

CHELTENHAM TOWNSHIP
PUBLIC WORKS
STORMWATER QUALITY
OPERATIONS AND MAINTENANCE MANUAL

2005

OVERVIEW

The purpose of this manual is to provide an overview of the Cheltenham Township Public Works Department and its divisions with a policy and procedures guide for its operations that affect the water quality of waterways that the stormwaters of the Township flow into.

The Township's Stormwater Management Ordinance regulates all activities that could cause pollutants to enter the waterways and requires they be addressed to eliminate or minimize stormwater impacts.

It is intended that this manual be distributed to all new employees, as a refresher to all existing employees, and to all interested persons so they may understand the Township's commitment to water quality.

The Public Works Departments Divisions (Fleet, Highway, Parks, Sewer and Refuse) all play a major role in stormwater quality in the manner in which they conduct their normal daily operations and as role models for the Township residents and contractors who do work in the Township.

The mission of the Public Works Department is to perform their duties in a manner that will help lower pollution levels in waterways through the use of a Pollution Prevention Plan that guides them through the operations and maintenance practices they perform.

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FLEET OPERATIONS

1. Storm Water Inlet/Separator

A stormwater inlet/separator is located in the Public Works Facility parking lot directly in front of garage bay # 4. This inlet collects rainwater that falls on the parking lot and delivers it to a separator tank that separates the water from oils and solids, keeping these pollutants out of the Tookany Creek. It is cleaned out yearly.



2. Vehicle and equipment washing.

All vehicles and equipment will only be washed in areas of the Public Works Facility parking lot that drain to the stormwater inlet/separator or the indoor truck washing bay. Environmentally safe detergents will be used. The only offsite vehicle washing allowed will be at a commercial car wash.

3. Parking of vehicles or equipment that are leaking fluids.

All vehicles or equipment that are leaking fluids must be parked in areas of the Public Works Facility parking lot that drain to the stormwater inlet/separator.

4. Public Works Facility parking lot sweeping.

The Public Works Facility parking lot must be swept weekly. At times of snow removal or leaf pickup season, it may become necessary to sweep the parking lot more often. This keeps excessive amount of debris from entering the stormwater inlet/separator and lowering its efficiency.

5. Vehicle or equipment fluid spills.

In the event of discovery of fluid leaks or spills, they should be immediately contained with drip pans and draining boards to capture the fluids and then be reported to the fleet supervisor. Oil dry is stored in the garage shop next to the rear stairway. This material should be sprinkled

around and over the spill. Clean up of the oil dry will be immediately after the vehicle is moved for repair and can be placed in a trash bag and disposed of in the municipal trash.



6. Parts washing

Parts washing will only take place in the parts washer in the shop. Do not wash parts off with any petroleum solvent in the yard.



7. Secondary Containment for hazardous materials

A secondary containment system is located in the shop for storage of hazardous materials such as used oil drums. When the drums are filled arrangements will be made to dispose of them to a proper facility.



8. Outdoor storage of chemical containers

No outdoor storage of chemical containers (oil cans, antifreeze cans, oil fillers, batteries) is permitted. If chemical containers are stored outside of the garage, such as old batteries, they must be in an enclosed structure that will keep rain off of them and will contain any leakage.

9. Disposal of Hazardous Materials

No hazardous material shall be disposed of by pouring into a storm drain. If you would not drink it, don't dump it.

10. Do not sweep debris into gutters or storm drains

All swept debris must be collected and disposed of in the municipal trash or approved landfill.

11. Daily vehicle inspection

During the daily inspection of each vehicle, inspect for leaking fluids and include in vehicle report for repair.

12. Vehicle and equipment maintenance

All possible maintenance work shall be conducted indoors.

13. Snow removal equipment

Prior to the winter season, all salt spreading equipment will be maintain to operate in accordance with manufactures specifications.

