



**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION III WATER BRANCH, ENFORCEMENT
AND COMPLIANCE ASSURANCE DIVISION
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT**

for

Name of Facility: East Manchester Township MS4
Facility Address: 5080 North Sherman Street Ext, Mt. Wolf, PA 17347
Mailing Address: 5080 North Sherman Street Ext, Mt. Wolf, PA 17347

Report Prepared on: 3/3/2021
Date

By: ,
Environmental Scientist (PG Environmental)
Signature

Report Final as of: _____
Date

By: _____, EPA
Signature

General Information

Type of Inspection:	MS4 Compliance Inspection
Owner:	East Manchester Township
Operators:	East Manchester Township and Gordon Brown and Associates
Permittee:	East Manchester Township
NPDES Permit No:	PA133601
NPDES Permit Effective Date:	March 16, 2013
NPDES Permit Expiration Date:	March 15, 2018
Receiving Water(s) and/or MS4:	Hartmann Run, Codorus Creek Main Branch, Conewago Creek, Musser Creek, Little Conewago Creek, Susquehanna River
Latitude and Longitude:	40.0589, -76.6971

Facility Field Visits Overview

On February 10, 2021, representatives from U.S. Environmental Protection Agency (EPA) Region III, EPA contractors, PG Environmental and Eastern Research Group (ERG), (hereinafter, EPA Inspection Team) conducted site visit inspections of multiple locations managed under the East Manchester Township, Pennsylvania (hereinafter, Township) Municipal Separate Storm Sewer System (MS4) program. These in-person site visits complement an offsite compliance audit of the Township's MS4 program conducted January 20, 21, and 28, 2021. Both the offsite inspection and field inspections were conducted to assess the Township's compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (PAG-13; Permit No. PA133601; hereinafter, the Permit). A copy of the Permit is provided in Appendix A.

Approximate Entry Time: 9:15 AM (EST) **Approximate Exit Time:** 2:45 PM (EST)

Unique Project Identifier (UPI): 3E21WN021A

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Appendix A: Pennsylvania’s NPDES General Permit for Stormwater Discharges from Small MS4s (PAG-13)

Appendix B: Exhibit Log

- Exhibit 1 – Municipal Building Drainage Plan
- Exhibit 2 – Public Works Vehicle Wash, Fueling Station, and Stock Yard Drainage Plan
- Exhibit 3 – SalonCentric Drainage Plan
- Exhibit 4 – May 2019 Inspection Report for SalonCentric
- Exhibit 5 – Rite Aid Drainage Plan
- Exhibit 6 – May 2019 Inspection Report for Rite Aid
- Exhibit 7 – Dauberton Park Drainage Plan
- Exhibit 8 – May 2019 Inspection Report for Dauberton Park
- Exhibit 9 – Drainage Plans for Rentzel Subdivision Detention Basin 2
- Exhibit 10 – Drainage Plans for Rentzel Subdivision Detention Basin 8
- Exhibit 11 – May 2019 Inspection Report for Rentzel Subdivision Detention Basins 1, 2 and 8

INTRODUCTION

Weather and Precipitation:

It should be noted that there was approximately 2-12 inches of snow on the ground at the time of the inspection, which limited ground visibility. During the inspection, there were cloudy skies and temperatures averaging approximately 31 degrees Fahrenheit. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and seven days prior are provided in the table below.

Table 1. Total Precipitation Preceding Inspection

Station Name	Date	Precipitation Amount on Ground (inches) ¹
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 3, 2021	9.8
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 4, 2021	8.7
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 5, 2021	6.6
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 6, 2021	2.0
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 7, 2021	2.3
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 8, 2021	-
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 9, 2021	2.0
Mount Wolf 1.0 SE, PA US - US1PAYR0020	February 10, 2021	2.0

INSPECTION PROCEDURES

Inspection Opening and Closing Conferences

The EPA Inspection Team arrived at the East Manchester Township Municipal Building at 9:15 AM (EST) for the inspection. Jake Albright of PG Environmental and Chuck Schadel of EPA Region III displayed their Clean Water Act inspector credentials to Township representatives at the outset of the inspection and explained that the purpose of the inspection was to conduct field observations to complement an offsite compliance review of the Township's MS4 program conducted January 20-28, 2021.

The EPA Inspection conducted a brief closing conference at the Township Municipal Building with the Township Engineer and Public Works Director to share preliminary observations prior to leaving the Township at approximately 2:45 PM (EST).

This report includes observations and photographs from inspections conducted at two Township owned and operated facilities, one Township owned and operated BMP, one BMP that the city has not inspected yet, and multiple privately operated BMPs that the City inspects to verify proper long-term operation and maintenance.

¹ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

FIELD OBSERVATIONS

Location No. 1: East Manchester Township Municipal Building

Address/Location: 5080 North Sherman Street Extension, Mt. Wolf, PA, 17347

Relevant Minimum Control Measure (MCM): Pollution Prevention / Good Housekeeping

Entry Time: 9:15 AM (EST)

Exit Time: 10:15 AM (EST)

Table 1.1. Participants

Name	Title/Affiliation
Shane Haugh	Public Works Director
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The East Manchester Township Municipal Building (hereinafter, Municipal Building) includes an office building, a garage for truck and equipment maintenance and storage, a parking lot, a new salt and stone storage structure, and used oil disposal. The new salt and stone storage structure was installed at the Municipal Building in August of 2020; the project also included expanding the parking lot on the northern portion of the property and installing a new stormwater basin on the northwest side of the property. Stormwater collected from the southern portion of the property is conveyed into an infiltration bed located on the southern border of the property. Stormwater on the northern portion of the property is collected in parking lot catch basins and conveyed to the new stormwater pond.

