

STANDARD OPERATING PROCEDURE POLLUTION PREVENTION AND GOOD HOUSEKEEPING

2951 GREENFIELD RD, DPW COMPLEX

PREPARED FOR:

THE CITY OF DEARBORN
16901 MICHIGAN AVE, DEARBORN, MI 48126



MARCH 2019

SECTION A – PURPOSE

The Michigan Department of Environmental Quality (MDEQ) National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Phase II Stormwater Discharge Permit Application requires a description of current and proposed BMPs to meet the minimum control measure requirements for the Pollution Prevention and Good Housekeeping Program to the maximum extent practicable to prevent or reduce the discharge of pollutants from municipal facilities and operations. The following standard operating procedure is intended for the 2951 Greenfield Rd DPW Complex, which has been deemed as a high priority based on the operations that are conducted at the site.

SECTION B – FACILITY ASSESSMENT AND PRIORITIZATION

The MDEQ NPDES Phase II Stormwater Discharge Permit Application requires a standard operating procedure (SOP) for identifying the structural and non-structural stormwater controls implemented and maintained to prevent or reduce pollutant runoff at each facility with the high potential for pollutant runoff. DPW Complex was assessed for its potential to discharge pollutants to the waters of the state and as deemed a medium priority based on the following applicable criteria:

1. Amount of urban pollutants stored at the site (i.e. sediment, nutrients, metals, hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria, or other site-specific pollutants)
2. Potential for polluting activities to be conducted outside (i.e. vehicle washing)

Based on these criteria, the DPW Complex has been deemed a high priority site which has prompted the need for a site specific standard operating procedure to prevent or minimize the potential for pollutants from entering surface waters of the state as outlined in the NPDES permit application. Biweekly maintenance and inspection of site storm water management and control devices will be conducted by DPW staff to prevent and reduce pollutant runoff.

SECTION C – INVENTORY AND ASSESSMENT

The following is an inventory and assessment of stormwater controls (i.e. catch basins, detention basins, etc.) and facility operations that occur on site.

- Material Stockpiles (7)
- 6 Yard Dumpster (4)
- 4 Yard Dumpster (2)
- 15,000-gal Unleaded UGST (1)
- 15,000-gal Diesel UGST (1)
- 13,000 ton Salt Storage Structure (1)
- 5,500 gal Brine Tank (1)
- 1,200 gal Brine Mixing Tank (1)
- 1,500 tons Sand Storage Structure (1)
- Catch Basins (29)

- Detention Basin(1)
- Rain Garden (3)

C.1 Inventory and Description of Materials and Activities

The 2951 Greenfield Rd. DPW Complex consists of seven (7) stockpiles of various sizes, vehicle maintenance, and general storage. Municipal activities that occur at the facility include the following:

- Fuel Storage and Fueling
- Maintenance and Cleaning of Vehicles and Equipment
- Salt Storage and Loading
- Calcium Chloride Storage
- Brine Tank and Mixing Tank
- Street Sweeper Dump Pit
- Stockpiled Materials

SECTION D – ROAD, PARKING LOT, AND SIDEWALK MAINTENANCE

Road, parking lot, and sidewalk maintenance activities includes pothole repair, sidewalk repair/replacement, and curb and gutter repair. These services are addressed by DPW field staff as determined in the field on an as needed basis. Materials are purchased in quantities as needed to reduce waste. Left over materials are stored in designated stockpile areas at the 2951 Greenfield site. In cases where a contractor is retained to perform these activities, a City representative is on site to oversee the work and ensure that left over material, concrete washout, and other associated pollutants are disposed of properly. Disposing of concrete washout and other excess repair materials into the storm sewer is strictly prohibited by the City.

D.1 Stockpiled Materials

Materials that are stockpiled at this location include topsoil, sand, gravel, stone, slag, construction fill dirt, wood chips, brush and firewood, asphalt and concrete as needed. All stockpiles have perimeter controls in place to prevent erosion which are comprised of precast concrete blocks and/or silt fence that are positioned to effectively prevent erosion of the stockpile.

SECTION E – FUEL STORAGE AND FUELING

The DPW Complex currently has one (1) 15,000-gal UGST for unleaded fuel and one (1) 15,000-gal UGST for diesel fuel. Part 5 Rules indicate that fuel storage areas “shall be designed, constructed, maintained, and operated to prevent the release of polluting materials through sewers, drains, or otherwise directly or indirectly into any public sewer system or to the surface or groundwater’s of this state.” The City has met this requirement through the proper storage and pollution prevention methods currently in place. These include the following:

- The unleaded and diesel fuel tanks are 15,000-gallon tanks that are comprised of fiberglass and are doubled walled.

- All bulk liquid tanker delivery vehicles will only be allowed on site after contact has been made with city personnel and it has been confirmed that these personnel will be present at the delivery point.
- A spill kit will be stationed in close proximity to the storage tanks at all times.

A fueling log is maintained to track and record the volume of fuel dispersed for City vehicles and equipment. Completion of these logs is mandatory and used as secondary control to track the volume of fuel stored in the tanks.

