



Operation & Maintenance for Municipal Operations

Vehicle Fueling

Place overfill prevention equipment on Underground Storage Tanks (USTs). Watch the transfer constantly to prevent overfilling and spilling (NOTE: this is not Act 167 reimbursable)

Discourage "topping off" of fuel tanks through training and posting signs

Follow Department of Environmental Protection (DEP) regulations and guidelines.

Avoid cleaning fueling areas with running water. Consider using a damp cloth on the pumps and a damp mop on the pavement 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

Vehicle 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 off 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

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 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 oil filters; ask your oil supplier or recycler about recycling oil filters.

If necessary, any large leaks on equipment should be stored in the wash bay where leaking material will be collected in the sanitary sewer lines.

Vehicle Washing

If possible, utilize commercial car washes. They typically recycle washwater or direct it to a wastewater treatment plant.

Create and use designated cleaning areas, preferably indoors where wash wastewater can be recycled or directed to treatment. If indoor washing is not possible, create specific areas to wash cars 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

Convert to use of phosphate-free biodegradable detergents 3900-PM-WM0100h 12/2002
Pump soapy water from car washes into a sanitary sewer drain. If pumping into a drain is not feasible, pump car wash water onto grass or landscaping to provide filtration

Be sure to check state and federal requirements regarding use of the sanitary sewer system.

Storm water Facility Maintenance

Inspect storm water detention/retention facilities and other BMPs:

Follow the inspection schedule developed during Year 2. Conduct planned maintenance activities.

Inspect and clean catch basins:

Inspect each catch basin at least once annually to determine if it needs cleaning and note any repair needs. If the depth of deposits is greater than or equal to one-third the depth from the basin bottom to the invert of the lowest pipe or opening into or out of the basin (EPA, 1999), have the catch basin cleaned as soon as possible. Inspect catch basins in which debris significantly exceeds the one-third depth standard once annually.

Dispose of sediment and debris removed from catch basins into debris containment bin, located at 330 South Osmond Street, State College Pa. 16801, as this may be classified as hazardous waste. It will require chemical analysis to determine appropriate disposal techniques.

Street Sweeping

Employ measures for street sweeping practices

Sweep residential streets on an average of nine (9) times a year and the downtown business district once (1) weekly while removing sediment, debris and other pollutants from road and parking lot surfaces.

Alternate the shifts of employees and regulate parking in densely populated areas to ensure that all locations can be swept.

Currently the street sweeper is scheduled 2am-10am, Monday through Friday as to accommodate 2am-6am parking restrictions.

Deposit any debris determined to be hazardous into debris containment bin, located at 330 South Osmond Street, State College Pa. 16801, and then transfer and properly dispose of debris at Centre County Refuse and Recycling Authority.

Streets

Storm Sewer Maintenance

Inspect storm water detention/retention facilities and other BMPs:

Inspect and clean catch basins:

Inspect each catch basin at least once annually to determine if it needs cleaning and note any repair needs. If the depth of deposits is greater than or equal to one-third the depth from the basin bottom to the invert of the lowest pipe or opening into or out of the basin (EPA, 1999), have the catch basin cleaned as soon as possible. Inspect catch basins in which debris significantly exceeds the one-third depth standard once annually.

Inspect and repair if necessary, storm sewer pipes prior to resurfacing and reconstructing of streets as a proactive approach to keep the infrastructure functioning properly.

Dispose of sediment and debris removed from catch basins and storm-septors in a proper manner, as this may be classified as hazardous waste. It will require chemical analysis to determine appropriate disposal techniques.

Sanitary Sewer Maintenance

Routinely clean and remove debris from all sanitary sewer mainlines within the sanitary sewer infrastructure once a year.

Respond to all sanitary sewer backup within the Public Right away and repair any defective lines.

Report any sewer spills to Department of Environmental Protection with a description of date, time, location, what caused the spill, amount of spill and method of cleanup of spill. Upon request of DEP follow up with an incident letter describing incident.

Clear and maintain sanitary sewer utility right of ways once yearly ensuring proper access of right of way.

Inspect and repair if necessary, sanitary sewer pipes prior to resurfacing and reconstructing of streets as a proactive approach to keep the infrastructure functioning properly.

Material Transfer (Refuse)

All municipal refuse collection vehicles conform to the Waste Transportation Safety (Act 90).

Wetlands

Walnut Springs Wetland Action Plan

Normal flow, Low flow, pre- and post-storm events

Operation during normal stream flow:

Inlet pipe open

Outflow pipe closed

Maintain 2 or 3, 4X6s in weir opening, adjust to maintain steady water flow

Clean inlet pipe and stone filter once a year in late spring or early summer

Check gates, pipe openings and weir once a month

Operation during low stream flow:

Inlet pipe open

Outflow pipe closed

Remove all 4X6s in weir opening

Check gates, pipe openings and weir once a month

Preparation for pre-storm event:

Pavement Management Evaluation System

The selection of streets to be reconstructed or resurfaced is based on a Pavement Management Evaluation System which is completed every two years. The rating system consists of several elements, such as cracking, curb condition, rutting, potholes, drainage, patching, ride quality, and traffic volume. The sum of these elements (subtracted from 100) establishes the PCI (Pavement Condition Index) score for each street section. The street sections are then mathematically ranked from worst to best on the PCI score (from 0 -100) and this score then forms the basis for future maintenance. The worst street sections then receive a more in-depth review as to need for curb work, utility work or "in fact" whether the street can be salvaged by resurfacing. Once identified, streets rated "Serious", "Very Poor" or "Poor" are recommended for improvement(s) in the 5-year CIP Reconstruction or Resurfacing list. The amount of work recommended is limited to the number of street sections that the budget can afford.