A drainage plan for the new construction is included in Appendix B, Exhibit 1.

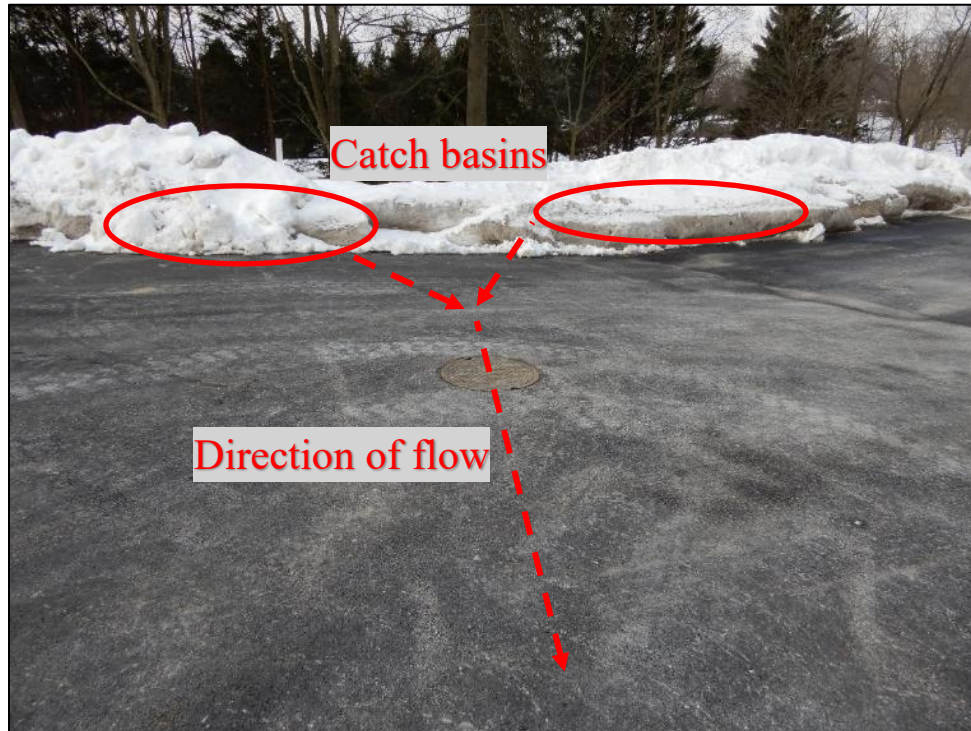
Part C.I.B.6.b BMP #2 states that the permittee should, “Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance 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. 3800-PM-BCW0100d 5/2016 Permit – 24 -.
- 2) All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.”

Observation 1: The EPA Inspection Team made the following observations related to the Township’s pollution prevention and good housekeeping at the Municipal Building.

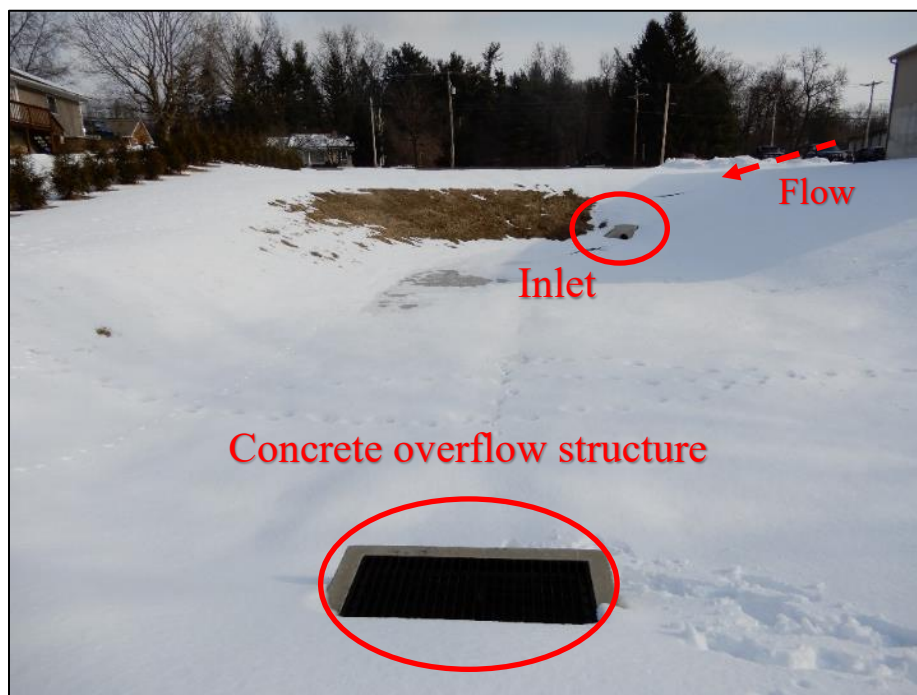
- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) Township staff stated the catch basins located in the vicinity of the salt and stone storage structure and northern parking lot were routed to the new stormwater basin (refer to Photographs 1 through 4).
- 3) Township staff stated that during construction of the parking lot, the stormwater pond was used as a sediment trap. According to Township staff, the project has not been officially closed, and an underdrain still needs to be installed in the pond. This is shown on the new construction drainage plans (refer to Appendix B, Exhibit 1). Some sediment was observed at the outfall of the new stormwater pond during the inspection (refer to Photograph 4).
- 4) The EPA Inspection Team observed a used oil tank without secondary containment on the west side of the Maintenance Building (refer to Photograph 5). Township staff stated that the tank is single-walled and that the oil is disposed of very infrequently, every 2-3 years.
- 5) The EPA Inspection Team observed drains on the floor of the garage that collect water that drips off of vehicles (refer to Photographs 6 and 7). Township staff stated that the drains have been plugged for at least five years. Staff also stated that the drains are cleaned regularly and most water collected just evaporates. The garage is primarily used for indoor vehicle maintenance activities and provides storage for 12 trucks. The EPA Inspection Team observed spill kits inside the garage (refer to Photograph 8).
- 6) The EPA Inspection Team observed the location of catch basins outside of the garage on the southern border of the property. At the time of the inspection, the inlets were covered in snow and were not able to be viewed (refer to Photograph 9). Township staff stated that the catch basins direct stormwater to an infiltration structure located under the pavement on the southern side of the property.



