## **Purpose**

The City of Stoughton (City) has prepared the following Stormwater Pollution Prevention Plan (SWPPP) to provide the status of the City's Public Works/Parks Department building. This report is prepared in compliance with the conditions of the NR 216 permit pursuant to Part II, Section F.7, of Wisconsin Pollutant Discharge Elimination System (WPDES) Permit Issuance No. WI-S050075-2. This report provides information related to the daily operations and maintenance activities for the Public Works Department facility.

#### A. Site Location and Contact Information

Name of Facility: Stoughton Public Works/Parks Department Building

Facility Address: 515 S 4th Street, Stoughton, WI 53589

Facility Contact: Brett Hebert

Title: Street Superintendent

Telephone: (608) 873-6303

#### B. