .

- What storm water is and why it can be a problem in our community.
- What the City of Pottsville is doing to manage storm water and how these activities will benefit us.

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## What is Storm Water?

- Rain events
- Snow melt
- Other surface runoff and drainage



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## Where Does Storm Water Go In Our Community?

- Travels over land
- Carried through municipal separate storm sewer system (MS4)
- Carried through combined sewer overflow system (CSO)
- Discharges into the Schuylkill River, West Branch Schuylkill River, and Norwegian Creek

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## A "Point" of Confusion: Point Source vs. Nonpoint Source

- POINT source
  - Travels through a conveyance system
  - Regulated under permit program
- NONPOINT source
  - Runoff that is not a point source
  - Addressed through voluntary programs

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## Why is Storm Water a Problem?

- Problem: Decrease in quality
- Problem: Increase in quantity
- Cause: Developed and disturbed land



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### Why is Storm Water a Problem?

- Problem: Non-storm water discharges enter systems
- Cause: Illicit discharges
- Cause: Illicit connections



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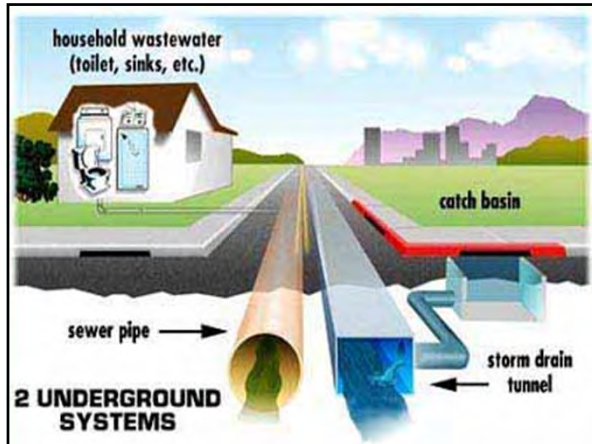
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### Storm Water Pollutants

- Sediment
- Trace Metals
- Nutrients
- Toxic Chemicals
- Bacteria
- Chlorides
- Oxygen Demand
- Thermal Impacts
- Oil and Grease

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### PA Water Quality and Storm Water Impacts

- Total of 83,161 stream miles in PA
  - 54% of total assessed
- 18.1% of assessed waters degraded
- Urban runoff #3 source of impairment
  - 1187 miles of rivers and streams
  - 14.5% of all impaired river and stream miles

From 2001 305(b) Report Update

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Now We Know About Storm Water and Its Impacts on Our Community. . .

**But What Are We Doing About It?**

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### Storm Water Permit Program for Small Communities

- Federal regulation requires permit for our community
- PA DEP created state permitting program to meet federal regulation

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### What Does Our Permit Require?

- Implement a storm water management program
- Track progress toward goals
- Report on our progress

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## Our Storm Water Program

- Public Education
- Construction Site Runoff Management
- Illicit Discharge Detection and Elimination
- Public Involvement
- Post-Construction Storm Water Management
- Good Housekeeping and Pollution Prevention

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## Public Education and Outreach

- Distribute educational materials developed by PA DEP
- Develop outreach plan for community

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## Public Involvement/Participation

- Provide public notice
- Create an public involvement plan
- Hold a public meeting on the program
- Start a volunteer program
  - Water Quality Monitoring
  - Storm Drain Stenciling
  - Stream Clean-Ups

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## Illicit Discharge Detection and Elimination

- Enact DEP's model ordinance or update our existing ordinance
- Develop storm sewer system map
- Implement program to detect non-storm water in system
- Educate community on problems related to dumping in storm sewers

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## Construction Site Storm Water Runoff Control

- Enact DEP's model ordinance or update our existing ordinance
- Coordinate with County Conservation District
  - Erosion and Sediment Control Program
  - NPDES Construction Storm Water Permitting
- Educate construction industry

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## Post-Construction Storm Water Management

- Adopt PA DEP's model storm water management ordinance
- Ensure proper operation and maintenance of post-construction controls

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**Pollution Prevention/  
Good Housekeeping**

- Implement O & M program that focuses on pollution prevention
- Train community employees on good housekeeping practices
- Educate community on pollution prevention

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**How Will Our  
Storm Water  
Program Benefit  
Our Community?**



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**Expected Benefits of Our  
Storm Water Program**

- Enhanced fishing
- Enhanced opportunities for recreation
- Reduced flood damage
- Drinking water benefits
- Navigational benefits
- Reduced illness
- Enhanced aesthetic value

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## How Can You Get Involved?

- Pass on information about the storm water program to other community residents
- Report any storm water issues to the City Administrator

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needs of our residents. 275 tons of recycling materials were collected and processed at the City Garage.

- The City and Street Department also worked in conjunction with our engineers to meet compliance requirements of the Municipal Separate Storm Sewer System permit. Staff Training, inspections of city infrastructure and a public meeting were all completed.
- Other projects included repair to the storm water system and road surface on North 14<sup>th</sup> Street, 2<sup>nd</sup>, Norwegian Street and Laurel Boulevard. 37 Storm water inlets were repaired or replaced.
- In 2016, the City applied 16,000 feet of street line markings in our community. That number included several crosswalk improvements that were done in cooperation with the Police Department in high risk areas.



# **MS4 Compliance**

**(Municipal Separate Storm Sewer System Permit)**

- Compliance
- Education
- Staff Training
- Public Participation





# An Overview of The City of Pottsville's Storm Water Management Program

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## Purpose of the Meeting

- The meeting is being held in accordance with MCM#2, BMP#3, which requires the City to solicit involvement and participation.
- The presentation will provide a summary of progress, activities, and accomplishments of the Storm Water Management Plan.

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## City of Pottsville

- General Permit PAG 132276
- Permit will Expire on 3/15/18.
- Permit renewal was submitted on 9/15/17

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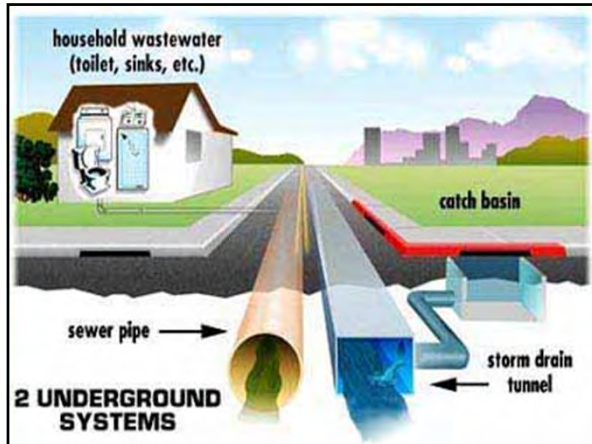
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### What Does Our Permit Require?

- Implement a storm water management program
- Track progress toward goals
- Report on our progress

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### Six Minimum Controls

• Public Education	• Public Involvement
• Construction Site Runoff Management	• Post-Construction Storm Water Management
• Illicit Discharge Detection and Elimination	• Good Housekeeping and Pollution Prevention

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## Public Education and Outreach

- Develop, implement and maintain a written Public Education and Outreach Program, review annually and update as needed.
- Develop and maintain lists of target audience, review list and update annually.
- Annually publish at least one issue of a newsletter, a pamphlet, a flyers or a website that includes general stormwater education information. City website now includes a stormwater management webpage.
- Distribute stormwater educations materials and/or information to the target audiences.

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## Public Involvement/Participation

- Develop, Implement and maintain a written Public Involvement and Participation Program. The plan shall be evaluated annually and revised as necessary.
- Allow public comment on any stormwater related Ordinances. The City adopted a revised Stormwater Management Ordinance at a public meeting on October 9, 2017.
- Regularly solicit public involvement and participation from target audience groups on the implementation of the SWMP. This includes an annual meeting, reporting cooperation activities such as the stencil program by Schuylkill Action Network and reporting of Illicit Discharges.

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## Illicit Discharge Detection and Elimination

- Develop and implement a written program for the detection, elimination and prevention of illicit discharges. The city must evaluate it's plan annually.
- Develop and Maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls, and the locations and names of all surface waters that receive discharges. The City updated their map(s) as part of the permit renewal effort.
- Develop and Maintain map(s) that show the entire storm sewer collections system. The City updated their map(s) as part of the most recent permit renewal.
- Conduct dry weather screenings of it's MS4 outfall to evaluate for presence of illicit discharges. The City most recently surveyed all the outfall in 2016 and will do so again in 2018.
- Enact a Stormwater Management Ordinance. The City adopted the DEP's 2022 Model Ordinance in October 2017.
- Provide educations outreach to public employees, business owners, property owners, the general public and elected officials about the program to detect and eliminate illicit discharges.

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## Construction Site Storm Water Runoff Control

- Do not issue building permits to anyone proposing or conducting earth disturbance activities that require an NPDES permit unless the party has an NPDES permit.
- The City must notify DEP or the County Conservation District within 5 days of receipt of an application for a permit involving an earth disturbance of one acre or more.
- Enact, implement and enforce an ordinance to require the implementation and maintenance of E&S control BMP's. The City's most recent Stormwater Management ordinance meets this requirement.
- Coordinate with County Conservation District

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## Post-Construction Storm Water Management

- Enact, Implement and enforce an ordinance to require post-construction stormwater management for new developments. The City's most recent ordinance meets these requirements.
- Develop and implement measures to encourage and expand the use of Low Impact Development. The City's most recent stormwater ordinance meets this requirement.
- Ensure adequate O&M of all post construction stormwater management BMPs that have been installed. The City must maintain a list of all PCSM BMPs approved since 3/10/2003 and must inspect them annually.

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## Pollution Prevention/ Good Housekeeping

- Identify and document all operations that are owned or operated by the City and have the potential for generating pollution to stormwater runoff. The inventory must be updated annually as necessary.
- Develop and maintain a written O&M program for all operations that could contribute to the discharge of pollutants. Permittees must review and update the written
- Develop and Implement an employee training program. Employee training shall be at least annually and shall be documented in writing.

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## Other Requirements

- Pollutant Control Measures for waters impaired by metals and/or pH associated with Abandoned Mine Drainage (AMD)
- Pollutant Control Measures for waters impaired by priority organic compounds
- Pollutant Reduction Plan requirements for discharges to waters impaired for nutrients and/or sediment.
- **Currently not applicable to the City of Pottsville but..... In 5 years?**

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## Questions or Comments

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- The Street Department also worked diligently to meet the recycling needs of our residents. In November, the City conducted our first electronic recycling event. In just 5 hours, more than 30 tons of televisions, computers and other electronic items were collected. In addition, more than 250 tons of cardboard and metal were collected and processed at the City Garage.
- The City and Street Department also worked in conjunction with our engineers to meet compliance requirements of the Municipal Separate Storm Sewer System permit. Staff Training, inspections of City infrastructure and a public meeting were all completed.
- Other projects included repair to the storm water system at 14<sup>th</sup> and Laurel Boulevard and West Railroad Street, the rebuilding of 36 storm water inlets and a partnership with





# MS4 Compliance

(Municipal Separate Storm Sewer System Permit)

- Compliance
- Education
- Staff Training
- Public Participation







**D. MCM #2 PUBLIC INVOLVEMENT/ PARTICIPATION**





## D.1a OPPORTUNITIES FOR PUBLIC PARTICIPATION AND REPORTING ACTIVITIES



# APPENDIX D.1A MCM #2 BMP #1A OPPORTUNITIES FOR PARTICIPATION ACTIVITIES INCLUDING PUBLIC REPORTING

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts      Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator      570-628-4417

Outreach Date	Outreach or Reporting Activity
<b>Initial Activities</b>	
2/18/2018	Solicit input for activities at meeting.
10/5/2016	Illicit discharge monitoring
10/16/2017	Stenciling drainage inlets – Schuylkill Action Network
2/21/2018	Suspected Illicit Discharge Reporting – Updated website with interactive complaint form
<b>Other Activities</b>	
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## D.1b ANNUAL MS4 REPORT







COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

**MS4 ANNUAL REPORT FORM**  
**FOR STORM WATER DISCHARGES FROM**  
**SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**  
Reporting Period: March 10, 2004 through March 9, 2005

SECTION I – SMALL MS4 OPERATOR INFORMATION		
<b>1. Name of MS4 Permittee and NPDES Permit Number</b>		
Name: <u>City of Pottsville</u>	PAG: <u>PAG132276</u>	PAI: _____
<b>2. Location</b>		
Municipality: <u>City of Pottsville</u>	County: <u>Schuylkill</u>	
Watershed Name(s): _____		
<b>3. Contact Person from the MS4</b>		
Name: <u>Thomas Palamar</u>	Title: <u>City Administrator</u>	Phone: <u>(570) 628-4417</u>
Fax: <u>(570) 628-4222</u>	Email: <u>cityadministrator@city.pottsville.pa.us</u>	
<b>4. Permittee Mailing Address</b>		
Address: <u>401 North Centre Street</u>		
City: <u>Pottsville</u>	State: <u>PA</u>	Zip Code: <u>17901</u>
<b>5. MS4 Website (If applicable)</b>		
URL: _____		
<b>6. Permittee's Consultant/Engineer Information (If applicable)</b>		
Company Name: <u>alfred benesch &amp; company</u>		
Consultant/Engineer Name: <u>David L. Horst, P.E.</u> Title: <u>Project Engineer</u>		
Phone: <u>(570) 622-4055</u>	Fax: <u>(570) 622-1232</u>	Email: <u>dhorst@benesch.com</u>
Address: <u>400 One Norwegian Plaza, P.O. Box 1090</u>		
City: <u>Pottsville</u>	State: <u>PA</u>	Zip Code: <u>17901</u>

## SECTION II – MCM INFORMATION

7A. Was your municipality granted a one-year extension in meeting MCMs #2, #3, #4 and #5 by the local DEP Regional Office to develop and implement a watershed-based Storm Water Management Plan?

Yes (continue)                       No (Go to MCM#1)

7B. All protocol activities for years one and two must be completed by the end of year two. Have you completed all protocol activities for years one and two?

Yes                                       No

7C. Implementation of watershed-based or Act 167 Storm Water Management Plans. **The Schuylkill County Commissioners will be preparing and enacting an ACT 167 Storm Water Management Plan during 2009.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan?                      Yes     No

    If yes, has DEP approved the plan?    Yes     No

    If yes, give date: \_\_\_\_\_

Are the ordinances in the plan enacted:    Yes     No

    If yes, give date: \_\_\_\_\_

    If ordinances are not enacted, please provide the planned enactment date \_\_\_\_\_  
    and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan?                      Yes     No

    If yes, has DEP approved the plan?    Yes     No

    If yes, give date: \_\_\_\_\_

Are the ordinances in the plan enacted:    Yes     No

    If yes, give date: \_\_\_\_\_

    If ordinances are not enacted, please provide the planned enactment date \_\_\_\_\_  
    and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan?                      Yes     No

    If yes, has DEP approved the plan?    Yes     No

    If yes, give date: \_\_\_\_\_

Are the ordinances in the plan enacted:    Yes     No

    If yes, give date: \_\_\_\_\_

    If ordinances are not enacted, please provide the planned enactment date \_\_\_\_\_  
    and explain the status: \_\_\_\_\_

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

**8A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update Target Audience Information** (Review your plan and provide new information about your target audiences and their communication channels)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The City of Pottsville identified homeowners within the MS4 storm water service area. In addition, a list of potential and past developers within the City was developed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**8B. BMP: Continue to Raise Awareness and Begin to Educate All Target Audiences** (Distribute fact sheets to developers; run a storm water ad in your local newspaper; distribute posters to schools, community organizations, institutions, and businesses; stencil storm drains and maintain website links)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

Was your MS4 granted a 1-year timeline extension in meeting this MCM #2, by the local Regional Office of the DEP?

Yes  No If "Yes", complete Items 10A. and B. If "No", complete Item 10B. only.

**10A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Develop Public Involvement and Participation Program.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met:

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**10B. BMP: Notify and solicit public input/involvement on Storm Water Management Program development and implementation.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

Was your MS4 granted a 1-year timeline extension in meeting this MCM #3, by the local Regional Office of the DEP?

Yes  No If "Yes", complete all Items. If "No", complete Items 12B., D. and E.

**12A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Map all outfalls.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met:

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12.B. BMP: Implement and enforce DEP-approved ordinance to satisfy this Minimum Control Measure. If you have a 1-year extension, this BMP also includes adoption of an ordinance during year two.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12C. BMP: Presentation on IDD&E Program and Ordinance during a public meeting.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met:

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12D. BMP: Distribute educational material.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

MCM#3 (continued)

12E. **BMP: Establish and list priority areas, and conduct screening and sampling on 25% of outfalls.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

# Outfalls in System: \_\_\_\_\_

# Outfalls Screened: \_\_\_\_\_

# Outfalls Sampled (Dry weather flows): \_\_\_\_\_

# Outfalls Determined to be Illicit: \_\_\_\_\_

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Describe how the priority was established and how outfalls were selected for the 25% screened during year two.

Describe the corrective actions taken to eliminate the illicit discharges: **City of Pottsville along with the Greater Pottsville Area Sewer Authority has completed a large project within the City which seperated some of the Combined Sewer Overflow systems into a sanitary sewer and storm sewer service areas.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce DEP-approved ordinance. If you have a 1-year extension, this BMP also includes adoption of an ordinance during year two.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Require that the Erosion and Sediment Control Plans be developed in accordance with the requirements of Chapter 102 (Erosion and Sediment Control) of the DEP regulations.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Establish or continue a procedure for review and enforcement of Erosion and Sediment Control Plans. Does your municipality or someone on your behalf perform construction inspections?**

Yes  No

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **Erosion and Sedimentation Control Plans are reviewed and enforced by the Schuylkill Conservation District.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14D. BMP: Meet Public Education and Outreach permit requirements and measurable goals for developers and builders.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **Developers are required to prepare a Erosion and Sedimentation Control Plan per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

Was your MS4 granted a 1-year timeline extension in meeting this MCM #5, by the local Regional Office of the DEP?

Yes  No If "Yes", complete all Items. If "No", complete Items 16A. and C.

**16A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce DEP-approved ordinance. If you have a one-year extension, this BMP also includes adoption of an ordinance during year two.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**16B. BMP: Require that post-construction structural and non-structural BMPs are designed, constructed and maintained to meet state water quality requirements. Implementation of DEP-approved ordinances is one way to satisfy this requirement. Either municipal resources or an agreement with the local County Conservation District, or other service providers, may be employed to meet this requirement.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill Conservation District reviews post-construction stormwater management plans as part of the NPDES permit process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**16C. BMP: Ensure that storm water BMPs are built, operated, and maintained as designed.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill Conservation conducts inspections of construction sites to ensure storm water BMPs are built and maintained as designed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS AND MAINTENANCE — MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Develop an operation, maintenance, and inspection program for storm water facilities.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Develop a pollution prevention program for municipal vehicle operation, maintenance, fueling, and washing.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct basic awareness training for municipal employees.**

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met or not met: **The Schuylkill County Commissioners will begin an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN *PROTOCOL* FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

### SECTION III – CERTIFICATION

#### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Thomas Palamar

Name and official title

*TH. Palamar*  
Signature

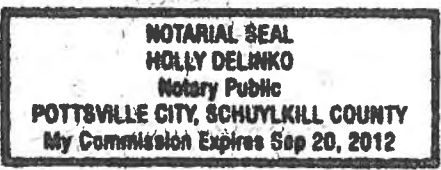
1/5/07  
Date

Sworn and subscribed to before me, this 5<sup>th</sup> day of January, 2009

*Holly Delinko*  
Notary Public

My commission expires 9/30/2012

(Notary Public Seal and Stamp)











COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

## MS4 ANNUAL REPORT FORM

FOR STORM WATER DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)  
Reporting Period (Check appropriate block that you are reporting):

- March 10, 2005 through March 9, 2006 (due June 9, 2006)  
 March 10, 2006 through March 9, 2007 (due June 9, 2007)  
 March 10, 2007 through March 9, 2008 (due June 9, 2008)

### SECTION I – SMALL MS4 OPERATOR INFORMATION

1. Name of MS4 Permittee and NPDES Permit Number

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

2. Location

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

3. Contact Person from the MS4

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

4. Permittee Mailing Address

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

5. MS4 Website (If applicable)

URL: \_\_\_\_\_

6. Permittee's Consultant/Engineer Information (If applicable)

Company Name: alfred benesch & company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: 570-622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901

## SECTION II – MCM INFORMATION

7A. Have you completed all required activities for?

Year 1:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 2:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 3:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 4:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 5:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7B. Complete the following section for each watershed-based or Act 167 Storm Water Management Plan. **The Schuylkill County Commissioners will be preparing and enacting an ACT 167 Storm Water Management Plan during 2009.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

7C. Please provide current contact name and phone number information:	
MCM #1 Public Education and Outreach on Storm Water Impacts	
Name: <u>Thomas Palamar</u>	Phone: <u>(570) 628-4417</u>
MCM #2 Public Involvement/Participation	
Name: <u>Same as above</u>	Phone: _____
MCM #3 Illicit Discharge Detection and Elimination (IDD&E)	
Name: <u>Same as above</u>	Phone: _____
MCM #4 Construction Site Storm Water Runoff Control	
Name: <u>Same as above</u>	Phone: _____
MCM #5 Post-Construction Storm Water Management in New Development and Redevelopment	
Name: <u>Same as above</u>	Phone: _____
MCM #6 Pollution Prevention/Good Housekeeping for Municipal Operations	
Name: <u>Same as above</u>	Phone: _____

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

**8A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**8B. BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/markings? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

**10A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**10B. BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

**12A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12B. BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12C. BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

MCM#3 (continued)

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: \_\_\_\_\_

Number of outfalls screened during the past permit year: \_\_\_\_\_

Number of screenings conducted during the past permit year: \_\_\_\_\_

Number of outfalls/screenings with dry weather flow during the past permit year: \_\_\_\_\_

Number of dry weather flows sampled during the past permit year: \_\_\_\_\_

Number of outfalls determined to have an illicit discharge or connection during past permit year: \_\_\_\_\_

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations. Plans are reviewed and enforced by the Schuylkill Conservation District.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **Developers are informed of their need to prepare and implement an Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

MCM#4 (continued)

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

**16A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**16B. BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The Schuylkill County Commissioners will begin an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM - NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

### SECTION III – CERTIFICATION

#### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Thomas Palamar, City Administrator

Name and official title

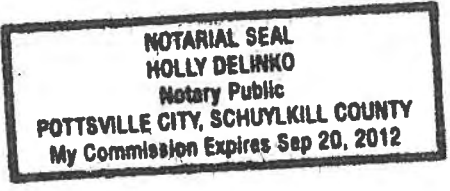
*THA Palamar*  
Signature

1/5/09  
Date

Sworn and subscribed to before me, this 5 day of January, 20 09

*Holly Delinko*  
Notary Public

My commission expires 9/20/2012



(Notary Public Seal and Stamp)



NOT APPLICABLE

**SECTION IV – SPECIAL ADDENDUM REPORT FOR MS4S DISCHARGING INTO THE CHESAPEAKE BAY WATERSHED**

**Reporting Period (Check appropriate block that you are reporting):**

- March 10, 2005 through March 9, 2006 (due June 9, 2006)  
 March 10, 2006 through March 9, 2007 (due June 9, 2007)  
 March 10, 2007 through March 9, 2008 (due June 9, 2008)

1. Name: \_\_\_\_\_ PAG: \_\_\_\_\_ PAI: \_\_\_\_\_

Name of Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

**GEOGRAPHIC LOCATION**

2. **State Hydrologic Unit Code** – Provide the Hydrologic Unit Code(s) of the watershed(s) to which the MS4 discharges its storm water. This information is available at EPA's 'Surf Your Watershed' Website at <http://cfpub.epa.gov/surf/state.cfm?statepostal=PA>

List Hydrologic Unit Code(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**URBAN STORM WATER BEST MANAGEMENT PRACTICES**

3. **Structural BMPs** – List the permanent structural BMPs installed in the MS4, the number of acres that drain to each BMP, the name of the water body that receives discharges from the BMP, how often each BMP is inspected or maintained (quarterly, annually, etc.), and the name of the person or organization responsible for inspection and maintenance of the BMP.

Structural BMP	Drainage Area	Name of Receiving Water Body	Inspection/Maintenance Frequency	Name of Responsible Person or Organization





**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

## MS4 ANNUAL REPORT FORM FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

### Reporting Period

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, \_\_\_\_\_ through March 9, \_\_\_\_\_ (due June 9, \_\_\_\_\_)

### SECTION I – SMALL MS4 OPERATOR INFORMATION

**1. Name of MS4 Permittee and NPDES Permit Number**

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

**2. Location**

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

**3. Contact Person from the MS4**

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

**4. Permittee Mailing Address**

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

**5. MS4 Website (If applicable)**

URL: \_\_\_\_\_

**6. Permittee's Consultant/Engineer Information (If applicable)**

Company Name: alfred benesch & company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: (570) 622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901

## SECTION II – MCM INFORMATION

7A. Have you completed all required activities for?

Year 1:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 2:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 3:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 4:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 5:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7B. Complete the following section for each watershed-based or Act 167 Storm Water Management Plan. **The Schuylkill County Commissioners began preparing and enacting an ACT 167 Storm Water Management Plan during 2009.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

7C. Please provide current contact name and phone number information:	
MCM #1 Public Education and Outreach on Storm Water Impacts	
Name: <u>Thomas Palamar</u>	Phone: <u>(570) 628-4417</u>
MCM #2 Public Involvement/Participation	
Name: <u>Same as the above</u>	Phone: _____
MCM #3 Illicit Discharge Detection and Elimination (IDD&E)	
Name: <u>Same as the above</u>	Phone: _____
MCM #4 Construction Site Storm Water Runoff Control	
Name: <u>Same as the above</u>	Phone: _____
MCM #5 Post-Construction Storm Water Management in New Development and Redevelopment	
Name: <u>Same as the above</u>	Phone: _____
MCM #6 Pollution Prevention/Good Housekeeping for Municipal Operations	
Name: <u>Same as the above</u>	Phone: _____

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

**8A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The City of Pottsville identified homeowners with the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**8B. BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/markings? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The City of Pottsville will post all of their education data on their public access Cable TV Channel.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

10A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

10B. **BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville has participated in the information gathering part of the ACT 167 Stormwater plan.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

12A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12B. **BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during this process. In addition, the City of Pottsville is reviewing the model ordinances proposed as part of the MS4 permit package for possible enactment in 2010

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12C. **BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during this process. Education material will be posted on the City's Cable TV channel.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: \_\_\_\_\_

Number of outfalls screened during the past permit year: \_\_\_\_\_

Number of screenings conducted during the past permit year: \_\_\_\_\_

Number of outfalls/screenings with dry weather flow during the past permit year: \_\_\_\_\_

Number of dry weather flows sampled during the past permit year: \_\_\_\_\_

Number of outfalls determined to have an illicit discharge or connection during past permit year: \_\_\_\_\_

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuykill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during that process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during this process. In addition, the City is reviewing the model MS4 Ordinance for possible adoption in 2010.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: Developers are informed of their need to prepare and implement an Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

16A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during this process. In addition, the City is reviewing the Model MS4 Ordiances for possible adoption in 2010.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

16B. **BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



## SECTION III – CERTIFICATION

### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Thomas Palamar, City Administrator**

\_\_\_\_\_  
Name and official title

\_\_\_\_\_  
Signature

June 16, 2010

\_\_\_\_\_  
Date

Sworn and subscribed to before me, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

(Notary Public Seal and Stamp)

NOT APPLICABLE

**SECTION IV – SPECIAL ADDENDUM REPORT FOR MS4S DISCHARGING INTO THE CHESAPEAKE BAY WATERSHED**

**Reporting Period**

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, \_\_\_\_\_ through March 9, \_\_\_\_\_ (due June 9, \_\_\_\_\_)

1. Name: \_\_\_\_\_ PAG: \_\_\_\_\_ PAI: \_\_\_\_\_  
 Name of Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

**GEOGRAPHIC LOCATION**

2. **State Hydrologic Unit Code** – Provide the Hydrologic Unit Code(s) of the watershed(s) to which the MS4 discharges its storm water. This information is available at EPA's 'Surf Your Watershed' Website at <http://cfpub.epa.gov/surf/state.cfm?statepostal=PA>

List Hydrologic Unit Code(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**URBAN STORM WATER BEST MANAGEMENT PRACTICES**

3. **Structural BMPs** – List the permanent structural BMPs installed in the MS4, the number of acres that drain to each BMP, the name of the water body that receives discharges from the BMP, how often each BMP is inspected or maintained (quarterly, annually, etc.), and the name of the person or organization responsible for inspection and maintenance of the BMP.

Structural BMP	Drainage Area	Name of Receiving Water Body	Inspection/Maintenance Frequency	Name of Responsible Person or Organization





COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

**MS4 ANNUAL REPORT FORM  
FOR STORMWATER DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

**Reporting Period**

**(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)**

- March 10, 2008 through March 9, 2009 (due June 9, 2009)**  
 **March 10, 2009 through March 9, 2010 (due June 9, 2010)**  
 **March 10, 2010 through March 9, 2011 (due June 9, 2011)**

**SECTION I – SMALL MS4 OPERATOR INFORMATION**

**1. Name of MS4 Permittee and NPDES Permit Number**

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

**2. Location**

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

**3. Contact Person from the MS4**

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

**4. Permittee Mailing Address**

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

**5. MS4 Website (If applicable)**

URL: \_\_\_\_\_

**6. Permittee's Consultant/Engineer Information (If applicable)**

Company Name: alfred benesch & company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: (570) 622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901

## SECTION II – MCM INFORMATION

7A. Have you completed all required activities for?

Year 1:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 2:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 3:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 4:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 5:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7B. Complete the following section for each watershed-based or Act 167 Storm Water Management Plan.  
**The Schuylkill County Commissioners began preparing and enacting an ACT 167 Storm Water Management Plan during 2009.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

7C. Please provide current contact name and phone number information:

MCM #1

Public Education and Outreach on Storm Water Impacts

Name: Thomas Palamar Phone: (570) 628-4417

MCM #2

Public Involvement/Participation

Name: Same as the above Phone: \_\_\_\_\_

MCM #3

Illicit Discharge Detection and Elimination (IDD&E)

Name: Same as the above Phone: \_\_\_\_\_

MCM #4

Construction Site Storm Water Runoff Control

Name: Same as the above Phone: \_\_\_\_\_

MCM #5

Post-Construction Storm Water Management in New Development and Redevelopment

Name: Same as the above Phone: \_\_\_\_\_

MCM #6

Pollution Prevention/Good Housekeeping for Municipal Operations

Name: Same as the above Phone: \_\_\_\_\_

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

8A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville identified homeowners with the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

8B. **BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/marketing? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City of Pottsville will posted the education data on their public access Cable TV Channel. In addition, a public meeting is scheduled for 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

10A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

10B. **BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville has participated in the information gathering part of the ACT 167 Stormwater plan.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

12A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12B. **BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process. In addition, the City of Pottsville is reviewing the model ordinances proposed as part of the MS4 permit package for possible enactment in 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12C. **BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process. Education material will be posted on the City's Cable TV channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: \_\_\_\_\_

Number of outfalls screened during the past permit year: \_\_\_\_\_

Number of screenings conducted during the past permit year: \_\_\_\_\_

Number of outfalls/screenings with dry weather flow during the past permit year: \_\_\_\_\_

Number of dry weather flows sampled during the past permit year: \_\_\_\_\_

Number of outfalls determined to have an illicit discharge or connection during past permit year: \_\_\_\_\_

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009.  
The City of Pottsville will address this area during that process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

13. **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will address this area during this process. In addition, the City is reviewing the model MS4 Ordinance for possible adoption in 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Developers are informed of their need to prepare and implement Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#4 (continued)**

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners began an ACT 167 Storm Water Management Plan during 2009. The City of Pottsville will address this area during this process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

16A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process. In addition, the City is reviewing the Model MS4 Ordiances for possible adoption in 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

16B. **BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill County Commissioners will began an ACT 167 Stormwater Management Plan during 2009. The City of Pottsville will adress this area during this process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

## SECTION III – CERTIFICATION

### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Thomas Palamar, City Administrator** \_\_\_\_\_

Name and official title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Sworn and subscribed to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

(Notary Public Seal and Stamp)



NOT APPLICABLE

## SECTION IV – SPECIAL ADDENDUM REPORT FOR MS4S DISCHARGING INTO THE CHESAPEAKE BAY WATERSHED

### Reporting Period

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, \_\_\_\_\_ through March 9, \_\_\_\_\_ (due June 9, \_\_\_\_\_)

1. Name: \_\_\_\_\_ PAG: \_\_\_\_\_ PAI: \_\_\_\_\_  
Name of Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

### GEOGRAPHIC LOCATION

2. **State Hydrologic Unit Code** – Provide the Hydrologic Unit Code(s) of the watershed(s) to which the MS4 discharges its storm water. This information is available at EPA's 'Surf Your Watershed' Website at <http://cfpub.epa.gov/surf/state.cfm?statepostal=PA>

List Hydrologic Unit Code(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

### URBAN STORM WATER BEST MANAGEMENT PRACTICES

3. **Structural BMPs** – List the permanent structural BMPs installed in the MS4, the number of acres that drain to each BMP, the name of the water body that receives discharges from the BMP, how often each BMP is inspected or maintained (quarterly, annually, etc.), and the name of the person or organization responsible for inspection and maintenance of the BMP.

Structural BMP	Drainage Area	Name of Receiving Water Body	Inspection/Maintenance Frequency	Name of Responsible Person or Organization





**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

## MS4 ANNUAL REPORT FORM FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

### Reporting Period

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, 2011 through March 9, 2012 (due June 9, 2012)

### SECTION I – SMALL MS4 OPERATOR INFORMATION

**1. Name of MS4 Permittee and NPDES Permit Number**

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

**2. Location**

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

**3. Contact Person from the MS4**

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

**4. Permittee Mailing Address**

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

**5. MS4 Website (If applicable)**

URL: \_\_\_\_\_

**6. Permittee's Consultant/Engineer Information (If applicable)**

Company Name: alfred benesch & company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: (570) 622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901

## SECTION II – MCM INFORMATION

7A. Have you completed all required activities for?

Year 1:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 2:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 3:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 4:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 5:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7B. Complete the following section for each watershed-based or Act 167 Storm Water Management Plan.  
**The Schuylkill County Commissioners began preparing and enacting an ACT 167 Storm Water Management Plan during 2009.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

7C. Please provide current contact name and phone number information:

MCM #1

Public Education and Outreach on Storm Water Impacts

Name: Thomas Palamar Phone: (570) 628-4417

MCM #2

Public Involvement/Participation

Name: Same as the above Phone: \_\_\_\_\_

MCM #3

Illicit Discharge Detection and Elimination (IDD&E)

Name: Same as the above Phone: \_\_\_\_\_

MCM #4

Construction Site Storm Water Runoff Control

Name: Same as the above Phone: \_\_\_\_\_

MCM #5

Post-Construction Storm Water Management in New Development and Redevelopment

Name: Same as the above Phone: \_\_\_\_\_

MCM #6

Pollution Prevention/Good Housekeeping for Municipal Operations

Name: Same as the above Phone: \_\_\_\_\_

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

8A. **MS4s USING DEP PROTOCOL for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville identified homeowners with the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

8B. **BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/markings? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City of Pottsville will posted the education data on their public access Cable TV Channel. In addition, a public meeting is scheduled for 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

10A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City assisted a local Headwaters Association in identifying and stenciling inlets that were part of the MS4 system. A rain barrel contest was held as part City's Block of Art festival.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

10B. **BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City distributed handouts relating to the MS4 system and began posting information on the community bulletin board.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

12A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville received the mapping from the Greater Pottsville Area Sewer Authority for the recent sewer separation project. Previously separated area had been compiled on separate maps. The city is in the process of updating their mapping to include all regulated MS4s on one map.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12B. **BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville is reviewing the model ordinances proposed as part of the MS4 permit package for possible enactment in 2012. In the interim, the City Code specifically prohibits the discharge of sanitary sewage or industrial wastes to any natural outlet within the City unless suitable treatment has been provided.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12C. **BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Education material was posted on the City's Cable TV channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: \_\_\_\_\_

Number of outfalls screened during the past permit year: \_\_\_\_\_

Number of screenings conducted during the past permit year: \_\_\_\_\_

Number of outfalls/screenings with dry weather flow during the past permit year: \_\_\_\_\_

Number of dry weather flows sampled during the past permit year: \_\_\_\_\_

Number of outfalls determined to have an illicit discharge or connection during past permit year: \_\_\_\_\_

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The completion of the Sewer Separation project has created several new sewer outfalls. These outfalls are into a covered arch under a City Street. It is not possible to monitor the outfalls at the discharge point. The City will monitor these out falls at the manhole nearest the discharge point. As stated previously in the report an updated map is being developed to show the necessary data.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the model MS4 Ordinance for possible adoption in 2011.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Developers are informed of their need to prepare and implement Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City Code Enforcement along with the Schuylkill Conservation District was responsible for oversight of active construction sites to insure the compliance with applicable regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

16A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the Model MS4 Ordinances for possible adoption in 2012.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

16B. **BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Use City road crew to repair infrastructure and clean inlets and drain pipes as needed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City is developing a pollution prevention plan for it's maitenance department.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City employees are trained in either informal meetings with management or sent to various training programs as needed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

## SECTION III – CERTIFICATION

### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Thomas Palamar, City Administrator**

Name and official title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Sworn and subscribed to before me, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

(Notary Public Seal and Stamp)

NOT APPLICABLE

**SECTION IV – SPECIAL ADDENDUM REPORT FOR MS4S DISCHARGING INTO THE CHESAPEAKE BAY WATERSHED**

**Reporting Period**

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)
- March 10, 2009 through March 9, 2010 (due June 9, 2010)
- March 10, \_\_\_\_\_ through March 9, \_\_\_\_\_ (due June 9, \_\_\_\_\_)

1. Name: \_\_\_\_\_ PAG: \_\_\_\_\_ PAI: \_\_\_\_\_  
Name of Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

**GEOGRAPHIC LOCATION**

2. **State Hydrologic Unit Code** – Provide the Hydrologic Unit Code(s) of the watershed(s) to which the MS4 discharges its storm water. This information is available at EPA's 'Surf Your Watershed' Website at <http://cfpub.epa.gov/surf/state.cfm?statepostal=PA>

List Hydrologic Unit Code(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**URBAN STORM WATER BEST MANAGEMENT PRACTICES**

3. **Structural BMPs** – List the permanent structural BMPs installed in the MS4, the number of acres that drain to each BMP, the name of the water body that receives discharges from the BMP, how often each BMP is inspected or maintained (quarterly, annually, etc.), and the name of the person or organization responsible for inspection and maintenance of the BMP.