Photograph 1. View, facing west, of catch basins (covered in snow) located south of the new sand and stone storage structure.



Photograph 2. View, facing east, of the new parking lot area north of the existing Maintenance Building.



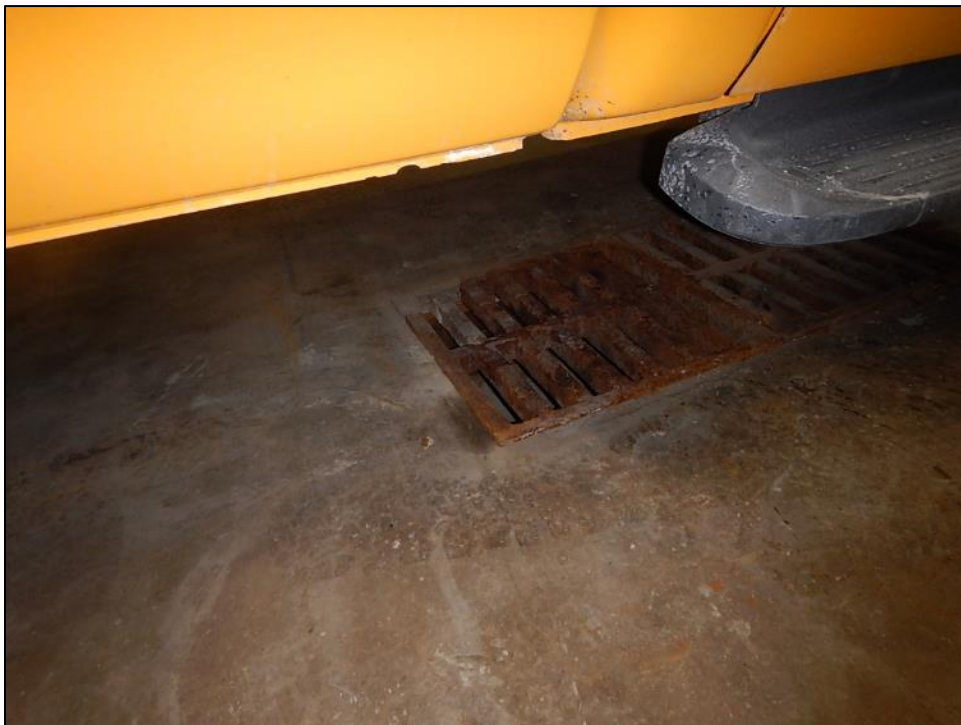
Photograph 3. View, facing east, of the new stormwater pond in the north portion of the property.



Photograph 4. View of the outlet for the new stormwater pond. Note that sediment was observed at the outlet.



Photograph 5. View, facing southeast, of the used oil storage tank located on the western side of the property. The tank had a volume of approximately 150 gallons; it was not double-walled or located within secondary containment.



Photograph 6. View of a drain inside the maintenance garage. Township staff stated the drains were plugged.



Photograph 7. View of another drain in the garage. Township staff stated the drains were plugged.



Photograph 8. View of a spill kit and cleanup material located in the garage.



Photograph 9. View, facing southwest, of a catch basin covered in snow on the southern border of the property. The runoff from the impervious pavement in front of the garage on the southern portion of the property drains to the basin, then to an infiltration bed on the south side of the parking lot.

Location No. 2: Public Works Vehicle Wash, Fueling Station, and Stock Yard

Address/Location: 40.059706, -76.696139, North Sherman Street Extension

Relevant MCM: Pollution Prevention / Good Housekeeping

Entry Time: 10:15 AM (EST)

Exit Time: 11:15 AM (EST)

Table 2.1. Participants

Name	Title/Affiliation
Shane Haugh	Public Works Director
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The Public Works Vehicle Wash, Fueling Station, and Stock Yard (property) is located across the street from the Municipal Building on North Sherman Street Extension. The property contains two buildings, an indoor vehicle wash and storage garage, and an auxiliary generator building. The property also contains outdoor stock storage locations on the northern portion of the property and a fueling station for both diesel and gasoline, including aboveground storage tanks, across from the indoor vehicle washing and storage station. According to the Public Works Director, wastewater from the indoor vehicle wash drains into an oil water separator and then into the yard on the south eastern end of the property. The property also contains inlets positioned outdoors that lead to the same location. The properties that border the washing garage are private. North Sherman Street Extension borders the property's southern end.

A drainage plan for the new construction is included in [Appendix B, Exhibit 2](#).

Part C.I.B.6.b BMP #2 states that the permittee should, “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.

- 3) 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. 3800-PM-BCW0100d 5/2016 Permit - 24 –.
- 4) All permittees must review and update the written O&M program each year of General Permit coverage, as necessary.

Observation 2: The EPA Inspection Team made the following observations related to the Township's pollution prevention and good housekeeping at the Public Works Vehicle Wash, Fueling Station, and Stock Yard.