14. Vehicle fueling

Care must be taken to avoid spills while fueling vehicles or any motorized equipment. Do not top off. All spills must be soaked up with oil dry and then the oil dry must be cleaned up. **Do not leave a vehicle unattended while fueling.**

HIGHWAY DEPARTMENT

1. Daily vehicle inspection
During the daily inspection of each vehicle, inspect for leaking fluids and include in vehicle report for repair.
2. Vehicle cleaning
All vehicles and equipment must be washed in an area that flows to the Inlet/separator or in truck wash bay.
3. Equipment fluid leaks
Any vehicle or equipment that leaks fluids must immediately be turned off and any fluid that has leaked must be contained. (Oil dry) Vehicles must not be driven if they are leaking fluids. Notify the Township garage for repair and vehicle transport. After the vehicle is removed the oil dry used for containment must be swept up and disposed of in the Township municipal trash.
During the daily inspection of vehicles by operators the area where a vehicle is parked should be checked for signs of dripping fluid and if present, be reported on the daily vehicle inspection report.
4. Excavations
Whenever ground is dug up care must be taken to avoid dirt being carried into the stormwater system. The following methods are to be used:
 - A. Inlet protection. Silt containment bags will be placed in the closest downhill inlet. Sediment containment fabric and hay bales are also acceptable.



- B. If water pumping is needed the pump must be connected to a silt bag to filter the pumped water.



- C. If digging occurs on a slope and will leave an area that can be eroded by rainwater, a silt fence must be properly placed down slope from the excavation.



- D. For larger earth disturbance projects, such as ball field renovations, an erosion control plan must be made and the requirements of this plan must be checked daily and repaired if needed.
- E. At the conclusion of a digging operation the entire area must be cleaned and swept and all temporary protections removed and disposed of in the Township municipal waste.

5. Snow removal operations

All snow plow/salt spreader operators must be trained on the proper operation and application rates of road salt. Proper operation of the salt spreader should be made after each new load of salt is placed on the truck.

Application of salt should not be made before snow has started to avoid dry salt from being swept off the dry roadway by vehicles.

6. Salt Storage Pile

The entire salt storage pile will be covered by a tarp whenever it is not being actively used in salting operations. This reduces the amount of salt that is washed away by rainwater.

7. Vehicles driving off roadways

Vehicles should not be driven off roadways (into parks) whenever possible and never if the ground is wet. If a vehicle must drive off the road, any dirt that is carried back onto the roadway must immediately be cleaned up, either by street sweeper or broom and shovel, and disposed of at the Waverly Rd. Leaf Site for future disposal to an approved dump site.

8. Street Sweeping

Streets will be swept following each scheduled leaf pickup on the street and at the end of snow removal season. In addition to this, all streets will be swept at least once a year.

High debris and litter streets, such as those in business districts and roads near waterways will be swept on an as needed basis as determined by the Highway Supervisor. Streets that are used for public events, such as street fairs, will be swept immediately following the event.

All debris that is swept up will be placed in a designated area of the Waverly Road Leaf Site for future disposal to an approved dumpsite. The Highway Supervisor will keep records of the total cubic yards of debris disposed.

9. Storm Sewer Inlet Cleaning

All storm sewers will have the inlet covers/grates removed and be cleaned out following the end of leaf removal season.

All debris that is removed will be placed in a designated area of the Waverly Road Leaf Site for future disposal to an approved dumpsite. The Highway Supervisor will keep records of the total cubic yards of debris disposed.

Clogged inlets that cause street flooding will be immediately cleaned out, the debris placed in a truck. The Highway Supervisor will then be notified of the location in order to determine which inlets require cleaning on a semi-annual or more frequent schedule.