Structural BMP	Drainage Area	Name of Receiving Water Body	Inspection/Maintenance Frequency	Name of Responsible Person or Organization







**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

## MS4 ANNUAL REPORT FORM FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

### Reporting Period

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, 2012 through March 9, 2013 (due June 9, 2013)

### SECTION I – SMALL MS4 OPERATOR INFORMATION

1. **Name of MS4 Permittee and NPDES Permit Number**

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

2. **Location**

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

3. **Contact Person from the MS4**

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

4. **Permittee Mailing Address**

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

5. **MS4 Website (If applicable)**

URL: \_\_\_\_\_

6. **Permittee's Consultant/Engineer Information (If applicable)**

Company Name: Alfred Benesch & Company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: (570) 622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901

## SECTION II – MCM INFORMATION

7A. Have you completed all required activities for?

Year 1:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 2:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 3:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Year 4:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Year 5:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

7B. Complete the following section for each watershed-based or Act 167 Storm Water Management Plan.  
**The Schuylkill County Commissioners began preparing and enacting an ACT 167 Storm Water Management Plan during 2009. Phase I of the plan was completed however due to lack of funding; the County has not begun Phase II activities, which includes plan development and implementation.**

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

Watershed Plan Name \_\_\_\_\_

Is this an Act 167 Plan? Yes  No

If yes, has DEP approved the plan? Yes  No

If yes, give date: \_\_\_\_\_

Is the ordinance required by the plan enacted: Yes  No

If yes, give effective date: \_\_\_\_\_

If the ordinance is not enacted, please provide the anticipated enactment date \_\_\_\_\_  
and explain the status: \_\_\_\_\_

7C. Please provide current contact name and phone number information:	
MCM #1 Public Education and Outreach on Storm Water Impacts	
Name: <u>Thomas Palamar</u>	Phone: <u>(570) 628-4417</u>
MCM #2 Public Involvement/Participation	
Name: <u>Same as the above</u>	Phone: _____
MCM #3 Illicit Discharge Detection and Elimination (IDD&E)	
Name: <u>Same as the above</u>	Phone: _____
MCM #4 Construction Site Storm Water Runoff Control	
Name: <u>Same as the above</u>	Phone: _____
MCM #5 Post-Construction Storm Water Management in New Development and Redevelopment	
Name: <u>Same as the above</u>	Phone: _____
MCM #6 Pollution Prevention/Good Housekeeping for Municipal Operations	
Name: <u>Same as the above</u>	Phone: _____

**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

**8A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville identified homeowners within the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed. Also the Greater Pottsville Area Sewer Authority has been conducting inspections to prevent stormwater from entering the sanitary sewer system in areas where the combined sewers have been separated.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**8B. BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/markings? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**A PowerPoint presentation on the City's MS4 Storm Water Management Program was done at the local Rotary Club chapter during National Engineer's Week. The City will coordinate other civic organizations, local ecology clubs, etc. for future opportunities for public education. The City of Pottsville posted the education data on their public access Cable TV Channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

10A. **MS4s USING DEP PROTOCOL for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**A PowerPoint presentation on the City's MS4 Storm Water Management Program was done at the local Rotary Club chapter during National Engineer's Week. The City will coordinate with other civic organizations, local ecology clubs, etc. for future opportunities for public education. Also as in the past, the City will look to partner with the Schuylkill Conservation District or local headwater associations for additional public involvement projects.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

10B. **BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City distributed handouts relating to the MS4 system and began posting information on the community bulletin board.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

**12A. MS4s USING DEP PROTOCOL for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville received the mapping from the Greater Pottsville Area Sewer Authority for the recent sewer separation project. Previously separated area had been compiled on separate maps. The city prepared a map of the MS4 areas and submitted it to the DEP as part of the MS4 permit renewal packet.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12B. BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville is reviewing the model ordinances proposed as part of the MS4 permit package for possible enactment in 2013. In the interium, the City Code specifically prohibits the discharge of sanitary sewage or industrial wastes to any natural outlet within the City unless suitable treatment has been provided.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**12C. BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Education material was posted on the City's Cable TV channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

MCM#3 (continued)

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: 27

Number of outfalls screened during the past permit year: 0

Number of screenings conducted during the past permit year: 0

Number of outfalls/screenings with dry weather flow during the past permit year: 0

Number of dry weather flows sampled during the past permit year: 0

Number of outfalls determined to have an illicit discharge or connection during past permit year: NA

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The completion of the Sewer Separation project has created several new sewer outfalls. These outfalls are into a covered arch under a City Street. It is not possible to monitor the outfalls at the discharge point. The City will monitor these out falls at the manhole nearest the discharge point. No screenings of outfalls were conducted during the past permit year.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations (Chapter 197 of the City Code) allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the model MS4 Ordinance for possible adoption in 2013.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Developers are informed of their need to prepare and implement Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City Code Enforcement along with the Schuylkill Conservation District was responsible for oversight of active construction sites to insure the compliance with applicable regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans. No complaints for construction site storm runoff were reported to the City during the permit year.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

**15. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

16A. **MS4s USING DEP PROTOCOL for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the Model MS4 Ordinances for possible adoption in 2013.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

16B. **BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process. Long term operation and maintenance requirements are identified in the NPDES permit.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:



**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

**18A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Use City road crew to repair infrastructure and clean inlets and drain pipes as needed. No formal written O&M plan was been prepared for this permit year.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18B. BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City is developing a pollution prevention plan for it's maintenance department.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**18C. BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.

Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City employees are trained in either informal meetings with management or sent to various training programs as needed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

### SECTION III – CERTIFICATION

#### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

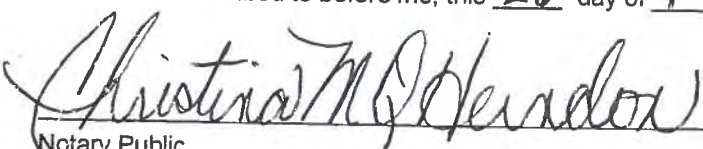
Thomas Palamar, City Administrator

Name and official title

  
Signature

8/29/13  
Date

Sworn and subscribed to before me, this 29 day of May, 20 13

  
Notary Public

My commission expires 8/17/2015

(Notary Public Seal and Stamp)



NOT APPLICABLE

**SECTION IV – SPECIAL ADDENDUM REPORT FOR MS4S DISCHARGING INTO THE CHESAPEAKE BAY WATERSHED**

**Reporting Period**

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, \_\_\_\_\_ through March 9, \_\_\_\_\_ (due June 9, \_\_\_\_\_)

1. Name: \_\_\_\_\_ PAG: \_\_\_\_\_ PAI: \_\_\_\_\_  
 Name of Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

**GEOGRAPHIC LOCATION**

2. **State Hydrologic Unit Code** – Provide the Hydrologic Unit Code(s) of the watershed(s) to which the MS4 discharges its storm water. This information is available at EPA's 'Surf Your Watershed' Website at <http://cfpub.epa.gov/surf/state.cfm?statepostal=PA>

List Hydrologic Unit Code(s): \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**URBAN STORM WATER BEST MANAGEMENT PRACTICES**

3. **Structural BMPs** – List the permanent structural BMPs installed in the MS4, the number of acres that drain to each BMP, the name of the water body that receives discharges from the BMP, how often each BMP is inspected or maintained (quarterly, annually, etc.), and the name of the person or organization responsible for inspection and maintenance of the BMP.

Structural BMP	Drainage Area	Name of Receiving Water Body	Inspection/Maintenance Frequency	Name of Responsible Person or Organization





**MS4 ANNUAL REPORT FORM**  
**FOR STORMWATER DISCHARGES FROM**  
**SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)**

**Reporting Period**

(Check appropriate block. Fill in the year for the reporting period you are submitting the report if not listed.)

- March 10, 2008 through March 9, 2009 (due June 9, 2009)  
 March 10, 2009 through March 9, 2010 (due June 9, 2010)  
 March 10, 2013 through January 1, 2014 (due June 9, 2014)

**SECTION I – SMALL MS4 OPERATOR INFORMATION**

**1. Name of MS4 Permittee and NPDES Permit Number**

Name: City of Pottsville PAG: PAG132276 PAI: \_\_\_\_\_  
Co-permittee : \_\_\_\_\_

**2. Location**

Municipality: City of Pottsville County: Schuylkill  
Watershed Name(s): \_\_\_\_\_

**3. Contact Person from the MS4**

Name: Thomas Palamar Title: City Administrator Phone: (570) 628-4417  
Fax: (570) 628-4222 Email: cityadministrator@city.pottsville.pa.us

**4. Permittee Mailing Address**

Address: 401 North Centre Street  
City: Pottsville State: PA Zip Code: 17901

**5. MS4 Website (If applicable)**

URL: \_\_\_\_\_

**6. Permittee's Consultant/Engineer Information (If applicable)**

Company Name: Alfred Benesch & Company  
Consultant/Engineer Name: David L. Horst, P.E. Title: Project Engineer  
Phone: (570) 622-4055 Fax: (570) 622-1232 Email: dhorst@benesch.com  
Address: 400 One Norwegian Plaza, P.O. Box 1090  
City: Pottsville State: PA Zip Code: 17901



7C. Please provide current contact name and phone number information:

MCM #1

Public Education and Outreach on Storm Water Impacts

Name: Thomas Palamar

Phone: (570) 628-4417

MCM #2

Public Involvement/Participation

Name: Same as the above

Phone: \_\_\_\_\_

MCM #3

Illicit Discharge Detection and Elimination (IDD&E)

Name: Same as the above

Phone: \_\_\_\_\_

MCM #4

Construction Site Storm Water Runoff Control

Name: Same as the above

Phone: \_\_\_\_\_

MCM #5

Post-Construction Storm Water Management in New Development and Redevelopment

Name: Same as the above

Phone: \_\_\_\_\_

MCM #6

Pollution Prevention/Good Housekeeping for Municipal Operations

Name: Same as the above

Phone: \_\_\_\_\_



**MCM#1 - PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS — MINIMUM CONTROL MEASURE**

8A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update Target Audience Information** (Have you reviewed your public education plan for accuracy and content and made any relevant changes regarding your target audiences and their communication channels? If so, include/attach your revised plan.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville identified homeowners within the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed. Also the Greater Pottsville Area Sewer Authority has been conducting inspections to prevent stormwater from entering the sanitary sewer system in areas where the combined sewers have been separated.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

8B. **BMP: Continue public education and outreach.** (What was accomplished during the past permit year regarding: Developer education/outreach? Storm water ad in local newspaper? Provide posters or other information to schools and businesses? Storm drain stenciling/markings? Maintain website links and provide website educational info? Educational information in your newsletter? Any other public education/outreach?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Previously, a PowerPoint presentation on the City's MS4 Storm Water Management Program was done at the local Rotary Club chapter during National Engineer's Week. The City will coordinate other civic organizations, local ecology clubs, etc. for future opportunities for public education. The City of Pottsville posted the education data on their public access Cable TV Channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#1 (continued)**

**9. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#2 - PUBLIC INVOLVEMENT/PARTICIPATION — MINIMUM CONTROL MEASURE**

10A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Update your Public Involvement and Participation Plan (PIPP).** (Have you reviewed your PIPP for accuracy and content and made any relevant changes? If so, include/attach your revised PIPP.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Previously, a PowerPoint presentation on the City's MS4 Storm Water Management Program was done at the local Rotary Club chapter during National Engineer's Week. The City will coordinate with other civic organizations, local ecology clubs, etc. for future opportunities for public education. Also as in the past, the City will look to partner with the Schuylkill Conservation District or local headwater associations for additional public involvement projects.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

10B. **BMP: Notify and solicit public input/involvement regarding implementation of your Storm Water Management Program.** (How and when did you solicit public input/involvement? What were the results/accomplishments during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City distributed handouts relating to the MS4 system and began posting information on the community bulletin board.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#2 (continued)**

**11. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E) — MINIMUM CONTROL MEASURE**

12A. **MS4s USING DEP PROTOCOL for this MCM**

**BMP: Map all outfalls and receiving water-bodies.** (Is your map up-to-date and accurate? Have you mapped additional features that can assist your outfall screening program, such as inlets, piping and outfall drainage areas? If updated, please submit)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville received the mapping from the Greater Pottsville Area Sewer Authority for the recent sewer separation project. Previously separated area had been compiled on separate maps. The city prepared a map of the MS4 areas and submitted it to the DEP as part of the MS4 permit renewal packet.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12B. **BMP Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville is reviewing the model ordinances proposed as part of the MS4 permit package for possible enactment in 2013. In the interium, the City Code specifically prohibits the discharge of sanitary sewage or industrial wastes to any natural outlet within the City unless suitable treatment has been provided.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

12C. **BMP: Distribute IDD&E specific educational material.** (What educational material was distributed to public employees, businesses and the general public concerning the hazards associated with illegal discharges and improper disposal of waste? Who received it? When?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Education material was posted on the City's Cable TV channel.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

12D. **BMP: Establish priority areas, conduct screening/sampling and take appropriate actions as needed.**  
(Describe how the priority area was established and which outfalls were selected for screening during the past permit year. Summarize the results of your outfall screening/sampling. Include properly completed illicit discharge field screening form for any problem outfall. Include the illicit discharge quarterly summary report form. Describe the corrective actions taken to eliminate any illicit discharges or connections.)

Number of outfalls in system: 27

Number of outfalls screened during the past permit year: 0

Number of screenings conducted during the past permit year: 0

Number of outfalls/screenings with dry weather flow during the past permit year: 0

Number of dry weather flows sampled during the past permit year: 0

Number of outfalls determined to have an illicit discharge or connection during past permit year: NA

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The completion of the Sewer Separation project has created several new sewer outfalls. These outfalls are into a covered arch under a City Street. It is not possible to monitor the outfalls at the discharge point. The City will monitor these out falls at the manhole nearest the discharge point. Screening for the outfalls was scheduled to begin in 2014.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#3 (continued)**

**13. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#4 - CONSTRUCTION SITE STORM WATER RUNOFF CONTROL — MINIMUM CONTROL MEASURE**

**14A. MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?).

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations (Chapter 197 of the City Code) allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the model MS4 Ordinance for possible adoption in 2014.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14B. BMP: Implement procedures for the review and enforcement of Erosion and Sediment (E&S) Control Plans.** (Who reviewed E&S Control Plans during the past permit year? Did the MS4 permittee conduct any E&S site inspections? Briefly describe any enforcement activities undertaken by the MS4 permittee.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City of Pottsville requires Erosion and Sediment Control Plans as part of their Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**14C. BMP: Provide education and outreach for developers and builders.** (What educational/outreach materials were distributed to developers/builders during the past permit year?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Developers are informed of their need to prepare and implement Erosion and Sediment Control Plans per the City's Subdivision and Land Development Regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.



**MCM#4 (continued)**

14D. **BMP: Require construction site operators to control waste at the construction site.** (What was done in the past permit year to require construction site operators to control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City Code Enforcement along with the Schuylkill Conservation District was responsible for oversight of active construction sites to insure the compliance with applicable regulations.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

14E. **BMP: Implement procedures for the receipt and consideration of information submitted by the public.** (Summarize any information or complaints received from the public during the past permit year concerning construction site storm water runoff. Briefly describe how you responded to any such information/complaints?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Complaints for storm water runoff are referred to the Schuylkill Conservation District who is responsible for enforcement of E&S plans and Post Construction Storm Water Management plans. No complaints for construction site storm runoff were reported to the City during the permit year.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#4 (continued)**

15. **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#5 - POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT — MINIMUM CONTROL MEASURE**

16A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement and enforce ordinance to satisfy this Minimum Control Measure.** (How was ordinance implemented and enforced during the past permit year in order to meet the goals of this MCM?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The City of Pottsville through Subdivision and Land Development regulations allows the Schuylkill Conservation District to have jurisdiction in reviewing E&S Plans and issuing NPDES Stormwater permits for new development. In addition, the City is reviewing the Model MS4 Ordinances for possible adoption in 2013.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

16B. **BMP: Ensure that all Post-Construction Storm Water Management (PCSWM) BMPs in new or re-development areas are built as designed, and operated and maintained properly.** (Summarize how the MS4 permittee accomplished this during the past permit year. Include a list of all applicable PCSWM BMPs.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**The Schuylkill Conservation District reviews Post Construction Storm Water Management plans as part of the NPDES permit process. Long term operation and maintenance requirements are identified in the NPDES permit.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#5 (continued)**

**17. MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol, approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**MCM#6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS —  
MINIMUM CONTROL MEASURE**

18A. **MS4s USING DEP *PROTOCOL* for this MCM**

**BMP: Implement an operation, maintenance, inspection and repair program for all municipally owned storm water facilities.** (Describe how your program was implemented during the past permit year. Include your written Operation & Maintenance (O&M) plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**Use City road crew to repair infrastructure and clean inlets and drain pipes as needed. No formal written O&M plan was been prepared for this permit year.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

18B. **BMP: Implement a pollution prevention/operation and maintenance program for all municipal vehicle/equipment operation, maintenance, fueling, and washing activities.** (Describe how your program was implemented during the past permit year. Include your written pollution prevention/O&M plan, if not previously submitted.)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions: **The City is developing a pollution prevention plan for it's maintenance department.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

18C. **BMP: Conduct BMP 18A and 18B training for appropriate municipal employees.** (Who was trained? When was the training conducted? What was the subject matter?)

Measurable goal for this BMP was met.  Measurable goal for this BMP was not met.

Describe how goal was met; or if not met, give an explanation and proposed corrective actions:

**City employees are trained in either informal meetings with management or sent to various training programs as needed.**

Is this BMP appropriate to meet your identified measurable goal?  Yes  No. If No, please provide additional information on other BMP(s) that would meet the goal.

**MCM#6 (continued)**

19.  **MS4s USING OWN PROTOCOL FOR THIS MCM – NOT APPLICABLE**

If you are implementing your own protocol approved by the Department, describe the current status of this Minimum Control Measure. In the boxes below list all BMPs and measurable goals you identified on your NOI or application approved by DEP. If the goals were met, describe how they were met. If they were not met, describe the current status of each and when/how they will be met.

**Goal #1**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #2**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

**Goal #3**

List/Describe BMPs and measurable goal (Approved by DEP):

Describe how measurable goal was met:

If not met, describe reason(s), current status, plans and schedule for meeting the goal:

### SECTION III – CERTIFICATION

#### CERTIFICATION STATEMENT

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Thomas Palamar, City Administrator**

\_\_\_\_\_  
Name and official title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Sworn and subscribed to before me, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

(Notary Public Seal and Stamp)









## MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL/PROGRESS REPORT

For the Reporting Period: January 1, 2014 to January 1, 2015

- Annual Report     Progress Report  
 New Permittee     Renewal Permittee

Due Date: June 9, 2015

### GENERAL INFORMATION

Permittee Name: <b>City of Pottsville</b>	NPDES Permit No.: <b>PAG132276</b>
Mailing Address: <b>401 North Centre Street</b>	Effective Date: <b>2014</b>
City, State, Zip: <b>Pottsville, PA 17901</b>	Expiration Date: <b>2018</b>
MS4 Contact Person: <b>Thomas Palamar</b>	Renewal Due Date: <b>9/16/2017</b>
Title: <b>City Administrator</b>	Admin. Extended? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Phone: <b>(570) 628-4417</b>	Municipality: <b>City of Pottsville</b>
Email: <b>cityadministrator@city.pottsville.pa.us</b>	County: <b>Schuylkill</b>

Co-Permittees (if applicable): **NA**

### WATER QUALITY INFORMATION

Are there any discharges to waters within the Chesapeake Bay Watershed?     Yes     No

Identify all surface waters that receive stormwater discharges from storm sewers within the MS4 urbanized area and provide the requested information (see instructions).

Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Unnamed Tributaries to Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff	Yes	Yes
Unnamed Tributaries to West Branch of Schuylkill River	CWF	Yes	PCB, AMD	Yes	Yes
Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes
West Branch Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes

Identify any Wasteload Allocations (WLAs) identified in TMDLs for the MS4, if applicable. Identify the pollutant(s) and mass load(s):

**NA**

**GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION**

Have you completed all MCM activities required by the permit for this reporting period?  Yes  No

Provide current contact name and phone number information for the required MCMs (if same as page 1, leave blank):

MCM	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	Thomas Palamar	(570) 628-4417
#2 Public Involvement/Participation	Thomas Palamar	(570) 628-4417
#3 Illicit Discharge Detection and Elimination (IDD&E)	Thomas Palamar	(570) 628-4417
#4 Construction Site Storm Water Runoff Control	Thomas Palamar	(570) 628-4417
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Thomas Palamar	(570) 628-4417
#6 Pollution Prevention / Good Housekeeping	Thomas Palamar	(570) 628-4417

**MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS**

**BMP #1: Develop, implement and maintain a written Public Education and Outreach Program**

*Measurable Goal: For new permittees a Public Education and Outreach Program (PEOP) shall be developed and implemented during the first year of permit coverage and shall be re-evaluated each permit year thereafter and revised as needed. For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.*

- For new permittees only, attach the written PEOP or a summary thereof to the first report submitted to DEP.
- If you are not a new permittee, did you complete and submit your written PEOP to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
- Date of last evaluation of or revision to the PEOP: **Revised January 2016**
- What were the plans and goals for public education and outreach for the reporting period?

The City of Pottsville identified homeowners within the MS4 stormwater service area. In addition, a list of potential and past developers within the City was developed. Also, the Greater Pottsville Area Sewer Authority has been conducting inspections to prevent stormwater from entering the sanitary sewer systems in areas where the combined sewers were separated. The MS4 program was discussed in the Mayor's State of the City Address. The City is part of the ongoing Schuylkill Street Art Contest that is sponsored by the Partnership for the Delaware Estuary. Winning art designs are applied to a storm drain in the City. The City began development of the written plan in 2015.

- Did the MS4 achieve its goal(s) for the PEOP during the reporting period?  Yes  No

Explain the rationale for your answer:

In addition to the work described above, the City began to develop a revised stormwater plan in 2015 for submission to the Department.

- Identify specific plans and goals for public education and outreach for the upcoming year:

The City of Pottsville prepared and update to their PEOP in 2015 and submitted it to PADEP in January of 2016. Specific Initiatives included providing information of the City's webpage, publishing a newsletter, having a public meeting, and distributing related storm water materials.

**BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4**

*Measurable Goal: For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually.*

- For new permittees only, attach your target audience list(s) to the first report submitted to DEP.

2. If you are not a new permittee, did you complete and submit your target audience list to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Date of last review or revision to target audience list(s): **Revised January 2016**

**BMP #3: Annually publish at least one educational item on your Stormwater Management Program**

**Measurable Goal:** For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.

1. For new permittees only, attach your published stormwater educational or informational materials to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your published stormwater educational or informational materials to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Do you have a municipal newsletter?  Yes  No  
If Yes, how often was it published during the reporting period and what MS4-related material did it contain?  
**It was published once in 2016 (developed in 2015). It contains the permit information and the links to the MS4 sites.**
4. Do you have a municipal website?  Yes  No (URL: )  
If Yes, what MS4-related material does it contain?  
**<http://www.city.pottsville.pa.us/ms4/> - It contains the plan overview, resources, plan, schedule, educational material and MS4 links.**
5. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:  
**PowerPoint presentation was done previously at the local Rotary Club chapter. The City continues to seek opportunities with other civic organizations, school ecology clubs, etc. for future opportunities for public education. The City posted notices on their public access Cable TV Channel.**
6. Date of most recent review and/or update to published stormwater educational materials: **January 2016**
7. Identify specific plans for the publication of stormwater materials for the upcoming year:  
**The updated Stormwater Management Plan and schedule and annual newsletter have been published on the City's website along with links to more information.**

**BMP #4: Distribute stormwater educational materials to the target audiences**

**Measurable Goal:** All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMP #3.

Identify the two additional methods of distributing stormwater educational materials during the previous year (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

**The City will contact the Schuylkill Headwaters Association, The Schuylkill Conservation District, and Trout Unlimited with an effort to promote pollution prevention of our storm water discharge through supported and partnered education programs for the City. One School or club program will be addressed through this effort each year. Additional education materials will be distributed to the affected school(s)/clubs.**

**MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION**

**BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)**

**Measurable Goal:** A new permittee's PIPP shall be developed and implemented during the first year of coverage under this General Permit. All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to:

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
- c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.

- 1. For new permittees only, attach your written PIPP or a summary thereof to the first report submitted to DEP.
- 2. If you are not a new permittee, did you complete and submit your written PIPP or summary to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**

3. Date of last review and/or update to the PIPP: **January 2016 (Developed in 2015)**

4. Explain how your PIPP addresses items a, b and c of the Measurable Goal:  
**The City will contact the Schuylkill Headwaters Association, The Schuylkill Conservation District, and Trout Unlimited with an effort to promote pollution prevention of our storm water discharge through supported and partnered education programs for the City. One School or club program will be addressed through this effort each year. Additional education materials will be distributed to the affected school(s)/clubs. The City has partnered with the Ecology Club at Pottsville Area High School by establishing relationships with Mr. Adrian Portland, Biology Teacher/ Club Advisor and Ms. Tiffany Reedy, Principal. The City is part of the ongoing Schuylkill Street Art Contest that is sponsored by the Partnership for the Delaware Estuary. Winning art designs are applied to a storm drain in the City.**

**BMP #2: Prior to adoption of any ordinance (municipal permittees) or SOP (non-municipal permittees) required by the permit, provide adequate public notice and opportunities for public review, input, and feedback.**

**Measurable Goal:** Advertise any proposed MS4 Stormwater Management Ordinance or SOP, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response.

- 1. Was an MS4-related ordinance or SOP developed during the reporting period?  Yes  No
- 2. If Yes, describe how you advertised the draft ordinance and how you provided opportunities for public review, input and feedback:

3. If an ordinance or SOP was enacted/developed or amended during the reporting period, provide the following information:

Ordinance No. / SOP Name	Date of Public Notice	Date of Public Hearing	Date Enacted
Ordinance 829 (Chapter 193)	2013	2013	11/11/2013

**BMP #3: Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implementation of your SWMP.**

**Measurable Goals:** Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in the implementation of your SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

1. Date of the public meeting(s): **City Council meetings are conducted on the first Monday of each month, which allows for public comment.**
2. How were meeting(s) advertised to the public? **Meetings are advertised in the newspaper as required by law.**
3. Indicate where the meeting(s) were held and the number of attendees:  
**Meetings are held at Pottsville City Hall.**
4. What types of MS4-related activities did you solicit public involvement and participation for?  
**Public Comment is open to any MS4 related activities**
5. What MS4-related activities did the public participate in?  
**The City is part of the ongoing Schuylkill Street Art Contest that is sponsored by the Partnership for the Delaware Estuary. Winning art designs are applied to a storm drain in the City.**

### **MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)**

**BMP #1: You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.**

**Measurable Goal:** For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter. For renewal permittees, the existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.

1. For new permittees only, attach your written IDD&E program to the first report.
2. If you are not a new permittee, did you complete and submit your written IDD&E program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Date of last review and/or update to IDD&E program: **January 2016**

**BMP #2: Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.**

**Measurable Goals:** For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4th) year of permit coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.

1. Have you completed a map(s) of all outfalls and receiving waters of your storm sewer system?  Yes  No

2. For new permittees only, attach the completed map to the 4<sup>th</sup> year Annual Report.
3. Date of last update or revision to map(s): 5/3/2017
4. Total number of discharge points in your storm sewer system that:  
Discharge directly to surface waters (outfalls): 34  
Discharge to storm sewers owned by others: 0
5. Total number of outfalls that are mapped at this time: 34

**BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.**

*Measurable Goals: For new permittees, develop the map(s) by the end of the fourth (4th) year of coverage under the permit and update and maintain the map(s) as necessary each year of permit coverage thereafter. For renewal permittees, update and maintain the map(s) as necessary during each year of permit coverage.*

1. Have you completed a map(s) that includes roads, inlets, piping, swales, catch basins, channels, basins, municipal boundaries and watershed boundaries?  Yes  No
2. If Yes, is the map(s) on the same map(s) as for outfalls and receiving waters?  Yes  No
3. For new permittees only, attach the completed map to the 4<sup>th</sup> year Annual Report.

4. If you are not a new permittee, did you complete and submit your map to DEP?  Yes  No  
If Yes, provide the latest submission date: 9/12/12
5. Date of last update or revision to map: 5/3/2017

**BMP #4: Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.**

*For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet excerpted from the Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments (CWP, October 2004). Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.*

*The results of outfall inspections and actions taken to remove or correct illicit discharges shall be summarized in periodic reports.*

1. For new permittees only, were at least 40% of all outfalls screened during dry weather?  Yes  No  
  
If Yes for #1, indicate the number screened and the percent of all outfalls it represents. If No for #1, indicate reason(s) why this was not completed:  
  
Are you on pace to screen all outfalls twice during the permit term?  Yes  No
2. For renewal permittees, indicate the percent of outfalls screened during the reporting period: 40%  
  
Are you on pace to screen all outfalls once during the permit term?  Yes  No

3. For all permittees, indicate the percent of outfalls screened that revealed dry weather flows: 65%
4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids?  Yes  No
5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment. **The revised maps, sample results and corrective report is attached.**

6. Do you use the "Outfall Reconnaissance Inventory / Sample Collection Field Sheet" provided in the permit?  
 Yes  No  
If No, attach a copy of your monitoring form.

**BMP #5: Enact a stormwater management ordinance (municipal entities) or develop an SOP (non-municipal entities) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.**

***Measurable Goal:** Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. (For non-municipal permittees, new permittees shall develop and implement a Standard Operating Procedure (SOP) within the first year of coverage).*

*Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements. (For non-municipal permittees, the SOP satisfies this requirement. If no existing SOP exists, it should be developed during the first year of coverage).*

***Measurable Goal:** New permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit. Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to the Department. (For non-municipal permittees, submit the SOP to the first report).*

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges?  Yes  No  
If Yes, indicate the date of the ordinance or SOP: 2013
2. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to the first report submitted to DEP.
3. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to DEP?  Yes  No
4. Were there any violations of the ordinance during the reporting period?  Yes  No  
If Yes, describe what enforcement actions were taken for each violation:

**BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.**

***Measurable Goals:** During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.*

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period?  Yes  No  
If Yes, what was distributed? **Pollution Reporting Form was developed for the City website.**



2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?  
 Yes  No
3. Do you maintain documentation of all responses, action taken, and the time required to take action?  Yes  No

#### MCM #4 – CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?  
 Yes  No **(If No, complete all remaining questions for this MCM; if Yes, skip to MCM #5).**

**BMP #1: Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. Your program shall provide for construction stormwater permitting, construction inspection, and enforcement of installation and maintenance of the necessary E&S control measures. Your program shall describe clearly how your program will be coordinated with DEP's NPDES Construction Stormwater Permitting program.**

***Measurable Goals:** For new permittees, the written program for this MCM shall be developed during the first year of permit coverage; nevertheless, you are responsible for implementation of this MCM during entire term of this permit, including the time you are developing your program.*

*For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.*

1. For new permittees only, attach the written stormwater associated with construction activities program to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your written stormwater associated with construction activities program to DEP?  Yes  No  
If Yes, provide the latest submission date:
3. Date of last update or revision to the stormwater associated with construction activities program:

**BMP #2: The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.**

***Measurable Goal:** Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit. (Non-municipal permittees shall develop and implement an SOP).*

***Measurable Goal:** Permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment and implementation of a stormwater management ordinance that meets all requirements of this permit.*

1. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to DEP?  Yes  No  
If Yes, provide the latest submission date:

**BMP #3: Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.**

***Measurable Goal:** New permittees shall establish requirements to address this BMP by the end of the first year of permit coverage. Renewal permittees shall continue to implement existing requirements and update as necessary. This could be implemented by written municipal ordinance/code provisions, by standard notes on the site plans, by any other written format that accomplishes the objectives of this BMP, or by any combination of these measures. The goal of this BMP shall be communicated to construction site operators during pre-construction meetings. This BMP shall be implemented during each year of the MS4 permit. Permittees must prepare and maintain records of site inspections, including dates and results and you must maintain these records in accordance with the Retention of Records requirements in this Permit.*

1. Identify the mechanism(s) in place to regulate construction site operators and wastes produced at construction sites:
2. During the reporting period what has been the results of implementing the mechanism(s) described above?

**BMP #4: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.**

***Measurable Goal:** Permittees shall establish and implement a tracking system to keep a record of any submitted public information as well as your response, actions, and results. This BMP shall be implemented during each year of coverage under this General Permit and information should be submitted with the each periodic report.*

Describe the tracking system established for documenting public information concerning local construction activities and describe responses taken during the reporting period:

#### **MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

Are you relying on PA's statewide program for MCM #5 BMPs #1 - #3?  Yes  No

**(If No, complete all remaining questions for this MCM; if Yes, skip to BMP #4)**

**BMP #1: Develop a written procedure that describes how the permittee shall address all required components of this MCM. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual.**

***Measurable Goal:** The written procedure shall be developed by the end of the first year of permit coverage and be reviewed and updated every permit year thereafter, as needed. The intent of BMP #1 is for the permittee to describe how the listed tasks will be accomplished.*

1. For new permittees only, attach your written procedure for post-construction management to the first report.
2. If you are not a new permittee, did you complete and submit your written procedure for post-construction management to DEP?  Yes  No

If Yes, provide the latest submission date:

3. Date of last review or update of post-construction management procedure:

**BMP #2: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of the permit.**

***Measurable Goal:** All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.*

1. Number of development or redevelopment projects in urbanized area during reporting period:
2. Describe the tracking system in place:
3. Describe the structural and/or non-structural BMPs that were required for these projects:

**BMP #3: Ensure that controls are installed that shall prevent or minimize water quality impacts.**

***Measurable Goal:** All qualifying development or redevelopment projects shall be inspected during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly). Permittees not relying on DEP's statewide QLP to satisfy requirements under this BMP shall summarize construction inspections and results in periodic reports. See BMP #6 for requirements related to post-construction inspection and tracking of PCSM BMPs to ensure that the operation and maintenance plan is being implemented.*

If there were development or redevelopment projects during the reporting period, attach documentation of inspections of PCSM BMPs to this report.

**BMP #4: The permittee shall enact, implement, and enforce an ordinance (municipal) or SOP or other regulatory mechanism (non-municipal) to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.**

***Measurable Goal:** Within the first year of coverage under this permit, new permittees shall enact and implement a stormwater management ordinance (municipal) or SOP (non-municipal) that meets the requirements of this General Permit.*

***Measurable Goal:** All permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this General Permit.*

1. Do you have an ordinance (or SOP) to address post-construction stormwater runoff from new and redevelopment projects and does it include sanctions?  Yes  No  
If Yes, indicate the date of the ordinance or SOP: **2013**  
For new permittees only, attach a copy of the ordinance or SOP.
2. If you are not a new permittee, has the ordinance (or SOP) been submitted to DEP with a letter from an official, engineer or solicitor that certifies the enactment of an ordinance or SOP for PCSM activities?  Yes  No
3. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities?  Yes  No

**BMP #5: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.**

***Measurable Goal:** In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices and for each project list and track the BMPs that were used.*

***Measurable Goal:** Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.*

1. Identify ordinances enacted or updated during the reporting period to ensure consistency with LID practices:  
No new ordinances were developed at this time

**BMP 6: Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).**

***Measurable Goal:** Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.*

***Measurable Goal:** An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include:*

- all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003;
- the exact location of the PCSM BMP (e.g., street address);
- information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;
- the type of BMP and the year it was installed;
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;
- the actual inspection/maintenance activities for each BMP;
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

1. For new permittees only, attach the written inspection program to ensure that stormwater BMPs are properly operated and maintained.

2. If you are not a new permittee, did you complete and submit your written inspection program to ensure that stormwater BMPs are properly operated and maintained to DEP?  Yes  No  
If Yes, provide the latest submission date: Submitted to DEP on 2/8/2016

3. How do you ensure that stormwater BMPs are properly operated and maintained? Explain if you rely on means other than municipal inspections to ensure adequate O&M (consistent with your stormwater ordinance).  
Inspect SW BMPs annually for the first 5 years, every 3 years after that and after each 10 year storm.