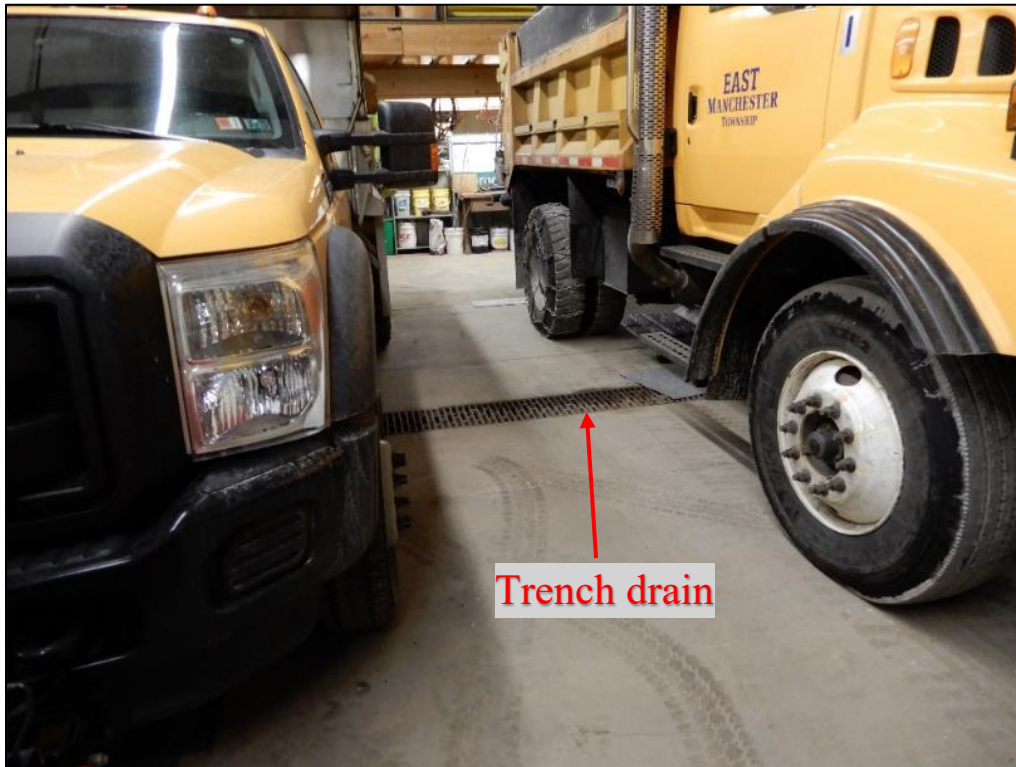
- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) Township staff stated that wash water from the vehicle wash is captured in a trench drain inside the building and routed into a catch basin located between the wash building and the generator building (refer to Photograph 10). Water collected in the catch basin flows into an oil/water separator. Township staff stated that the oil/water separator discharges into an infiltration bed in the yard on the southern side of the property (refer to Photograph 11). The ground in this area was not visible at the time of the inspection due to snow. The infiltration bed location is shown on the site drainage plan in Appendix B, Exhibit 2.
- 3) Township staff stated that vehicles are only washed inside the garage. No other maintenance is performed in the vehicle wash garage. Wash water is collected in a trench drain in the garage and directed to the oil/water separator (refer to Photographs 12 and 13).
- 4) The EPA Inspection Team observed absorbent pads placed under vehicles stored in the in the wash bay (refer to Photograph 14).
- 5) The EPA Inspection Team observed a spill kit available in the garage (refer to Photograph 15).
- 6) The EPA Inspection Team observed what appeared to be fresh petroleum staining in front of the fueling station (refer to Photographs 16 through 18). A spill kit was available at the location.
- 7) The EPA Inspection Team observed filter sock and earthen berms to control runoff on the northeastern portion of the property where stockpiles were located (refer to Photographs 19 and 20).
- 8) The EPA Inspection Team observed uncovered stocked materials stored on the northern portion of the property (refer to Photograph 21).



Photograph 10. View, facing south, of the catch basin that collects vehicle wash water and routes it to the oil/water separator.



Photograph 11. View, facing northeast, of the vicinity of the infiltration bed where the oil/water separator discharges.



Photograph 12. View inside the garage of the trench drain that stretches the length of the garage. The drain leads to an oil/water separator that drains to an infiltration bed in the yard.



Photograph 13. Additional view of the trench drain that stretches the length of the garage.



Photograph 14. View of the absorbent pads under the hydraulic line on a stored vehicle in the garage.



Photograph 15. View of a spill kit inside the garage.



Photograph 16. View, facing north, of the fueling station. The station had a joint aboveground tank for gasoline (500 gallons) and diesel (2,000 gallons) on the northern border of the property.



Photograph 17. View of the spill kit stored at the fueling station.



Photograph 18. Apparent petroleum stain in front of the spill kit storage at the fueling station.



Photograph 19. View, facing northeast, of two filter sock berms used to control runoff in the the northeastern portion of the property.



Photograph 20. View, facing southeast, of a filter sock berm located in the stockpile area as well as an earthen berm located down gradient along the perimeter of the property.



Photograph 21. View, facing northeast, of an uncovered dirt stockpile in the northeastern portion of the property.

Location No. 3: SalonCentric Detention Pond

Address/Location: 75 Steam Boat Blvd., Manchester, PA 17345

Relevant MCM: Post Construction Stormwater Management

Entry Time: 12:30 AM (EST)

Exit Time: 12:45 AM (EST)

Table 3.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	Inspector, EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: Stormwater from the SalonCentric parking lot is collected by several catch basins and conveyed via two separate underground pipes into the stormwater basin. Water from the stormwater basin is discharged via a concrete riser outlet structure to an intermittent stream south of the pond that eventually leads to tributaries of the Susquehanna River. This stormwater basin is privately owned and maintained. Township staff stated that they recently inspected the stormwater basin and maintained and replaced fill and riprap on the northeastern side of the basin.