10. Township parking lot sweeping
All township parking lots will be swept at the direction of the Highway Supervisor. Inspection of parking lots near public events will be checked following an event to determine the need for cleaning. The Refuse Supervisor will also check Township parking lots for need of cleaning and relay this information to the Highway Supervisor.
11. Sanitary Sewer Overflow Procedures
When any employee sees or is notified of a sanitary sewer overflow, the following procedure must be followed:
 - A. Notify your immediate supervisor and the Sewer Enforcement Officer of the spill.
 - B. Supervisor notifies Public Works Superintendent of spill.
 - C. Public Works Superintendent and Sewer Enforcement Officer inspect spill and determine equipment needed to fix cause of spill as well as contain and clean up spill.
 - D. Sewer Enforcement Officer contacts DEP, telephone # 484-250-5900, and reports spill.
 - E. When cause of spill is fixed and cleanup is complete Sewer Enforcement Officer again contacts DEP to report the problem is fixed.
 - F. An after action report is completed by the Sewer Enforcement Officer documenting incident from first reporting to final contact of DEP.
 - G. The after action report is filed in the Building and Zoning Department with a copy being kept at the Public Works Facility.
12. Hazardous Material Spills
Discharge of fluids from vehicles or equipment that can be contained and cleaned up with less than 1 bag of oil dry will be cleaned up by Highway Department personnel. If the amount spilled cannot be cleaned up with 1 bag or less of oil dry, or if the spill threatens to enter any stormwater inlet or waterway, the police should be notified so they can contact the closest fire department.
Any spill of unknown materials that could be hazardous should immediately be reported to the Police Department who will notify the appropriate agency to deal with the spill.
13. Illegal Dumping – Trash or yard debris
Report all instances of this type of illegal dumping to the Refuse Supervisor. The Refuse Supervisor will arrange removal and will tabulate this information and if necessary, contact the Township Police to attempt to apprehend offenders.
14. Illegal Dumping – Oil or hazardous materials
Report all instances of this type of dumping to the Highway Supervisor. The Highway Supervisor will evaluate the situation and arrange containment and clean up or elevate the clean up using the procedures of # 12 above. The Highway Supervisor will record the incident for reporting in the MS 4 Annual Report.
15. Truck Hauling
All trucks hauling loose materials (leaves, stone, dirt, etc.) must have the load covered with a tarp when traveling over roadways.

16. Debris clean up of waterways

When debris or trash is cleaned out of waterways the Highway Supervisor will be notified and will notify the adjacent property owner that dumping into waterways is illegal. (Stormwater Pollution Found In Your Area door hangar issued) Addresses of dumping will be tabulated by the Highway Supervisor and citations issued for repeated offenses.

PARKS DEPARTMENT

1. Daily vehicle inspection
During the daily inspection of each vehicle, inspect for leaking fluids and include in vehicle report for repair.

2. Fertilizers and Weed Killers
Wherever possible, the use of environmentally friendly fertilizers and weed controls will be purchased.

The manufactures application rate will not be exceeded during application.

Only personnel properly trained and licensed may apply commercial grade weed killer.

All fertilizers and weed killers will be stored in the parks garage.

3. Grass Cutting
When cutting grass, discharge from the mower shall not be directed at any streets or waterways. After each mowing, any adjacent street or drive will be blown clean, back onto the grassy area.

If excessive amounts of animal waste are found during mowing, notify the Parks Supervisor who will work with the Parks Director to have the area posted with "Clean Up After Your Pet" signs.

4. No-Mow Zones
Some areas of grassland along streams will be designated no-mow zones. A no-mow zone is a strip of grass along a stream that is planted with specific grasses that are allowed to grow long. They function as a filter of rainwater to remove debris and impurities before they reach the stream. These areas will be designated by the Parks Supervisor and should not be cut.

5. Stream Inspections
Whenever a Township crew mows grass in a park with a stream in it, the crew leader will inspect the stream for debris, trash or un-natural contaminates. Debris will be removed from the stream and piled up for removal. The Parks Supervisor will be notified in order to arrange removal of the debris. If the debris was dumped in the stream a record will be kept by the Parks Supervisor, and if necessary the Township Police will be notified in an attempt to apprehend illegal dumpers.

If any pipes emptying into the stream appear to contain anything other than rainwater, the Sewer Enforcement Officer will be notified immediately.

6. Trash Receptacle Inspection
Whenever a Township employee is in a park and sees a full trash receptacle they will notify the Refuse Supervisor so that arrangements can be made for emptying.

7. Sidewalk snow removal
Applications of snow melting materials will be done at uniform rates so they do not form piles.

Sno-Melt (Calcium Chloride) and or Urea will be used for ice control on sidewalks. Road salt will not be used on sidewalks.

8. Pool emptying or backwashing
Before any pools are emptied the water must be checked to have a chlorine level of less than .01 mg./L and a PH of 6.5 to 8.5.

Backwashing of filters can be done onto fields but will not be allowed directly into streams.

9. Debris clean up of waterways
When debris or trash is cleaned out of waterways the Parks Supervisor will be notified and will notify the adjacent property owner that dumping into waterways is illegal. (Stormwater Pollution Found In Your Area door hangar issued) Addresses of dumping will be tabulated by the Highway Supervisor and citations issued for repeated offenses.

10. Inspection & Maintenance of Township owned stormwater facilities.
All facilities will be inspected in the spring and fall by the Parks Supervisor to insure proper operation. Maintenance will be scheduled and documented by the Parks Supervisor.

REFUSE DEPARTMENT

1. **Daily vehicle inspection**
During the daily inspection of each vehicle, inspect for leaking fluids and include in vehicle report for repair.
2. **Spill Clean Up**
All refuse trucks will be checked by the operator before leaving the yard for brooms and shovels for spill clean ups.

Crews will pick up any trash they spill during their routes.

If spills are liquids, the Refuse Supervisor will be notified in order to make a determination if they should be cleaned up with oil dry. The oil dry will be cleaned up after application.
3. **Restricted Materials**
If paints, oils or other un-acceptable trash is noticed in a trash receptacle it should not be picked up. Notify the Refuse Supervisor so that he can inform the resident of regulations.
4. **Parks Trash Receptacles**
If any trash receptacles in parks are noticed to be full during travels through the Township they should be immediately emptied.
5. **Co-ordination with Community Clean Up Programs**
The Refuse Supervisor will work with Community Clean Up Programs to make sure they have sufficient supplies to achieve their goals. Pick-up of the refuse they collect will be done as soon as possible following conclusion of the cleanup.

SEWER DEPARTMENT

1. **Daily vehicle inspection**
During the daily inspection of each vehicle, inspect for leaking fluids and include in vehicle report for repair.

2. **Sanitary Sewer Overflow Procedures**
When any employee sees or is notified of a sanitary sewer overflow, the following procedure must be followed:
 - A. Notify your immediate supervisor and Hank Wacker, Sewer Enforcement Officer, of the spill.
 - B. Supervisor notifies Public Works Superintendent, Richard Young of spill.
 - C. Public Works Superintendent and Sewer Enforcement Officer inspect spill and determine equipment needs to fix cause of spill as well as contain and clean up spill.
 - D. Sewer Enforcement Officer contacts DEP, telephone # 484-250-5900, and reports spill.
 - E. When cause of spill is fixed and cleanup is complete the Sewer Enforcement Officer again contacts DEP to report the problem is fixed.
 - F. An after action report (see attachment B) is completed by the Sewer Enforcement Officer documenting incident from first reporting to final contact of DEP.
 - G. The after action report is filed in the Building and Zoning Department with a copy being kept at the Public Works Facility.

3. **Sewer Overflow Cleanup Procedure**
The following procedure will be followed when cleaning up overflows of the sanitary sewer system:
 - A. Clearing of the blockage causing the overflow.
 - B. If the overflow is threatening to enter a stream or stormwater inlet, lime will be spread in the flow path to the stream or inlet and be reapplied as necessary to sanitize the flow as much as possible.
 - C. All solids will be collected and disposed of in the Township Municipal Waste.
 - D. Lime will be reapplied to the entire area that was affected.
 - E. The Township Sewer Enforcement Officer will inspect the area and approve the cleanup.

4. **Sewer Cleaning**
During scheduled maintenance of cleaning sewer lines, the following procedure will be followed:
 - A. A catch basket will be placed at the exit pipe of the lower manhole.
 - B. The sewer line will be cleaned from the low manhole to the upstream manhole.
 - C. The material captured in the catch basket will be stored in a watertight container and transported to disposal in the Township Municipal Waste.

5. **Sewer Backup Trouble Spots**
All known trouble spots will be inspected monthly and cleaned each three months or sooner.