4. Date that inspection program was last reviewed or updated: January 2016

5. Total number of sites with PCSM BMPs installed as of the date of this report: 21

6. Total number of sites inspected during this reporting period: 0

7. Number of sites found to have PCSM BMP deficiencies: 0

8. Number of enforcement actions taken during this reporting period: 0

### MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

**BMP #1: Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).**

**Measurable Goal:** *By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.*

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4?  Yes  No
2. When was the inventory last reviewed? **2013**
3. When was it last updated? **2016**
4. How many new facilities and/or activities were added to this inventory during this reporting period? **0**

**BMP #2: Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good housekeeping measures, contain site-specific information, and address the following areas:**

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.

**Measurable Goal:** *During the first year of permit coverage, new permittees shall develop and implement a written O&M program that complies with BMPs #1 and #2. Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.*

1. For new permittees only, attach the written O&M program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written O&M program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**

3. Date of last review or update to O&M program: **January 2016**

**BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee's overall stormwater management program that could affect municipal operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.**

***Measurable Goal:** During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.*

***Measurable Goal:** Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).*

1. For new permittees only, attach the written training program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written training program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Date of last review or update to training program: **January 2016 (Developed 2015)**
4. Identify the date(s) of employee training, the names of attendees, the topics covered, and the training presenters:  
**Met with City Officials on several occasions to discuss permit requirements. Met with City Road crew on 12/20/2106 to discuss program overview and IDDE topics.**

**BEST MANAGEMENT PRACTICES (BMPs)**

Provide an assessment of the appropriateness of the BMPs implemented to date, and identify any steps that will be taken to address deficiencies in the BMPs or make changes to BMPs or other aspects of the SWMP developed by the permittee.

**The City of Pottsville updated their MS4 Stormwater Management plan in 2016 to address correspondence received from reviewing agencies.**

**MS4 TMDL Plan**

**Chesapeake Bay Pollutant Reduction Plan (CBPRP)**

Is the permittee required to develop an MS4 TMDL Plan?

Yes  No

Is the permittee required to develop a CBPRP?

Yes  No

What is the status of the TMDL Design Details (if applicable)?

- Under Development (Due Date:        )
- Submitted to DEP (Submission Date:        )
- Approved by DEP (Approval Date:        )

What is the status of the CBPRP (if applicable)?

- Under Development (Due Date:        )
- Submitted to DEP (Submission Date:        )
- Approved by DEP (Approval Date:        )

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, describe progress with implementing BMPs and other activities identified in those plans:

**NA**

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, complete the section below. Identify the required pollutant reductions (for those with MS4 TMDL Plans) or pollutant reductions committed to by the permittee (for those with CBPRPs) and the cumulative reductions achieved through implementing the BMPs, as of the end of the reporting period:

**NA**





**OTHER REQUIRED REPORT ELEMENTS**

Identify the progress towards achieving the statutory requirements of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP) and complying with water quality standards.

**NA**

Provide a summary of stormwater activities planned during the next reporting cycle (not identified previously in this report):

**NA**

Provide a summary of notices, intergovernmental agreements and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations

**NA**

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Tom Palamar

Name of Responsible Official

Signature

570-628-4417

Telephone No.

Date





## MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL/PROGRESS REPORT

For the Reporting Period: January 2, 2015 to December 31, 2016

- Annual Report     Progress Report  
 New Permittee     Renewal Permittee

Due Date: June 9, 2017

GENERAL INFORMATION					
Permittee Name:	City of Pottsville	NPDES Permit No.:	PAG132276		
Mailing Address:	401 North Centre Street	Effective Date:	2014		
City, State, Zip:	Pottsville, PA 17901	Expiration Date:	2018		
MS4 Contact Person:	Thomas Palamar	Renewal Due Date:	9/16/2017		
Title:	City Administrator	Admin. Extended?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Phone:	(570) 628-4417	Municipality:	City of Pottsville		
Email:	cityadministrator@city.pottsville.pa.us	County:	Schuylkill		
Co-Permittees (if applicable): NA					
WATER QUALITY INFORMATION					
Are there any discharges to waters within the Chesapeake Bay Watershed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Identify all surface waters that receive stormwater discharges from storm sewers within the MS4 urbanized area and provide the requested information (see instructions).					
Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Unnamed Tributaries to Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff	Yes	Yes
Unnamed Tributaries to West Branch of Schuylkill River	CWF	Yes	PCB, AMD	Yes	Yes
Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes
West Branch Schuylkill River	CWF	Yes	Urban Runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes
Identify any Wasteload Allocations (WLAs) identified in TMDLs for the MS4, if applicable. Identify the pollutant(s) and mass load(s):					
NA					

**GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION**

Have you completed all MCM activities required by the permit for this reporting period?  Yes  No

Provide current contact name and phone number information for the required MCMs (if same as page 1, leave blank):

MCM	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	Thomas Palamar	(570) 628-4417
#2 Public Involvement/Participation	Thomas Palamar	(570) 628-4417
#3 Illicit Discharge Detection and Elimination (IDD&E)	Thomas Palamar	(570) 628-4417
#4 Construction Site Storm Water Runoff Control	Thomas Palamar	(570) 628-4417
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Thomas Palamar	(570) 628-4417
#6 Pollution Prevention / Good Housekeeping	Thomas Palamar	(570) 628-4417

**MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS**

**BMP #1: Develop, implement and maintain a written Public Education and Outreach Program**

*Measurable Goal:* For new permittees a Public Education and Outreach Program (PEOP) shall be developed and implemented during the first year of permit coverage and shall be re-evaluated each permit year thereafter and revised as needed. For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

- For new permittees only, attach the written PEOP or a summary thereof to the first report submitted to DEP.
- If you are not a new permittee, did you complete and submit your written PEOP to DEP?  Yes  No  
If Yes, provide the latest submission date: Submitted to DEP on 2/8/2016

3. Date of last evaluation of or revision to the PEOP: Revised January 2016

4. What were the plans and goals for public education and outreach for the reporting period?

Develop/update written Public Education and Outreach Program, develop/update target audience groups, publish a newsletter, and distribute educational materials.

- Did the MS4 achieve its goal(s) for the PEOP during the reporting period?  Yes  No

Explain the rationale for your answer:

The revised Pottsville MS4 plan as submitted includes the PEOP and the target audience groups. A public hearing was held on December 15, 2016 to discuss the MS4 program and pass out educational materials. The meeting was advertised on the local newspaper, was open to the public and was attended by the PAHS Ecology Club and the Press. The Pottsville Republican published an article about the hearing the following day.

6. Identify specific plans and goals for public education and outreach for the upcoming year:

The City of Pottsville will continue to update the target audience list, schedule a public meeting to discuss the MS4 permit renewal and accompanying Pollution Reduction Plan.

**BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4**

*Measurable Goal:* For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually.

- For new permittees only, attach your target audience list(s) to the first report submitted to DEP.

2. If you are not a new permittee, did you complete and submit your target audience list to DEP?  Yes  No  
If Yes, provide the latest submission date: Submitted to DEP on 2/8/2016
3. Date of last review or revision to target audience list(s): Revised January 2016

**BMP #3: Annually publish at least one educational item on your Stormwater Management Program**

*Measurable Goal: For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.*

1. For new permittees only, attach your published stormwater educational or informational materials to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your published stormwater educational or informational materials to DEP?  Yes  No  
If Yes, provide the latest submission date: Submitted to DEP on 2/8/2016
3. Do you have a municipal newsletter?  Yes  No  
If Yes, how often was it published during the reporting period and what MS4-related material did it contain?  
Published once in 2016. It contains the permit information and the links to the MS4 sites.
4. Do you have a municipal website?  Yes  No (URL: )  
If Yes, what MS4-related material does it contain?  
<http://www.city.pottsville.pa.us/ms4/> - It contains the plan overview, resources, plan, schedule, educational material and MS4 links.
5. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:  
A PowerPoint presentation on the City's MS4 program was presented at a public meeting on December 15, 2016.
6. Date of most recent review and/or update to published stormwater educational materials: January 2016
7. Identify specific plans for the publication of stormwater materials for the upcoming year:  
The 2016 Plan and schedule along with the Annual Newsletter will be published on the City's website with links to more information

**BMP #4: Distribute stormwater educational materials to the target audiences**

*Measurable Goal: All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMP #3.*

Identify the two additional methods of distributing stormwater educational materials during the previous year (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

The City will contact the Schuylkill Headwaters Association, The Schuylkill Conservation District, and Trout Unlimited with an effort to promote pollution prevention of our storm water discharge through supported and partnered education programs for the City. One School or club program will be addressed through this effort each year. Additional education materials will be distributed to the affected school(s)/clubs.

**MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION**

**BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)**

**Measurable Goal:** A new permittee's PIPP shall be developed and implemented during the first year of coverage under this General Permit. All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to:

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
- c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.

- 1. For new permittees only, attach your written PIPP or a summary thereof to the first report submitted to DEP.
- 2. If you are not a new permittee, did you complete and submit your written PIPP or summary to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**

3. Date of last review and/or update to the PIPP: **January 2016**

4. Explain how your PIPP addresses items a, b and c of the Measurable Goal:  
**The PIPP outlines public participation activities, including communication outreach and reports.**

**BMP #2: Prior to adoption of any ordinance (municipal permittees) or SOP (non-municipal permittees) required by the permit, provide adequate public notice and opportunities for public review, input, and feedback.**

**Measurable Goal:** Advertise any proposed MS4 Stormwater Management Ordinance or SOP, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response.

- 1. Was an MS4-related ordinance or SOP developed during the reporting period?  Yes  No
- 2. If Yes, describe how you advertised the draft ordinance and how you provided opportunities for public review, input and feedback:

3. If an ordinance or SOP was enacted/developed or amended during the reporting period, provide the following information:

Ordinance No. / SOP Name	Date of Public Notice	Date of Public Hearing	Date Enacted
Ordinance 829 (Chapter 193)	2013	2013	11/11/2013

**BMP #3: Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implementation of your SWMP.**

***Measurable Goals:** Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in the implementation of your SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.*

1. Date of the public meeting(s): **December 15, 2016**
2. How were meeting(s) advertised to the public? **Advertised in the Pottsville Republican**
3. Indicate where the meeting(s) were held and the number of attendees:  
**Pottsville City Hall with approximately 15 attendees**
4. What types of MS4-related activities did you solicit public involvement and participation for?  
**City of Pottsville, through the Partnership for Delaware Estuary, had a stencil design contest for local students. Public Meeting – discussed reporting illicit discharges.**
5. What MS4-related activities did the public participate in?  
**The City is part of the ongoing Schuylkill Street Art Contest that is sponsored by the Partnership for the Delaware Estuary. Winning art designs are applied to a storm drain in the City.**

### **MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)**

**BMP #1: You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.**

***Measurable Goal:** For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter. For renewal permittees, the existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.*

1. For new permittees only, attach your written IDD&E program to the first report.
2. If you are not a new permittee, did you complete and submit your written IDD&E program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Date of last review and/or update to IDD&E program: **January 2016**

**BMP #2: Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.**

***Measurable Goals:** For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4th) year of permit coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.*

1. Have you completed a map(s) of all outfalls and receiving waters of your storm sewer system?  Yes  No



2. For new permittees only, attach the completed map to the 4<sup>th</sup> year Annual Report.
3. Date of last update or revision to map(s): 5/3/2017
4. Total number of discharge points in your storm sewer system that:  
Discharge directly to surface waters (outfalls): 34  
Discharge to storm sewers owned by others: 0
5. Total number of outfalls that are mapped at this time: 34

**BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.**

*Measurable Goals: For new permittees, develop the map(s) by the end of the fourth (4th) year of coverage under the permit and update and maintain the map(s) as necessary each year of permit coverage thereafter. For renewal permittees, update and maintain the map(s) as necessary during each year of permit coverage.*

1. Have you completed a map(s) that includes roads, inlets, piping, swales, catch basins, channels, basins, municipal boundaries and watershed boundaries?  Yes  No
2. If Yes, is the map(s) on the same map(s) as for outfalls and receiving waters?  Yes  No
3. For new permittees only, attach the completed map to the 4<sup>th</sup> year Annual Report.

4. If you are not a new permittee, did you complete and submit your map to DEP?  Yes  No  
If Yes, provide the latest submission date: 9/12/12
5. Date of last update or revision to map: 5/3/2017

**BMP #4: Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.**

*For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet excerpted from the Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments (CWP, October 2004). Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.*

*The results of outfall inspections and actions taken to remove or correct illicit discharges shall be summarized in periodic reports.*

1. For new permittees only, were at least 40% of all outfalls screened during dry weather?  Yes  No  
  
If Yes for #1, indicate the number screened and the percent of all outfalls it represents. If No for #1, indicate reason(s) why this was not completed:  
  
Are you on pace to screen all outfalls twice during the permit term?  Yes  No
2. For renewal permittees, indicate the percent of outfalls screened during the reporting period: 100%  
  
Are you on pace to screen all outfalls once during the permit term?  Yes  No

3. For all permittees, indicate the percent of outfalls screened that revealed dry weather flows: 41%
4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids?  Yes  No
5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment. **The revised maps, sample results and corrective report is attached.**

6. Do you use the "Outfall Reconnaissance Inventory / Sample Collection Field Sheet" provided in the permit?  
 Yes  No
- If No, attach a copy of your monitoring form.

**BMP #5: Enact a stormwater management ordinance (municipal entities) or develop an SOP (non-municipal entities) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.**

***Measurable Goal:** Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. (For non-municipal permittees, new permittees shall develop and implement a Standard Operating Procedure (SOP) within the first year of coverage).*

*Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements. (For non-municipal permittees, the SOP satisfies this requirement. If no existing SOP exists, it should be developed during the first year of coverage).*

***Measurable Goal:** New permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit. Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to the Department. (For non-municipal permittees, submit the SOP to the first report).*

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges?  Yes  No
- If Yes, indicate the date of the ordinance or SOP: 2013
2. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to the first report submitted to DEP.
3. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that prohibits non-stormwater discharges to DEP?  Yes  No
4. Were there any violations of the ordinance during the reporting period?  Yes  No
- If Yes, describe what enforcement actions were taken for each violation:

**BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.**

***Measurable Goals:** During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.*

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period?  Yes  No
- If Yes, what was distributed? Public meeting and meeting with municipal employees regarding illicit discharge.

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?  
 Yes  No
3. Do you maintain documentation of all responses, action taken, and the time required to take action?  Yes  No

#### MCM #4 – CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?  
 Yes  No (If No, complete all remaining questions for this MCM; if Yes, skip to MCM #5).

**BMP #1: Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. Your program shall provide for construction stormwater permitting, construction inspection, and enforcement of installation and maintenance of the necessary E&S control measures. Your program shall describe clearly how your program will be coordinated with DEP's NPDES Construction Stormwater Permitting program.**

***Measurable Goals:** For new permittees, the written program for this MCM shall be developed during the first year of permit coverage; nevertheless, you are responsible for implementation of this MCM during entire term of this permit, including the time you are developing your program.*

*For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.*

1. For new permittees only, attach the written stormwater associated with construction activities program to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your written stormwater associated with construction activities program to DEP?  Yes  No  
If Yes, provide the latest submission date:
3. Date of last update or revision to the stormwater associated with construction activities program:

**BMP #2: The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.**

***Measurable Goal:** Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit. (Non-municipal permittees shall develop and implement an SOP).*

***Measurable Goal:** Permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment and implementation of a stormwater management ordinance that meets all requirements of this permit.*

1. For new permittees only, attach an ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to the first report submitted to DEP.
2. If you are not a new permittee, did you complete and submit your ordinance (or SOP) and letter from an official, engineer or solicitor that addresses stormwater associated with construction activities to DEP?  Yes  No  
If Yes, provide the latest submission date:

**BMP #3: Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.**

*Measurable Goal: New permittees shall establish requirements to address this BMP by the end of the first year of permit coverage. Renewal permittees shall continue to implement existing requirements and update as necessary. This could be implemented by written municipal ordinance/code provisions, by standard notes on the site plans, by any other written format that accomplishes the objectives of this BMP, or by any combination of these measures. The goal of this BMP shall be communicated to construction site operators during pre-construction meetings. This BMP shall be implemented during each year of the MS4 permit. Permittees must prepare and maintain records of site inspections, including dates and results and you must maintain these records in accordance with the Retention of Records requirements in this Permit.*

1. Identify the mechanism(s) in place to regulate construction site operators and wastes produced at construction sites:
2. During the reporting period what has been the results of implementing the mechanism(s) described above?

**BMP #4: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.**

*Measurable Goal: Permittees shall establish and implement a tracking system to keep a record of any submitted public information as well as your response, actions, and results. This BMP shall be implemented during each year of coverage under this General Permit and information should be submitted with the each periodic report.*

Describe the tracking system established for documenting public information concerning local construction activities and describe responses taken during the reporting period:

#### **MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

Are you relying on PA's statewide program for MCM #5 BMPs #1 - #3?  Yes  No

**(If No, complete all remaining questions for this MCM; if Yes, skip to BMP #4)**

**BMP #1: Develop a written procedure that describes how the permittee shall address all required components of this MCM. Guidance can be found in the Pennsylvania Stormwater Best Management Practices Manual.**

*Measurable Goal: The written procedure shall be developed by the end of the first year of permit coverage and be reviewed and updated every permit year thereafter, as needed. The intent of BMP #1 is for the permittee to describe how the listed tasks will be accomplished.*

1. For new permittees only, attach your written procedure for post-construction management to the first report.
2. If you are not a new permittee, did you complete and submit your written procedure for post-construction management to DEP?  Yes  No  
If Yes, provide the latest submission date:
3. Date of last review or update of post-construction management procedure:

**BMP #2: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of the permit.**

**Measurable Goal:** All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.

1. Number of development or redevelopment projects in urbanized area during reporting period:
2. Describe the tracking system in place:
3. Describe the structural and/or non-structural BMPs that were required for these projects:

**BMP #3: Ensure that controls are installed that shall prevent or minimize water quality impacts.**

**Measurable Goal:** All qualifying development or redevelopment projects shall be inspected during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly). Permittees not relying on DEP's statewide QLP to satisfy requirements under this BMP shall summarize construction inspections and results in periodic reports. See BMP #6 for requirements related to post-construction inspection and tracking of PCSM BMPs to ensure that the operation and maintenance plan is being implemented.

If there were development or redevelopment projects during the reporting period, attach documentation of inspections of PCSM BMPs to this report.

**BMP #4: The permittee shall enact, implement, and enforce an ordinance (municipal) or SOP or other regulatory mechanism (non-municipal) to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.**

**Measurable Goal:** Within the first year of coverage under this permit, new permittees shall enact and implement a stormwater management ordinance (municipal) or SOP (non-municipal) that meets the requirements of this General Permit.

**Measurable Goal:** All permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this General Permit.

1. Do you have an ordinance (or SOP) to address post-construction stormwater runoff from new and redevelopment projects and does it include sanctions?  Yes  No

If Yes, indicate the date of the ordinance or SOP: 2013

For new permittees only, attach a copy of the ordinance or SOP.

2. If you are not a new permittee, has the ordinance (or SOP) been submitted to DEP with a letter from an official, engineer or solicitor that certifies the enactment of an ordinance or SOP for PCSM activities?  Yes  No
3. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities?  Yes  No

**BMP #5: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.**

**Measurable Goal:** *In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices and for each project list and track the BMPs that were used.*

**Measurable Goal:** *Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.*

1. Identify ordinances enacted or updated during the reporting period to ensure consistency with LID practices:

**No new ordinances were developed at this time**

**BMP 6: Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).**

**Measurable Goal:** *Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.*

**Measurable Goal:** *An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include:*

- *all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003;*
- *the exact location of the PCSM BMP (e.g., street address);*
- *information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner;*
- *the type of BMP and the year it was installed;*
- *maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources;*
- *the actual inspection/maintenance activities for each BMP;*
- *an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.*

1. For new permittees only, attach the written inspection program to ensure that stormwater BMPs are properly operated and maintained.

2. If you are not a new permittee, did you complete and submit your written inspection program to ensure that stormwater BMPs are properly operated and maintained to DEP?  Yes  No

If Yes, provide the latest submission date: Submitted to DEP on 2/8/2016

3. How do you ensure that stormwater BMPs are properly operated and maintained? Explain if you rely on means other than municipal inspections to ensure adequate O&M (consistent with your stormwater ordinance).

Inspect SW BMPs annually for the first 5 years, every 3 years after that and after each 10 year storm.

4. Date that inspection program was last reviewed or updated: January 2016

5. Total number of sites with PCSM BMPs installed as of the date of this report: 21

6. Total number of sites inspected during this reporting period: 21

7. Number of sites found to have PCSM BMP deficiencies: 0

8. Number of enforcement actions taken during this reporting period: 0

### MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

**BMP #1: Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).**

*Measurable Goal: By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.*

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4?  Yes  No
2. When was the inventory last reviewed? **January 2016**
3. When was it last updated? **January 2016**
4. How many new facilities and/or activities were added to this inventory during this reporting period? **0**

**BMP #2: Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good housekeeping measures, contain site-specific information, and address the following areas:**

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.

*Measurable Goal: During the first year of permit coverage, new permittees shall develop and implement a written O&M program that complies with BMPs #1 and #2. Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.*

1. For new permittees only, attach the written O&M program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written O&M program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**

3. Date of last review or update to O&M program: **January 2016**

**BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee's overall stormwater management program that could affect municipal operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.**

***Measurable Goal: During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.***

***Measurable Goal: Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).***

1. For new permittees only, attach the written training program to the first Annual Report.
2. If you are not a new permittee, did you complete and submit your written training program to DEP?  Yes  No  
If Yes, provide the latest submission date: **Submitted to DEP on 2/8/2016**
3. Date of last review or update to training program: **January 2016 (Developed 2015)**
4. Identify the date(s) of employee training, the names of attendees, the topics covered, and the training presenters:  
**12/20/2016 – City Road Department – MS4 program overview and IDDE topics.**



**BEST MANAGEMENT PRACTICES (BMPs)**

Provide an assessment of the appropriateness of the BMPs implemented to date, and identify any steps that will be taken to address deficiencies in the BMPs or make changes to BMPs or other aspects of the SWMP developed by the permittee.

**MCM 1 BMP 3 – city website was updated to include MS4 material**

**MCM 2 BMP 3 – Planning public meeting for 2017**

**Continue updating focus mapping, develop low impact development policies/ordinances, follow up with Illicit Discharge corrective actions, schedule PCSM BMP inspections, update website with meeting minutes, coordinate with GPASA regarding illicit discharges into the storm sewer.**

**MS4 TMDL Plan**

**Chesapeake Bay Pollutant Reduction Plan (CBPRP)**

Is the permittee required to develop an MS4 TMDL Plan?

Yes  No

Is the permittee required to develop a CBPRP?

Yes  No

What is the status of the TMDL Design Details (if applicable)?

- Under Development (Due Date:        )
- Submitted to DEP (Submission Date:        )
- Approved by DEP (Approval Date:        )

What is the status of the CBPRP (if applicable)?

- Under Development (Due Date:        )
- Submitted to DEP (Submission Date:        )
- Approved by DEP (Approval Date:        )

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, describe progress with implementing BMPs and other activities identified in those plans:

**NA**

For permittees with DEP-approved MS4 TMDL Plans and/or CBPRPs, complete the section below. Identify the required pollutant reductions (for those with MS4 TMDL Plans) or pollutant reductions committed to by the permittee (for those with CBPRPs) and the cumulative reductions achieved through implementing the BMPs, as of the end of the reporting period:

**NA**



**OTHER REQUIRED REPORT ELEMENTS**

Identify the progress towards achieving the statutory requirements of reducing the discharge of pollutants to the Maximum Extent Practicable (MEP) and complying with water quality standards.

**NA**

Provide a summary of stormwater activities planned during the next reporting cycle (not identified previously in this report):

**NA**

Provide a summary of notices, intergovernmental agreements and other relevant documents if the permittee is relying on another governmental entity to satisfy any of its permit obligations

**NA**

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Tom Palamar

Name of Responsible Official

Signature

570-628-4417

Telephone No.

Date





## ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD January 1, 2017 TO JUNE 30, 2018

GENERAL INFORMATION					
Permittee Name:	City of Pottsville	NPDES Permit No.:	PAG132276		
Mailing Address:	401 North Centre Street	Effective Date:	2014		
City, State, Zip:	Pottsville, PA 17901	Expiration Date:	2018		
MS4 Contact Person:	Thomas Palamar	Renewal Due Date:	9/16/2017		
Title:	City Administrator	Municipality:	Pottsville		
Phone:	570-628-4417	County:	Schuylkill		
Email:	cityadministrator@city.pottsville.pa.us				
Co-Permittees (if applicable): NA					
Appendix(ces) that permittee is subject to (select all that apply):					
<input type="checkbox"/> Appendix A <input type="checkbox"/> Appendix B <input type="checkbox"/> Appendix C <input type="checkbox"/> Appendix D <input type="checkbox"/> Appendix E <input type="checkbox"/> Appendix F					
WATER QUALITY INFORMATION					
Are there any discharges to waters within the Chesapeake Bay Watershed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).					
Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Unnamed Tributaries to Schuylkill River	CWF	Yes	Urban runoff, AMD, Channelization, Bank Modifications, Road runoff	Yes	Yes
Unnamed Tributaries to the West Branch of Schuylkill River	CWF	Yes	PCB, AMD	Yes	Yes
Schuylkill River	CWF	Yes	Urban runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes
West Branch Schuylkill River	CWF	Yes	Urban runoff, AMD, Channelization, Bank Modifications, Road Runoff, PCB	Yes	Yes

**GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION**

Have you completed all MCM activities required by the permit for this reporting period?  Yes  No

List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.

MCM	Entity Responsible	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	City of Pottsville	Thomas Palamar	(570) 628-4417
#2 Public Involvement/Participation	City of Pottsville	Thomas Palamar	(570) 628-4417
#3 Illicit Discharge Detection and Elimination (IDD&E)	City of Pottsville	Thomas Palamar	(570) 628-4417
#4 Construction Site Storm Water Runoff Control	City of Pottsville	David Petravich	(570) 622-1234
#5 Post-Construction Storm Water Management in New Development and Redevelopment	City of Pottsville	Thomas Whitaker	(570) 622-7690
#6 Pollution Prevention / Good Housekeeping	City of Pottsville	Thomas Whitaker	(570) 622-7690

**MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS**

**BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.**

- For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?  
 Yes  No
- Date of latest annual review of PEOP: **February 2018**      Were updates made?  Yes  No
- What were the plans and goals for public education and outreach for the reporting period?  
**See attached updated Plan dated September 2018**
- Did the MS4 achieve its goal(s) for the PEOP during the reporting period?  Yes  No
- Identify specific plans and goals for public education and outreach for the upcoming year:

**BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4.**

- For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?  
 Yes  No
- Date of latest annual review of target audience lists: **February 2018**      Were updates made?  Yes  No

**BMP #3: Annually publish at least one educational item on your Stormwater Management Program.**

- For new permittees only, were stormwater educational and informational items produced and published in print and/or on the Internet within the first year of permit coverage?  
 Yes  No
- Date of latest annual review of educational materials: **February 2018**      Were updates made?  Yes  No
- Do you have a municipal website?  Yes  No (URL: <http://www.city.pottsville.pa.us/ms4/>)

If Yes, what MS4-related material does it contain?

**Permit Overview, Outreach Contact Form, MS4 Complaint Form, Schedule, Outfall Maps, Stormwater Ordinance, etc.**

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:

**Public Meeting**

5. Identify specific plans for the publication of stormwater materials for the upcoming year:

**Coordinate Stencil Design competition with local High Schools.**

**BMP #4: Distribute stormwater educational materials to the target audiences.**

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

**Public Meeting, posters**

**MCM #1 Comments:**

**MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION**

**BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)**

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?

Yes  No

2. Date of latest annual review of PIPP: **February 2018** Were updates made?  Yes  No

**BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:**

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period?  Yes  No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

**City Council reviewed the ordinance at a public meeting, then advertised the ordinance prior to adopting in October 2017.**

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP
Stormwater Management Ordinance	9/11/2017	9/11/2017	10/9/2017



**BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.**

1. At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?

Yes  No      If Yes, Date of Meeting or Event: **2/12/2018**

2. Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.

**Schuylkill Action Network coordinating with the City to complete inlet stencil project.**

3. Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.

**Students from PAHS Ecology Club attended public meeting for general overview of MS4 program. Students from PAHS participated in stencil art project with Schuylkill Action Network.**

**MCM #2 Comments:**

**MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)**

**BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.**

1. For new permittees only, was the written IDD&E program developed within one year of permit coverage?

Yes  No

2. Date of latest annual review of IDD&E program: **February 2018**      Were updates made?  Yes  No

**BMP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).**

1. Have you completed a map(s) that includes all components of BMP #2?  Yes  No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. Date of last update or revision to map(s): **7/6/2017**

3. Total No. of Outfalls in MS4: **37**      Total No. of Outfalls Mapped: **37**

4. Total No. of Observation Points: **37**      Total No. of Observation Points Mapped: **37**

5. During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period?

Yes  No      If Yes, select:  Existing Outfall(s) Identified  New Outfall(s) Proposed

**BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.**

1. Have you completed a map(s) that includes all components of BMP #3?  Yes  No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters?  Yes  No

3. Date of last update or revision to map(s): **7/6/2017**

**BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.**

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? **20**

2. Indicate the percentage of all outfalls screened in the past five years. **100%**

3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: **40%**

4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids?  Yes  No

5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.

6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?

Yes  No

If No, attach a copy of your screening report form.

**BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges?  Yes  No

If Yes, indicate the date of the ordinance or SOP: **October 9, 2017**

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges?  Yes  No

If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.

3. Were there any violations of the ordinance or SOP during the reporting period?  Yes  No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP?  Yes  No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

**BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.**

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period?  Yes  No

If Yes, what was distributed? Updated Complaint form was added to City of Pottsville Website. IDDE was discussed at public meeting with general public and City Officials present.

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?  Yes  No

3. Do you maintain documentation of all responses, action taken, and the time required to take action?  Yes  No

**MCM #3 Comments:**

**MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

Yes  No

*(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)*

**BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.**

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

Yes  No  Not Applicable (no building permit applications received)

**BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.**

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

Yes  No  Not Applicable (no building permit applications received)

**BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs?  Yes  No

If Yes, indicate the date of the ordinance or SOP: **October 9, 2017**

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)?  Yes  No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.**

Specify the number of E&S Plans you reviewed during the reporting period: **0**

**BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.**

Specify the number of E&S inspections you completed during the reporting period: **0**

**BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.**

Specify the number of enforcement actions you took during the reporting period for improper E&S: **0**

**BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.**

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

**Notifying developers and their engineers of the City's Ordinance requirements.**

**BMP #8: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public to the permittee regarding local construction activities.**

1. A tracking system has been established for receipt of public inquiries and complaints.  Yes  No

2. Specify the number of inquiries and complaints received during the reporting period: **0**

**MCM #4 Comments:**

**MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

**BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs?  Yes  No

If Yes, indicate the date of the ordinance or SOP: **October 9, 2017**

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)?  Yes  No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment?  Yes  No

If Yes, indicate the date of the ordinance or SOP: **October 9, 2017**

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)?  Yes  No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.**

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003?  Yes  No

If Yes to #1, complete Table 1 on the next page.

2. Has proper O&M occurred during the reporting period for all PCSM BMPs?  Yes  No

3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

*If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.*

**BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.**

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale): **0**

2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?

Yes  No

**PCSM BMP INVENTORY**

**Table 1.** To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions). \* City is in the process of reviewing the permits below for the missing information.

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1	GPASA – Sewer Upgrade		Greater Pottsville Area Sewer Authority	0 ' "	0 ' "	2003		PAG2-0054-04-003
2	Yuengling Bicentennial Park		City of Pottsville	0 ' "	0 ' "	2004		PAG2-0054-04-017
3	Barefield Gardens		Barefield Gardens LP	0 ' "	0 ' "	2004		PAG2-0054-04-021
4	Fanelli Professional Center		Geisinger Clinic	0 ' "	0 ' "	2004		PAG2-0054-04-035
5	GPASA – Collection Sys. Imp.		Greater Pottsville Area Sewer Authority	0 ' "	0 ' "	2005		PAG2-0054-05-001
6	Sharp Mountain Reclamation		City of Pottsville	0 ' "	0 ' "	2005		PAG2-0054-05-031(1)
7	Social Security Bldg.		Miller Bros. Contracting	0 ' "	0 ' "	2006		PAG2-0054-06-007
8	Sch. County. School Employees		Sch. Co. Employees Credit Union	0 ' "	0 ' "	2007		PAG2-0054-06-031
9	General George A. Joulwan Park		City of Pottsville	0 ' "	0 ' "	2007		PAG2-0054-07-010
10	Pottsville Centre Station		City of Pottsville	0 ' "	0 ' "	2008		PAG2-0054-08-019
11	McCann's Bldg & Parking Lot		KM Real Estate LP	0 ' "	0 ' "	2010		PAG2-0054-09-015
12	Service Access Management		Service Access & Management	0 ' "	0 ' "	2012	Bi-annual cleaning or pavement and inlets	PAG2-0054-11-017
13	Sharp Mountain Plaza Renewal		Sharp Mountain Plaza LLC	0 ' "	0 ' "	2014		PAG2-0054-04-005RR
14	CVS Pharmacy		Pottsville ZCF Pharmacy DST.	0 ' "	0 ' "	2014		PAG2-0054-14-012

**BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).**

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?  
 Yes  No  Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?  
 Yes  No

**BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.**

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed?  Yes  No

**MCM #5 Comments:**

**MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING**

**BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.**

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4?  Yes  No
2. When was the inventory last reviewed? **February 2018**
3. When was it last updated? **February 2018**

**BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.**

1. Have you developed a written O&M program for the operations identified in BMP #1?  Yes  No
2. Date of last review or update to written O&M program: **February 2018**

**BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.**

1. Have you developed an employee training program?  Yes  No
2. Date of last review or update to training program: **February 2018** Date of latest training: **June 2018**

3. Training topics covered:

**IDDE Dry Weather Outfall Inspections, GPS Handheld Unit Data collection.**

4. Name(s) of training presenter(s):

**David L. Horst, P.E.**

5. Names of training attendees:

**Ben Hinkel, City Intern, Chris Wollyung, City Intern, Justin Hughs, City Intern, Donald Chescavage Jr., Maintenance Worker, and Dylan Pogera, Maintenance Worker.**

**MCM #6 Comments:**

**POLLUTANT CONTROL MEASURES (PCMs)**

*Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.*

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)		<input type="checkbox"/>	
Source Inventory		<input type="checkbox"/>	
Investigation of Suspected Sources		<input type="checkbox"/>	
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	

**PCM Comments:**

**No PCM are applicable to this permit**

**POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS**

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			Chesapeake Bay
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			Chesapeake Bay,
<input type="checkbox"/> Combined PRP / TMDL Plan			

Joint Plan (if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)

Joint Plan Participants:



2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
<input type="checkbox"/> Chesapeake Bay PRP (Appendix D)			
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due:

4. Have any modifications to the plan(s) occurred since DEP approval?  Yes  No

If Yes to #4, was the updated plan(s) submitted to DEP?  Yes  No

If Yes to #4, did you comply with the public participation requirements of the applicable appendix?  Yes  No

If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

6. Anticipated activities for next reporting period.

**PRP/TMDL Plan Comments:**

**NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION**

**Table 2.** List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
						0 ' "	0 ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 ' "	0 ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 ' "	0 ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 ' "	0 ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						0 ' "	0 ' "		<input type="checkbox"/>	<input type="checkbox"/>	

**BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION**

**Table 3.** List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspection	Satisfactory?
						0 ' "	0 ' "				<input type="checkbox"/>
						0 ' "	0 ' "				<input type="checkbox"/>
						0 ' "	0 ' "				<input type="checkbox"/>
						0 ' "	0 ' "				<input type="checkbox"/>
						0 ' "	0 ' "				<input type="checkbox"/>
						0 ' "	0 ' "				<input type="checkbox"/>

### CERTIFICATION

**For PAG-13 Permittees:** I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

**For All Permittees:** I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Thomas Palamar, City Administrator

\_\_\_\_\_  
Name of Responsible Official

570-628-4417

\_\_\_\_\_  
Telephone No.

  
\_\_\_\_\_  
Signature

9/18/2018

\_\_\_\_\_  
Date

## D.2. MCM #2 BMP #2 MS4 ORDINANCES – POTTSVILLE



# STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO. 862

MUNICIPALITY OF

**City of Pottsville**

---

**Schuylkill**

COUNTY, PENNSYLVANIA

Adopted at a Public Meeting Held on  
October 9, 2017



**FILE OF THE COUNCIL OF THE  
CITY OF POTTSVILLE, PA**

**1<sup>st</sup> Reading 9/11/2017**

**Bill Number 2/2017**

**Ordinance Number 862**

**Introduced by Councilman Atkinson**

**Enacted by Council October 9, 2017**

**AN ORDINANCE  
AMENDING THE CITY OF POTTSVILLE CODIFIED ORDINANCES  
SECTION 193, ENTITLED THE CITY OF POTTSVILLE STORMWATER  
MANAGEMENT AND PROHIBITED DISCHARGES**

**THE CITY OF POTTSVILLE CODIFIED ORDINANCES ARE HEREBY AMENDED BY THE  
FOLLOWING:**

**Article I – General Provisions**

Section 101.	Short Title
Section 102.	Statement of Findings
Section 103.	Purpose
Section 104.	Statutory Authority
Section 105.	Applicability
Section 106.	Repealer
Section 107.	Severability
Section 108.	Compatibility with Other Requirements
Section 109.	Erroneous Permit
Section 110.	Waivers

**Article II – Definitions**

**Article III – Stormwater Management Standards**

Section 301.	General Requirements
Section 302.	Exemptions
Section 303.	Volume Controls
Section 304.	Rate Controls

**Article IV – Stormwater Management Site Plan Requirements**

Section 401.	Plan Requirements
Section 402.	Plan Submission
Section 403.	Plan Review
Section 404.	Modification of Plans
Section 405.	Resubmission of Disapproved SWM Site Plans
Section 406.	Authorization to Construct and Term of Validity
Section 407.	As-Built Plans, Completion Certificate and Final Inspection



Article V – Operation and Maintenance

Section 501.	Responsibilities of Developers and Landowners
Section 502.	Operation and Maintenance Agreements

Article VI – Fees and Expenses

Section 601.	General
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Article VII – Prohibitions

Section 701.	Prohibited Discharges and Connections
Section 702.	Roof Drains and Sump Pumps
Section 703.	Alteration of SWM BMPs

Article VIII – Enforcement and Penalties

Section 801.	Right-of-Entry
Section 802.	Inspection
Section 803.	Enforcement
Section 804.	Suspension and Revocation
Section 805.	Penalties
Section 806.	Appeals

Article IX – References

Appendix A – Operation and Maintenance Agreement

## ARTICLE I - GENERAL PROVISIONS

### Section 101. Short Title

This Ordinance shall be known and may be cited as the “City of Pottsville Stormwater Management Ordinance.”