A drainage plan is included in [Appendix B, Exhibit 3](#). An inspection of the pond was conducted in May of 2019. The report indicated the pond was overgrown at the time (refer to [Appendix B, Exhibit 4](#)).

Part C.I.B.5.c BMP #3 states that the permittee must, “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.”

Observation 3: The EPA Inspection Team made the following observations related to the Township's post construction stormwater management at the SalonCentric stormwater basin.

- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) The EPA Inspection Team observed water quality snout device in the catch basin upstream of the stormwater basin (refer to Photograph 22).
- 3) The EPA Inspection Team observed that the concrete riser outlet structure located in the southern end of the stormwater basin apparently was not aligned properly (refer to Photographs 23 and 24).
- 4) Stormwater is discharged from the stormwater basin, through the concrete riser outlet structure, and to an intermittent tributary of the Susquehanna River (refer to Photograph 25). The EPA Inspection Team did not observe any sediment or signs of other pollution in the stream.



Photograph 22. View of the water quality snout device installed in the catch basin upstream of the stormwater basin.



Photograph 23. View, facing northwest, of the stormwater basin and concrete riser outlet structure. The riser structure was not aligned.



Photograph 24. View of the concrete riser outlet structure. The red arrows show where the riser sections were apparently not aligned.



Photograph 25. View, facing south, of the outfall to the intermittent tributary to the Susquehanna River, south of the stormwater basin.

Location No. 4: Rite Aid Detention Basin

Address/Location: 4150 N George Street Extension, Manchester, PA 17345

Relevant MCMs: Post Construction Stormwater Management

Entry Time: 12:50 PM (EST)

Exit Time: 1:10 PM (EST)

Table 4.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The eastern portion of the Rite Aid property includes a stormwater basin constructed with low flow concrete channels. Stormwater runoff is collected by catch basins in the Rite Aid parking lot and conveyed to inlets in the northern and southwestern parts of the stormwater basin. The basin drains into a wetland area to the east of the property. The basin is privately owned and maintained. A separate stormwater basin is located to the north of the Rite Aid basin, which is part of the Advanced Auto property and not considered to be part of the Rite Aid BMP.

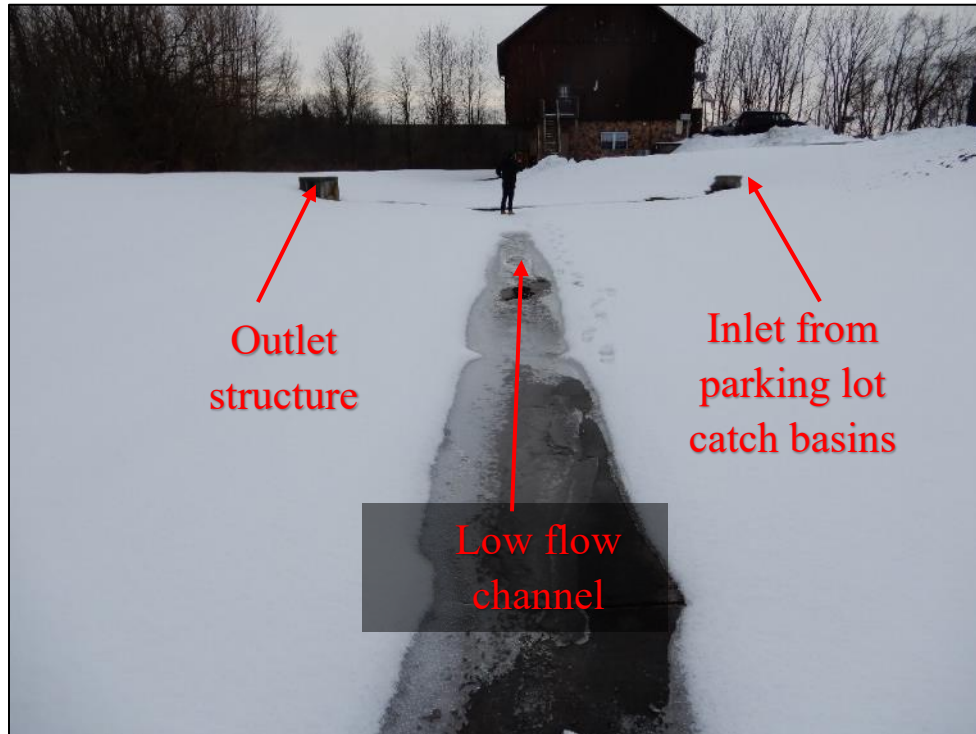
A site drainage plan is included in [Appendix B, Exhibit 5](#). An inspection of the pond was conducted in May of 2019. The report indicated the pond was overgrown around the inlet and outlet structures at the time and that earthen material and litter should be removed (refer to [Appendix B, Exhibit 6](#)).

Part C.I.B.5.c BMP #3 states that the permittee must, “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.”

Observation 4: The EPA Inspection Team made the following observations related to the Township's post construction stormwater management at the Rite Aid.

- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) The EPA Inspection Team observed partially frozen pooled water in the concrete low flow channel (refer to Photograph 26). This same issue of pooled water was referenced in the May 2019 inspection report (refer to Appendix B, Exhibit 6).
- 3) The EPA Inspection Team observed litter in front of the outlet and inlet structures as well as at the outfall into the wetland area (refer to Photographs 27 through 29). Litter in the basin was also referenced in the May 2019 inspection report (refer to Appendix B, Exhibit 6).
- 4) Mud and sediment with vegetation growing in it was observed to be accumulated in front of the outlet structure. Township staff stated that the concrete low flow channel extended to meet the outlet structure. Vegetation at the outlet was also referenced in the May 2019 inspection report (refer to Appendix B, Exhibit 6).