Reference: Pavement Condition & Improvement Report October-November 2013

Snow Removal/Deicing

Reference: Anti-Skid & Snow Removal Procedures for Winter of 2013-2014

Specifically, we adhere to the National Salt Institutes recommendations and guidelines for salt applications.

Right of Way Maintenance

Sanitary sewer right of way maintenance is performed by Public Works staff clearing areas of overgrown vegetation and trimming trees once yearly.

The [State College Borough Code of Ordinances, Chapter IX, Part C](#), requires grass and/or weeds (noxious vegetation) to be controlled so as not to exceed a height of 6 inches, conceal any solid waste, or produce excessive pollen during the growing season: April 1 to October 31. The following requirements must be met to be in compliance with the Grass and Weed Ordinance:

Residents are required to obtain written permission from the Borough's Public Works Department before placing anything in the area within the right of way between the sidewalk and the curb (Garden Plot), other than grass such as vegetation, crushed stone, bricks or any other paving material and to maintain this area per [State College Borough Code of Ordinances, Chapter IX, Part C](#).

The parking of motor vehicles on lawn, landscaped areas or outside authorized parking areas is expressly prohibited in all areas (including private property) of the Borough. Questions regarding lawn parking violations should be directed to the Parking Department at 814-278-4769 and questions regarding number of spaces and authorized areas should be directed to the Zoning Officer at 814-234-7190.

Leaf, Yard Debris Pickup and Disposal

Curbside leaf collection is offered to Borough residents during the fall leaf collection season every other week and during the spring leaf collection season every week. Winter and summer months, leaves can be deposited in the organics recycling cart for collection.

Yard debris collection is provided to all residential refuse customers on a weekly basis via organics collection cart, with items larger than 2 inches in diameter being collected by request unless a holiday falls within a week and that will cancel bulk collection for that week.

Leaves and Yard Debris are hauled to the State College Boroughs' Composting Facility (110 Hawbaker Industrial Drive) to be processed into mulch and compost.

Close all inlets (leave top card out of water flow devise)

Open outlet

Check and clear gates, pipe openings and weir for obstructions and problems

Decision to prepare for storm made during normal working hours if possible

On call supervisor should contact Alan Sam, Amy Kerner, Eric Brooks or Tony Marusiak if unanticipated storm occurs after hours. Maintenance and inspection reports to be completed by Street Department personnel.

Operation for post-storm event:

Open inlet pipe

Close outflow pipe

Insure that 2 or 3, 4X6s in weir opening

Check gates, pipe openings and weir for obstructions or problems

Immediately repair any erosion

Post-storm inspection should be performed within two working days following end of storm

Westerly Parkway Basin/Wetland Action Plan

This facility is to remain unlocked 24/7 during normal weather conditions although it is closed to the public between dusk and dawn similar to regulations in other parks. Signage near both entrances indicates that the Center is closed dusk to dawn and will be locked prior to and during storm events.

Normal Operation

Gates at both entrances are to be unlocked and in the open position.

Check and clear debris from outflow pipe/grate once a month.

Mow grass outside of fences as needed to maintain a height of 6" or less.

Mow grass adjacent to woodchip trail and on level area inside of fence adjacent to the sidewalk as needed to maintain a height of 6" or less. Check for and fill in groundhog holes within at least three feet of trails.

Mow bottom of basin between gravel trail and lower wetland at least once a year during the dormant season.

Remove undesirable woody vegetation on bank once a year.

Collect litter that has accumulated within and near the facility once a month

Pre and Post Storm Operation

The Operations Manager or his designee shall make the decision to prepare for a storm event during normal business hours if possible.

On-call Supervisor is responsible for locking the gates if an unanticipated storm occurs on the weekend or after normal business hours.

Gates at both entrances are to be locked once the facility is cleared of pedestrians when more than one inch of rain or flooding is predicted. Gates protecting the inflow pipe shall be unlocked and secured in an open position.

Gates are to remain locked following a storm until water is no longer within 10' of gravel trail (Not including puddles). Close and lock gates protecting the inflow pipes when facility is opened.

If gates are locked prior to the weekend or a holiday they may remain locked until the next regular business day.

Within 72 hours after the end of a storm, the outflow pipe/grate shall be inspected and cleared of debris and any erosion to the woodchip or gravel trail is to be reported or repaired.

Maintenance/ Storage Yard

Storage of all loose material is under roof including limestone chips, quarry waste and rock salt.

Salt Brine storage tank has 110% containment system in the event of a leak.

All equipment is washed within a bay that drains to an oil separator that is connected to the sanitary sewer line.

Storage garage roof drains deposit into a rain water collection tank which is reused for sanitary sewer cleaning/ maintenance.

Filtering Manhole Maintenance

Units are inspected and cleaned if necessary every 6 months. Once the sediment depth reaches 15% of the storage capacity crews then clean and dispose of sediment and debris in a proper manner, as this may be classified as hazardous waste. It will require chemical analysis to determine appropriate disposal techniques.

Rain Gardens

In the spring clean-up of the rain gardens is done by removing any dead material and silt built up and any other material that may block the flow of water that has gathered throughout the winter months. During the growing season crews remove any dead material and weed the rain gardens.

In the fall crews remove the dead vegetation and silt build up in the area.

In some cases, it is necessary to remove some of the rocks which line the garden to properly clean leaves and silt from the area.