### Section 102. Statement of Findings

The governing body of the municipality finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. A comprehensive program of stormwater management (SWM), including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource that provides groundwater recharge for water supplies and supports the base flow of streams.
- D. The use of green infrastructure and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of pre-development hydrology.



- E. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES) program.

### **Section 103. Purpose**

The purpose of this Ordinance is to promote health, safety, and welfare within the municipality and its watershed by minimizing the harms and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve natural drainage systems.
- C. Manage stormwater runoff close to the source, reduce runoff volumes and mimic predevelopment hydrology.
- D. Provide procedures and performance standards for stormwater planning and management.
- E. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and streambeds.
- G. Provide proper operation and maintenance of all stormwater best management practices (BMPs) that are implemented within the municipality.
- H. Provide standards to meet NPDES permit requirements.

### **Section 104. Statutory Authority**

The municipality is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania Municipalities Planning Code, as amended, and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, The Stormwater Management Act.

### **Section 105. Applicability**

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Ordinance.

### **Section 106. Repealer**

Any other ordinance provision(s) or regulation of the municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only.

### **Section 107. Severability**

In the event that a court of competent jurisdiction declares any section or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance.

### **Section 108. Compatibility with Other Requirements**

Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

### **Section 109. Erroneous Permit**

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the Municipality purporting to validate such a violation.



## Section 110. Waivers

- A. If the Municipality determines that any requirement under this Ordinance cannot be achieved for a particular regulated activity, the Municipality may, after an evaluation of alternatives, approve measures other than those in this Ordinance, subject to Section 110, paragraphs B and C.
- B. Waivers or modifications of the requirements of this Ordinance may be approved by the Municipality if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modifications will not be contrary to the public interest and that the purpose of the Ordinance is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal or better achievement of the purpose of the Ordinance. A request for modifications shall be in writing and accompany the Stormwater Management Site Plan submission. The request shall provide the facts on which the request is based, the provision(s) of the Ordinance involved and the proposed modification.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one acre may be granted by the Municipality unless that action is approved in advance by the Department of Environmental Protection (DEP) or the delegated county conservation district.

## ARTICLE II – DEFINITIONS

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word “includes” or “including” shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes, and are intended for this Ordinance only.

**Agricultural Activity** – Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

**Applicant** – A landowner, developer, or other person who has filed an application to the municipality for approval to engage in any regulated activity at a project site in the municipality.

**Best Management Practice (BMP)** – Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: “structural” or “non-structural.” In this Ordinance, non-structural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff, whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

**Conservation District** – A conservation district, as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.



**Design Storm** – The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24 hours) used in the design and evaluation of stormwater management systems. Also see Return Period.

**Detention Volume** – The volume of runoff that is captured and released into the waters of the Commonwealth at a controlled rate.

**DEP** – The Pennsylvania Department of Environmental Protection.

**Development Site (Site)** – See Project Site.

**Disturbed Area** – An unstabilized land area where an earth disturbance activity is occurring or has occurred.

**Earth Disturbance Activity** – A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

**Erosion** – The natural process by which the surface of the land is worn away by water, wind, or chemical action.

**Existing Condition** – The dominant land cover during the 5-year period immediately preceding a proposed regulated activity.

**FEMA** – Federal Emergency Management Agency.

**Floodplain** – Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area. Also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).

**Floodway** – The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed—absent evidence to the contrary—that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

**Forest Management/Timber Operations** – Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

**Green Infrastructure** – Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

**Hydrologic Soil Group (HSG)** – Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D (NRCS<sup>1,2</sup>).

**Impervious Surface (Impervious Area)** – A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.

**Karst** – A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on Schuylkillate rocks, such as limestone or dolomite.

**Land Development (Development)** – Inclusive of any or all of the following meanings: (i) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a group of two or more



buildings or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) any subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

**Low Impact Development (LID)** – Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on-site.

**Municipality** – City of Pottsville, Schuylkill County, Pennsylvania.

**NRCS** – USDA Natural Resources Conservation Service (previously SCS).

**Peak Discharge** – The maximum rate of stormwater runoff from a specific storm event.

**Pervious Area** – Any area not defined as impervious.

**Project Site** – The specific area of land where any regulated activities in the municipality are planned, conducted, or maintained.

**Qualified Professional** – Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this Ordinance.

**Regulated Activities** – Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

**Regulated Earth Disturbance Activity** – Activity involving earth disturbance subject to regulation under 25 Pa. Code 92, 25 Pa. Code 102, or the Clean Streams Law.

**Retention Volume/Removed Runoff** – The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

**Return Period** – The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one year is 0.04 (i.e., a 4% chance).

**Riparian Buffer** – A permanent area of trees and shrubs located adjacent to streams, lakes, ponds and wetlands.

**Runoff** – Any part of precipitation that flows over the land.

**Sediment** – Soils or other materials transported by surface water as a product of erosion.

**State Water Quality Requirements** – The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

**Stormwater** – Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

**Stormwater Management Facility** – Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; and infiltration facilities.

**Stormwater Management Site Plan** – The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance. **Stormwater Management Site Plan** will be designated as **SWM Site Plan** throughout this Ordinance.

**Subdivision** – As defined in The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.



**USDA** – United States Department of Agriculture.

**Waters of this Commonwealth** – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

**Watershed** – Region or area drained by a river, watercourse, or other surface water of this Commonwealth.

**Wetland** – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

## **ARTICLE III – STORMWATER MANAGEMENT STANDARDS**

### **Section 301. General Requirements**

- A. For all regulated activities, unless preparation of an SWM Site Plan is specifically exempted in Section 302:
1. Preparation and implementation of an approved SWM Site Plan is required.
  2. No regulated activities shall commence until the municipality issues written approval of an SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by the municipality, in accordance with Section 406, shall be on site throughout the duration of the regulated activity.
- C. The municipality may, after consultation with DEP, approve measures for meeting the state water quality requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, state law including, but not limited to, the Clean Streams Law.
- D. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual (E&S Manual<sup>3</sup>)*, No. 363-2134-008, as amended and updated.
- E. Impervious areas:
1. The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
  2. For development taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
  3. For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 303 and the peak rate controls of Section 304 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.
- F. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification to the adjacent property owner(s). Such stormwater flows shall be subject to the requirements of this Ordinance.
- G. All regulated activities shall include such measures as necessary to:
1. Protect health, safety, and property.



2. Meet the water quality goals of this Ordinance by implementing measures to:
    - a. Minimize disturbance to floodplains, wetlands, and wooded areas.
    - b. Maintain or extend riparian buffers.
    - c. Avoid erosive flow conditions in natural flow pathways.
    - d. Minimize thermal impacts to waters of this Commonwealth.
    - e. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
  3. Incorporate methods described in the *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual<sup>4</sup>). If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this Ordinance, the SWM Site Plan must include a detailed justification demonstrating that the use of LID and green infrastructure is not practicable.
- H. The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.
- I. Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Ordinance.
- J. Normally dry, open top, storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.
- K. The design storm volumes to be used in the analysis of peak rates of discharge should be obtained from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland.
- NOAA's Atlas 14<sup>5</sup> can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
- L. For all regulated activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law, and the Storm Water Management Act.
- M. Various BMPs and their design standards are listed in the BMP Manual<sup>4</sup>.

### **Section 302. Exemptions**

- A. Regulated activities that result in cumulative earth disturbances less than one (1.0) are exempt from the requirements in Section 303, Section 304, and Article IV of this ordinance.
- B. Agricultural activity is exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- C. Forest management and timber operations are exempt from the SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- D. Exemptions from any provisions of this Ordinance shall not relieve the applicant from the requirements in Sections 301.D. through K.
- E. The Municipality may deny or revoke any exemption pursuant to this Section at any time for any project that the Municipality believes may pose a threat to public health and safety or the environment.

### **Section 303. Volume Controls**

The green infrastructure and low impact development practices provided in the BMP Manual<sup>4</sup> shall be utilized for all regulated activities wherever possible. Water volume controls shall be implemented using the *Design Storm Method* in Subsection A or the *Simplified Method* in Subsection B below. For regulated activity areas equal or less than



one acre that do not require hydrologic routing to design the stormwater facilities, this Ordinance establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology and other factors.

- A. The *Design Storm Method* (CG-1 in the BMP Manual<sup>4</sup>) is applicable to any size of regulated activity. This method requires detailed modeling based on site conditions.
1. Do not increase the post-development total runoff volume for all storms equal to or less than the 2-year 24-hour duration precipitation.
  2. For modeling purposes:
    - a. Existing (predevelopment) non-forested pervious areas must be considered meadow in good condition.
    - b. Twenty Percent (20%) of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions.
- B. The *Simplified Method* (CG-2 in the BMP Manual<sup>4</sup>) provided below is independent of site conditions and should be used if the *Design Storm Method* is not followed. This method is not applicable to regulated activities greater than one acre or for projects that require design of stormwater storage facilities. For new impervious surfaces:
1. Stormwater facilities shall capture at least the first two (2) inches of runoff from all new impervious surfaces.
  2. At least the first one inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration.
  3. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed runoff should be infiltrated.
  4. This method is exempt from the requirements of Section 304, Rate Controls.

#### **Section 304. Rate Controls**

- A. For areas not covered by a release rate map from an approved Act 167 Stormwater Management Plan:

Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events. If it is shown that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement.

- B. For areas covered by a release rate map from an approved Act 167 Stormwater Management Plan:

For the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storm events, the post-development peak discharge rates will follow the applicable approved release rate maps. For any areas not shown on the release rate maps, the post-development discharge rates shall not exceed the pre-development discharge rates.



## ARTICLE IV – STORMWATER MANAGEMENT (SWM) SITE PLAN REQUIREMENTS

### Section 401. Plan Requirements

The following items shall be included in the SWM Site Plan:

- A. Appropriate sections from the municipal's Subdivision and Land Development Ordinance, and other applicable local ordinances, shall be followed in preparing the SWM Site Plans. In instances where the Municipality lacks Subdivision and Land Development regulations, the content of SWM Site Plans shall follow the county's Subdivision and Land Development Ordinance.
- B. The Municipality shall not approve any SWM Site Plan that is deficient in meeting the requirements of this Ordinance. At its sole discretion and in accordance with this Article, when a SWM Site Plan is found to be deficient, the municipality may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the Municipality may accept submission of modifications.
- C. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the Operation and Maintenance (O&M) Plan discussed in paragraph E.9 below.
- D. The following signature block for the municipality:  
  
"Municipal official, on this date October 9, 2017, has reviewed and hereby certifies that the SWM Site Plan meets all design standards and criteria of the Municipal Ordinance No.862."
- E. The SWM Site Plan shall provide the following information:
  1. The overall stormwater management concept for the project.
  2. A determination of site conditions in accordance with the BMP Manual<sup>4</sup>. A detailed site evaluation shall be completed for projects proposed in areas of carbonite geology or karst topography, and other environmentally sensitive areas, such as brownfields.
  3. Stormwater runoff design computations and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in Section 301.
  4. Expected project time schedule.
  5. A soil erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.
  6. The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.
  7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.
  8. SWM Site Plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells.
  9. The SWM Site Plan shall include an O&M Plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.
  10. A justification must be included in the SWM Site Plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this Ordinance.



## **Section 402. Plan Submission**

Five copies of the SWM Site Plan shall be submitted as follows:

1. Two copies to the municipality.
2. One copy to the municipal engineer (when applicable).
3. One copy to the County Conservation District.
4. One copy to the County Planning Commission/Office.

## **Section 403. Plan Review**

- A. SWM Site Plans shall be reviewed by the municipality for consistency with the provisions of this Ordinance.
- B. The Municipality shall notify the applicant in writing within 45 days whether the SWM Site Plan is approved or disapproved. If the SWM Site Plan involves a Subdivision and Land Development Plan, the notification shall occur within the time period allowed by the Municipalities Planning Code (90 days). If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the municipality.
- C. For any SWM Site Plan that proposes to use any BMPs other than green infrastructure and LID practices to achieve the volume and rate controls required under this Ordinance, the Municipality will not approve the SWM Site Plan unless it determines that green infrastructure and LID practices are not practicable.
- D. If the Municipality disapproves the SWM Site Plan, the Municipality will state the reasons for the disapproval in writing. The Municipality also may approve the SWM Site Plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.

## **Section 404. Modification of Plans**

A modification to a submitted SWM Site Plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan as determined by the Municipality shall require a resubmission of the modified SWM Site Plan in accordance with this Article.

## **Section 405. Resubmission of Disapproved SWM Site Plans**

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the Municipality's concerns, to the Municipality in accordance with this Article. The applicable review fee must accompany a resubmission of a disapproved SWM Site Plan.

## **Section 406. Authorization to Construct and Term of Validity**

The Municipality's approval of an SWM Site Plan authorizes the regulated activities contained in the SWM Site Plan for a maximum term of validity of 5 years following the date of approval. The Municipality may specify a term of validity shorter than 5 years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the Municipality signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 407 within the term of validity, then the Municipality may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the Municipality shall be resubmitted in accordance with Section 405 of this Ordinance.

## **Section 407. As-Built Plans, Completion Certificate, and Final Inspection**

- A. The developer shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM Site Plan. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the Municipality.
- B. The as-built submission shall include a certification of completion signed by a qualified professional verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The



latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.

- C. After receipt of the completion certification by the Municipality, the Municipality may conduct a final inspection.

## **ARTICLE V – OPERATION AND MAINTENANCE**

### **Section 501. Responsibilities of Developers and Landowners**

- A. The Municipality shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM Site Plan. The municipality may require a dedication of such facilities as part of the requirements for approval of the SWM Site Plan. Such a requirement is not an indication that the municipality will accept the facilities. The municipality reserves the right to accept or reject the ownership and operating responsibility for any portion of the stormwater management controls.
- B. Facilities, areas, or structures used as SWM BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- C. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.
- D. The Municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

### **Section 502. Operation and Maintenance Agreements**

- A. Prior to final approval of the SWM Site Plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A) covering all stormwater control facilities which are to be privately owned.
  - 1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Agreement.
  - 2. The owner shall convey to the Municipality conservation easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.
  - 3. The owner shall keep on file with the Municipality the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the Municipality within ten (10) working days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the Municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

### **Section 503. Performance Guarantee**

For SWM Site Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Municipality for the timely installation and proper construction of all stormwater management controls as required by the approved SWM Site Plan and this Ordinance in accordance with the provisions of Sections 509, 510, and 511 of the Pennsylvania Municipalities Planning Code.

## **ARTICLE VI – FEES AND EXPENSES**

### **Section 601. General**

The Municipality may include all costs incurred in the review fee charged to an applicant.

The review fee may include, but not be limited to, costs for the following:

- A. Administrative/clerical processing.



- B. Review of the SWM Site Plan.
- C. Attendance at meetings.
- D. Inspections.

## **ARTICLE VII – PROHIBITIONS**

### **Section 701. Prohibited Discharges and Connections**

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the surface waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this Commonwealth, which are not composed entirely of stormwater, except (1) as provided in paragraph C below and (2) discharges authorized under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution a regulated small MS4 or to the waters of this Commonwealth:
  - 1. Discharges or flows from firefighting activities.
  - 2. Discharges from potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
  - 3. Non-contaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
  - 4. Diverted stream flows and springs.
  - 5. Non-contaminated pumped ground water and water from foundation and footing drains and crawl space pumps.
  - 6. Non-contaminated HVAC condensation and water from geothermal systems.
  - 7. Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
  - 8. Non-contaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.
- D. In the event that the municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this Commonwealth, the municipality or DEP will notify the responsible person(s) to cease the discharge.

### **Section 702. Roof Drains and Sump Pumps**

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.

### **Section 703. Alteration of SWM BMPs**

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, or structures that were installed as a requirement of this Ordinance without the written approval of the Municipality.



## ARTICLE VIII – ENFORCEMENT AND PENALTIES

### Section 801. Right-of-Entry

Upon presentation of proper credentials, the municipality or its designated agent may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

### Section 802. Inspection

The landowner or the owner's designee (including the Municipality for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this Ordinance according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:

1. Annually for the first 5 years.
2. Once every 3 years thereafter.
3. During or immediately after the cessation of a 10-year or greater storm.

Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Municipality within 30 days following completion of the inspection.

### Section 803. Enforcement

- A. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM Site Plan, unless specifically exempted in Section 302.
- B. It shall be unlawful to violate Section 703 of this Ordinance.
- C. Inspections regarding compliance with the SWM Site Plan are a responsibility of the Municipality.

### Section 804. Suspension and Revocation

- A. Any approval or permit issued by the Municipality pursuant to this Ordinance may be suspended or revoked for:
  1. Non-compliance with or failure to implement any provision of the approved SWM Site Plan or O&M Agreement.
  2. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
  3. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the Municipality when:
  1. The Municipality has inspected and approved the corrections to the violations that caused the suspension.
  2. The Municipality is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.
- D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for



the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

**Section 805. Penalties**

- A. Anyone violating the provisions of this Ordinance shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$500.00 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
- B. In addition, the municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

**Section 806. Appeals**

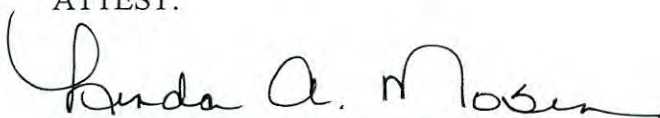
- A. Any person aggrieved by any action of the Municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the Municipality within 30 days of that action.
- B. Any person aggrieved by any decision of the Municipality, relevant to the provisions of this Ordinance, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the Municipality's decision.

**ARTICLE IX – REFERENCES**

- 1. U.S. Department of Agriculture, National Resources Conservation Service (NRCS). *National Engineering Handbook*. Part 630: Hydrology, 1969-2001. Originally published as the *National Engineering Handbook*, Section 4: Hydrology. Available from the NRCS online at: <http://www.nrcs.usda.gov/>.
- 2. U.S. Department of Agriculture, Natural Resources Conservation Service. 1986. *Technical Release 55: Urban Hydrology for Small Watersheds*, 2nd Edition. Washington, D.C.
- 3. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. *Pennsylvania Stormwater Best Management Practices Manual*. Harrisburg, PA.
- 4. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (March 31, 2012), as amended and updated. *Erosion and Sediment Pollution Control Program Manual*. Harrisburg, PA.
- 5. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center. 2004-2006. *Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, Version 3.0*, Silver Spring, Maryland. Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

ORDAINED AND ENACTED THIS 14<sup>th</sup> day of October, 2017.

**CITY OF POTTSVILLE**  
  
Mayor James T. Muldowney

ATTEST:  
  
Linda A. Moser, Deputy City Clerk





## APPENDIX A

### **OPERATION AND MAINTENANCE (O&M) AGREEMENT STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES (SWM BMPs)**

**THIS AGREEMENT**, made and entered into this day of 20\_\_\_\_, by and between \_\_\_\_\_ (hereinafter the "Landowner"), and City of Pottsville, Schuylkill County, Pennsylvania (hereinafter "Municipality");

#### **WITNESSETH**

**WHEREAS**, the Landowner is the owner of certain real property as recorded by deed in the land records of \_\_\_\_\_ County, Pennsylvania, Deed Book \_\_\_\_\_ at page \_\_\_\_\_, (hereinafter "Property").

**WHEREAS**, the Landowner is proceeding to build and develop the Property; and

**WHEREAS**, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality (hereinafter referred to as the "O&M Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

**WHEREAS**, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

**WHEREAS**, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

**NOW, THEREFORE**, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the SWM Site Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the on-site BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted



against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.

8. The Municipality intends to inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Schuylkill \_\_\_\_\_ County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

\_\_\_\_\_

For the Landowner:

\_\_\_\_\_

ATTEST:

\_\_\_\_\_ (City, Borough, Township)

County of \_\_\_\_\_, Pennsylvania

I, \_\_\_\_\_, a Notary Public in and for the county and state aforesaid, whose commission expires on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, do hereby certify that \_\_\_\_\_ whose name(s) is/are signed to the foregoing Agreement bearing date of the \_\_\_\_ day \_\_\_\_\_, 20\_\_\_\_, has acknowledged the same before me in my said county and state.

GIVEN UNDER MY HAND THIS \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
(SEAL)

**D.3. MCM #2 BMP #3 ANNUAL MS4 MEETING MINUTES**



## Meeting Minutes

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Current Date: March 26, 2016  
Project: **Pottsville MS4 Plan and Schedule, Schuylkill County**  
Project No.: 30693.02  
Date/Time: February 26, 2016/9:00 AM  
Place: City Hall  
Attendees: See Attached Sign-In Sheet

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The purpose of this meeting was to present the newly developed and submitted MS4 Plan and Schedule to the responsible City staff and officials. The following items were reviewed:

1. EPA 5/29/2014 MS4 Permit violation Administrative Order for Compliance and Request for Information letter. This general permit is for Discharges of Storm water from Small Municipal Separate Storm Sewer Systems, abbreviated to MS4. The letter stated the City failed to adequately implement or to document its compliance with the permit, as documented in the 2010 and 2011 annual reports.
2. Handouts included the Plan and Schedule Table of Contents and Appendices for the six minimum controls as well as the Schedule of activities by quarter for the current permit 2014-2018. The City also had a complete hard copy.
3. Discussed several appendices that contained new forms to support documentation of activities and attendees.
4. Tom Palamar stated documentation can be sent to him in any form as needed for filing.
5. Mike Hummel stated we can transition responsibilities to City staff to minimize engineering costs as the staff becomes more familiar with the activities and responsibilities.
6. Tom Palamar stated the outreach activities should include funny, eye catching type posters. Prizes could be offered for coloring or poster type activities for children to help them gain awareness.
7. Tom Palamar stated his desire to create an ordinance to allow and to promote Low Impact Development (LID) standards.
8. Tom Palamar stated Sharp Mountain PCSM BMP's associated with the growing greener projects will be maintained by the City.
9. Tom Whitaker led a discussion on washing, salt and ash storage, and similar activities at the City garage. Mike Hummel discussed the need to eliminate illicit City wash drainage to receiving waters.

10. Mike Hummel suggested the City periodically make public references to the MS4 Plan and Schedule and all the resources developed. These resources will be copied to the City web page. Tom Palamar indicated the City is likely to be revamping the web site soon. Mike Hummel submitted the initial PDF Plan and Schedule documents electronically to the City.
11. The implementation activities will be ongoing. Mike Hummel will help coordinate this work and the transition of activities from Benesch led to City administered as needed. A task has been setup in the retainer for this work.

All Attendees are requested to review the above minutes for corrections and/or comments. If no comments are received within ten (10) business days, these minutes will become the basis for all official action.

Respectfully submitted,



Michael S. Hummel, P.E.  
Project Manager

cc:

X:\30600s\30693.02 Pottsville 2016 Retainer\Office\_Docs\Correspondence\Meeting\_Minutes\MM.MS4 Presentation to City.022616.docx

2/26/16 Potts MSY. Secu in

Name	Position	email
Mike Hummel	benesdy-engineer	mhummel@benesdy.com
Rebecca Trefsgar	<del>Assistant</del> to CA	rtrefsgar@city.pottsville.pa.us
Tom Whitaker	Superintendent	tomwhit@verizon.net
Tom Polmar	City Admin	cityadministrator@city.pottsville.pa.us
Jim Muldowney	Mayor	mayor@city.pottsville.pa.us





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## Meeting Minutes

Project: Pottsville MS4 Annual Meeting

MS4 Permit: March 16, 2013 to March 15, 2018

Date/Time: December 15, 2016, 3:30 pm

Place: Pottsville City Hall, 2<sup>nd</sup> Floor Meeting Room

Attendees: Michael Hummel, P.E., Alfred Benesch & Company, Consulting Engineer  
David Horst, P.E., Alfred Benesch & Company  
Thomas Palamar, Pottsville City Administrator  
(See sign-in sheet for additional attendees)

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The purpose of the meeting was to promote participation activities related to maximizing clean MS4 discharges to receiving streams including public reporting of suspected illicit discharges. The format of the meeting included a review the MS4 permit, review the mapping and dry weather monitoring activities, and to introduce/reinforce the education and outreach messages.

The meeting included information related to opportunities for the public to participate include reporting of suspected illicit discharges, decisions related to planning and holding public meetings, and updating other programs and activities.

The meeting included a sign-in sheet to further develop the contact list of emails and addresses including Engineers, Developers, Public Agencies, businesses, schools, and environmental groups to facilitate routine communication to each group annually and prior to meetings and MS4 public involvement and participation activities.

The following minutes have been prepared to document the discussions/concerns.

1. The MS4 education presentation was utilized with posters and an interactive discussion to present the material. It covered an overview of Pottsville's Storm Water Management Program.
2. It included storm water education, the collection system, sources of pollution, benefits of reducing pollution and the effects of urbanization. Illicit discharges were discussed.
3. The City's storm water permit was also discussed. The plan and schedule was presented and there were questions about future permitting including changes to discharge of pool water.
4. Participation programs in 2016 and 2017 including stenciling, dry weather monitoring, posters, and outreach art contests were discussed.
5. The City's MS4 mapping and outfalls were displayed during the presentation and on boards.
6. Dry weather monitoring results were presented.
7. A local land development storm water BMP's were presented and discussed.
8. The City's new MS4 web site was presented and discussed. It is accessed from the City's web site. Further information regarding the City's, PADEP's and EPA's storm water resources was discussed.
9. The local newspaper reporter was present and he wrote an article for the Pottsville Republican Herald.

**Follow-up:**

1. New contacts will be added to the outreach list.
2. Contacts will be made for the next participation and/or meeting.

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The above meeting notes reflect a summary of the information presented and the comments received at the meeting.

Respectfully submitted,

*Michael S. Hummel*

Michael S. Hummel, P.E.  
Project Manager

## Meeting Minutes

Project: Pottsville MS4 Annual Meeting

MS4 Permit: March 16, 2013 to March 15, 2018

Date/Time: February 12, 2018, 6:00 pm

Place: Pottsville City Hall, 2<sup>nd</sup> Floor Meeting Room

Attendees: David L. Horst P.E., Alfred Benesch & Company, Consulting Engineer  
Thomas Palamar, Pottsville City Administrator, James Muldowney, Mayor, Joseph Devine, Councilman, Dorothy Botto, Councilwoman, Edmund Jones, Councilman, Ellen Micka, City Treasurer, William Messaros, City Controller, Thomas Pellish, Esq, City Solicitor, Lia Kral, City Clerk, several members of the public.

The purpose of the meeting was to provide City Council and the general public an overview of the of the City's Storm Water Management Program and the progress and activities used to accomplish the plan objectives

The following minutes have been prepared to document the discussions/concerns.

1. The City's current general permit will expire on March 15, 2018. A permit renewal application was submitted to DEP on 9/17/2017.
2. The MS4 Permit does not include pipe networks that include combined sewer overflows. Those outfalls are under the jurisdiction of the Greater Pottsville Area Sewer Authority.
3. The Six Minimum controls were reviewed and discussed. Copies of the draft permit Stormwater Management plan requirements were provided to Council members.
4. Public Education and Outreach – Changes to the City's webpage were highlighted.
5. Public Involvement/Participation – Highlighted the winning entry to the Schuylkill Action Network sidewalk art program. The winning entry was Councilman Devine's nephew and the winning design was stenciled on the inlet near the High School.
6. Illicit Discharge Detection and Elimination – Provided updates on the map revisions and the dry weather screening efforts.
7. Construction Site Storm Water Runoff and Post Construction Storm water Management – Gave Council and the public an update on the City's latest ordinance and the inventory of PCSM BMPs.
8. Pollution Prevention/Good Housekeeping – Discussed the City's training efforts for their municipal staff.
9. Reviewed receiving stream impairments and Pollutant Reduction Plans. Noted that PRP is not anticipated as part of this permit cycle but the City may still seek opportunities to address Pollutant Control Measures for impaired streams.


**Follow-up:**

1. Complete the Annual Report requirements for Jan 2017 – June 2018.
2. Schedule meeting with City staff to discuss public participation/involvement for the new permit cycle.

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The above meeting notes reflect a summary of the information presented and the comments received at the meeting.

Respectfully submitted,



David L Horst, P.E.  
Project Engineer

**E. MCM #3 ILLICIT DISCHARGE DETECTION AND ELIMINATION**



**E.1. MCM #3 BMP #1 PROGRAM UPDATES**





# APPENDIX E.1 MCM #3 BMP #1 PROGRAM UPDATES

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts | Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator | 570-628-4417

Outreach Date	Illicit Discharge Detection and Elimination Update Log
<b>Initial Program 2016</b>	
5/9/2018	Prepare IDDE Summary Report for Permit Years 2014 and 2016
5/9/2018	Update IDDE written report
5/9/2018	Refer illicit discharges for sanitary sewer to the GPASA.
Click here to enter a date.	Click here to enter a date.
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**City of Pottsville  
IDDE Summary Report  
Permit year 2014**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
001	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	Flow Present - Samples Taken	No Follow-up is necessary. Outfall is not located within City Limits. Fecal levels were below action level limits.	NA
002	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2017	Flow Present - Samples Taken	Additional Dry weather screening required. Flow originates from wetland area with AMD identifiers.	NA
003	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	Flow Present - Samples Taken	Flow originates from an AMD discharge, flows into drainage swale at railroad and discharges from drain pipe to river.	NA
004	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detion and Elimination program. City to Notify GPASA to assist in identifying illicit discharges.	Ongoing
005	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	Flow Present - Samples Taken	Minimal flow during dry weather. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
006	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
007	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Outfall structure is an existing CSO outfall. Update Map to show not MS4	NA
017	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
018	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
019	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/16/2014	Flow Present - Samples Taken	Follow up with additional sampling to see if contamination originates within the Municipal Boundaries.	Ongoing
020	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/16/2014	Flow Present - Samples Taken	Continued monitoring. Samples were below action level limits. Monitor in accordance with permit requirements.	Ongoing
021	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing

**City of Pottsville  
IDDE Summary Report  
Permit year 2014**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
023	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	9/18/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA

**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
001	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	Flow Present - Samples Taken	No Follow-up is necessary. Outfall is not located within City Limits. Samples tested positive for Fecal Coliform so the matter was referred to the GPASA.	NA
001A	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	No Flow Present	No Follow-up necessary. No flow present during dry weather. Outfall is not located within City Limits.	NA
002	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	No Flow Present	No Follow-up necessary. No flow present during dry weather. 2014 Inspection flow originated from wetland area with AMD identifiers.	NA
003	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	Flow Present - Samples Taken	Flow originates from an AMD discharge, flows into drainage swale at railroad and discharges from drain pipe to river.	NA
004	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detion and Elimination program. City to Notify GPASA to assist in identifying illicit discharges.	Ongoing
005	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/2/2016	Flow Present - Samples Taken	Minimal flow during dry weather. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
006	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
007	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Outfall structure is an existing CSO outfall. Update Map to show not MS4	NA
008	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
009	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detion and Elimination program. City to Notify GPASA to assist in identifying illicit discharges.	Ongoing
010A	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	Flow Present - No Samples Taken	No sample was taken due to the location of the manhole and the impact on traffic patterns. Physical Indicators for sanitary sewage were present during visual observation. City to notify	Ongoing
010B	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	NA	NA	Outfall is a CSO outfall with diversion MH on Norwegian Street tied into the existing line.	NA

**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
011	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City to Notify GPASA to assist in identifying illicit discharges.	Ongoing
012	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	NA	NA	Outfall is a CSO outfall with diversion MH on Market Street tied into the existing line.	NA
013	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH				
014	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Storm line connected to CSO Diversion Structure on 2nd Street.	NA
015	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City to Notify GPASA to assist in identifying illicit discharges.	Ongoing
016	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
017	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
018	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
019	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/6/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
020	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/6/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Earlier samples were below action level limits. Monitor in accordance with permit requirements.	Ongoing
021	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/6/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
022	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	NA	NA	Need to Conduct Inspection of Outfall as required by permit.	Ongoing



**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
023	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
024	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	12/14/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
025	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
026	West Branch Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/12/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
027	West Branch Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/12/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
028	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
029	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
030	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
031	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
032	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
033	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
034	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing



## Horst, David L.

---

**From:** Horst, David L.  
**Sent:** Wednesday, May 09, 2018 12:49 PM  
**To:** gpasa@comcast.net  
**Cc:** 'tpalamar@city.pottsville.pa.us'; 'City Administrator'; 'Rebecca Trefsger'; 'street-parks@city.pottsville.pa.us'  
**Subject:** City of Pottsville MS4 - Illicit Discharge  
**Attachments:** IDDESummary2017.pdf; 2016 Dry Weather OM Reports.GPASA.pdf; MS4\_Map\_Update.pdf

Tim,

I am attaching a copy of the IDDE Summary and Dry Weather reports we completed for the outfall screenings conducted in 2016. Based on the observation of flow during dry weather and the sample results, we believe the illicit discharge at the outfalls is due to sanitary sewage for Outfalls 1, 4, 9, 10, 11, and 15 (See attached Map). Please review the attached and give me a call to discuss how we can eliminate potential connections to the MS4 system. Thanks

Dave

David L. Horst, PE | Project Engineer

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**P** 570-622-4055 / **Direct:** 570-624-4285 | **F** 570-6221232 | **E** [dhorst@benesch.com](mailto:dhorst@benesch.com) | **W** [www.benesch.com](http://www.benesch.com)

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**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving Water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
001	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Flow Present - Samples Taken	No Follow-up is necessary. Outfall is not located within City Limits. Samples tested positive for Fecal Coliform so the matter was referred to the GPASA.	NA
001A	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	No Flow Present	No Follow-up necessary. No flow present during dry weather. Outfall is not located within City Limits.	NA
002	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Flow Present - Samples Taken	Flow originates from an AMD discharge, flows into drainage swale at railroad and discharges from drain pipe to river. City to monitor.	NA
003	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	10/5/2016	Flow Present - Samples Taken	Flow originates from an AMD discharge, flows into drainage swale at railroad and discharges from drain pipe to river. City to Monitor.	NA
003A	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Flow Present - Samples Taken	Flow originates from an AMD discharge, flows into drainage swale at railroad and discharges from drain pipe to river. Sample tested high for Fecal Coliform. City to investigate if other sources of sample has tested and re-confirmed measure	NA
004	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Flow Present - Samples Taken	below the action levels in the City's Illicit Discharge Detention and Elimination program. Previous years exceeded the action levels. City notified GPASA to assist in identifying illicit discharges. City to monitor.	Ongoing
005	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Flow Present - Samples Taken	Minimal flow during dry weather. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
006	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
007	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	8/27/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Outfall structure is an existing CSO outfall. Update Map to show not MS4	NA
008	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
009	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	7/12/2018	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City notified GPASA to assist in identifying illicit discharges.	Ongoing

**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving Water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
010A	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	7/12/2018	No Flow Present - No Samples Taken	No sample was taken due to lack of discharge water, however physical indicators for sanitary sewage were present during visual observation. City to notify GPASA to assist in identifying illicit discharges	Ongoing
010B	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	NA	NA	Outfall is a CSO outfall with diversion MH on Norwegian Street tied into the existing line. Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City notified GPASA to assist in identifying illicit discharges.	NA
011	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	7/12/2018	Flow Present - Samples Taken		Ongoing
012	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	NA	NA	Outfall is a CSO outfall with diversion MH on Market Street tied into the existing line.	NA
013	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH				
014	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Storm line connected to CSO Diversion Structure on 2nd Street.	NA
015	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	7/12/2018	Unknown - No Sample Taken	Observation Point filled with stone. Previous years samples tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City to notify GPASA to assist in identifying illicit discharges.	Ongoing
016	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/5/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
017	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
018	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	9/17/2014	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
019	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	6/29/2018	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing

**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving Water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
020	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	10/6/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Earlier samples were below action level limits. Monitor in accordance with permit requirements.	Ongoing
021	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	7/12/2018	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
022	Tributary to Schuylkill River	Yes	2040203	AMD	Al, Fe, Mn, and pH	6/25/2018	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
023	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
024	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	12/14/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
025	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	6/25/2018	No Flow Present	No follow-up necessary. Previous years samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
026	West Branch Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/25/2018	Flow Present - Samples Taken	No follow-up necessary. Flow present during dry weather. Outfall structure is an existing CSO outfall. Update Map to show not MS4. High Fecal Coliform Levels were recorded. City notified GPASA.	Ongoing
027	West Branch Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/25/2018	Flow Present - Samples Taken	Sample has tested for fecal coliform greater than the action levels in the City's Illicit Discharge Detention and Elimination program. City notified GPASA to assist in identifying illicit discharges.	Ongoing
028	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	6/29/2018	Flow Present - Samples Taken	No follow-up necessary. Samples results are below action levels. Continue monitoring flow and water quality for any change.	Ongoing
029	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
030	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
031	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA



**City of Pottsville  
IDDE Summary Report  
Permit year 2016**

Outfall ID	Receiving Water	Receiving water Impaired (2010 303(d)/305(b))	HUC	Applicable TMDL(s)	TMDL Pollutants	Date of Last Screening	Summary of Screening Results	Details of Any Necessary Followup	Date of Followup Resolution
032	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
033	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	10/12/2016	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
034	Tributary to West Branch Schuylkill River	Yes	2040203	PCB	PCB	6/29/2018	Flow Present - Samples Taken	No follow-up necessary. Samples results are upstream were above action levels for Fecal Coliform while Sample downstream was below the action level. City to continue monitoring flow and water quality for any change.	Ongoing
035	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	Observation Point Blocked	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
036	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	No Flow Present	No follow-up necessary. No flow present during dry weather. Monitor in accordance with permit requirements.	NA
037	Schuylkill River	Yes	2040203	AMD/PCB	Al, Fe, Mn, pH, PCB's and siltation	6/29/2018	No Flow Present	No follow-up necessary. No flow present during dry weather. Outfall is a swale that receives flow from CSO diversion manhole. Map to be updated showing outfall as CSO.	NA

## **E.2. MCM #3 BMP #2 MS4 OUTFALL MAPS**







**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- - - DRAINAGE BASIN DIVIDE
- STREAM OR SWALE
- MS4 STORMWATER LINE
- SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE

0 600 1200 FEET

Rev	Date	By	Chk'd	Description

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**CITY OF POTTSVILLE  
MS4 OUTFALL MAPPING  
2017 UPDATE**

City of Pottsville, Pennsylvania

Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

Scale: AS NOTED    Date: 07/06/2017    Project No.: 30799.20    Sheet No.: 1 OF 6





**E.3. MCM #3 BMP #3 MS4 OUTFALL FOCUS MAPS**

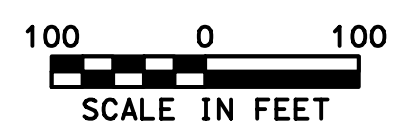






**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- · - · - STREAM OR SWALE
- - - - - MS4 STORMWATER LINE
- - - - - SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE



Rev	Date	By	Chk'd	Description

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 Pottsville, Pennsylvania 17901  
 570-622-4055

**CITY OF POTTSVILLE**  
**MS4 OUTFALL MAPPING**  
**2017 UPDATE**  
**SCHUYLKILL RIVER DRAINAGE BASIN**  
 City of Pottsville, Pennsylvania

Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

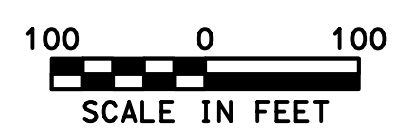
Scale: AS NOTED    Date: 07/06/2017    Project No.: 30799.20    Sheet No.: 2 OF 6





**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- · - · - STREAM OR SWALE
- - - MS4 STORMWATER LINE
- - - SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE



Rev	Date	By	Chk'd	Description

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**CITY OF POTTSVILLE**  
MS4 OUTFALL MAPPING  
2017 UPDATE  
**SCHUYLKILL RIVER DRAINAGE BASIN**  
City of Pottsville, Pennsylvania

Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

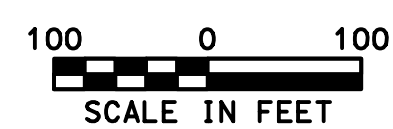
Scale: AS NOTED    Date: 07/06/2017    Project No.: 30799.20    Sheet No.: 3 OF 6





**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- - - STREAM OR SWALE
- - - MS4 STORMWATER LINE
- - - SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE



Rev	Date	By	Chk'd	Description

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CITY OF POTTSVILLE  
MS4 OUTFALL MAPPING  
2017 UPDATE  
WEST BRANCH SCHUYLKILL DRAINAGE BASIN  
City of Pottsville, Pennsylvania

Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

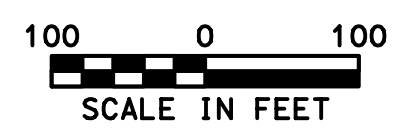
Scale: AS NOTED    Date: 07/06/2017    Project No.: 30799.20    Sheet No.: 4 OF 6





**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- - - STREAM OR SWALE
- - - MS4 STORMWATER LINE
- - - SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE



SEE SHEET 4

Rev	Date	By	Chk'd	Description

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400 One Norwegian Plaza  
Pottsville, Pennsylvania 17901  
570-622-4055

CITY OF POTTSVILLE  
MS4 OUTFALL MAPPING  
2017 UPDATE  
WEST BRANCH DRAINAGE BASIN  
City of Pottsville, Pennsylvania

Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

Scale: AS NOTED    Date: 07/06/2017    Project No.: 30799.20    Sheet No.: 5 OF 6

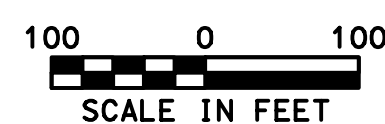




SEE SHEET 5

**LEGEND**

- - - MUNICIPAL BOUNDARY (UC)
- · — · STREAM OR SWALE
- - - MS4 STORMWATER LINE
- - - SEPARATED STORMWATER LINE WITH CSO OUTFALL
- INLET STRUCTURE
- STORMWATER MANHOLE



Rev	Date	By	Chk'd	Description

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CITY OF POTTSVILLE  
MS4 OUTFALL MAPPING  
2017 UPDATE  
WEST BRANCH DRAINAGE BASIN  
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Drawn: RMD    Designed: DLH    Checked: \_\_\_\_\_

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Project No.: 30799.20

Sheet No.: 6 OF 6





**E.4. MCM #3 BMP #4 DRY WEATHER OUTFALL REPORTS AND ENFORCEMENT LOGS**





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>001</u>	
Today's date: <u>8-27-2014</u>		Time (Military): <u>10:15 AM</u>	
Investigators:		Form completed by: <u>DLH</u>	
Temperature (°F): <u>73°F</u>	Rainfall (in.): Last 24 hours: <u>0</u>	Last 48 hours: <u>0</u>	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLH cell</u>	Photo #s: <u>2014-08-27 10.20.03.089</u>		
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input checked="" type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: <u>8'</u> Top Width: <u>46"</u> Bottom Width: <u>48"</u>	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, Skip to Section 5		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input checked="" type="checkbox"/> Flow #2	Flow depth	<u>2</u>	In	Tape measure
	Flow width	<u>4' 0"</u>	Ft, In	Tape measure
	Measured length	<u>2' _____"</u>	Ft, In	Tape measure
	Time of travel	<u>3</u>	S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	outfall is under large fill area - heavy sediment
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**  
 Flow observed in both Inlets @ Pittsville Pizzeria  
 Inlets on Forest Hill Road completely block with sediment

# Pottsville Environmental Testing Laboratory, Inc.

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Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

09/05/14

Sample Location: OUTFALL 001  
Sample Date @ Time: 08/27/14 @ 1020  
Rec'd Date @ Time: 08/27/14 @ 1520

Sampled By: DLH  
Rec'd By: MCF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.41	0.01	S.U.	08/29/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	08/29/14	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00300	mg/l	09/02/14	E200.7 <sup>2</sup>
4. Phenols	ND	0.00500	mg/l	09/02/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	08/29/14	E425.1 <sup>2</sup>
6. Fecal Coliform	140.	1.	cfu/100 ml	08/27/14 (1528)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)

(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <b>602</b>	
Today's date: <b>8-27-14</b>		Time (Military): <b>11:03</b>	
Investigators:		Form completed by: <b>DLH</b>	
Temperature (°F): <b>73</b>	Rainfall (in.): Last 24 hours: <b>0"</b> Last 48 hours: <b>0"</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <b>OLH Cell</b>		Photo #s: <b>2014-08-27</b>	<b>11.40.12 jpg</b>
Land Use in Drainage Area (Check all that apply):			<b>11.39.47 jpg</b>
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space	<b>11.26.14 jpg</b>	
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional	<b>11.04.59 jpg</b>	
<input checked="" type="checkbox"/> Suburban Residential	Other: _____	<b>11.04.30 jpg</b>	
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <b>originates off lot on Centre Street - appears to have amo influence</b>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>12</b>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input checked="" type="checkbox"/> Flow #1	Volume	<b>1</b>	Liter	Bottle
	Time to fill	<b>12</b>	Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Iron Deposits from AMD
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

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POTTSVILLE, PA 17901

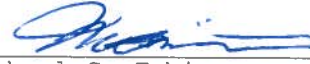
09/05/14

Sample Location: OUTFALL 002  
Sample Date @ Time: 08/27/14 @ 1145  
Rec'd Date @ Time: 08/27/14 @ 1520

Sampled By: DLH  
Rec'd By: MCF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	4.27	0.01	S.U.	08/29/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	08/29/14	E330.5 <sup>1</sup>
3. Copper, Total	0.00410	0.00300	mg/l	09/02/14	E200.7 <sup>2</sup>
4. Phenols	ND	0.00500	mg/l	09/02/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	08/29/14	E425.1 <sup>2</sup>
6. Fecal Coliform	10.	1.	cfu/100 ml	08/27/14 (1528)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)

(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.















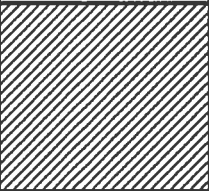
**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <u>603</u>	
Today's date: <u>8-27-14</u>		Time (Military): <u>14106</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>83</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLH Cell</u>	Photo #s: <u>2014-08-27 14.07.21.JPG</u> <u>2014-08-27 14.07.10.JPG</u>		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <u>AMO</u>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24</u>  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial			

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input checked="" type="checkbox"/> Flow #1	Volume	<u>1</u>	Liter	Bottle
	Time to fill	<u>4</u>	Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	AND orange color
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

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CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901


09/05/14

Sample Location: OUTFALL 00/3 DLH  
Sample Date @ Time: 08/27/14 @ 1410  
Rec'd Date @ Time: 08/27/14 @ 1520

Sampled By: DLH  
Rec'd By: MCF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.06	0.01	S.U.	08/29/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.07	0.02	mg/l	08/29/14	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00300	mg/l	09/02/14	E200.7 <sup>2</sup>
4. Phenols	0.00600	0.00500	mg/l	09/02/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	08/29/14	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	08/27/14 (1536)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









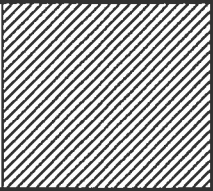
**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <u>004</u>	
Today's date: <u>8-27-2014</u>		Time (Military): <u>14:20</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>73</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:	Photo #s: <u>2014-08-27 14.25.22.jpg</u> <u>2014-09-16 15.32.41</u> <u>2014-09-27 14.23.04.jpg</u> <u>2014-09-16 15.32.33</u> <u>2014-08-27 14.21.44.jpg</u> <u>2014-09-16 15.27.25</u> <u>2014-08-27 14.4.28.jpg</u>		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <u>Possible AMD</u>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____ <u>unknown</u>	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____ <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>- ?</u>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, Skip to Section 5		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial	→ <u>passes through CSO diversion</u> <u>≠ follow up - not CSO manhole</u>		

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *C50 diversion manhole*

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No *Sampled 9-16-2014*

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*C50 diversion manhole → diversion sealed shut*

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

RECEIVED  
OCT - 6 2014

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

BY: DLH


09/24/14

Sample Location: OUTFALL 004  
Sample Date @ Time: 09/16/14 @ 1530  
Rec'd Date @ Time: 09/16/14 @ 1600

Sampled By: DLH  
Rec'd By: CP

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.08	0.01	S.U.	09/19/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	09/19/14	E330.5 <sup>1</sup>
3. Copper, Total	0.00660	0.00200	mg/l	09/22/14	E200.7 <sup>2</sup>
4. Phenols	0.00500	0.00500	mg/l	09/22/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	09/19/14	E425.1 <sup>2</sup>
6. Fecal Coliform	6000.	1.	cfu/100 ml	09/16/14 (1608)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.



















**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <u>005</u>	
Today's date: <u>8-27-2014</u>		Time (Military): <u>13:39</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>82</u>	Rainfall (in.): Last 24 hours: <u>0"</u> Last 48 hours: <u>0"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLH Cell</u>		Photo #: <u>2014-08-27 13.44.45 JPG</u>	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(This area is shaded in the original form)	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input checked="" type="checkbox"/> Flow #1	Volume	<u>1</u>	Liter	Bottle
	Time to fill	<u>1:08</u>	Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only** (If No, Skip to Section 5)  
 Are Any Physical Indicators Present in the flow?  Yes  No

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls** (If No, Skip to Section 6)  
 Are physical indicators that are not related to flow present?  Yes  No

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

09/05/14

Sample Location: OUTFALL 005  
Sample Date @ Time: 08/27/14 @ 1350  
Rec'd Date @ Time: 08/27/14 @ 1520

Sampled By: DLH  
Rec'd By: MCF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.86	0.01	S.U.	08/29/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	08/29/14	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00300	mg/l	09/02/14	E200.7 <sup>2</sup>
4. Phenols	0.00800	0.00500	mg/l	09/02/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	08/29/14	E425.1 <sup>2</sup>
6. Fecal Coliform	80.	1.	cfu/100 ml	08/27/14 (1528)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <b>006</b>	
Today's date: <b>8-27-14</b>		Time (Military): <b>14:45</b>	
Investigators: <b>DLH</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>85</b>	Rainfall (in.): Last 24 hours: <b>0'</b> Last 48 hours: <b>0'</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <b>DLH Cell</b>		Photo #: <b>2014-08-27 14.47.51.SPS</b>	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>15"</u>  In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <b>007</b>	
Today's date: <b>8-21-14</b>		Time (Military): <b>14:51</b>	
Investigators: <b>DLH</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>73</b>	Rainfall (in.): Last 24 hours: <b>0.4</b> Last 48 hours: <b>0.4</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <b>DLH Cell</b>		Photo #: <b>2014-08-28 14.45.30, 2014-08-28 14.45.44</b> <b>2014-09-16 15.49.31, 2014-09-16 15.50.00</b> <b>2014-09-16 15.51.03</b>	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <b>CSO outfall structure</b>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

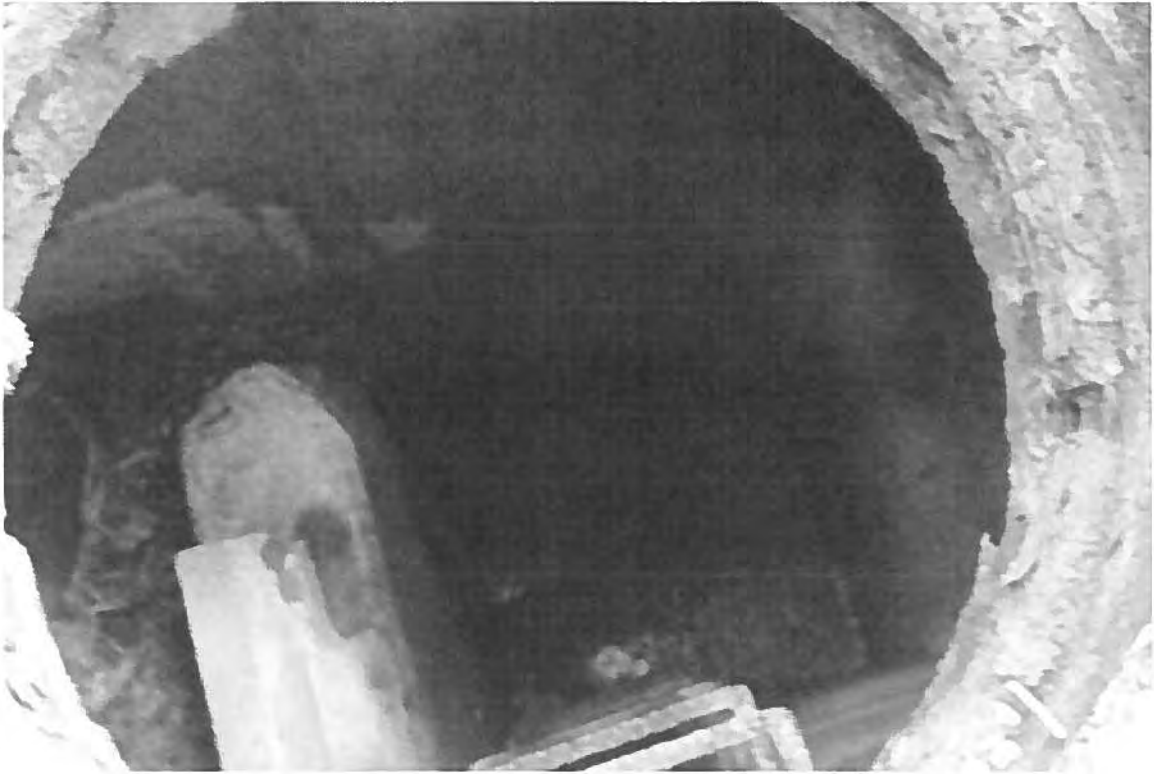
2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CSO outfall structure













**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <b>017</b>	
Today's date: <b>9-17-2014</b>		Time (Military):	
Investigators: <b>DLH</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>46</b>	Rainfall (in.): Last 24 hours: <b>—</b> Last 48 hours: <b>—</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <b>DLH Phone</b>		Photo #s: <b>2014-09-17 08.52.19.jpg 2014-09-17 08.51.52.jpg</b>	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <b>Pine Street</b>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>24"</b>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____		Depth: _____ Top Width: _____ Bottom Width: _____	[Hatched Area]
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____' ____"	Tape measure	
	Measured length	____' ____"	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*Needs a new lid - still labeled Sanitary Sewer  
 → actual discharge is at intersection of ~~sewer~~ and fire*







# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>018</u>	
Today's date: <u>9-17-2014</u>		Time (Military): <u>8:20</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>48°F</u>	Rainfall (in.): Last 24 hours: <u>    </u> Last 48 hours: <u>    </u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLL Cell</u>		Photo #s: <u>2014-09-17 03.38.17.jpg</u>	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Spruce Street</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: <u>TCP</u>	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(This area is shaded in the original form)	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No <span style="float: right;">If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam</span>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

outlet pipe not accessible newed  
 manhole upstream. Lid labelled  
 Sanitary sewer







# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: 019	
Today's date: 9-16-2014		Time (Military): 16:49	
Investigators: DLH		Form completed by: DLH	
Temperature (°F): 65	Rainfall (in.): Last 24 hours: _____ Last 48 hours: _____		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: DLH Cell		Photo #s: 2014-09-16 17.05.52.jpg, 2014-09-16 16.57.09.jpg	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input checked="" type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: _____ Known Industries: _____	
Notes (e.g., origin of outfall, if known): Waber Street			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area indicating submerged)
<input checked="" type="checkbox"/> In-Stream (applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			
3" of water in 36" storm ne at waber + front street 4' at outlet				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  No  Yes *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*Area previous 650 that was separated - potential sewer connections*

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

09/24/14

Sample Location: OUTFALL 019  
Sample Date @ Time: 09/16/14 @ 1715  
Rec'd Date @ Time: 09/17/14 @ 1000

Sampled By: DLH  
Rec'd By: SF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.62	0.01	S.U.	09/19/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.04	0.02	mg/l	09/19/14	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00200	mg/l	09/22/14	E200.7 <sup>2</sup>
4. Phenols	0.00500	0.00500	mg/l	09/22/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	09/19/14	E425.1 <sup>2</sup>
6. Fecal Coliform	1540.	1.	cfu/100 ml	09/17/14 (1253)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <b>020</b>	
Today's date: <b>9-16-2014</b>		Time (Military): <b>16:43</b>	
Investigators: <b>DLH</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>63°F</b>	Rainfall (in.): Last 24 hours: <b>-</b> Last 48 hours: <b>-</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <b>DLH Cell</b>		Photo #s: <b>2014-09-16 16.31.45.JPG, 2014-09-16 16.31.30.JPG</b> <b>2014-09-16 16.26.30.JPG</b>	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <b>Nichols Street</b>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>16"</b>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input checked="" type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, Skip to Section 5 → <b>outlet pipe partially submerged</b>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial	<b>popped manhole - pipe from Nichols and CSO manhole</b>			

**Section 3: Quantitative Characterization**

~~No samples taken~~    **flowing**    **sampled 9-17-2014**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Unable to remove lid from diversion manhole

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

09/24/14

Sample Location: OUTFALL 020  
Sample Date @ Time: 09/17/14 @ 0907  
Rec'd Date @ Time: 09/17/14 @ 1000

Sampled By: DLH  
Rec'd By: SF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.99	0.01	S.U.	09/19/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	09/19/14	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00200	mg/l	09/22/14	E200.7 <sup>2</sup>
4. Phenols	0.00500	0.00500	mg/l	09/22/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	09/19/14	E425.1 <sup>2</sup>
6. Fecal Coliform	360.	1.	cfu/100 ml	09/17/14 (1258)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)

(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>021</u>	
Today's date: <u>9-17-2014</u>		Time (Military): <u>9:20 AM</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>52</u>	Rainfall (in.): Last 24 hours:	Last 48 hours: <u>      </u>	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLH Cell phone</u>		Photo #s: <u>2014-09-17_09.28.07 sp3, 2014-09-17_09.28.26</u>	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Ravine + Railroad Street</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>unknown</u>	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<i>If No, Skip to Section 5</i>	
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input checked="" type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Manhole lid labeled Sanitary Sewer  
 outfall covered over sampled at manhole  
 Some deposits in manhole

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CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901


09/24/14

Sample Location: OUTFALL 021  
Sample Date @ Time: 09/17/14 @ 0920  
Rec'd Date @ Time: 09/17/14 @ 1000

Sampled By: DLH  
Rec'd By: SF

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.75	0.01	S.U.	09/19/14	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.07	0.02	mg/l	09/19/14	E330.5 <sup>1</sup>
3. Copper, Total	0.00220	0.00200	mg/l	09/22/14	E200.7 <sup>2</sup>
4. Phenols	ND	0.00500	mg/l	09/22/14	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.01	mg/l as MBAS	09/19/14	E425.1 <sup>2</sup>
6. Fecal Coliform	1210.	1.	cfu/100 ml	09/17/14 (1258)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)

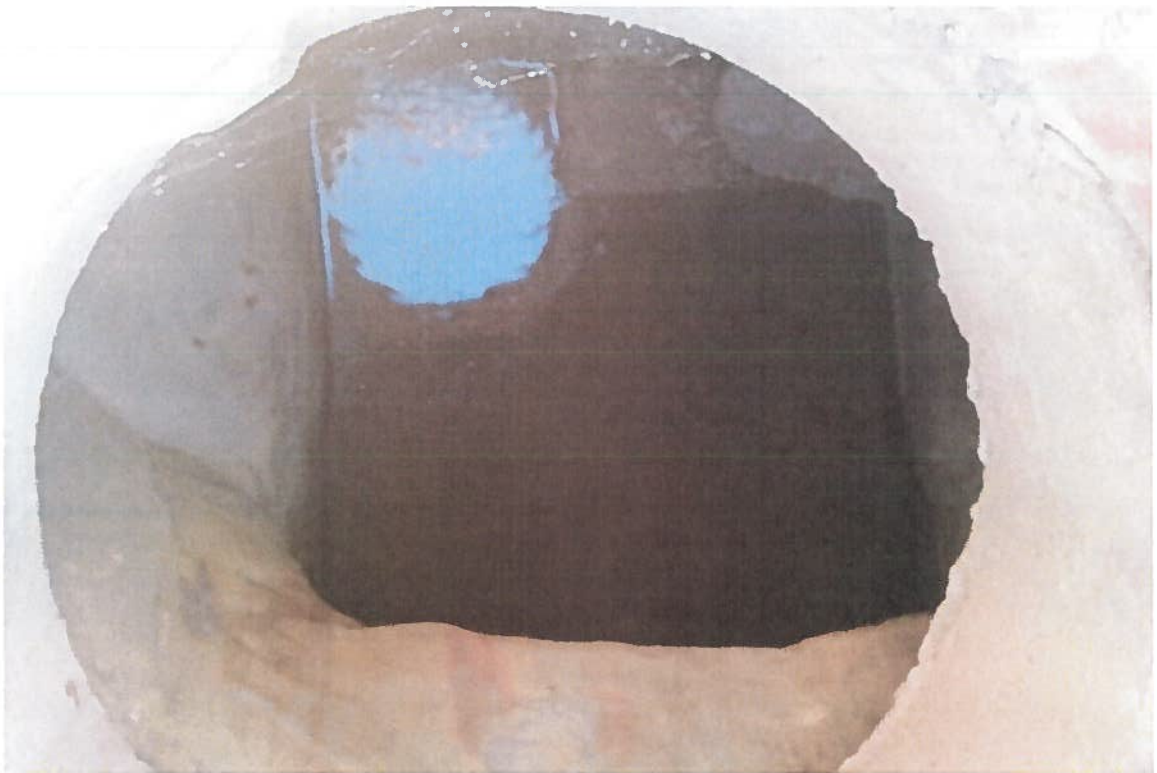
(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

## Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.









# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>023</u>	
Today's date: <u>7-18-2014</u>		Time (Military): <u>14:55</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F):	Rainfall (in.): Last 24 hours:	Last 48 hours:	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>DLH</u>		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Several 15" CMP outfall along Westgate Road - need to pull subdivision plan for drainage area - outfalls visible from bike path</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>15"</u>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area)	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam	

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>CO1</u>	
Today's date: <u>10/5/16</u>		Time (Military): <u>6:57</u>	
Investigators:		Form completed by: <u>DLA</u>	
Temperature (°F): <u>55</u>	Rainfall (in.): Last 24 hours: <u>-</u> Last 48 hours: <u>0.25"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera: <u>Go Pro</u>		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: <u>8"</u> Top Width: <u>46"</u> Bottom Width: <u>48"</u>	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible studs or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	<i>Well collapsing</i>
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# Pottsville Environmental Testing Laboratory, Inc.

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CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

10/26/16

Sample Location: OUTFALL 001  
Sample Date @ Time: 10/06/16 @ 0910  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.90	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0079	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	1.5	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	15600.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 003  
Sample Date @ Time: 10/06/16 @ 0925  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0056	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL 004  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.60	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.17	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0093	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.020	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.87	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>





**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <b>1A</b>	
Today's date: <b>10/5/16</b>		Time (Military): <b>9:30</b>	
Investigators:		Form completed by: <b>DLH</b>	
Temperature (°F): <b>60</b>	Rainfall (in.): Last 24 hours: _____ Last 48 hours: <b>0.25</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: <b>Arch</b>	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>18"</b> Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>002</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>7:57</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>60</u>	Rainfall (in.): Last 24 hours: <u>-</u> Last 48 hours: <u>0.5</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other: <input type="checkbox"/> Petroleum/gas	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	Aval - Tree - Debris
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>003</u>	
Today's date: <u>10-5-13</u>		Time (Military): <u>12:32</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLW</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: _____ Last 48 hours: <u>0.25"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Possible AMD</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input checked="" type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input checked="" type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input checked="" type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input checked="" type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF PRESENT	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *AMD*

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed in infrastructure repairs)?**

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

10/26/16

Sample Location: OUTFALL 001  
Sample Date @ Time: 10/06/16 @ 0910  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.90	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0079	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	1.5	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	15600.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL 003  
Sample Date @ Time: 10/06/16 @ 0925  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0056	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 004  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.60	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.17	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0093	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.020	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.87	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>004</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>1034</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLV</u>	
Temperature (°F): <u>65</u>	Rainfall (in): Last 24 hours: <input type="radio"/> Last 48 hours: <u>0.25"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE?	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>?</u> In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input checked="" type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *AmD*

### Section 7: Data Collection

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

10/26/16

Sample Location: OUTFALL 001  
Sample Date @ Time: 10/06/16 @ 0910  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.90	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0079	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	1.5	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	15600.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 003  
Sample Date @ Time: 10/06/16 @ 0925  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0056	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 004  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.60	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.17	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0093	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.020	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.87	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>005</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>10:40</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F):	Rainfall (in.): Last 24 hours:		Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	[Hatched Area]
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<i>If No, Skip to Section 5</i>	
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: **OUTFALL 005**  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	8.04	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0066	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	200.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 009  
Sample Date @ Time: 10/06/16 @ 1000  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.77	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.26	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0236	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.022	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	49000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 011  
Sample Date @ Time: 10/06/16 @ 1030  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.70	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.09	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.016	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	7700.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 015  
Sample Date @ Time: 10/06/16 @ 1040  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0124	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.126	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <b>008</b>	
Today's date: <b>10-3-16</b>		Time (Military): <b>11:35</b>	
Investigators:		Form completed by:	
Temperature (°F): <b>65</b>	Rainfall (in.): Last 24 hours: <b>0</b> Last 48 hours: <b>0.25"</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <b>accessed manhole @ Union &amp; Progress → 23' to outfall</b>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>18"</b>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>009</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>13:00</u>	
Investigators: <u>EL - VR</u>		Form completed by: <u>OLL</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <input checked="" type="checkbox"/> Last 48 hours: <u>0.25"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<u>Decommissioned diversion MH - 40' to stream outfall</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>48"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No, Skip to Section 5			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____" ____"	Ft, In	Tape measure
	Measured length	____" ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *Sewage*

**Section 7: Data Collection**

- Sample for the lab?  Yes  No
- If yes, collected from:  Flow  Pool
- Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: OUTFALL 005  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	8.04	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0066	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	200.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 009  
Sample Date @ Time: 10/06/16 @ 1000  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.77	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.26	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0236	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.022	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	49000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 011  
Sample Date @ Time: 10/06/16 @ 1030  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.70	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.09	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.016	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	7700.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 015  
Sample Date @ Time: 10/06/16 @ 1040  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0124	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.126	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>



# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>010</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>13:33</u>	
Investigators: <u>EL + VR</u>		Form completed by: <u>OLL</u>	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<u>Decommissioned Diversion MH</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (if present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



# Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input checked="" type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *Suspected Sanitary Connection*

**Section 7: Data Collection**

1. Sample for the lab?  *DNA*  No  No Sample taken - unsafe location

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>011</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>13:51</u>	
Investigators: <u>EL &amp; VR</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>65</u>	Rainfall (in): Last 24 hours: <u>-</u> Last 48 hours: <u>.25"</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input checked="" type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input checked="" type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: <u>Arch</u>	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>60"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX: (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input checked="" type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious *Sewer Connections*

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: OUTFALL 005  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	8.04	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0066	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	200.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

Sample Location: OUTFALL 009  
Sample Date @ Time: 10/06/16 @ 1000  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.77	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.26	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0236	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.022	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	49000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

Sample Location: OUTFALL 011  
Sample Date @ Time: 10/06/16 @ 1030  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.70	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.09	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.016	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	7700.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

Sample Location: OUTFALL 015  
Sample Date @ Time: 10/06/16 @ 1040  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0124	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.126	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>014</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>14:39</u>	
Investigators: <u>EL &amp; VR</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0.24</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Storm water M+H</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>3"</u> Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	___' ___"	Ft, In	Tape measure
	Measured length	___' ___"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Per VR → Diversion Structure @ 2nd Street +.25

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>015</u>	
Today's date: <u>10-5-16</u>		Time (Military): <u>12:15</u>	
Investigators: <u>EL + VR</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0.25</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Decommissioned Diversion M16</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

Section 7: Data Collection

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: OUTFALL 005  
Sample Date @ Time: 10/06/16 @ 0930  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	8.04	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0066	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	200.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL 009  
Sample Date @ Time: 10/06/16 @ 1000  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.77	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.26	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0236	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	0.022	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	49000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL 011  
Sample Date @ Time: 10/06/16 @ 1030  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.70	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.09	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.016	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	7700.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 015  
Sample Date @ Time: 10/06/16 @ 1040  
Rec'd Date @ Time: 10/06/16 @ 1045

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.89	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0124	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.126	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	50000.	1.	cfu/100 ml	10/06/16 (1303)	SM9222D <sup>1</sup>



# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <b>016</b>	
Today's date: <b>10-5-16</b>		Time (Military): <b>14:13</b>	
Investigators: <b>EL &amp; VR</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>65</b>	Rainfall (in): Last 24 hours: <b>0</b> Last 48 hours: <b>0.25</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <b>Decommissioned Diversion MH →</b>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <b>12"</b>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	[Hatched Area]	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible studs or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, studs, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**



**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <u>019</u>	
Today's date: <u>10-6-16</u>		Time (Military): <u>13:28</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial <u>Stream</u>			

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____' ____"	Tape measure	
	Measured length	____' ____"	Tape measure	
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

*See Screen is damaged*

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: **OUTFALL 019**  
Sample Date @ Time: 10/06/16 @ 1328  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.54	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0047	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	800.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

-----  
Sample Location: **OUTFALL WATER STREET**  
Sample Date @ Time: 10/06/16 @ 1340  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.27	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	1100.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

-----  
Sample Location: **OUTFALL 021**  
Sample Date @ Time: 10/06/16 @ 1400  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.60	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.045	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	400.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
Michael C. Fabian  
Laboratory Director

{ PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
{ PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.



**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <u>020</u>	
Today's date: <u>10-6-16</u>		Time (Military): <u>1314Z</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLA</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<u>Manhole eliminated in street</u>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/hour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>021</u>	
Today's date: <u>10-6-16</u>		Time (Military): <u>13:52</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>65</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

### Outfall Observation Field Sheet

*could not access outfall*

Section 4: Physical Indicators for Flowing Outfalls Only  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/acid <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/06/16

Sample Location: OUTFALL 019  
Sample Date @ Time: 10/06/16 @ 1328  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.54	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0047	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	800.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL WATER STREET  
Sample Date @ Time: 10/06/16 @ 1340  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.27	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	1100.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL 021  
Sample Date @ Time: 10/06/16 @ 1400  
Rec'd Date @ Time: 10/06/16 @ 1420

Sampled By: EL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.60	0.01	S.U.	10/06/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	10/06/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/18/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/09/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	0.045	0.0400	mg/l as MBAS	10/07/16	E425.1 <sup>2</sup>
6. Fecal Coliform	400.	1.	cfu/100 ml	10/06/16 (1438)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

( PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
( PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <del>023</del> 023	
Today's date: 10-12-16		Time (Military): 11: 22	
Investigators: EL		Form completed by: DLH	
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0	Last 48 hours: 0	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____ 15 _____ <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area)
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed		Outfall ID 024	
Today's date: 12/14/2016		Time (Military) 12:15	
Investigators dlh		Form completed by dlh	
Temperature (°F) 38	Rainfall (in.) Last 24 hours 0		Last 48 hours 0
Latitude	Longitude	GPS Unit	GPS LMK #
Camera: dlh cell phone		Photo #s 284, 286, 287	
Land Use in Drainage Area (Check all that apply)			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <p style="text-align: center;">Cottage Hill West</p>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: 15	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area indicating submerged status)
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____"	Ft, In	Tape measure
	Measured length	_____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc ) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Only <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam</i>

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?









# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>025</u>	
Today's date: <u>10-12-16</u>		Time (Military): <u>9:40</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLW</u>	
Temperature (°F): <u>50</u>	Rainfall (in.): Last 24 hours: <u>0</u>	Last 48 hours: <u>0</u>	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<u>Swale behind wet wash center → carry flow from Bk path</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>18</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____			
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)			
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> Petroleum/gas	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity		<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!	<input checked="" type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input checked="" type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:		<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input checked="" type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

### Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>026</u>	
Today's date: <u>10-12-16</u>		Time (Military): <u>9:00</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLW</u>	
Temperature (°F): <u>50</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Separated area on West End Avenue</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input checked="" type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____			
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial <u>in Both</u>				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input checked="" type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input checked="" type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**



CITY OF POTTSVILLE (cont.)  
10/12/16

Sample Location: ~~OUTFALL 025~~ Tributary at West West Center  
Sample Date @ Time: 10/12/16 @ ----  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.06	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	100.	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

-----  
Sample Location: ~~OUTFALL 026A~~ 27  
Sample Date @ Time: 10/12/16 @ 0900  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.81	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0043	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

-----  
Sample Location: ~~OUTFALL 026B~~ 26  
Sample Date @ Time: 10/12/16 @ 0905  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.79	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>



# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>027</u>	
Today's date: <u>10-12-16</u>		Time (Military): <u>9:05</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>50</u>	Rainfall (in): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Separate area on west End Ave</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input checked="" type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>0.36"</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____' ____"	Tape measure	
	Measured length	____' ____"	Tape measure	
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other: <input type="checkbox"/> Petroleum/gas	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No      If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/12/16

Sample Location: ~~OUTFALL 025~~ Tributary at West Wash Center  
Sample Date @ Time: 10/12/16 @ ----  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.06	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	100.	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

Sample Location: ~~OUTFALL 026A~~ 27  
Sample Date @ Time: 10/12/16 @ 0900  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.81	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0043	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

Sample Location: ~~OUTFALL 026B~~ 26  
Sample Date @ Time: 10/12/16 @ 0905  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.79	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <u>OLR</u>	
Today's date: <u>10-12-16</u>		Time (Military): <u>10:10</u>	
Investigators: <u>EL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>56</u>	Rainfall (in.): Last 24 hours: <u>0</u> Last 48 hours: <u>0</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input checked="" type="checkbox"/> Open Space	
<input checked="" type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known): <u>Surface water along RR + Roller Road II inlets on westward Run</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input checked="" type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: <u>6</u> Top Width: <u>9</u> Bottom Width: <u>5</u>	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	___' ___"	Ft, In	Tape measure
	Measured length	___' ___"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK IF Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)	
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input checked="" type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input checked="" type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK IF Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
10/12/16

Sample Location: OUTFALL 028

Sample Date @ Time: 10/12/16 @ 1010

Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH

Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.03	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

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If there are any questions regarding this data, feel free to contact me.