Photograph 26. View, facing south, of the basin. Note the low flow contained partially frozen moisture.



Photograph 27. View, facing west, of the outlet structure. Note that the concrete channel is not visible due to the vegetation growing in the accumulated mud and sediment in front of the structure. Litter was also present near the outlet.



Photograph 28. View, facing north, of the stormwater basin inlets on the north side of the BMP which allow flow to enter the structure from the Advanced Auto stormwater basin. Note the trash observed at this location.



Photograph 29. View of partially frozen water pooled in front of the outlet from the stormwater basin into the wetland area located east of the BMP. Note trash observed near the outlet.

Location No. 5: Dauberton Park Stormwater Basin

Address/Location: 40.0522, -76.7167

Relevant MCM: Post Construction Stormwater Management

Entry Time: 1:15 PM (EST)

Exit Time: 1:30 PM (EST)

Table 5.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The EPA Inspection Team visited the Dauberton Park stormwater basin, which is owned and maintained by the Township. Township staff stated that the stormwater basin maintains some level of water year-round. The basin has one outlet structure located on the north end of the BMP that discharges to Hartman Run, located to the east of the basin. The basin has two inlets located on the northeastern and southwestern side of the basin respectively that collect runoff from the surrounding apartment complex.

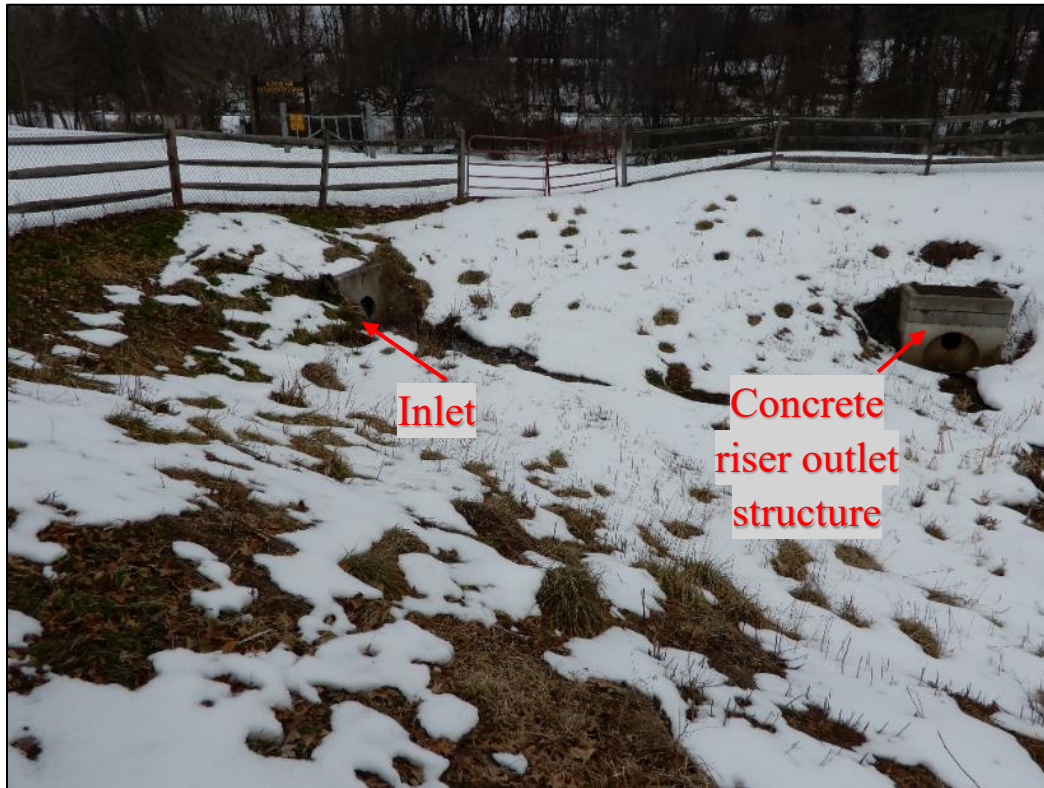
A drainage plan is included in [Appendix B, Exhibit 7](#). A Township inspection of the pond was conducted in May of 2019. The report indicated the pond was overgrown in areas and that groundhog holes should be filled (refer to [Appendix B, Exhibit 8](#)).

Part C.I.B.5.c BMP #3 states that the permittee must, “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.”

Observation 5: The EPA Inspection Team made the following observations related to the Township's post construction stormwater management at Dauberton Park:

- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) The EPA Inspection Team observed an inlet and a concrete riser outlet structure on the northern and northeastern end of the stormwater basin, respectively (refer to Photograph 30). The EPA Inspection Team additionally observed an inlet on the southwestern side of the basin, as well as vegetation and a willow tree growing in the middle of the stormwater basin, away from the embankment (refer to Photograph 31). The removal of vegetation was recommended in the May 2019 inspection report (refer to Appendix B, Exhibit 8). Township staff stated that a third-party contractor performs seasonal maintenance of mowing embankments and cutting cattails.
- 3) The basin discharges to the east into Hartman Run (refer to Photographs 32 and 33). No apparent signs of pollution or sediment were observed in the receiving water.
- 4) The EPA Inspection Team observed a discontinuous plastic pipe leading to the basin from the apartment complex parking lot to the west (refer to Photographs 34 and 35). Township staff stated they were not previously aware of the pipe.