All other vehicle fluids are stored indoors. Floor drains within the DPW building are connected to the sanitary sewer. Vehicle maintenance activities, including washing, are conducted indoors.

SECTION F – ON SITE WASTE DISPOSAL

A total of four (4) 6 yard dumpsters and two (2) 4 yard dumpsters are kept on site for office trash and construction refuse. The dumpsters are not used for the disposing of hazardous materials. The lids of the dumpsters are to be closed at all times.

F.1 Household Hazardous Waste

The City relies on the services of the Green for Life, USA (GFL) for collaborative household hazardous waste recycling events <https://gflusa.com/>

SECTION G – VEHICLE WASHING AND MAINTENANCE

Vehicle maintenance activities are conducted by DPW staff for the City of Dearborn's entire vehicle fleet, but no vehicles in use by the police and fire departments. Maintenance activities conducted by DPW staff include, but are not limited to, oil changes and other vehicle fluids, brakes, tune ups, and general repair tasks. A maintenance log is maintained by DPW staff to document all vehicle maintenance and repair activities.

Vehicle washing activities is conducted indoors in a designated area inside the main DPW building. The area is sloped inward to contain wash water to prevent wash water from flowing outside of the designated washing area. Wash water is collected by a catch basin located within the vehicle washing area and is connected to the sanitary sewer.

Used oil is stored in 500-gal above ground tank. When full Buck's Oil Company is contacted to pump down the tank and dispose of properly.

SECTION H – WINTER OPERATIONS

The City DPW field staff applies rock salt and brine as part of their deicing procedures during the winter months. Bulk storage of road salt and brine is located at the 2951 Greenfield Rd. DPW Complex.

H.1 Salt Storage and Loading

The City of Dearborn has one (1) salt storage structure, which consists of a salt dome with a capacity of 13,000 tons. The floor of the salt dome is comprised of an impervious cement pad. The structure is not located within 50 feet of a lake shore, stream bank, or wetland, nor is it located in a 100-year floodplain.

Loading of salt at both structures takes place at the structure entrance on a paved surface. The loading area is maintained after each use, with excess salt being swept back inside the storage facility. There are no catch basins located near the salt storage structures.

H.2 Brine Storage and Loading

The City of Dearborn has one (1) 5,500-gallon brine storage tank and one (1) 1,200-gallon brine mixing tank with secondary containment that is located on an impervious cement pad. Vehicles travel down a paved approach for loading. There are two (2) catch basins located 65' and 70' from the brine storage tanks that have been disconnected from the storm water sewer and are now conveyed to the sanitary sewer system.

Salt and brine storage and application training is performed annually to DPW staff. Staff has been trained to minimize any track-out from loading operations. Salt application vehicles are calibrated before the winter season.

SECTION I – NON-STRUCTURAL CONTROLS

The City of Dearborn is committed to employing preventative maintenance practices through the use of several nonstructural controls to prevent stormwater pollution. These nonstructural controls are everyday types of activities undertaken by employees at the facility. The non-structural controls implemented at the 2951 Greenfield Rd DPW Complex are as follows:

I.1 Routine Inspections and Good Housekeeping Procedures

Preventive maintenance involves the regular inspection, testing, and cleaning of facility equipment, vehicles, and operational systems. DPW supervisors meet with DPW field staff on a daily basis to discuss daily assignments and objectives. A routine inspection is conducted by facility staff during site walkthroughs during normal operations activities on a bi-weekly basis. The purpose of these inspections is to identify and prevent conditions that could lead to stormwater pollution. A log of corrective actions will be kept on file using the City's computer system.

Staff inspects all vehicles consistent with Commercial Driver's License Procedures, and performs detailed vehicle inspections every month. Completed vehicle maintenance records and fueling logs are kept on file at the DPW facility.

Part 5 rules also require surveillance of polluting materials. The routine inspections will include this information for the salt storage and fueling areas.

I.2 Comprehensive Site Inspections

The comprehensive site inspection will include the areas and equipment identified in the preventive maintenance program, good housekeeping procedures, a review of the routine preventive maintenance reports, and any other paperwork associated with this SOP. All DPW related activities will be evaluated during the comprehensive inspection. In contrast to the routine inspections, comprehensive inspections will focus on areas that have a reasonable potential for significant materials to contaminate stormwater runoff. The comprehensive site inspection for DPW areas will be conducted every six (6) months which generally coincides with a planned cleaning of the entire facility. Documentation of the comprehensive site inspection results will be prepared and kept on file.

I.3 Employee Training Program

Employee training programs will be implemented to inform appropriate personnel at all levels of responsibility of safety, environmental impacts, and good housekeeping practices. The standard operating procedure for employee training can be found in the City's general Pollution Prevention and Good Housekeeping Standard Operating Procedure.

SECTION J – PROCESS FOR REVISION

This procedure shall be reviewed once per permit cycle by the Stormwater Manager for any updates to streamline the requirements.