  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)

(<sup>2</sup>PA DEP Lab Name: QC, Inc.; ID Number: 09-131)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.





# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <del>629</del> 629	
Today's date: 10-12-16		Time (Military): 11:20	
Investigators: EL		Form completed by: DLH	
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0	Last 48 hours: 0	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>5</u>  In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area)
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Paint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Paint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <del>030</del> 030	
Today's date: 10-12-16		Time (Military): 11:18	
Investigators: EL		Form completed by: DLH	
Temperature (°F): 60	Rainfall (in.): Last 24 hours: 0	Last 48 hours: 0	
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE <input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: 15 In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Shaded area)
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____', ____"	Tape measure	
	Measured length	____', ____"	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <del>030</del> 031	
Today's date: 10-12-16		Time (Military): 11:15	
Investigators: EL		Form completed by: DLH	
Temperature (°F): 60	Rainfall (in.): Last 24 hours: $\emptyset$ Last 48 hours: $\emptyset$		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____ 15	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area)	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	____' ____"	Tape measure	
	Measured length	____' ____"	Tape measure	
	Time of travel		Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight, origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <del>52</del> 032	
Today's date: 10-12-16		Time (Military): 11:10	
Investigators: EL		Form completed by: DLH	
Temperature (°F): 60	Rainfall (in): Last 24 hours: $\emptyset$ Last 48 hours: $\emptyset$		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____ 15 _____  In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	(Hatched area)
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Observation Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# CITY OF POTTSVILLE

## OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: <del>031</del> 033	
Today's date: 10-2-16		Time (Military): 11:02	
Investigators:		Form completed by:	
Temperature (°F): 62	Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>15</u>  Depth: _____ Top Width: _____ Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	SUBMERGED	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Observation Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK If Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green See severity	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Clearly visible in outfall flow <input type="checkbox"/> 3 - Opaque
Turbidity	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK If Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

- Sample for the lab?  Yes  No
- If yes, collected from:  Flow  Pool
- Intermittent flow trap set?  Yes  No *If Yes, type:  OBM  Caulk dam*

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



**CITY OF POTTSVILLE**

**OUTFALL OBSERVATION/ SAMPLE COLLECTION FIELD SHEET**

**Section 1: Background Data**

Subwatershed:		Outfall ID: <del>034</del> <b>034</b>	
Today's date: <b>10-12-16</b>		Time (Military): <b>11:25</b>	
Investigators: <b>EL</b>		Form completed by: <b>DLH</b>	
Temperature (°F): <b>60</b>	Rainfall (in.): Last 24 hours: <b>∅</b> Last 48 hours: <b>∅</b>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<i>surface water from neighboring Twp.</i>			

**Section 2: Outfall Description**

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>15</u>  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input checked="" type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial <i>Sampled ds + upStream</i>			

**Section 3: Quantitative Characterization**

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

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Palo Alto, Pennsylvania 17901

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CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

10/28/16

Sample Location: **MAPLE AVE.**  
Sample Date @ Time: 10/12/16 @ 1124  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	5.74	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/22/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

Sample Location: **034 UPSTREAM**  
Sample Date @ Time: 10/12/16 @ 1115  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.08	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

Sample Location: **OUTFALL 034**  
Sample Date @ Time: 10/12/16 @ 1110  
Rec'd Date @ Time: 10/12/16 @ 1145

Sampled By: EL/DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	6.92	0.01	S.U.	10/12/16	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	10/12/16	E330.5 <sup>1</sup>
3. Copper, Total	0.0051	0.00410	mg/l	10/21/16	E200.7 <sup>2</sup>
4. Phenols	ND	0.0150	mg/l	10/16/16	E420.1 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.0400	mg/l as MBAS	10/14/16	E425.1 <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	10/12/16 (1239)	SM9222D <sup>1</sup>

# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>004</u>	
Today's date: <u>8-29</u>		Time (Military): <u>11:01</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>83</u>	Rainfall (in.): Last 24 hours: <u>3.2</u> Last 48 hours: <u>1.5</u>		
Latitude: <u>40° 40' 29" N</u>	Longitude: <u>76° 11' 13" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: <u>8"</u> <input type="checkbox"/> Top Width: <u>48"</u> <input type="checkbox"/> Bottom Width: <u>45"</u>	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	___' ___"	Ft, In	Tape measure
	Measured length	___' ___"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  No (If No, Skip to Section 5)  Yes

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	wall cavity
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No IF Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illlicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

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CITY OF POTTSVILLE  
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POTTSVILLE, PA 17901

07/23/18

Sample Location: **OUTFALL #1**  
Sample Date @ Time: 07/12/18 @ 1030  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.30	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	320.	1.	cfu/100 ml	07/12/18 (1327)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #2  
Sample Date @ Time: 07/12/18 @ 1125  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	4.69	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	30.	1.	cfu/100 ml	07/12/18 (1341)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #3  
Sample Date @ Time: 07/12/18 @ 1100  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.10	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.13	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	07/12/18 (1336)	SM9222D <sup>1</sup>





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schoy Kill River</u>		Outfall ID: <u>002</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>11:15AM</u>	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>85</u>	Rainfall (in.): Last 24 hours: <u>2.7</u> Last 48 hours: <u>2.7</u>		
Latitude: <u>40° 40' 38.4" N</u>	Longitude: <u>76° 11' 20.7" W</u>	GPS Unit:	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <u>Surface run-off from walkways on Centre Street. AMD Source Suspected</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12</u> In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____	Ft, In	Tape measure
	Measured length	_____	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Iron deposits from AMD
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Brown <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Orange <input type="checkbox"/> Green	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

07/23/18

Sample Location: OUTFALL #1  
Sample Date @ Time: 07/12/18 @ 1030  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.30	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	320.	1.	cfu/100 ml	07/12/18 (1327)	SM9222D <sup>1</sup>

-----  
Sample Location: **OUTFALL #2**  
Sample Date @ Time: 07/12/18 @ 1125  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	4.69	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	30.	1.	cfu/100 ml	07/12/18 (1341)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #3  
Sample Date @ Time: 07/12/18 @ 1100  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.10	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.13	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	07/12/18 (1336)	SM9222D <sup>1</sup>





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>003A</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>11:30 AM</u>	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>83</u>	Rainfall (in.): Last 24 hours: <u>2.7</u> Last 48 hours: <u>2.7</u>		
Latitude: <u>40°40' 41.95" N</u>	Longitude: <u>76°11' 22.02" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			
<u>Drainage Pipe under Railroad</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12</u>	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input checked="" type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____		
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width		Ft, In	Tape measure
	Measured length		Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input checked="" type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	Sec severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	AND Iron deposits
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>		

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

### Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Additional flow from AND overflow at outfall No. 3

CITY OF POTTSVILLE (cont.)  
07/12/18

Sample Location: **OUTFALL #3A**  
Sample Date @ Time: 07/12/18 @ 1115  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.13	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.15	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. <b>Fecal Coliform</b>	<b>3000.</b>	<b>1.</b>	<b>cfu/100 ml</b>	<b>07/12/18 (1337)</b>	<b>SM9222D<sup>1</sup></b>

-----  
Sample Location: OUTFALL #4  
Sample Date @ Time: 07/12/18 @ 1050  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.25	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.38	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.001	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.039	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.164	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	160.	1.	cfu/100 ml	07/12/18 (1335)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #5  
Sample Date @ Time: 07/12/18 @ 1045  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.46	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.06	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	170.	1.	cfu/100 ml	07/12/18 (1328)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #9  
Sample Date @ Time: 07/12/18 @ 0846  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.08	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	1900.	1.	cfu/100 ml	07/12/18 (1323)	SM9222D <sup>1</sup>



# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>003</u>	
Today's date: <u>8-29-18</u>		Time (Military): <u>11:20</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>83°F</u>	Rainfall (in.): Last 24 hours: <u>1.7</u> Last 48 hours: <u>1.2</u>		
Latitude: <u>40°40'47"N</u>	Longitude: <u>76°11'23"W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known): <u>And outfall above Railroad</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12"</u> In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<i>(applicable when collecting samples)</i>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ "	Ft, In	Tape measure
	Measured length	_____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	Drange color
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>		

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

- Sample for the lab?  Yes  No
- If yes, collected from:  Flow  Pool
- Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# Pottsville Environmental Testing Laboratory, Inc.

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Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

07/23/18

Sample Location: OUTFALL #1  
Sample Date @ Time: 07/12/18 @ 1030  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.30	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	320.	1.	cfu/100 ml	07/12/18 (1327)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #2  
Sample Date @ Time: 07/12/18 @ 1125  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	4.69	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	ND	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	30.	1.	cfu/100 ml	07/12/18 (1341)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #3  
Sample Date @ Time: 07/12/18 @ 1100  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.10	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.13	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	ND	1.	cfu/100 ml	07/12/18 (1336)	SM9222D <sup>1</sup>



# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>004</u>	
Today's date: <u>6-29</u>		Time (Military): <u>11:09</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>80</u>	Rainfall (in.): Last 24 hours: _____ Last 48 hours: _____		
Latitude: <u>40°40'48.80" N</u>	Longitude: <u>76°11'24.43" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____ <p style="text-align: center;"><u>unknown</u></p>	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____  <input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____  <input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	Diameter/Dimensions: <u>?</u>  In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ ' _____"	Ft, In	Tape measure
	Measured length	_____ ' _____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion	<input type="checkbox"/> Peeling
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Excessive	<input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive	<input type="checkbox"/> Inhibited
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Brown	<input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown	<input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**



CITY OF POTTSVILLE (cont.)  
07/12/18

Sample Location: OUTFALL #3A  
Sample Date @ Time: 07/12/18 @ 1115  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.13	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.15	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	3000.	1.	cfu/100 ml	07/12/18 (1337)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #4  
Sample Date @ Time: 07/12/18 @ 1050  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.25	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.38	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.001	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.039	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.164	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	160.	1.	cfu/100 ml	07/12/18 (1335)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #5  
Sample Date @ Time: 07/12/18 @ 1045  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.46	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.06	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	170.	1.	cfu/100 ml	07/12/18 (1328)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #9  
Sample Date @ Time: 07/12/18 @ 0846  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.08	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	1900.	1.	cfu/100 ml	07/12/18 (1323)	SM9222D <sup>1</sup>



# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>005</u>	
Today's date: <u>6-24</u>		Time (Military):	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>80 F</u>	Rainfall (in.): Last 24 hours: <u>4"</u> Last 48 hours: <u>1"</u>		
Latitude: <u>40° 40' 51.50" N</u>	Longitude: <u>76° 11' 26.08" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ "	Ft, In	Tape measure
	Measured length	_____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
07/12/18

Sample Location: OUTFALL #3A  
Sample Date @ Time: 07/12/18 @ 1115  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.13	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.15	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	3000.	1.	cfu/100 ml	07/12/18 (1337)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #4  
Sample Date @ Time: 07/12/18 @ 1050  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.25	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.38	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.001	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.039	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.164	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	160.	1.	cfu/100 ml	07/12/18 (1335)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #5  
Sample Date @ Time: 07/12/18 @ 1045  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.46	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.06	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	170.	1.	cfu/100 ml	07/12/18 (1328)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #9  
Sample Date @ Time: 07/12/18 @ 0846  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.08	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	1900.	1.	cfu/100 ml	07/12/18 (1323)	SM9222D <sup>1</sup>





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>009</u>	
Today's date: <u>7-12-16</u>		Time (Military): <u>6:42</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>69</u>	Rainfall (in.): Last 24 hours: <u>None</u> Last 48 hours: <u>None</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u> In Water: <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

- Sample for the lab?  Yes  No
- If yes, collected from:  Flow  Pool
- Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

CITY OF POTTSVILLE (cont.)  
07/12/18

Sample Location: OUTFALL #3A  
Sample Date @ Time: 07/12/18 @ 1115  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.13	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.15	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	3000.	1.	cfu/100 ml	07/12/18 (1337)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #4  
Sample Date @ Time: 07/12/18 @ 1050  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.25	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.38	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.001	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.039	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.164	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	160.	1.	cfu/100 ml	07/12/18 (1335)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #5  
Sample Date @ Time: 07/12/18 @ 1045  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.46	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.06	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	170.	1.	cfu/100 ml	07/12/18 (1328)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #9  
Sample Date @ Time: 07/12/18 @ 0846  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.08	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.05	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.004	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.014	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	1900.	1.	cfu/100 ml	07/12/18 (1323)	SM9222D <sup>1</sup>





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>O10A</u>	
Today's date: <u>7-12-18</u>		Time (Military): <u>8:47</u>	
Investigators: <u>DH, BH</u>		Form completed by:	
Temperature (°F): <u>69</u>	Rainfall (in.): Last 24 hours: <u>None</u> Last 48 hours: <u>None</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: <u>concrete</u>	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other: <u>stone arch</u>	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u> In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ "	Ft, In	Tape measure
	Measured length	_____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroluem/gas <input type="checkbox"/> Petroluem (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Other:	No flow but waste present in the arch
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>011</u>	
Today's date: <u>7-12-18</u>		Time (Military): <u>9:01</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>71</u>	Rainfall (in.): Last 24 hours: <u>None</u> Last 48 hours: <u>None</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: <u>✓</u>	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other: <u>Arch</u>	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____		
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial	<u>Standing water</u>			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ " _____ "	Ft, In	Tape measure
	Measured length	_____ " _____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input checked="" type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input checked="" type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Browns <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	<input type="checkbox"/> Oil <input type="checkbox"/> Other:
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	<input type="checkbox"/> Other:

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Ilicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Sample Location: **OUTFALL #11**  
Sample Date @ Time: 07/12/18 @ 0905  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DHL  
Rec'd By: LLB

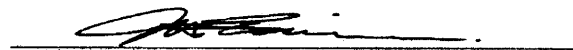
PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.36	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.63	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.028	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.061	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.194	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. <b>Fecal Coliform</b>	<b>2200.</b>	1.	cfu/100 ml	07/12/18 (1324)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #21  
Sample Date @ Time: 07/12/18 @ 1015  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DHL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.52	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.07	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	290.	1.	cfu/100 ml	07/12/18 (1326)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.



Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: M.J. Reider, Inc.; ID Number: 06-003)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.





# City of Pottsville

could not locate

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>015</u>	
Today's date: <u>7-12-18</u>		Time (Military): <u>9:17</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>71</u>	Rainfall (in.): Last 24 hours: <u>none</u> Last 48 hours: <u>None</u>		
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other: <u>arch</u>	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u> In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>		

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

- Sample for the lab?  Yes  No
- If yes, collected from:  Flow  Pool
- Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Sample location covered

# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>019</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>8:22 AM</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>72</u>	Rainfall (in.): Last 24 hours: <u>1.95</u> 1" Last 48 hours: <u>0.08</u> 1"		
Latitude: <u>40°41'34.32" N</u>	Longitude: <u>76°11'45.84" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>  <input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____			
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	Sec severity <input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*sample will be taken at a later date*



# Pottsville Environmental Testing Laboratory, Inc.

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Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

07/26/18

Sample Location: **OUTFALL #19**  
Sample Date @ Time: 07/19/18 @ 0930  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.45	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.035	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	620.	1.	cfu/100 ml	07/19/18 (1320)	SM9222D <sup>1</sup>

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Sample Location: **OUTFALL #19 UP STREAM**  
Sample Date @ Time: 07/19/18 @ 0920  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.18	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	90.	1.	cfu/100 ml	07/19/18 (1326)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #22  
Sample Date @ Time: 07/19/18 @ 0945  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.55	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	50.	1.	cfu/100 ml	07/19/18 (1319)	SM9222D <sup>1</sup>

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# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>021</u>	
Today's date: <u>7-12-18</u>		Time (Military): <u>9:52</u>	
Investigators: <u>DLH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>71</u>	Rainfall (in.): Last 24 hours: <u>None</u> Last 48 hours: <u>None</u>		
Latitude: <u>40°41'35" N</u>	Longitude: <u>76°12'15" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>36"</u> In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ "	Ft, In	Tape measure
	Measured length	_____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Excessive <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	<input type="checkbox"/> Oil <input type="checkbox"/> Other:
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	<input type="checkbox"/> Other:

**Section-6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Sample Location: OUTFALL #11  
Sample Date @ Time: 07/12/18 @ 0905  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DHL  
Rec'd By: LLB

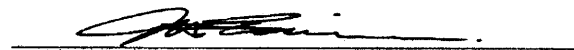
PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.36	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.63	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.028	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.061	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.194	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	2200.	1.	cfu/100 ml	07/12/18 (1324)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #21  
Sample Date @ Time: 07/12/18 @ 1015  
Rec'd Date @ Time: 07/12/18 @ 1145

Sampled By: DHL  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.52	0.01	S.U.	07/12/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.07	0.02	mg/l	07/12/18	E330.5 <sup>1</sup>
3. Copper, Total	0.002	0.001	mg/l	07/17/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/18/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/13/18	SM5540C <sup>2</sup>
6. Fecal Coliform	290.	1.	cfu/100 ml	07/12/18 (1326)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.



Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: M.J. Reider, Inc.; ID Number: 06-003)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Norwegian Creek</u>		Outfall ID: <u>022</u>	
Today's date: <u>6-25-18</u>		Time (Military): <u>8:51</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>75</u>	Rainfall (in.): Last 24 hours: <u>1.45</u> Last 48 hours: <u>greater 1"</u>		
Latitude: <u>40°41'23.50"N</u>	Longitude: <u>76°12'55.28W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input checked="" type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>18"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (if present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	_____ "	Ft, In	Tape measure
	Measured length	_____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: <input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>		

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No  Pool  Caulk dam  
 2. If yes, collected from:  Flow  Pool  
 3. Intermittent flow trap set?  Yes  No  OBM  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

Some erosion under pipe discharge

# Pottsville Environmental Testing Laboratory, Inc.

164 East Bacon Street  
Palo Alto, Pennsylvania 17901

Telephone 570-622-7315  
Fax 570-622-7365

CITY OF POTTSVILLE  
P.O. BOX 50  
POTTSVILLE, PA 17901

07/26/18

Sample Location: OUTFALL #19  
Sample Date @ Time: 07/19/18 @ 0930  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.45	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.035	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	620.	1.	cfu/100 ml	07/19/18 (1320)	SM9222D <sup>1</sup>

-----  
Sample Location: OUTFALL #19 UP STREAM  
Sample Date @ Time: 07/19/18 @ 0920  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.18	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	90.	1.	cfu/100 ml	07/19/18 (1326)	SM9222D <sup>1</sup>

-----  
Sample Location: **OUTFALL #22**  
Sample Date @ Time: 07/19/18 @ 0945  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE(TIME)	METHOD
1. pH, Laboratory	7.55	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.03	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.011	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	50.	1.	cfu/100 ml	07/19/18 (1319)	SM9222D <sup>1</sup>





# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>West Branch</u>		Outfall ID: <u>025</u>	
Today's date: <u>6-25-18</u>		Time (Military): <u>9:04</u>	
Investigators: <u>DLH, BJA</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>77</u>	Rainfall (in.): Last 24 hours: <u>1"</u> Last 48 hours: <u>2.1"</u>		
Latitude: <u>40° 40' 32.04" N</u>	Longitude: <u>76° 18' 2.5" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>18"</u>  In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion	<input type="checkbox"/> Peeling
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Excessive	<input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive	<input type="checkbox"/> Inhibited
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen Suds	<input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Other:
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown	<input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illlicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>West Branch</u>		Outfall ID: <u>026</u>	
Today's date: <u>6-25-18</u>		Time (Military): <u>9:18</u>	
Investigators: <u>DLA, BIA</u>		Form completed by: <u>DLA</u>	
Temperature (°F): <u>77</u>	Rainfall (in.): Last 24 hours: <u>4.1"</u> Last 48 hours: <u>7.1"</u>		
Latitude: <u>40° 40' 25" N</u>	Longitude: <u>76° 14' 8" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>20" 36"</u>  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Color	<input type="checkbox"/>	<input checked="" type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floatables -Does Not Include Trash!!	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Sample later date

CITY OF POTTSVILLE (cont.)  
07/19/18

Sample Location: **OUTFALL #26**  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.69	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.018	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. <b>Fecal Coliform</b>	<b>6000.</b>	1.	cfu/100 ml	07/19/18 (1308)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #27  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.78	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	4000.	1.	cfu/100 ml	07/19/18 (1312)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #28  
Sample Date @ Time: 07/19/18 @ 1015  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.98	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.010	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.088	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	60.	1.	cfu/100 ml	07/19/18 (1328)	SM9222D <sup>1</sup>

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# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>West Branch</u>		Outfall ID: <u>027</u>	
Today's date: <u>6-25-18</u>		Time (Military): <u>9:18</u>	
Investigators:		Form completed by:	
Temperature (°F): <u>77</u>	Rainfall (in.): Last 24 hours: <u>4.1"</u> Last 48 hours: <u>7.1"</u>		
Latitude: <u>40°40'25" N</u>	Longitude: <u>76°14'8" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24" x 36"</u> In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION		RELATIVE SEVERITY INDEX (1-3)		
		<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Green  <input checked="" type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen)	<input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other: <input type="checkbox"/> Brown <input type="checkbox"/> Orange  See severity	<input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Yellow <input type="checkbox"/> Red  <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 1 - Slight cloudiness  <input checked="" type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 2 - Cloudy  <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)
Odor	<input checked="" type="checkbox"/>					
Color	<input type="checkbox"/>					
Turbidity	<input type="checkbox"/>					
Floatables - Does Not Include Trash!!	<input checked="" type="checkbox"/>					

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*sample at later date*

CITY OF POTTSVILLE (cont.)  
07/19/18

Sample Location: OUTFALL #26  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.69	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.018	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	6000.	1.	cfu/100 ml	07/19/18 (1308)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #27  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.78	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	4000.	1.	cfu/100 ml	07/19/18 (1312)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #28  
Sample Date @ Time: 07/19/18 @ 1015  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.98	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.010	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.088	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	60.	1.	cfu/100 ml	07/19/18 (1328)	SM9222D <sup>1</sup>

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# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>West Branch</u>		Outfall ID: <u>028</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>9:30</u>	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>77</u>	Rainfall (in.): Last 24 hours: <u>71"</u> Last 48 hours: <u>21"</u>		
Latitude: <u>40° 40' 35" N</u>	Longitude: <u>76° 14' 16" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input type="checkbox"/> Suburban Residential	Other: _____		
<input checked="" type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>12"</u>	In Water: <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input checked="" type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input checked="" type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>		<u>from pipe</u>
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width		Ft, In	Tape measure
	Measured length		Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Excessive <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Floatables <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

collect water

CITY OF POTTSVILLE (cont.)  
07/19/18

Sample Location: OUTFALL #26  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.69	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.02	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.018	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	6000.	1.	cfu/100 ml	07/19/18 (1308)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #27  
Sample Date @ Time: 07/19/18 @ 1020  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	7.78	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	ND	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	4000.	1.	cfu/100 ml	07/19/18 (1312)	SM9222D <sup>1</sup>

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Sample Location: OUTFALL #28  
Sample Date @ Time: 07/19/18 @ 1015  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.98	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.08	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.010	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	0.088	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. Fecal Coliform	60.	1.	cfu/100 ml	07/19/18 (1328)	SM9222D <sup>1</sup>

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# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>West Branch</u>		Outfall ID: <u>034</u>	
Today's date: <u>02-29-16</u>		Time (Military): <u>9:45</u>	
Investigators: <u>DH BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>79'</u>	Rainfall (in.): Last 24 hours: <u>&lt;1"</u> Last 48 hours: <u>7"</u>		
Latitude: <u>40° 40' 49" N</u>	Longitude: <u>76° 13' 37"</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____		
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Sec		
<input type="checkbox"/> Flow #2	Flow depth	In	Tape measure	
	Flow width	Ft, In	Tape measure	
	Measured length	Ft, In	Tape measure	
	Time of travel	S	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	





Sample Location: **OUTFALL #34 UP STREAM**  
Sample Date @ Time: 07/19/18 @ 1000  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.69	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.99	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.012	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. <b>Fecal Coliform</b>	<b>2000.</b>	1.	cfu/100 ml	07/19/18 (1313)	SM9222D <sup>1</sup>

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Sample Location: **OUTFALL #34 DOWN STREAM**  
Sample Date @ Time: 07/19/18 @ 1005  
Rec'd Date @ Time: 07/19/18 @ 1100

Sampled By: DLH  
Rec'd By: LLB

PARAMETER	RESULT	MDL	UNITS	TEST DATE (TIME)	METHOD
1. pH, Laboratory	6.99	0.01	S.U.	07/19/18	SM4500H-B <sup>1</sup>
2. Chlorine, Total	0.04	0.02	mg/l	07/19/18	E330.5 <sup>1</sup>
3. Copper, Total	ND	0.010	mg/l	07/24/18	E200.8 <sup>2</sup>
4. Phenols	0.017	0.010	mg/l	07/25/18	E420.4 <sup>2</sup>
5. Detergents/ Surfactants	ND	0.050	mg/l as MBAS	07/20/18	SM5540C <sup>2</sup>
6. <b>Fecal Coliform</b>	<b>250.</b>	1.	cfu/100 ml	07/19/18 (1318)	SM9222D <sup>1</sup>

If there are any questions regarding this data, feel free to contact me.

  
\_\_\_\_\_  
Michael C. Fabian  
Laboratory Director

(<sup>1</sup>PA DEP Lab Name: PETL, Inc.; ID Number: 54-184)  
(<sup>2</sup>PA DEP Lab Name: M.J. Reider, Inc.; ID Number: 06-003)

Notes:

1. A result of "ND" indicates the concentration of the analyte tested was either not detected or below the MDL.
2. MDL = minimum detectable level.



# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

Not found

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>035</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>10:05</u>	
Investigators: <u>DLH, BL</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>80</u>	Rainfall (in.): Last 24 hours: <u>4.1"</u> Last 48 hours: <u>5.2"</u>		
Latitude: <u>40°4'2"N</u>	Longitude: <u>76°11'11"W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input checked="" type="checkbox"/> Suburban Residential		Other: _____	
<input checked="" type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			
<u>Blocked inlet at Street - No other drainage</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling <input type="checkbox"/> Paint Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil <input type="checkbox"/> Sheen Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No
2. If yes, collected from:  Flow  Pool
3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**



# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>036</u>	
Today's date: <u>8-29-14</u>		Time (Military): <u>10:16</u>	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>80</u>	Rainfall (in.): Last 24 hours: <u>1"</u> Last 48 hours: <u>71"</u>		
Latitude: <u>40° 41' 3" N</u>	Longitude: <u>76° 11' 10" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input checked="" type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: <u>24"</u>	In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____		
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls/**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Browns <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	<input type="checkbox"/> Oil <input type="checkbox"/> Other:
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	<input type="checkbox"/> Other:

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No If Yes, type:  OBM  Caulk dam

**Section 8: Any Non-Illlicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

# City of Pottsville

## Outfall Reconnaissance Inventory/ Sample Collection Field Sheet

### Section 1: Background Data

Sub-watershed: <u>Schuylkill River</u>		Outfall ID: <u>037</u>	
Today's date: <u>6-29-18</u>		Time (Military): <u>10:30</u>	
Investigators: <u>DLH, BH</u>		Form completed by: <u>DLH</u>	
Temperature (°F): <u>80</u>	Rainfall (in.): Last 24 hours: <u>&lt;1"</u> Last 48 hours: <u>71"</u>		
Latitude: <u>40°41'7" N</u>	Longitude: <u>76°11'4" W</u>	GPS Unit: <u>Trimble R1</u>	GPS LMK #:
Camera:	Photo #s:		
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space		
<input type="checkbox"/> Ultra-Urban Residential	<input type="checkbox"/> Institutional		
<input checked="" type="checkbox"/> Suburban Residential	Other: _____		
<input type="checkbox"/> Commercial	Known Industries: _____		
Notes (e.g., origin of outfall, if known):			
<u>Several inlet and pipe discharge to swale outfall at river</u>			
<u>CSO outfall pipe discharges to same swale.</u>			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partial <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input checked="" type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	<input type="checkbox"/> Depth: _____ <input type="checkbox"/> Top Width: _____ <input type="checkbox"/> Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>If No, Skip to Section 5</i>		
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____ " ____ "	Ft, In	Tape measure
	Measured length	____ " ____ "	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

# Outfall Reconnaissance Inventory Field Sheet

**Section 4: Physical Indicators for Flowing Outfalls Only**  
 Are Any Physical Indicators Present in the flow?  Yes  No (If No, Skip to Section 5)

*CSD Outfall combines with storm drain ditch at outlet*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)
Odor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint <input type="checkbox"/> 2 - Easily detected <input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Green <input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Gray <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle <input type="checkbox"/> 2 - Clearly visible in sample bottle <input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque
Floatables - Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Suds <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious <input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen) <input type="checkbox"/> 3 - Some: origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

**Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls**  
 Are physical indicators that are not related to flow present?  Yes  No (If No, Skip to Section 6)

*Severe erosion of bank*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Paint Corrosion <input type="checkbox"/> Peeling	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Sheen <input type="checkbox"/> Colors <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

**Section 6: Overall Outfall Characterization**

Unlikely  Potential (presence of two or more indicators)  Suspect (one or more indicators with a severity of 3)  Obvious

**Section 7: Data Collection**

1. Sample for the lab?  Yes  No

2. If yes, collected from:  Flow  Pool

3. Intermittent flow trap set?  Yes  No  OBM  Caulk dam

**Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?**

*CSD not NWSH*

**E.5. MCM #3 BMP #5 POTTSVILLE STORMWATER ORDINANCE – SEE D.2**





## Chapter 193. Stormwater Management

[HISTORY: Adopted by the City Council of the City of Pottsville 10-9-2017 by Ord. No. 862.<sup>[1]</sup> Amendments noted where applicable.]

### GENERAL REFERENCES

Flood damage prevention — See Ch. **124**.

Sewers — See Ch. **180**.

Excavations — See Ch. **194**, Art. **III**.

Subdivision of land — See Ch. **197**.

### Attachment 1 - Appendix A

[1] Editor's Note: This ordinance superseded former Ch. 193, Stormwater Management and Prohibited Discharges, adopted 11-11-2013 by Ord. No. 829.

## Article I. General Provisions

### § 193-1. Short title.

This chapter shall be known and may be cited as the "City of Pottsville Stormwater Management Ordinance."

### § 193-2. Statement of findings.

The governing body of the municipality finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases runoff volumes, flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines floodplain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases nonpoint source pollution of water resources.
- B. A comprehensive program of stormwater management (SWM), including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource that provides groundwater recharge for water supplies and supports the base flow of streams.
- D. The use of green infrastructure and low impact development (LID) are intended to address the root cause of water quality impairment by using systems and practices which use or mimic natural processes to: 1) infiltrate and recharge, 2) evapotranspire, and/or 3) harvest and use precipitation near where it falls to earth. Green infrastructure practices and LID contribute to the restoration or maintenance of predevelopment hydrology.
- E. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES) program.

## § 193-3. Purpose.

The purpose of this chapter is to promote health, safety, and welfare within the municipality and its watershed by minimizing the harms and maximizing the benefits described in § 193-2 of this chapter, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code Chapter 93 to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this commonwealth.
- B. Preserve natural drainage systems.
- C. Manage stormwater runoff close to the source, reduce runoff volumes and mimic predevelopment hydrology.
- D. Provide procedures and performance standards for stormwater planning and management.
- E. Maintain groundwater recharge to prevent degradation of surface water and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and streambeds.
- G. Provide proper operation and maintenance of all stormwater best management practices (BMPs) that are implemented within the municipality.
- H. Provide standards to meet NPDES permit requirements.

## § 193-4. Statutory authority.

The municipality is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, the Pennsylvania Municipalities Planning Code, as amended,<sup>[1]</sup> and/or the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. § 680.1 et seq., as amended, the Storm Water Management Act.

[1] Editor's Note: See 53 P.S. § 10101 et seq.

## § 193-5. Applicability.

All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this chapter.

## § 193-6. Repealer.

Any other ordinance provision(s) or regulation of the municipality inconsistent with any of the provisions of this chapter is hereby repealed to the extent of the inconsistency only.

## § 193-7. Severability.

In the event that a court of competent jurisdiction declares any section or provision of this chapter invalid, such decision shall not affect the validity of any of the remaining provisions of this chapter.

## § 193-8. Compatibility with other requirements.

Approvals issued and actions taken under this chapter do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance.

## § 193-9. Erroneous permit.

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an applicant is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other authorization is unlawful. No action may be taken by a board, agency or employee of the municipality purporting to validate such a violation.

## § 193-10. Waivers.

- A. If the municipality determines that any requirement under this chapter cannot be achieved for a particular regulated activity, the municipality may, after an evaluation of alternatives, approve measures other than those in this chapter, subject to § 193-10B and C.
- B. Waivers or modifications of the requirements of this chapter may be approved by the municipality if enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that the modifications will not be contrary to the public interest and that the purpose of the chapter is preserved. Cost or financial burden shall not be considered a hardship. Modification may be considered if an alternative standard or approach will provide equal or better achievement of the purpose of the chapter. A request for modifications shall be in writing and accompany the stormwater management site plan submission. The request shall provide the facts on which the request is based, the provision(s) of the chapter involved and the proposed modification.
- C. No waiver or modification of any regulated stormwater activity involving earth disturbance greater than or equal to one acre may be granted by the municipality unless that action is approved in advance by the Department of Environmental Protection (DEP) or the delegated county conservation district.

## Article II. Definitions

### § 193-11. Word usage; definitions.

For the purposes of this chapter, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The word "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
- C. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.
- D. These definitions do not necessarily reflect the definitions contained in pertinent regulations or statutes, and are intended for this chapter only.
- E. As used in this chapter, the following terms shall have the meanings indicated:

#### **AGRICULTURAL ACTIVITY**

Activities associated with agriculture, such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops, including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

#### **APPLICANT**

A landowner, developer, or other person who has filed an application to the municipality for approval to engage in any regulated activity at a project site in the municipality.

**BEST MANAGEMENT PRACTICE (BMP)**

Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this chapter. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "structural" or "nonstructural." In this chapter, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff, whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

**CONSERVATION DISTRICT**

A conservation district, as defined in Section 3(c) of the Conservation District Law [3 P.S. § 851(c)] that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code Chapter 102.

**DEP**

The Pennsylvania Department of Environmental Protection.

**DESIGN STORM**

The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a five-year storm) and duration (e.g., 24 hours) used in the design and evaluation of stormwater management systems. Also see "return period."

**DETENTION VOLUME**

The volume of runoff that is captured and released into the waters of the commonwealth at a controlled rate.

**DEVELOPMENT SITE (SITE)**

See "project site."

**DISTURBED AREA**

An unstabilized land area where an earth disturbance activity is occurring or has occurred.

**EARTH DISTURBANCE ACTIVITY**

A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

**EROSION**

The natural process by which the surface of the land is worn away by water, wind, or chemical action.

**EXISTING CONDITION**

The dominant land cover during the five-year period immediately preceding a proposed regulated activity.

**FEMA**

Federal Emergency Management Agency.

**FLOODPLAIN**

Any land area susceptible to inundation by water from any natural source or delineated by applicable FEMA maps and studies as being a special flood hazard area; also includes areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania DEP Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by DEP).

**FLOODWAY**



The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the one-hundred-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the one-hundred-year floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

### **FOREST MANAGEMENT/TIMBER OPERATIONS**

Planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

### **GREEN INFRASTRUCTURE**

Systems and practices that use or mimic natural processes to infiltrate, evapotranspire, or reuse stormwater on the site where it is generated.

### **HYDROLOGIC SOIL GROUP (HSG)**

Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D. (NOTE: See § 196-36A and B.)

### **IMPERVIOUS SURFACE (IMPERVIOUS AREA)**

A surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but not be limited to: roofs; additional indoor living spaces, patios, garages, storage sheds and similar structures; and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.

### **KARST**

A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on Schuylkillate rocks, such as limestone or dolomite.

### **LAND DEVELOPMENT (DEVELOPMENT)**

Inclusive of any or all of the following meanings:

- (1) The improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving a) a group of two or more buildings or b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of, streets, common areas, leaseholds, condominiums, building groups, or other features;
- (2) Any subdivision of land;
- (3) Development in accordance with Section 503(1.1) of the Pennsylvania Municipalities Planning Code.

[1]

### **LOW IMPACT DEVELOPMENT (LID)**

Site design approaches and small-scale stormwater management practices that promote the use of natural systems for infiltration, evapotranspiration, and reuse of rainwater. LID can be applied to new development, urban retrofits, and revitalization projects. LID utilizes design techniques that infiltrate, filter, evaporate, and store runoff close to its source. Rather than rely on costly large-scale conveyance and treatment systems, LID addresses stormwater through a variety of small, cost-effective landscape features located on site.

### **MUNICIPALITY**

City of Pottsville, Schuylkill County, Pennsylvania.

**NRCS**

USDA Natural Resources Conservation Service (previously SCS).

**PEAK DISCHARGE**

The maximum rate of stormwater runoff from a specific storm event.

**PERVIOUS AREA**

Any area not defined as impervious.

**PROJECT SITE**

The specific area of land where any regulated activities in the municipality are planned, conducted, or maintained.