Photograph 30. View, facing east, of one of the basin inlets and the concrete riser outlet structure located on the north end of the stormwater basin.



Photograph 31. View, facing southeast, of the inlet in the southeastern end of the stormwater basin. Also note the vegetation and willow tree.



Photograph 32. View, facing east, of the outfall structure and Hartman Run.



Photograph 33. Additional view of the outfall to Hartman Run.



Photograph 34. View, facing northwest, of the plastic pipe from the apartment complex parking lot leading to the stormwater basin.



Photograph 35. Additional view, facing west, of the pipe shown in Photograph 34.v

Location No. 6: Rentzel Subdivision Detention Basin 1 (sediment basin)

Address/Location: 40.0451, -76.4252

Relevant MCM: Post Construction Stormwater Management

Entry Time: 1:35 PM (EST)

Exit Time: 1:45 PM (EST)

Table 6.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: Rentzel Subdivision Detention Basin 1 was being used as a sediment basin for subdivision construction at the time of the inspection (refer to [Photograph 36](#)). The structure will eventually be converted to a post construction stormwater basin. The EPA Inspection Team did not make observations related to post construction program implementation for this structure.



Photograph 36. View, facing north, of the sediment basin.

Location No. 7: Rentzel Subdivision Detention Basin 2

Address/Location: 40.0764, -76.7171

Relevant MCM: Post Construction Stormwater Management

Entry Time: 1:50 PM (EST)

Exit Time: 2:05 PM (EST)

Table 7.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The Rentzel Subdivision Detention Basin 2 has two inlets located on the southern end of the basin and a concrete outlet structure located on the northwestern side of the basin. The outlet discharges to Musser Run, northwest of the basin.

A drainage plan is included in Appendix B, Exhibit 9.

Part C.I.B.5.c BMP #3 states that the permittee must, “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:

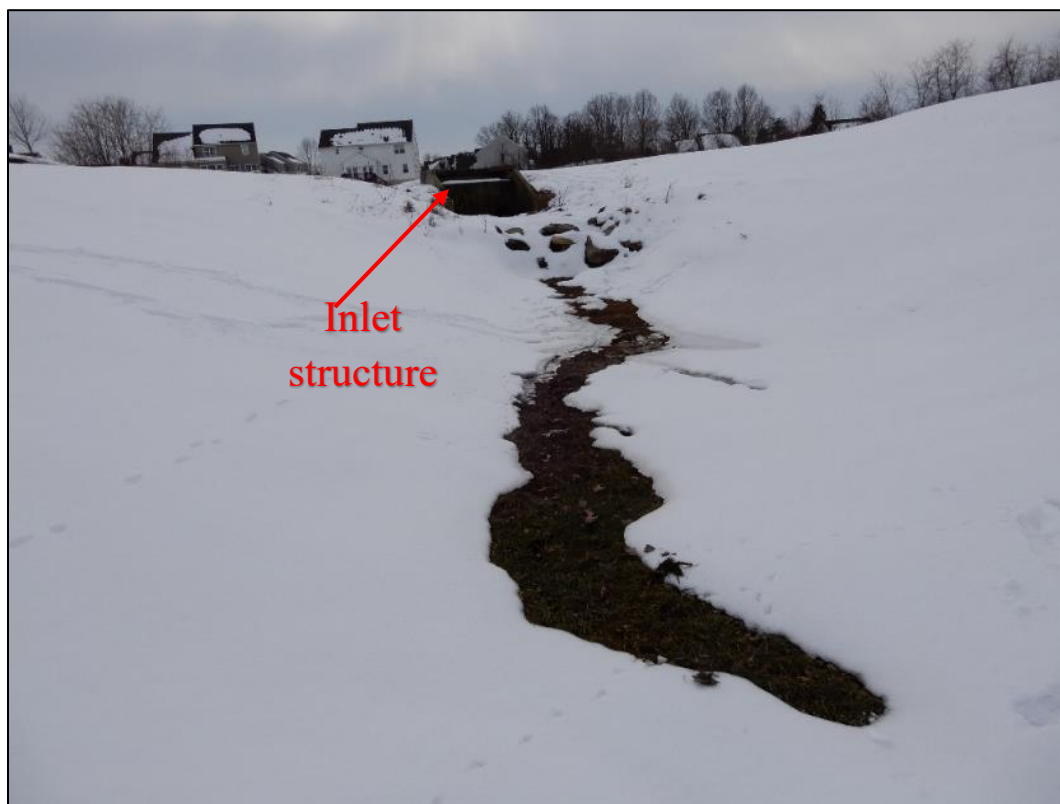
- All PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003.
- The exact location of the PCSM BMP (e.g., latitude and longitude, with street address).
- Information (e.g., name, address, phone 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.”

Observation 6: The EPA Inspection Team made the following observations related to the Township's post construction stormwater management at Rentzel Subdivision Detention Basin 2:

- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) A dual concrete inlet structure was located in the southern end of the basin (refer to Photographs 37 and 38).
- 3) The EPA Inspection Team observed rocks and sediment inside the concrete riser outlet structure (refer to Photographs 39 and 40).
- 4) The EPA Inspection Team observed signs of erosion at the center of the stormwater basin (refer to Photographs 41 and 42).
- 5) The basin discharges to Musser Run. The outfall was not able to be located at the time of the inspection due to the snow (refer to Photograph 43).
- 6) At the time of the inspection, the Township Engineer explained he had not conducted an as-built inspection for the phase of the subdivision project that included Detention Basin 2. The basin was functioning as a post construction stormwater management facility, but the owner had not yet filed proper paperwork to close out the project.



Photograph 37. View, facing south, of the dual inlet structure at the southern end of the basin.