Township of Cheltenham

8230 Old York Rd, Elkins Park, PA. 19027

Truck No. _____

Highway & Towed Equipment

Pre & Post – Trip Inspection

Beginning

OK

Before Starting Support

1. Check Underneath for fuel, oil and water leaks
2. Flats and loose or broken lug nuts (driver's responsibility)
3. Springs and hinges – Unit Leaning to one side
4. Shocks – Broken
5. Leaks around hubs
6. Tread Wear
7. Check all lights – Turn signals, 4 ways, parking and back-up lights

End of Day

OK

Walk Around Inspection

1. Fresh accident damage – Report to supervisor before moving unit
2. Mirrors – Replace if broken
3. Windshield – Cracked or chipped
4. Lens Covers for lights – Broken or missing
5. Check salt spreaders, snow plow & snow chains (seasonal)
6. Check interior of dump bodies

Raise Hood

1. Oil Level: Number of quarts added?
2. Water level – Reservoir should be at least ½ full: No. of gal. added?
3. Automatic transmission fluid – Fluid should be up to full mark with engine running: Number of quarts added?
4. Power steering fluid – Up to full mark and correct fluid added. Check with mechanic: Number of quarts added?
5. Visually inspect belts and wiring
6. Fuel support unit – Every night
7. Hydraulic fluids – Number of quarts added?

*Note: If any fluids are low, fill before leaving yard.

Start Engine

1. All gauges – Make sure they are working
2. Dash lights
3. Emergency equipment – Flares or reflectors, fire extinguisher, drivers license, owner's and ID card.
4. Washers and wipers
5. Horn
6. Emergency Brake

Beginning

End of Day

OK

Start Engine (Continued)

OK

- | | | |
|-------|---|-------|
| _____ | 7. Gas, brake and clutch pedal pads – Note: If missing or excessive wear. | _____ |
| _____ | 8. Seat and seat belts installed by the manufacturer. | _____ |
| _____ | 9. Indicator for automatic transmission | _____ |
| _____ | 10. Neutral safety switch | _____ |
| _____ | 11. Door handles and locks in working order | _____ |
| _____ | 12. Window Regulators | _____ |
| _____ | 13. Window in closed position at end of day. | _____ |
| _____ | 14. Exhaust leaks | _____ |
| _____ | 15. 2-Way radio check | _____ |

Driver’s Signature: _____ **Date:** _____

Supervisor’s Signature: _____ **Date:** _____

SUBJECT TO **DISCIPLINARY ACTION** IF SHEET IS NOT TURNED IN **DAILY**.

Important: No scrap metal or other metal between cab and body at any time. Cab must be cleaned out daily (throw away cups, papers, etc.). **Notify Superintendent** upon return to the yard due to breakdown.

Attachment B

SANITARY SEWER OVERFLOW REPORT

Date: Time: Sewer Map #:
Location:

Problem:

Fix:

Quantity of overflow in Gals.:
Township Sewer System Problem: Property Owner Sewer System Problem:

First Reported by:

Sewage Enforcement Officer Notified: Date: Time:
Public Works Superintendent Notified: Date: Time:

DEP Notified (484-250-5900): Date: Time: Person Contacted:

DEP Notified when fix: Date: Time: Person Contacted:

Comments:

Form filled out by:

Sanitary Sewer Overflow (SSO) Report to PADEP

1.	Date, Name, Phone # of person completing this report	Date: Name: Phone #:	Signature:
2.	Your organization name and address?		
3.	Date found and <u>specific</u> location of SSO?		
4.	How was SSO discovered? By who?		
5.	Start and end time of SSO? (actual or estimated)		
6.	Date, time and name of person who notified PADEP of SSO?	Date: Name: Time:	
7.	Description and actual or estimated volume of SSO?		
8.	Where, <u>precisely</u> , did SSO go? (land, roadway, basement, swale storm sewer, creek, etc.)		
9.	What caused SSO? How was it stopped?		
10.	Describe the extent of contamination and how it was cleaned up		
11.	What actions will be taken to prevent a re-occurrence? When?		
12.	Other Comments?		