**QUALIFIED PROFESSIONAL**

Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by this chapter.

**REGULATED ACTIVITIES**

Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

**REGULATED EARTH DISTURBANCE ACTIVITY**

Activity involving earth disturbance subject to regulation under 25 Pa. Code Chapter 92a, 25 Pa. Code Chapter 102, or the Clean Streams Law.<sup>[2]</sup>

**RETENTION VOLUME/REMOVED RUNOFF**

The volume of runoff that is captured and not released directly into the surface waters of this commonwealth during or after a storm event.

**RETURN PERIOD**

The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the twenty-five-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a twenty-five-year storm occurring in any one year is 0.04 (i.e., a four-percent chance).

**RIPARIAN BUFFER**

A permanent area of trees and shrubs located adjacent to streams, lakes, ponds and wetlands.

**RUNOFF**

Any part of precipitation that flows over the land.

**SEDIMENT**

Soils or other materials transported by surface water as a product of erosion.

**STATE WATER QUALITY REQUIREMENTS**

The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.<sup>[3]</sup>

**STORMWATER**

Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

**STORMWATER MANAGEMENT FACILITY**

Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention and retention basins; open channels; storm sewers; pipes; and infiltration facilities.

**STORMWATER MANAGEMENT SITE PLAN**

The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this chapter. "Stormwater management site plan"

will be designated as "SWM site plan" throughout this chapter.

#### **SUBDIVISION**

As defined in the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.<sup>[4]</sup>

#### **USDA**

United States Department of Agriculture.

#### **WATERS OF THIS COMMONWEALTH**

Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this commonwealth.

#### **WATERSHED**

Region or area drained by a river, watercourse, or other surface water of this commonwealth.

#### **WETLAND**

Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

[1] Editor's Note: See 53 P.S. § 10503(1.1).

[2] Editor's Note: See 35 P.S. § 691.1 et seq.

[3] Editor's Note: See 35 P.S. § 691.1 et seq.

[4] Editor's Note: See 53 P.S. § 10101 et seq.

## **Article III. Stormwater Management Standards**

### **§ 193-12. General requirements.**

- A. For all regulated activities, unless preparation of an SWM site plan is specifically exempted in § 193-13:
  - (1) Preparation and implementation of an approved SWM site plan is required.
  - (2) No regulated activities shall commence until the municipality issues written approval of an SWM site plan which demonstrates compliance with the requirements of this chapter.
- B. SWM site plans approved by the municipality, in accordance with § 193-21, shall be on site throughout the duration of the regulated activity.
- C. The municipality may, after consultation with DEP, approve measures for meeting the state water quality requirements other than those in this chapter, provided that they meet the minimum requirements of, and do not conflict with, state law, including, but not limited to, the Clean Streams Law.<sup>[1]</sup>
  - [1] Editor's Note: See 35 P.S. § 691.1 et seq.
- D. For all regulated earth disturbance activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities (e.g., during construction) to meet the purposes and requirements of this chapter and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (E&S Manual) (NOTE: See § 196-36D.), No. 363-2134-008, as amended and updated.
- E. Impervious areas:
  - (1) The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.

- (2) For development taking place in stages, the entire development plan must be used in determining conformance with this chapter.
  - (3) For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this chapter, except that the volume controls in § 193-14 and the peak rate controls of § 193-15 do not need to be retrofitted to existing impervious areas that are not being altered by the proposed regulated activity.
- F. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written notification to the adjacent property owner(s). Such stormwater flows shall be subject to the requirements of this chapter.
- G. All regulated activities shall include such measures as necessary to:
- (1) Protect health, safety, and property.
  - (2) Meet the water quality goals of this chapter by implementing measures to:
    - (a) Minimize disturbance to floodplains, wetlands, and wooded areas.
    - (b) Maintain or extend riparian buffers.
    - (c) Avoid erosive flow conditions in natural flow pathways.
    - (d) Minimize thermal impacts to waters of this commonwealth.
    - (e) Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
  - (3) Incorporate methods described in the Pennsylvania Stormwater Best Management Practices Manual (BMP Manual) (NOTE: See § 196-36C.). If methods other than green infrastructure and LID methods are proposed to achieve the volume and rate controls required under this chapter, the SWM site plan must include a detailed justification demonstrating that the use of LID and green infrastructure is not practicable.
- H. The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.
- I. Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this chapter.
- J. Normally dry, open-top storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 and not more than 72 hours from the end of the design storm.
- K. The design storm volumes to be used in the analysis of peak rates of discharge should be obtained from the latest version of the Precipitation-Frequency Atlas of the United States, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 (NOTE: See § 196-36E.) can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
- L. For all regulated activities, SWM BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this chapter and to meet all requirements under Title 25 of the Pennsylvania Code, the Clean Streams Law,<sup>[2]</sup> and the Storm Water Management Act.<sup>[3]</sup>
- [2] Editor's Note: See 35 P.S. § 691.1 et seq.
- [3] Editor's Note: See 32 P.S. § 680.1 et seq.
- M. Various BMPs and their design standards are listed in the BMP Manual. (NOTE: See § 196-36C.)

## § 193-13. Exemptions.

- A. Regulated activities that result in cumulative earth disturbances less than one are exempt from the requirements in §§ 193-14, 193-15, and Article IV of this chapter.

- B. Agricultural activity is exempt from the SWM site plan preparation requirements of this chapter, provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- C. Forest management and timber operations are exempt from the SWM site plan preparation requirements of this chapter, provided the activities are performed according to the requirements of 25 Pa. Code Chapter 102.
- D. Exemptions from any provisions of this chapter shall not relieve the applicant from the requirements in § 193-12D through K.
- E. The municipality may deny or revoke any exemption pursuant to this section at any time for any project that the municipality believes may pose a threat to public health and safety or the environment.

## § 193-14. Volume controls.

The green infrastructure and low impact development practices provided in the BMP Manual (NOTE: See § 196-36C.) shall be utilized for all regulated activities wherever possible. Water volume controls shall be implemented using the Design Storm Method in Subsection A or the Simplified Method in Subsection B below. For regulated activity areas equal to or less than one acre that do not require hydrologic routing to design the stormwater facilities, this chapter establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology and other factors.

- A. The Design Storm Method (CG-1 in the BMP Manual) (NOTE: See § 196-36C.) is applicable to any size of regulated activity. This method requires detailed modeling based on site conditions.
  - (1) Do not increase the post-development total runoff volume for all storms equal to or less than the two-year, twenty-four-hour-duration precipitation.
  - (2) For modeling purposes:
    - (a) Existing (predevelopment) nonforested pervious areas must be considered meadow in good condition.
    - (b) Twenty percent of existing impervious area, when present, shall be considered meadow in good condition in the model for existing conditions.
- B. The Simplified Method (CG-2 in the BMP Manual (NOTE: See § 196-36C.) provided below is independent of site conditions and should be used if the Design Storm Method is not followed. This method is not applicable to regulated activities greater than one acre or for projects that require design of stormwater storage facilities. For new impervious surfaces:
  - (1) Stormwater facilities shall capture at least the first two inches of runoff from all new impervious surfaces.
  - (2) At least the first one inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration.
  - (3) Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed runoff should be infiltrated.
  - (4) This method is exempt from the requirements of § 193-15, Rate controls.

## § 193-15. Rate controls.

- A. For areas not covered by a release rate map from an approved Act 167 stormwater management plan:



- (1) Post-development discharge rates shall not exceed the predevelopment discharge rates for the one-, two-, five-, ten-, twenty-five-, fifty-, and one-hundred-year, twenty-four-hour storm events. If it is shown that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the predevelopment analysis for one-, two-, five-, ten-, twenty-five-, fifty-, and one-hundred-year, twenty-four-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement.
- B. For areas covered by a release rate map from an approved Act 167 stormwater management plan:
- (1) For the one-, two-, five-, ten-, twenty-five-, fifty-, and one-hundred-year, twenty-four-hour storm events, the post-development peak discharge rates will follow the applicable approved release rate maps. For any areas not shown on the release rate maps, the post-development discharge rates shall not exceed the predevelopment discharge rates.

## Article IV. Stormwater Management (SWM) Site Plan Requirements

### § 193-16. Plan requirements.

The following items shall be included in the SWM site plan.

- A. Appropriate sections from the municipality's Subdivision and Land Development Ordinance,<sup>[1]</sup> and other applicable local ordinances, shall be followed in preparing the SWM site plans. In instances where the municipality lacks subdivision and land development regulations, the content of SWM site plans shall follow the county's Subdivision and Land Development Ordinance.
- [1] Editor's Note: See Ch. 197, Subdivision of Land.
- B. The municipality shall not approve any SWM site plan that is deficient in meeting the requirements of this chapter. At its sole discretion and in accordance with this article, when an SWM site plan is found to be deficient, the municipality may either disapprove the submission and require a resubmission, or in the case of minor deficiencies, the municipality may accept submission of modifications.
- C. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the operation and maintenance (O & M) plan discussed in Subsection E(9) below.
- D. The following signature block for the municipality:  
"Municipal official, on this date, October 9, 2017, has reviewed and hereby certifies that the SWM site plan meets all design standards and criteria of the Municipal Ordinance No. 862."
- E. The SWM site plan shall provide the following information:
- (1) The overall stormwater management concept for the project.
  - (2) A determination of site conditions in accordance with the BMP Manual. (NOTE: See § 196-36C.) A detailed site evaluation shall be completed for projects proposed in areas of carbonite geology or karst topography, and other environmentally sensitive areas, such as brownfields.
  - (3) Stormwater runoff design computations and documentation as specified in this chapter, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this chapter, including the recommendations and general requirements in § 193-12.
  - (4) Expected project time schedule.
  - (5) A soil erosion and sediment control plan, where applicable, as prepared for and submitted to the approval authority.

- (6) The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.
- (7) Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.
- (8) The SWM site plan shall show the locations of existing and proposed on-lot wastewater facilities and water supply wells.
- (9) The SWM site plan shall include an O & M plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.
- (10) A justification must be included in the SWM site plan if BMPs other than green infrastructure methods and LID practices are proposed to achieve the volume, rate and water quality controls under this chapter.

## § 193-17. Plan submission.

Five copies of the SWM site plan shall be submitted as follows:

- A. Two copies to the municipality.
- B. One copy to the Municipal Engineer (when applicable).
- C. One copy to the County Conservation District.
- D. One copy to the County Planning Commission/Office.

## § 193-18. Plan review.

- A. SWM site plans shall be reviewed by the municipality for consistency with the provisions of this chapter.
- B. The municipality shall notify the applicant in writing within 45 days whether the SWM site plan is approved or disapproved. If the SWM site plan involves a Subdivision and land development plan, the notification shall occur within the time period allowed by the Municipalities Planning Code<sup>[1]</sup> (90 days). If a longer notification period is provided by other statute, regulation, or ordinance, the applicant will be so notified by the municipality.  
<sup>[1]</sup> Editor's Note: See 53 P.S. § 10101 et seq.
- C. For any SWM site plan that proposes to use any BMPs other than green infrastructure and LID practices to achieve the volume and rate controls required under this chapter, the municipality will not approve the SWM site plan unless it determines that green infrastructure and LID practices are not practicable.
- D. If the municipality disapproves the SWM site plan, the municipality will state the reasons for the disapproval in writing. The municipality also may approve the SWM site plan with conditions and, if so, shall provide the acceptable conditions for approval in writing.

## § 193-19. Modification of plans.

A modification to a submitted SWM site plan that involves a change in SWM BMPs or techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the SWM site plan as determined by the municipality shall require a resubmission of the modified SWM site plan in accordance with this article.

## § 193-20. Resubmission of disapproved SWM site plans.

A disapproved SWM site plan may be resubmitted, with the revisions addressing the municipality's concerns, to the municipality in accordance with this article. The applicable review fee must accompany a resubmission of a disapproved SWM site plan.

## § 193-21. Term of validity.

The municipality's approval of an SWM site plan authorizes the regulated activities contained in the SWM site plan for a maximum term of validity of five years following the date of approval. The municipality may specify a term of validity shorter than five years in the approval for any specific SWM site plan. Terms of validity shall commence on the date the municipality signs the approval for an SWM site plan. If an approved SWM site plan is not completed according to § 193-22 within the term of validity, then the municipality may consider the SWM site plan disapproved and may revoke any and all permits. SWM site plans that are considered disapproved by the municipality shall be resubmitted in accordance with § 193-20 of this chapter.

## § 193-22. As-built plans; completion certificate; final inspection.

- A. The developer shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM site plan. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the municipality.
- B. The as-built submission shall include a certification of completion signed by a qualified professional verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. The latitude and longitude coordinates for all permanent SWM BMPs must also be submitted, at the central location of the BMPs. If any licensed qualified professionals contributed to the construction plans, then a licensed qualified professional must sign the completion certificate.
- C. After receipt of the completion certification by the municipality, the municipality may conduct a final inspection.

## Article V. Operation and Maintenance

### § 193-23. Responsibilities of developers and landowners.

- A. The municipality shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM site plan. The municipality may require a dedication of such facilities as part of the requirements for approval of the SWM site plan. Such a requirement is not an indication that the municipality will accept the facilities. The municipality reserves the right to accept or reject the ownership and operating responsibility for any portion of the stormwater management controls.
- B. Facilities, areas, or structures used as SWM BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or conservation easements that run with the land.
- C. The O&M plan shall be recorded as a restrictive deed covenant that runs with the land.
- D. The municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this article.

### § 193-24. Operation and maintenance agreements.

- A. Prior to final approval of the SWM site plan, the property owner shall sign and record an Operation and Maintenance (O&M) Agreement (see Appendix A)<sup>[1]</sup> covering all stormwater control facilities which are to be privately owned.

- (1) The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M agreement.
- (2) The owner shall convey to the municipality conservation easements to assure access for periodic inspections by the municipality and maintenance, as necessary.
- (3) The owner shall keep on file with the municipality the name, address, and telephone number of the person or company responsible for maintenance activities; in the event of a change, new information shall be submitted by the owner to the municipality within 10 working days of the change.

[1] Editor's Note: Appendix A is included as an attachment to this chapter.

- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M agreement, the municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.

## § 193-25. Performance guarantee.

For SWM site plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the municipality for the timely installation and proper construction of all stormwater management controls as required by the approved SWM site plan and this chapter in accordance with the provisions of Sections 509, 510, and 511 of the Pennsylvania Municipalities Planning Code.<sup>[1]</sup>

[1] Editor's Note: See 53 P.S. §§ 10509, 10510, and 10511.

## Article VI. Fees and Expenses

### § 193-26. Review fees.

- A. The municipality may include all costs incurred in the review fee charged to an applicant.
- B. The review fee may include, but not be limited to, costs for the following:
- (1) Administrative/clerical processing.
  - (2) Review of the SWM site plan.
  - (3) Attendance at meetings.
  - (4) Inspections.

## Article VII. Prohibitions

### § 193-27. Prohibited discharges and connections.

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any nonstormwater discharge, including sewage, process wastewater, and wash water to enter a regulated small MS4 or to enter the surface waters of this commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into a regulated small MS4, or discharges into waters of this commonwealth, which are not composed entirely of stormwater, except 1) as provided in Subsection C below and 2) discharges authorized under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution of a regulated small MS4 or of the waters of this commonwealth:
- (1) Discharges or flows from firefighting activities.

- (2) Discharges from potable water sources, including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of total residual chlorine (TRC).
  - (3) Noncontaminated irrigation water, water from lawn maintenance, landscape drainage and flows from riparian habitats and wetlands.
  - (4) Diverted stream flows and springs.
  - (5) Noncontaminated pumped groundwater and water from foundation and footing drains and crawl space pumps.
  - (6) Noncontaminated HVAC condensation and water from geothermal systems.
  - (7) Residential (i.e., not commercial) vehicle wash water where cleaning agents are not utilized.
  - (8) Noncontaminated hydrostatic test water discharges, if such discharges do not contain detectable concentrations of TRC.
- D. In the event that the municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute pollutants to a regulated small MS4 or to the waters of this commonwealth, the municipality or DEP will notify the responsible person(s) to cease the discharge.

## § 193-28. Roof drains and sump pumps.

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.

## § 193-29. Alteration of SWM BMPs.

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, or structures that were installed as a requirement of this chapter without the written approval of the municipality.

# Article VIII. Enforcement and Penalties

## § 193-30. Right of entry.

Upon presentation of proper credentials, the municipality or its designated agent may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this chapter.

## § 193-31. Inspection.

- A. The landowner or the owner's designee (including the municipality for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this chapter according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:
- (1) Annually for the first five years.
  - (2) Once every three years thereafter.
  - (3) During or immediately after the cessation of a ten-year or greater storm.
- B. Inspections should be conducted during or immediately following precipitation events. A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if



applicable. Inspection reports shall be submitted to the municipality within 30 days following completion of the inspection.

## § 193-32. Enforcement.

- A. It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM site plan, unless specifically exempted in § 193-13.
- B. It shall be unlawful to violate § 193-29 of this chapter.
- C. Inspections regarding compliance with the SWM site plan are a responsibility of the municipality.

## § 193-33. Suspension and revocation.

- A. Any approval or permit issued by the municipality pursuant to this chapter may be suspended or revoked for:
  - (1) Noncompliance with or failure to implement any provision of the approved SWM site plan or O&M agreement.
  - (2) A violation of any provision of this chapter or any other applicable law, ordinance, rule, or regulation relating to the regulated activity.
  - (3) The creation of any condition or the commission of any act during the regulated activity which constitutes or creates a hazard, nuisance or pollution, or endangers the life or property of others.
- B. A suspended approval may be reinstated by the municipality when:
  - (1) The municipality has inspected and approved the corrections to the violations that caused the suspension.
  - (2) The municipality is satisfied that the violation has been corrected.
- C. An approval that has been revoked by the municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this chapter.
- D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the municipality may provide a limited time period for the owner to correct the violation. In these cases, the municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this chapter.

## § 193-34. Violations and penalties.

- A. Anyone violating the provisions of this chapter shall be guilty of a summary offense, and upon conviction, shall be subject to a fine of not more than \$500 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense, and penalties shall be cumulative.
- B. In addition, the municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this chapter. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus, or other appropriate forms of remedy or relief.

## § 193-35. Appeals.

- A. Any person aggrieved by any action of the municipality or its designee, relevant to the provisions of this chapter, may appeal to the municipality within 30 days of that action.
- B. Any person aggrieved by any decision of the municipality, relevant to the provisions of this chapter, may appeal to the County Court of Common Pleas in the county where the activity has taken place within 30 days of the municipality's decision.

## Article IX. References

### § 193-36. List of references.

- A. United States Department of Agriculture, National Resources Conservation Service (NRCS). National Engineering Handbook. Part 630: Hydrology, 1969-2001. Originally published as the National Engineering Handbook, Section 4: Hydrology. Available from the NRCS online at: <http://www.nrcs.usda.gov/>.
- B. United States Department of Agriculture, Natural Resources Conservation Service, 1986. Technical Release 55: Urban Hydrology for Small Watersheds, 2nd Edition. Washington, D.C.
- C. Pennsylvania Department of Environmental Protection. No. 363-0300-002 (December 2006), as amended and updated. Pennsylvania Stormwater Best Management Practices Manual. Harrisburg, PA.
- D. Pennsylvania Department of Environmental Protection. No. 363-2134-008 (March 31, 2012), as amended and updated. Erosion and Sediment Pollution Control Program Manual. Harrisburg, PA.
- E. United States Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center, 2004-2006. Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, Version 3.0, Silver Spring, Maryland, Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

STORMWATER MANAGEMENT

*193 Attachment 1*

**City of Pottsville**

**Appendix A**

**Operation and Maintenance (O&M) Agreement  
Stormwater Management Best Management Practices (SWM BMPs)**

**THIS AGREEMENT**, made and entered into this day of 20\_\_\_\_, by and between \_\_\_\_\_ (hereinafter the “Landowner”), and City of Pottsville, Schuylkill County, Pennsylvania (hereinafter “Municipality”);

**WITNESSETH**

**WHEREAS**, the Landowner is the owner of certain real property as recorded by deed in the land records of \_\_\_\_\_ County, Pennsylvania, Deed Book \_\_\_\_\_ at page \_\_\_\_\_, (hereinafter “Property”).

**WHEREAS**, the Landowner is proceeding to build and develop the Property; and

**WHEREAS**, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality (hereinafter referred to as the “O&M Plan”) for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

**WHEREAS**, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

**WHEREAS**, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

**NOW, THEREFORE**, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the SWM Site Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved O&M Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no

POTTSVILLE CODE

obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

- 5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
- 6. The intent and purpose of this Agreement is to ensure the proper maintenance of the on-site BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
- 7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
- 8. The Municipality intends to inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Schuylkill County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

\_\_\_\_\_

For the Landowner:

\_\_\_\_\_

STORMWATER MANAGEMENT

ATTEST:

\_\_\_\_\_ (City, Borough, Township)

County of \_\_\_\_\_, Pennsylvania

I, \_\_\_\_\_, a Notary Public in and for the county and state aforesaid, whose commission expires on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, do hereby certify that \_\_\_\_\_ whose name(s) is/are signed to the foregoing Agreement bearing date of the \_\_\_\_ day \_\_\_\_\_, 20\_\_\_\_, has acknowledged the same before me in my said county and state.

**GIVEN UNDER MY HAND THIS** \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

\_\_\_\_\_  
(SEAL)





**E.6. MCM #3 BMP #6 EDUCATIONAL OUTREACH - SEE C.4 AND POLLUTION REPORTING**



# APPENDIX E.6 MCM #3 STORMWATER POLLUTION REPORTING

<b>Project:</b>	Pottsville MS4 Public Outreach on Stormwater Impacts	Year 2018 – 2023 Permit Cycle
<b>Facilitator:</b>	City Administrator	570-628-4417

Contact Name	Pollution Reporting Date	Location/address of suspected illicit discharge	Phone	E-Mail (preferred)
David L. Horst	5/10/2018	NA	570-622-4055	dhorst@benesch.com
No Complaints were received during permit year 2017 – Online complaint form was developed and added to the City website.				
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Report/Response activities:				
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Report/Response activities:				
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Report/Response activities:				







**F. MCM #4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**



**F.1. MCM #4 BMP #1 BUILDING PERMIT TRACKING FORM**









**F.2. MCM #4 BMP #2 BUILDING PERMIT REPORT FORM – SEE F.1.**



**F.3. MCM #4 BMP #3 STORMWATER ORDINANCE – SEE D.2**





**G. MCM #5 POST-CONSTRUCTION STORMWATER MANAGEMENT**



**G.1. MCM #5 BMP #1 POST-CONSTRUCTION STORMWATER ORDINANCE – SEE D.2**



**G.2. MCM #5 BMP #2 ENCOURAGE LID – SEE D.2**





**G.3. MCM #5 BMP #3 ENSURE O&M OF PERMITTED BMPs**



## G.3a PCSM O&M PROGRAM UPDATE LOG





# APPENDIX G.3.A PCSM O&M PROGRAM UPDATES

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts | Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator | 570-628-4417

Outreach Date	PCSM O&M Update Log
<b>Initial Program 2016</b>	
Click here to enter a date.	Click here to enter text.
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**G.3b INVENTORY & TRACKING OF PCSM BMPs & LID PROJECTS SINCE 3/10/2003**



## APPENDIX G.3.B PCSM O&M PROGRAM UPDATES

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts | Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator | 570-628-4417

Maintain an inventory of PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.

Permit Number	Permit Dates	Project Location	PCSM Coordinates	Party responsible of BMP O&M	Type of BMP	Year Installed	Maintenance Required for Each BMP	Actual inspection/maintenance Activity	Assessment or Comments
PAG2-0054-04-003	6/4/03	GPASA – Sewer Upgrade	Multiple Locations	Greater Pottsville Area Sewer Authority		2003			
PAG2-0054-04-017	7/20/04	Yuengling Bicentennial Park		City of Pottsville		2004			
PAG2-0054-04-021	9/16/04	Barefield Gardens		Barefield Gardens LP		2004			
PAG2-0054-04-035	12/6/04	Fanelli Professional Center		Geisinger Clinic		2004			
PAG2-0054-05-001	5/25/05	GPASA – Collection Sys, Imp.		Greater Pottsville Area Sewer Authority		2005			
PAG2-0054-05-031(1)	11/17/05	Sharp Mountain Reclamation		City of Pottsville		2005			
PAG2-0054-06-007	4/27/06	Social Security Bldg.		Miller Bros. Contracting		2006			
PAG2-0054-06-031	3/1/07	Sch. County. School Employees		Sch. Co. Employees Credit Union		2007			
PAG2-0054-07-010	6/15/07	General George A. Joulwan Park		City of Pottsville		2007			
PAG2-0054-08-019	11/26/08	Pottsville Centre Station		City of Pottsville		2008			
PAG2-0054-09-015	1/26/10	McCann's Bldg & Parking Lot		KM Real Estate LP		2010			



## APPENDIX G.3.B PCSM O&M PROGRAM UPDATES

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts | Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator | 570-628-4417

Maintain an inventory of PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.

Permit Number	Permit Dates	Project Location	PCSM Coordinates	Party responsible of BMP O&M	Type of BMP	Year Installed	Maintenance Required for Each BMP	Actual inspection/maintenance Activity	Assessment or Comments
PAG2-0054-11-017	2/7/12	Service Access Management	68-13-183, 68-13-184, 68-13-185, 68-13-190.01	Service Access & Management	Porous Pvmt. - Infiltration	2012	Bi-annual cleaning or pavement and inlets		
PAG2-0054-04-005RR	4/25/14	Sharp Mountain Plaza Renewal		Sharp Mountain Plaza LLC		2014			
PAG2-0054-14-012	10/3/14	CVS Pharmacy		Pottsville ZCF Pharmacy DST.		2014			

**H. MCM #6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**



**H.1. MCM #6.1 INVENTORY OF CITY FACILITIES AND ACTIVITIES (EXPANDED)**





# APPENDIX H.1 MCM #6.1 LIST OF CITY FACILITIES AND ACTIVITIES

<b>Project:</b>	Pottsville MS4 Public Outreach on Stormwater Impacts	Year 2018 – 2023 Permit Cycle
<b>Facilitator:</b>	City Administrator	570-628-4417

Facility Type	Facility Name/Location
Building	City Hall Maintain storm inlets, roof drainage.
Building	City Garage Manage fluids, inspect for leakage, spill prevention control. Do not allow wash water to enter storm system or stream.
Building	Salt Storage Keep rain off stored salt. Haul and move salt in dry weather. Calibrate spreaders. Sweep up spills.
Building	Recycle Center Clean-up spills. Maintain signing.
parking	City Hall, Garage, JFK Pool Maintain vehicles and cleanup any vehicle fluid leaks on parking area.
playground	Rotary, Bunker Hill, Norwegian near 17th, Joulwan, Race St., Vine St., Jollopa, Fairview, Main St. Maintain inlets, garbage facilities, signs.
park	Joulwan, Henry Clay, Boat Launch West End. Maintain parking areas and signs.
street	Local Streets Maintain/clean inlets and swales.
activity	Garbage Collection, curbside recycling, snow removal, deicing, street sweeping/disposal, inlet cleaning, lawn care, storm sewer inspection, vehicle cleaning, leaf/yard debris pickup/disposal, maintenance riparian buffers, new construction – cleanup spills, street sweeping.
activity	Demolition of dilapidated building Protect inlets, collect fluids, remove debris.
activity	bridge maintenance Protect inlets and streams from paint or cleaning debris.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.

# APPENDIX H.1 MCM #6.1 LIST OF CITY FACILITIES AND ACTIVITIES

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts      Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator      570-628-4417

Facility Type	Facility Name/Location
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
Choose an item.	Click here to enter text.
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Choose an item.	Click here to enter text.

## H.2. MCM #6.2 CITY O&M PROGRAM



OPERATIONS MANUAL  
For  
MUNICIPAL OWNED STORMWATER FACILITIES

CITY OF POTTSVILLE

SCHUYLKILL COUNTY, PENNSYLVANIA  
401 North Center Street, Pottsville PA, 17901  
Phone: 570-622-1234





**Table of Contents**

- 1. Goals..... 3
- 2. Pollution Prevention/Good Housekeeping Procedures ..... 3
  - a. Housekeeping..... 3
  - b. Storage and Handling of Material ..... 3
  - c. Spills ..... 3
- 3. Inspection and Maintenance of Stormwater Facilities ..... 4
  - a. Stormwater Structures..... 4
  - b. Stormwater Best Management Practices (BMPs) ..... 5
  - c. State Roadways ..... 6
  - d. Local Roads..... 6
- 4. Maintenance Schedule..... 7
  - a. Pollution Prevention/Good Houskeeping Maintenance Duties ..... 7
  - b. Stormwater Best Management Practices (BMPs) Duties..... 8
- 5. Forms..... 9
  - a. Maintenance Record for Equipment..... 9
  - b. Maintenance Record for Structures & BMPs ..... 9
  - c. Training Record for Staff ..... 9

**Contact Information**

City Administrator:	Tom Palamar (570) 622-1234
Public Works:	City Garage (570) 622-7690
Public Water	Schuylkill County Municipal Authority (570) 622-8240
Public Sewer	Greater Pottsville Area Sewer Authority (570) 622-0513
City Engineer:	Alfred Benesch & Company Phone: 570-622-4055



## 1. Goals

The goal of this Operations, Maintenance, and Inspection manual is to ensure that all of City of Pottsville storm water facilities are functioning properly and limit pollutant runoff to the maximum extent practical. If work on any part of the Municipal storm water system is conducted by outside contractors, they will also be required to follow the procedures outlined in this manual. This O & M manual will be reviewed periodically and revised as needed.

## 2. Pollution Prevention/Good Housekeeping Procedures

Preventative measures are essential components to an effective stormwater management program because they reduce the potential for introducing pollutants into stormwater runoff. The following guidelines encourage a clean work environment through routine maintenance and reduce the possibility for chemical spill, leaks or area contamination. Municipal staff should receive regular training in the handling of the various equipment and chemicals used by the Municipality. A training log will be used to keep a record of the training received by staff and outside contractors throughout the year.

### a. Housekeeping

- Maintain clean, dry floor and ground surfaces. Sweeping shall be conducted as needed to removed dirt and other debris that has the potential to be washed into storm drains or streams when practical.
- Check vehicles and maintain to prevent fluid loss.

### b. Storage and Handling of Material

- All containers, drums, and bags shall be stored outside vehicle and foot traffic areas
- Fluids and other chemical supplies shall be kept in well ventilated areas indoors (where practical). Containers shall be clearly labeled, sealed and stored as per manufacturer's recommendations when not in use.
- Absorbent material, spill kits and drip pans are to be kept near potential spill hazard. Protect materials from weather conditions if located outdoors.
- Perform annual inspections of all indoor and outdoor storage locations. Keep a record of inspections.

### c. Spills

- Contain the area with dike, berms, and/or applicable dry absorbent materials.

- Protect drains and effected outlets with absorbent materials (e.g. PIG MRO type sock, Haz-Mat PIG Pads)
- Check contamination areas and determine source of spill.
- Monitor contamination areas and keep written and photographic documentation of action taken.
- Collect and dispose of contaminated material properly in labeled containers.
- Spills of hazardous materials should only be remediated by trained Municipal Staff or other contracted personnel with experience in removal of hazardous material.
- Record spill occurrences, its location, spill type, method of clean up and responding personnel.
- Notify DEP if spill is considered to be one (1) gallon or more

DEP Wilkes Barre: 570-826-2511 (Northeast District Office)  
Environmental Emergency: 570-826-2511 (24 Hour Hotline)

### **3. Inspection and Maintenance of Stormwater Facilities**

City of Pottsville has a mix of storm sewer lines including corrugated metal pipe (CMP), stone culverts, and reinforced concrete pipe (RCP). Large portions of the stormwater system are part of the combined sewers (owned by the Greater Pottsville Area Sewer Authority) that have been separated. The MS4 Stormwater system and the corresponding outfalls are shown on the City of Pottsville Outfall Map.

All municipally owned stormwater facilities will be operated in a manner that prevents or reduces adverse environmental, public health and safety impacts. Routine inspections and maintenance tasks are part of Municipal staff regular job duties.

#### **a. Stormwater Structures**

- Visual inspections shall identify any damage, deterioration, collapsed pipes, misalignment and/or vandalism of stormwater structures.
- Visual inspections shall locate and identify illegal dumping activities (trash, garbage; construction debris, chemicals, etc.) potentially impacting stormwater facilities.
- When cleaning inlets of debris and trash, inlets shall be inspected for evidence of illicit discharges. Municipal representatives shall make



attempts to trace back discharges to their origin source and issue corrective measures.

- Cleared materials from inlets, pipes, outfalls, structural BMPs shall be evaluated to determine if it is municipal, residual, or hazardous waste.
- Keep written log on file with the City Maintenance Manager of inspection activities, including resulting in repairs, clean-up activities, maintenance or citations issued. Inspections may also include photographs to document conditions found by the City of Pottsville City Maintenance staff or other contracted Municipal representatives.
- City Maintenance shall prepare a list of maintenance duties and schedule for stormwater facilities owned by the Municipality. A copy of the maintenance schedule is to be kept on file with the Public Works Department and is included in the Operation & Maintenance (O&M) Manual Appendix.

**b. Stormwater Best Management Practices (BMPs)**

Best Management Practices (BMPs) may include rain gardens, wet ponds, bio-retention areas, detention basins, infiltration areas, riparian buffers, vegetated swales/channels, and porous pavement.

- The City shall maintain stormwater BMPs owned by the City that function as part of their stormwater management program (SWMP).
- Structural BMPs shall be investigated after significant storm events to identify sediment accumulation, riser obstructions, vegetation growth, invasive or monoculture plant communities, animal borrowing, erosion of embankments erosion near storm structures, and excessive algae growth.
- Use of chemical agents for maintenance practices is highly discouraged. Alternative methods of control are encouraged.
- If chemical agents must be used, their use shall be limited. Chemical use must be approved by the City Administrator/ Public Work Manager and be applied by a qualified professional that is licensed by the Commonwealth of Pennsylvania, Department of .Agriculture. A copy of their license (herbicide, pesticide) shall be provided prior to any work and kept on file.
- Annual and significant maintenance activities are to be documented in writing and kept on file with the City of Pottsville Office.

**c. State Roadways**

The City of Pottsville has approximately 5.59 miles of roads that are owned and maintained by the Pennsylvania Department of Transportation (PennDOT) as listed below:

S.R. 209 – Mauch Chunk Street, Centre Street, and Market Street

S.R. 61 – Claude A. Lord Boulevard

S.R. 901 – Gordon Nagle Trail

- The Public Works Department shall visually evaluate and inspect PennDOT roads during routine travel.
- Debris and sediment in the roadway shall be reported to PennDOT or removed by the City to maintain clear travel lanes.
- Areas with repeated flooding and/or poor drainage shall be identified and reported to PennDOT to review appropriate corrective actions.
- State roadways in which the City has entered into a winter traffic services agreement with PennDOT to provide winter maintenance should include the activities listed under the Local Roads subsection below, as necessary.

PennDOT Contact:        District 5.0  
                                  Schuylkill County Maintenance Office  
                                  (570) 385-7812

**d. Local Roads**

- Street sweeping shall be performed by the City Maintenance or contracted representative at least once during the calendar year. Additional street sweeping shall be performed on an as-needed basis, as determined by the City Maintenance Manager.
- All street sweeping operators must be trained in the proper use of vacuum sweeper equipment.
- Avoid paving activities during wet weather.
- Do not use water to remove construction debris and/or dust from construction areas.
- Do not wash debris into the storm system.
- Use mechanical sweepers and/or vacuums to collect and dispose of construction debris.

- Contain and properly dispose of water and wastes generated from cleaning construction equipment.
- Use inlet protection devices and allow areas to dry before uncovering inlets.
- Recycle waste materials where applicable (i.e. asphalt, stone, ...)
- Storage of snow removal and deicing materials used for roadways shall be located and managed in a manner to reduce impacts on the storm sewer systems and the environment.
- Salt storage is to be protected from wet weather (precipitation).
- Clean up and remove any spilled salt and/or deicing materials during loading and unloading activities to minimize tracking of materials.
- Operators of snow plows/salt spreaders are to be trained in proper application rates. Salt spreaders shall be examined prior to each operation to ensure they are functioning properly.
- Application rates shall be enough to accomplish the task for roadways and parking lots being mindful of special circumstances, such as proximity to surface waters, drainage to BMP structures, road widths and traffic concentration.
- City Maintenance is responsible for clearing inlets of excessive sediment or debris accumulations.
- All materials cleared from the Municipal storm sewer system shall be handled and disposed of in accordance with all applicable state and federal disposal regulations.