Photograph 38. View, facing southwest, of the dual inlet structure.



Photograph 39. View, facing west, of the concrete riser outlet structure.



Photograph 40. View inside the concrete riser outlet structure. Note the rocks and sediment inside the structure.



Photograph 41. View, facing northwest, of erosion in the center of the stormwater basin.



Photograph 42. Alternate view, facing northeast, of the erosion observed in the center of the stormwater basin.



Photograph 43. View of Musser Run in the vicinity of the basin outfall. The outfall structure was not able to be located due to the snow.

Location No. 8: Rentzel Subdivision Detention Basin 8

Address/Location: 40.0729, -76.7179

Relevant MCM: Post Construction Stormwater Management

Entry Time: 2:10 PM (EST)

Exit Time: 2:30 PM (EST)

Table 8.1. Participants

Name	Title/Affiliation
Byron Trout	Township Engineer
Shane Haugh	Public Works Director
Chuck Schadel	EPA Region 3
Jake Albright	Inspector, PG Environmental
Kelly Davis	Inspector, ERG

Description: The Rentzel Subdivision Detention Basin 8 had one inlet in the southeast end of the basin and one outlet structure in the southwest end of the basin that leads to a stream south of the basin. The basin was put online about two years prior to the inspection.

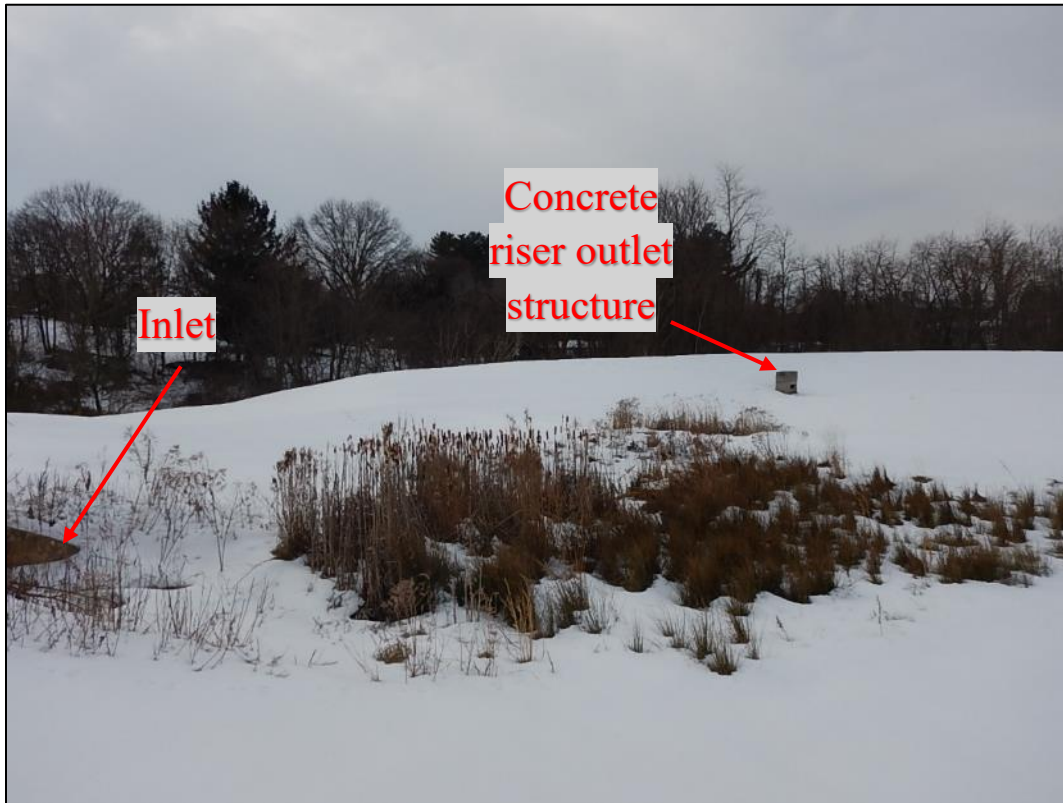
A drainage plan is included in [Appendix B, Exhibit 10](#). A Township inspection of the pond was conducted in May of 2019. The Township inspection indicated the pond was overgrown in areas (refer to [Appendix B, Exhibit 11](#)).

Part C.I.B.5.c BMP #3 states that the permittee must, “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.”

Observation 7: The EPA Inspection Team made the following observations related to the Township's post construction stormwater management at Rentzel Subdivision Detention Basin 8:

- 1) Visual observations were somewhat limited due to snowfall in excess of 3 inches covering the ground.
- 2) The EPA Inspection Team observed one inlet on the southeast end of the basin and one outlet in a concrete riser outlet structure on the southwest end of the basin. The EPA Inspection Team also observed vegetation in the basin at the time of the inspection (refer to Photographs 44 and 45). This same issue was referenced in the May 2019 Township inspection report (refer to Appendix B, Exhibit 11).
- 3) The EPA Inspection Team observed rip rap inside the outlet structure. Rip rap was also present at the outfall to the tributary to Musser Run (refer to Photographs 46 and 47). The EPA Inspection Team observed no excess sediment or additional rip rap downstream of the outfall (refer to Photograph 48).



Photograph 44. View, facing north, of the concrete riser outlet structure, inlet, and vegetation growing in the stormwater basin.



Photograph 45. View, facing east, of the inlet into the stormwater basin.



Photograph 46. View inside the concrete riser outlet structure. Note the rip rap inside the structure.



Photograph 47. View of the outfall to the tributary to Musser Run. Note rip rap was observed at the outfall.



Photograph 48. View, facing northeast, of the tributary to Musser Run, downstream of the outfall.