**4. Maintenance Schedule**

**a. Pollution Prevention/Good Housekeeping Maintenance Duties**

The following guidelines are reviewed and revised by the City of Pottsville as needed. If work on any part of the Municipal storm water system is conducted by outside contractors, they shall also be required to adhere to the following:

Table 1

Activity	Maintenance Task – Pollution Prevention	Frequency
Vehicles - Non-Winter	<ul style="list-style-type: none"> <li>• Wash exterior with truck wash product in designated areas using pressurized hose with automatic shut off.</li> <li>• Use non-toxic, biodegradable cleaning products.</li> </ul>	Quarterly

	<ul style="list-style-type: none"> <li>• Check for fluid leaks (motor oil, antifreeze, hydraulics).</li> <li>• Schedule repairs as necessary.</li> <li>• Collect waste fluids and dispose of in properly labeled containers.</li> </ul>	Monthly
Winter Vehicles	<ul style="list-style-type: none"> <li>• Check fluid levels.</li> <li>• Check hydraulic hoses for leaks.</li> </ul>	Weekly (Winter)
	<ul style="list-style-type: none"> <li>• Wash equipment with salt neutralizer detergent in designated wash areas.</li> <li>• Inspect and remove salt deposits from storage areas, where applicable.</li> <li>• Inspect salt spreaders for proper operation.</li> </ul>	Monthly (Winter)
Storage Areas	<ul style="list-style-type: none"> <li>• Keep drains clear of any obstructions.</li> <li>• Inspect storage areas for any leaking or improperly sealed containers.</li> <li>• Inspect floor drains for any fluid discharge to system.</li> <li>• Keep record of maintenance and/or corrective actions taken.</li> </ul>	Bi-Annually
	<ul style="list-style-type: none"> <li>• Clean out floor drains and oil separators.</li> <li>• Identify hazardous materials.</li> <li>• Review list update and appropriate response actions and maintenance procedures with staff.</li> </ul>	Annually
Street Sweeping	<ul style="list-style-type: none"> <li>• Prevent blockage and system pollution by removing remaining winter salt, sand and gravel, leaves and trash debris</li> </ul>	Bi-Annually or As Needed

**b. Stormwater Best Management Practices (BMPs) Duties**

The following guidelines are reviewed and revised by City of Pottsville as needed. If work on any part of the Municipal storm water system is conducted by outside contractors, they shall also be required to adhere to the following:

Table 2

Activity	Maintenance Task	Frequency
Storm Structures	<ul style="list-style-type: none"> <li>• Measure sediment accumulation levels in each BMP.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>• Inspect during significant storm events to evaluate proper functioning and compare against as-built plans (by engineer).</li> <li>• Determine adjustments/corrective measures needed to facilitate BMP functions during wet weather inspection.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>• Inspect condition of inlets, trash racks, and risers for evidence of leakage, damage, or corrosion.</li> <li>• Repair damaged areas promptly.</li> <li>• Keep records of repairs.</li> </ul>	Annually
Mowing	<ul style="list-style-type: none"> <li>• Mow grass to a height no less than four inches.</li> <li>• Maintain pond/basin perimeter as meadow.</li> <li>• Maintain buffer vegetation at least five feet wide along the BMP edge.</li> <li>• Do not mow to water edge.</li> <li>• Do not direct clippings into the BMP.</li> <li>• Do not use chemical fertilizers.</li> <li>• Avoid creating tire ruts when mowing along banks as soil can get compacted, killing vegetation and create temporary pools for mosquito larvae.</li> </ul>	Annually
Algae removal	<ul style="list-style-type: none"> <li>• Control algae by skimming. Do not use chemical herbicides.</li> <li>• Remove trash and vegetative debris regularly.</li> </ul>	Annually
pH levels	<ul style="list-style-type: none"> <li>• Restore pond pH levels when they are below 6.0</li> <li>• Add limestone or wood ash materials determined by water/soil analysis.</li> <li>• Re- sample pH level and record data</li> </ul>	Annually (test)

Weeding	<ul style="list-style-type: none"> <li>Inspect and remove invasive plants along BMP perimeters</li> <li>Dispose of materials in designated area outside BMP</li> </ul>	Bi-Annually (Spring-Fall)
Rain Gardens, Detention Basins, Bio-Retention, Infiltration, Vegetated Channels	<ul style="list-style-type: none"> <li>Inspect embankments and principal spillways for evidence of sloughing, animal burrows, woody growth, or erosion that may undermine embankments</li> <li>Repair damaged areas immediately.</li> <li>Keep records of repairs.</li> <li>Inspect internal and external side slopes of the BMP for evidence of sparse vegetative cover or slumping.</li> <li>Repair damaged areas immediately.</li> <li>Remove and dispose of trash, debris and dead vegetation</li> <li>Dispose of items properly off-site</li> <li>Keep records of vandalism and repair measures</li> </ul>	Bi-Annually (Spring-Fall)
Disease Control	<ul style="list-style-type: none"> <li>Do not use chemical insecticides</li> <li>Locate nesting and/or bat boxes adjacent to BMPs where applicable</li> </ul>	As directed
Watering	<ul style="list-style-type: none"> <li>Supplemental watering to be provided during plant establishment period, replacement plantings or periods of rainfall shortage.</li> <li>Water may be pumped from the BMP (if applicable)</li> </ul>	As directed
Aeration	<ul style="list-style-type: none"> <li>Compacted soils may require aeration to re-establish soil composition, rejuvenate vegetation and reduce weeds.</li> <li>Use core aerator for four to six inch depth.</li> <li>Make 2 passes with aerator.</li> </ul>	As directed
Winter Salt on Pavements	<ul style="list-style-type: none"> <li>Minimize salt and de-icing agents adjacent to BMP.</li> <li>Use alternative de-icing agents to rock salt when available.</li> </ul>	As directed
Sedimentation Excavation	<ul style="list-style-type: none"> <li>Remove sediment when pond volume is reduced by 25% and when forebay volume is reduced by 50%.</li> <li>Sediment volume removed shall return BMP to its designed water depth as indicated on approved grading plans.</li> <li>Drain BMP to allow soil to dry and small equipment to access interior for excavations or retain water level and use equipment with extension arm beyond the BMP embankment.</li> <li>Do not store sediment pile within any floodplain or streambank.</li> <li>Review Schuylkill Conservation District (SCD) Erosion and Sedimentation (E&amp;S) control guidelines for on-site BMP sediment removal and storage prior to any excavation work.</li> <li>Material may need to be dried on-site prior to hauling for final disposal.</li> <li>Record activities and volume of material removed.</li> <li>As no time shall the removed sediment be dumped off-site onto property not previously approved by the Schuylkill Conservation District.</li> </ul>	Every 7-10 years or as needed

**5. Forms**

**a. Maintenance Record for Equipment**

See attached form.

**b. Maintenance Record for Structures & BMPs**

See attached form.

**c. Training Record for Staff**

See attached form



MAINTENANCE RECORD (Equipment)

EQUIPMENT/VEHICLE:	
LOCATION:	
DEPARTMENT IN CHARGE:	

Regular Maintenance Activities: - Provide Description

Work was conducted as  Regular Maintenance  Discovery or Problem

Reason for corrective action: - Description of problem found

Comment/Notes:

Repair Complete Date:

MAINTENANCE RECORD (Structures & BMPs)

CONTROL MEASURE:	
LOCATION:	
DEPARTMENT IN CHARGE:	

Regular Maintenance Activities: - Provide Description

Work was conducted as  Regular Maintenance  Discovery or Problem

Reason for corrective action: - Description of problem found

Comment/Notes:

Repair Complete Date:

STAFF TRAINING

TRAINING DATE:	
TRAINING DESCRIPTION:	
NAME OR TRAINER/MODERATOR	
DEPARTMENT/COMPAY:	

Training was conducted in House?  Yes  No

**Type of Training**

- Staff Speaker
- Guest Speaker
- Conference
- Webinar/Internet Session
- Joint Municipal Training
- Other (Explain)\_\_\_\_\_

**Purpose**

- Required by Department (Municipal)
- Required by Government Agency
- Continuing Education (Sought by Individual)
- Education offered by Municipality
- Other (Explain)\_\_\_\_\_

**Attendance**

Attach attendance sheet with names and signatures of employees who received training as a group. Staff receiving individual training and/or continuing education shall attach a copy of their attendance certificate or a copy of the educational session pamphlet.

**ATTENDANCE SHEET**

Training Date:

Training Description:

EMPLOYEE NAME	EMPLOYEE SIGNATURE

**ATTENDANCE**

Attach attendance sheet with names and signatures of employees who received training as a group. Staff receiving individual training and/or continuing education shall attach a copy of their attendance certificate or a copy of the educational session pamphlet.





### H.3.a. MCM #6.3A CITY EMPLOYEE TRAINING PROGRAM



# MUNICIPAL EMPLOYEE STORMWATER TRAINING



**THE CITY OF POTTSVILLE  
PENNSYLVANIA**

401 North Centre Street  
Pottsville, PA 17901-1330  
(570) 622-1234

Stormwater Quality Program  
**City of Pottsville**

# **City of Pottsville**

**Working with our community  
to ensure a healthy stormwater environment**

## **VISION STATEMENT:**

As required by the City's MS<sub>4</sub> permit, we will develop and foster illicit discharge detection and elimination programs for the benefit of our environment.

## **MISSION STATEMENT:**

The mission of the MS<sub>4</sub> permit is to eliminate illicit stormwater discharges to the MS<sub>4</sub> waters to the maximum extent feasible.

# Do we have to train staff?

- 40 CFR 122.34 (b) (6)
  - (i): Operation and Maintenance program...includes a training component
  - (ii) Guidance:...to prevent and reduce stormwater pollution from
    1. park and open space maintenance
    2. fleet and
    3. building maintenance
    4. new construction and land disturbances and
    5. storm water system maintenance
  
- ADEQ General Permit AZG2002-002, Part V (B) (6) (a)

Develop and implement an operation and maintenance program that includes a training component...



# Do we have to train all staff?

- Refer to “guidance”
- Available to all employees
- Required for affected staff
  - Pollution-generating tasks
    - Fleet, facility, street, park maintenance
  - Field staff
    - Inspectors

# Training Methods

□ On-line self training – Intranet MS4 Program, 6 minimum control measures.

Materials Storage and Spill Cleanup  
Building and Grounds Maintenance  
IDDE

□ Pros

- At employees leisure
- Relevant to individual jobs

□ Cons

- No true evaluation
- No interaction trainer/trainee
- Same slide show each year
- Access to computers

# Training Methods

□ Classroom-tailored to individual responsibilities.

## Stormwater Pollution Awareness

### □ Pros

- Live training
- Designed for specific job
- Opportunity for interaction/questions

### □ Cons

- Requires staff
- Numerous PowerPoint slide shows
- Scheduling difficulties
- Presentations must be revised frequently / kept fresh

# Alternative Training Methods

## □ Stormwater jeopardy game

### □ Pros

- Fun for the employee
- Encourages employee participation with the instructor

### □ Cons

- Requires more preparation
- Scheduling difficulties
- Requires employees to have had previous training on the topic

Illicit Discharge	Common Pollutants	General Stormwater	Stormwater Safety	Around the County	Stormwater BMPs
10	10	10	10	10	10
20	20	20	20	20	20
30	30	30	30	30	30
40	40	40	40	40	40
50	50	50	50	50	50

Scores

**The act of disposing of trash, tires, yard waste, appliances and other waste materials, without the permission of the property owner**

Answer

The act of disposing of trash, tires, yard waste, appliances and other waste materials, without the

**A: Illegal dumping**



Scores

# Alternative Training Methods

- City internet
- Employee newsletters, pocket cards, staff publications



**STOP**  
ILLEGAL DUMPING TO  
**STORM DRAINS**

To report a violation\* or file a complaint:  
**602-506-6616**  
esd.maricopa.gov

**MARICOPA COUNTY** Environmental Services Department

\*Violations/pollutants in the storm drain include:

- ◇ spilled oil/grease
- ◇ animal waste
- ◇ leaking vehicles
- ◇ commercial waste
- ◇ industrial waste
- ◇ sediment/soil
- ◇ trash/debris
- ◇ chemical spills

Maricopa County Environmental Services Department  
Working with our community to ensure a safe and healthy environment



**Enviro FLASH** May 4, 2014

Working with our community to ensure a safe and healthy environment

**Congratulations to Employees with May Anniversaries**

John Traversone	Vector Control Division Manager	22 Years
Blaise Dettmer	Environmental Health Specialist	18 Years
David Guzman	Vector Control Supervisor	18 Years
Wesley Dightford	EHS Supervisor	14 Years
Mary Shaw	Environmental Health Specialist	14 Years
Korissa Entwistle	Drinking Water Program Supv.	9 Years
Dianne Stockham	Environmental Health Specialist	9 Years
Sam Matheson	EHS Supervisor	9 Years
Mirshala Rosenberger	EHS Supervisor	9 Years
Uli Tolbert	Developmental Sys. Technician	9 Years
Tanya Cook	Environmental Health Specialist	8 Years
Christa Gupta	ECRS	8 Years
John Stephenson	Environmental Health Specialist	7 Years
John Pasquelli	Public Information Aide	6 Years
Thomas Fanning	Vector Control Specialist	5 Years
Keith Sawyer	Food Service Worker Clerk	1 Year

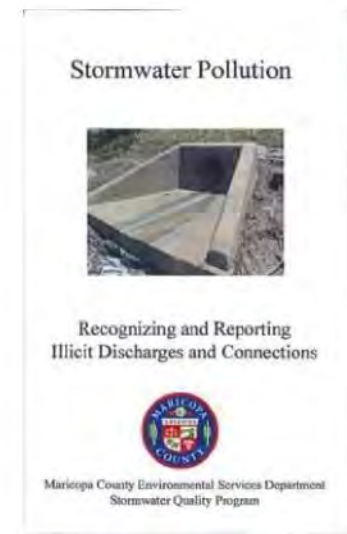
**Stormwater Poster Contest Winners**

Maricopa County Environmental Services Department Stormwater Quality Program recently celebrated the results of the 2013 Stormwater Pollution Awareness Poster Contest. With the support of Maricopa County Library District, Wildlife World Zoo and Aquarium, Children's Museum of Phoenix, Arizona State Parks, and Green Spaces, Garden artists were awarded for 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place in both categories: "1st" grade and "17" grade.


40,000 of the awards and recognitions, along with students' received certificates during the Board of Supervisors Meeting and were presented by the Chairman of the Board, Deputy Mayor and other County leadership.

**Missed the Ceremony? Or would like to watch it again? Enviro Flash brings it to you! Just Click on Web TV Icon Or visit:**  
<http://www.youtube.com/watch?v=8d3qz1jks>

May 4, 2014



**Stormwater Pollution**



**Recognizing and Reporting Illicit Discharges and Connections**

Maricopa County Environmental Services Department  
Stormwater Quality Program



# Lessons Learned

Vary class content each year

Keep it interesting

Repetition required

- Year 1: General stormwater training
- Year 2: Recognizing and reporting illicit discharges
- Year 3: Specific pollution prevention training
- Year 4: Stormwater jeopardy

# QUESTIONS?



**Michael Hummel, P.E., Alfred Benesch & Company**  
**Stormwater Program Consultant | Stormwater Quality Program**  
City of Pottsville  
401 N Centre Street, Pottsville, PA 17901  
Desk: 570.624.4268  
[mhummel@benesch.com](mailto:mhummel@benesch.com)

# **MS-4 Stormwater Management Program Protocol**

Pollution Prevention and Good  
Housekeeping for Municipal  
Operations and Maintenance





# What is MS4?

- Municipal Separate Storm Sewer System
- 1987 Clean Water Act Amendments
- Phase I MS4s for places with populations greater than 100,000
- Certain industrial and construction sites
- In Pennsylvania – Erie and Pittsburgh have combined sewer systems
- Allentown and part of Philadelphia are included in MS4 Phase I



# What is MS4 Phase II?

- Phase II became effective in 2003
- Phase II is for urban areas with < 100,000 population
- Urbanized areas defined based on 1990 and 2000 census data
- Requires NPDES permit for storm water
- US EPA requires six minimum control measures as part of program
- PA DEP incorporates Protocol in General Permit

# Six Minimum Control Measures

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Stormwater Management (New and Redevelopment)
- Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance

# Stormwater Management Evolution

- “Run it in ditches”
- “Run it in pipes”
- “Run it in stormwater pipes”
- “Keep it from stormwater pipes”
- “Just don’t cause a flood”
- “Oh... and don’t pollute either”

# Pollution Prevention and Good Housekeeping

- Following are excerpts from the Protocol Guidance Document developed by PA DEP for municipalities to use to comply with the MS-4 requirements, specifically the Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance. This pollution prevention aspect of the MS-4 Requirements is number six (6) of the six (6) Minimum Control Measures, MCM's. This Presentation and Training Seminar focuses on a comprehensive pollution prevention program for municipal operations focusing particularly on vehicle maintenance, fueling and washing, maintenance of stormwater facilities and employee training. Possibly changes in habits and procedures are necessary to meet these regulations.



**Good  
Housekeeping**



# Pollution Prevention Program for Municipal Operations

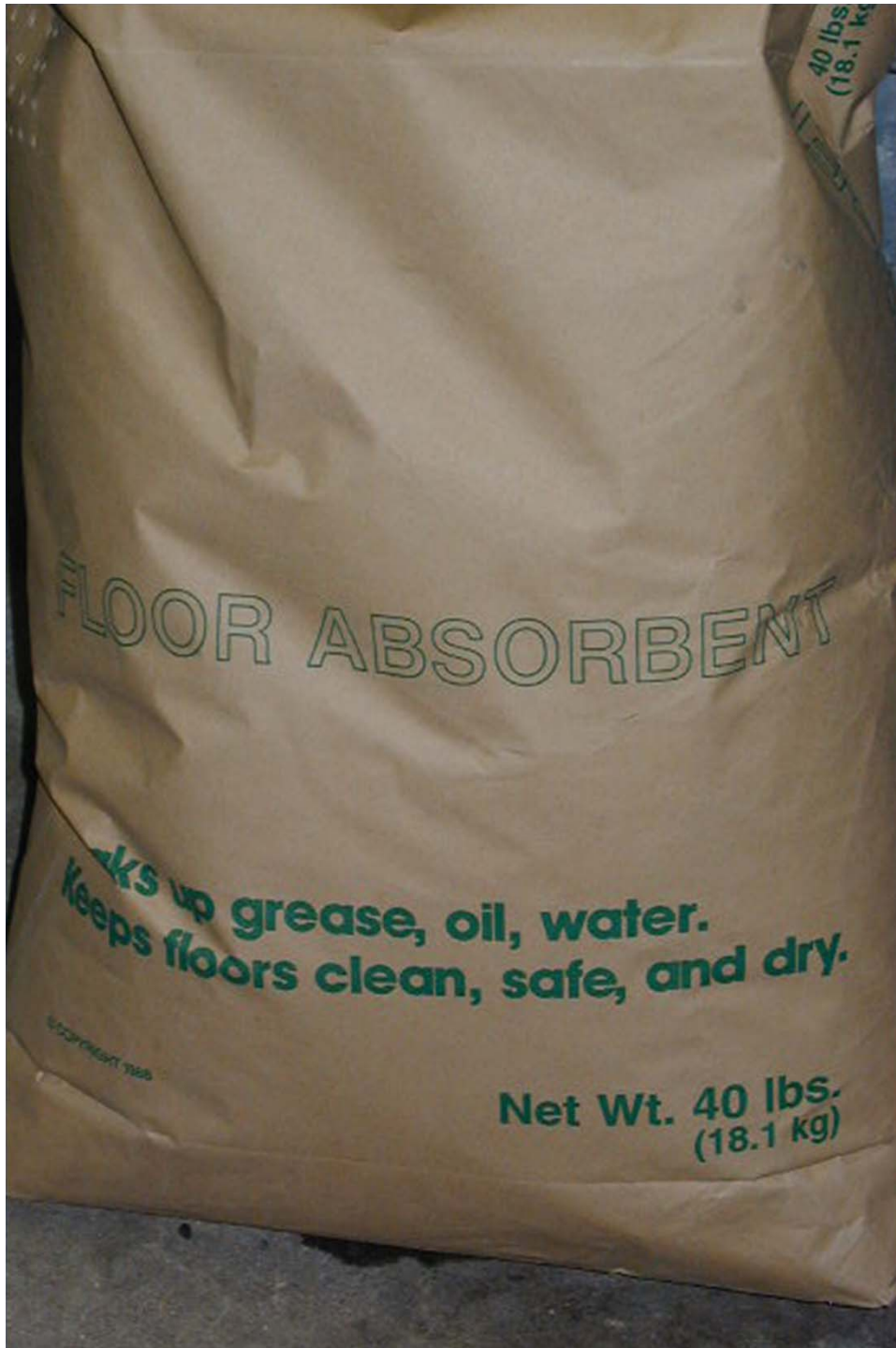
- Three key items that the program will focus on are:
  1. Vehicle maintenance, fueling and washing
  2. Stormwater facility operation, maintenance, and inspection
  3. Training: This seminar satisfies the requirements for the training portion.





# Municipal Vehicles: Maintenance

- Establish an operations and maintenance program for all municipal vehicle operations. You may already have implemented these O&M aspects; however if you have not or as a reminder, here are the following items relating to vehicle maintenance:
  - Having on hand dry absorbent material such as kitty litter, straw or sawdust for cleaning up spills;
  - Having designated receptacles for disposal of oils, oily rags, used filters, batteries, spent coolants, degreasers, etc.
  - Covered or pervious, i.e., grass or gravel washing areas
  - Signs that remind employees



**Pay attention to the  
frequency of activities;  
types of substances used;  
materials storage, handling and  
disposal practices;  
and new regulations.**

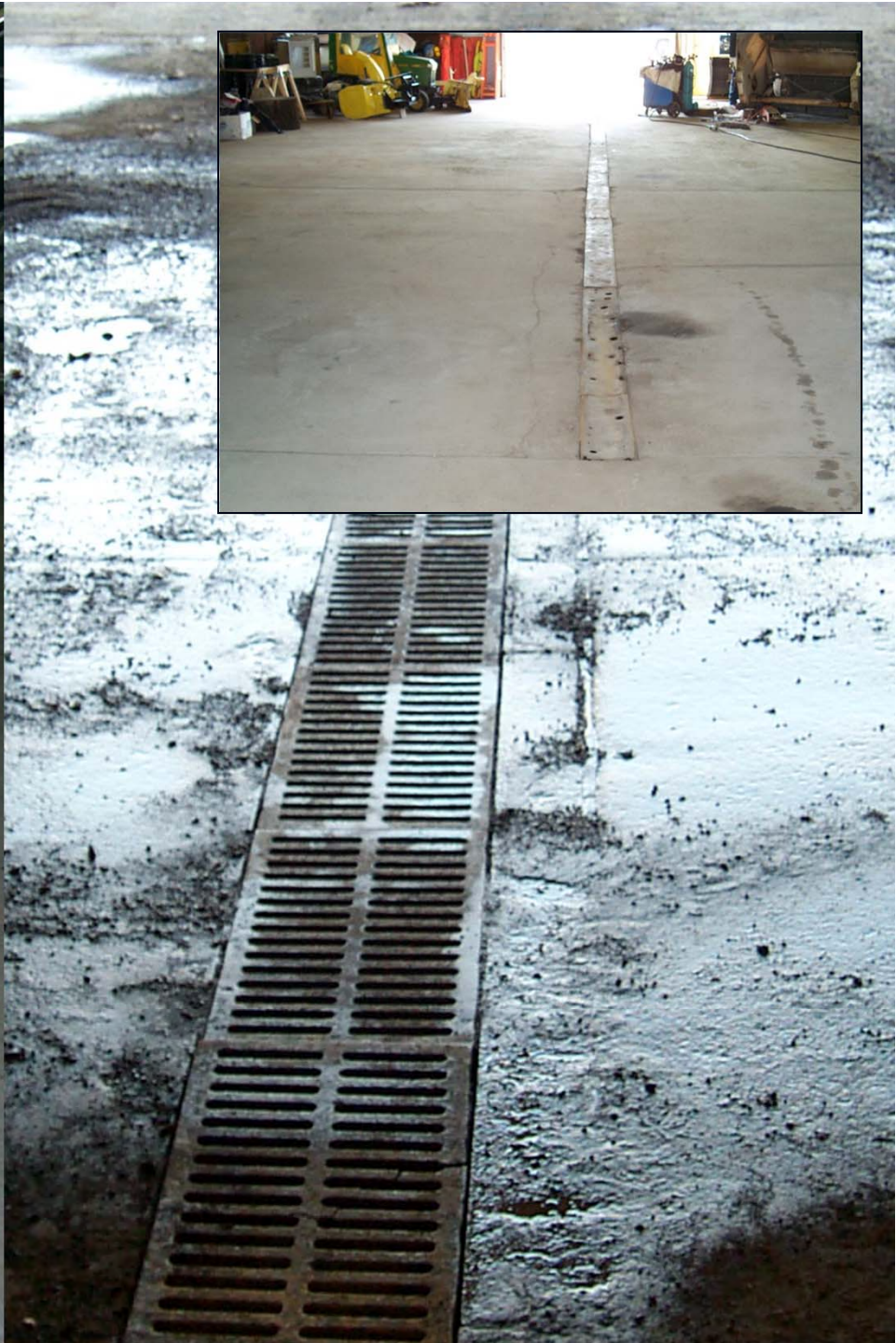




# Maintenance

- Make proper disposal of greasy rags, oil filters, air filters, batteries, spent coolant, degreasers, etc., easy by providing appropriate receptacles. Locate waste and recycling drums in properly controlled areas of the yard, preferably areas with a concrete slab and secondary containment.
- Avoid hosing down work areas.
- Put leaking vehicles coming in for service under cover or immediately place drip pans under them.
- Collect leaking or dripping fluids in drip pans or containers.

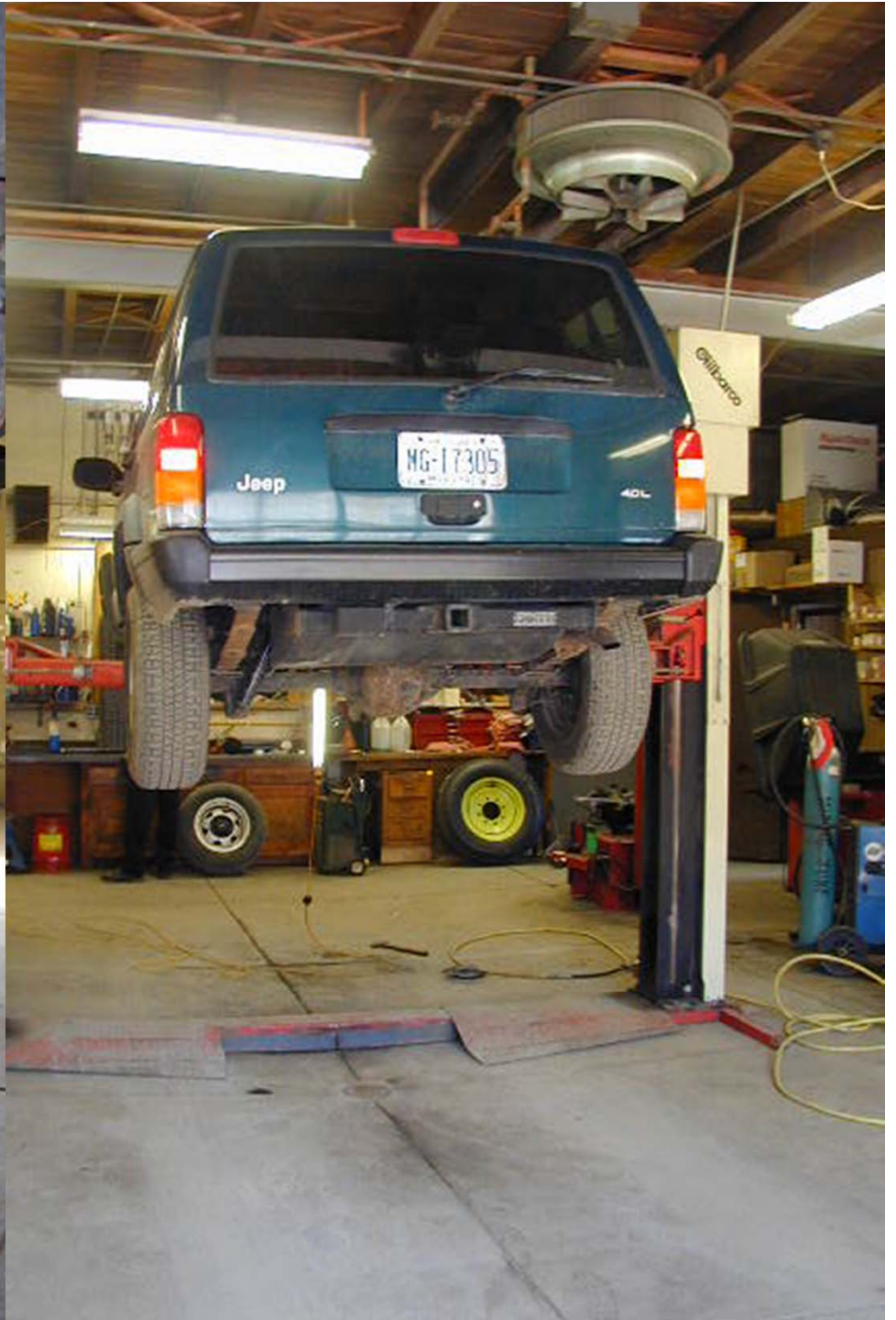




# Maintenance

- Keep a drip pan under the vehicle while you unclip hoses, unscrew filters or remove other parts.
- Do not pour liquid waste into floor drains, sinks, outdoor storm drain inlets, or other storm drains or sanitary sewer connections.
- Place oil filters in a funnel over the waste oil recycling or disposal collection tank to drain excess oil before disposal, then crush and recycle oils filters; ask your oil supplier or recycler about recycling oil filters.







# Fueling

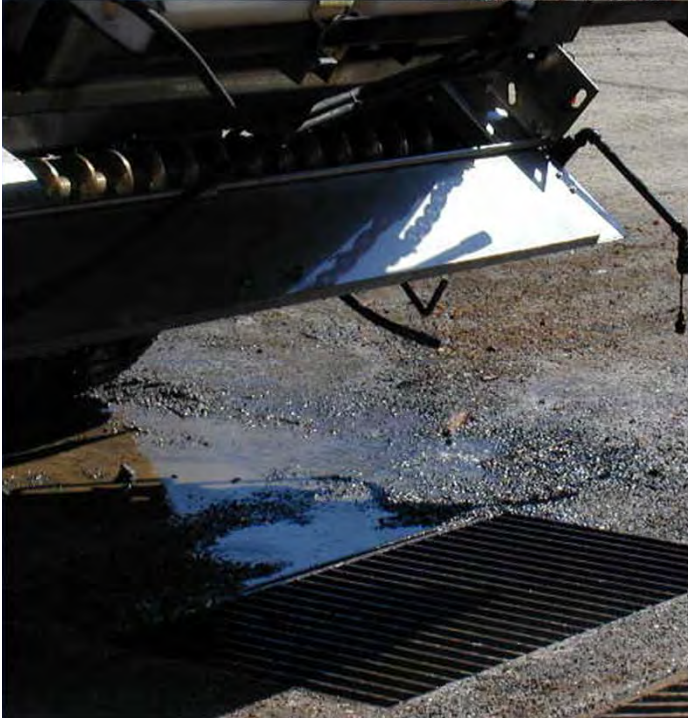
- Place overfill prevention equipment on underground storage tanks. Watch transfer constantly to prevent overfilling and spilling.
- Discourage topping off of fuel tanks through training and posting signs
- Avoid cleaning fuel areas with running water. Consider using damp cloth on pumps and a damp mop on paving rather than a hose.
- Control spills immediately. Small spills can be cleaned up with rags and larger spills can be cleaned with dry absorbent material such as kitty litter, straw or sawdust. Do not wash petroleum spills into the storm drain.



# Washing

- If possible utilize commercial car washes. They typically recycle wash water and direct it to a wastewater treatment plant.
- Create and use designated cleaning areas, preferably indoors where wash water can be recycled or directed to treatment. If indoor washing is not possible create specific areas to wash the vehicles on gravel, grass or other permeable surfaces.
- Block off storm drains while washing or use an insert to catch wash water. Make inserts and dams available.
- On-site washing to drains discharging to WWTP, if permitted.





# Washing

- Convert to use phosphate-free biodegradable detergents.
- Pump soapy water from the washing activity to a sanitary sewer drain. If pumping into a drain is not feasible, pump the wash water onto grass or landscaping to provide filtration.
- Be sure to check Local, State and Federal requirements regarding the use of the sanitary sewer system.



# Alternative to Road Salt

- Use of deicing materials other than salt in areas that drain to environmentally sensitive areas should be considered. Sources of alternatives can be found through a technical release – HITEC Releases ICE Ban (registration trademark) Evaluation Report.
- LTAP assists municipalities in training for the winter road maintenance.
- Request attendance at scheduled training sessions.







# Snow Storage Areas

- Designate Snow storage areas around the municipality for temporary storage of snow that has been removed. For some municipalities, these snow areas are used only after large precipitation events. However, these snow storage areas should be at least 100 feet from surface waters or groundwater drinking sources.
- Clean the storage areas after the snow has melted by collecting the debris and trash which was picked up in the snow removal process.

# Salt and Deicing Storage Areas

- Locate all salt and deicing areas outside the 100-year floodplain.
- Cover all salt and deicing material storage piles with tarps, hard shelters or within dikes or berms.





# Application of Salt and Deicing Materials

- Apply deicing materials according to manufacturer's recommendations for the given circumstance. When determining the amount to apply consider the road width, traffic concentration, proximity to surface waters and road temperature to prevent over application.
- Use trucks with calibration devices or volume controls on their spreaders.
- Avoid applying deicing materials near surface waters, groundwater drinking sources or other environmentally sensitive areas. In these areas and the High Quality (HQ) and Environmental Value (EV) waters apply alternative deicing materials such as sand or salt substitutes.





**Consider sweeping up  
extra anti-skid materials  
and stockpiling for re-use.**



# Landscaping

- Ensure that the applicators have a valid state license.
- Application of chemicals. Pretest the soils to determine the proper application rates.
- Apply fertilizer, herbicides and pesticides exactly according to the manufacture guidelines. More is not better.
- Ensure that all applicators are licensed by the state. Require that the applicators attend continuing education to keep abreast of the current and proper application techniques as detailed in the Pollution Prevention Training Section.





# Inlets and Storm Sewer Facilities

- Inspections of the facilities and outfalls identified in the permit.
- Maintain and clean the systems on a regular basis, including cleaning the inlets. Document the amount of material cleaned out of the storm sewer system.
- Keep gutter lines and swales clean and storm sewers will require less cleaning.
- Inspect each catch basin at least once a year to determine if it needs cleaning and note any repairs needed. If the depth of the materials in the bottom of the catch basins is greater than or equal to one-third the depth of the inlet bottom to the invert of the lowest pipe opening, have the catch basin cleaned as soon as possible.







# Inlets and Storm Sewer Facilities

- Catch basins that require regular cleaning inspect more often than once a year.
- Remove leaves, anti-skid and other debris from gutter lines and swales as soon as possible to prevent the materials from depositing in the catch basin.
- Dispose of the sediment and debris from the catch basins in a proper manner.











# Stenciling

- Location – Painting street with stencil
- Decal – No Dumping Drains to Creek with Frog Logo
- Painting – No Dumping Drains to Creek with Fish Logo











**Training the employees on proper procedures is a routine function in most municipalities.**



**The permit requirement under the Minimum Control Measure simply involves incorporating the new procedures developed for the inspection, cleaning, and maintenance of the stormwater facilities.**

**We can all do our part of keeping  
the Waters of the Commonwealth  
a little cleaner by changing  
our habits at work and at home.**

**Remember that we drink, play and enjoy these waters and the pollutants in the stormwater systems may cause the contamination and loss of this important resource.**

# Operations & Maintenance Tracking Forms

**Pollution Prevention and Good Housekeeping for  
Municipal Operations and Maintenance**

**Operations and Maintenance Program Development Tracking Form**

Municipality: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Date: 20\_\_

**Storm Water Facility Operation and Maintenance Program Development:  
Existing Program Information (for Permit Year 1)**

Storm Water Facility Type (check if applicable)	Existing Programs	
	Description of Corrective Maintenance Activities	Description of Preventative Maintenance Activities
Open Channels		
Culverts		
Detention Facilities		
Drainage Swales		
Infiltration Facilities		
Other		

**Storm Water Facility Operation and Maintenance Program Development:  
Proposed Program Modifications (for Permit Year 2)**

Storm Water Facility Type (check if applicable)	Proposed Program Modifications	
	Description of Corrective Maintenance Activities	Description of Preventative Maintenance Activities
Open Channels		
Culverts		
Detention Facilities		
Drainage Swales		
Infiltration Facilities		
Other		

# Operations & Maintenance Tracking Forms

Vehicle Maintenance, Fueling and Washing Program Development: Existing Program Information (for Permit Year 1)	
Type of Activity	Description of Existing Programs and Procedures (Include information on location, materials, disposal practices)
Vehicle Maintenance	
Vehicle Fueling	
Vehicle Washing	

Vehicle Maintenance, Fueling and Washing Program Development: Proposed Program Changes (for Permit Year 2)	
Type of Activity	Description of Proposed Changes to Existing Programs and Procedures (Include information on location, materials, disposal practices)
Vehicle Maintenance	
Vehicle Fueling	
Vehicle Washing	



# Special thanks to:

- Birdsboro Borough
- Cumru Township
- Spring Township
- Wyomissing Borough
- Berks County Planning Commission
- Berks County Public Works Association
- City of Reading
- Spotts, Stevens and McCoy, Inc.



# Questions and Answers

**H.3.b. MCM #6.3B LOG OF ANNUAL CITY EMPLOYEE TRAINING**



## APPENDIX H.3.b MCM #6.3B LOG OF EMPLOYEE MS4 TRAINING

**Project:** Pottsville MS4 Public Outreach on Stormwater Impacts | Year 2018 – 2023 Permit Cycle

**Facilitator:** City Administrator | 570-628-4417

Training Name & Date	Employee Names Trained
MS4 Overview- December 2016	City Road Crew Members
Outfall Inspection Requirements and GPS Unit – June 2018	City Interns, Maintenance Workers DJ Chescavage and Dylan Pogera
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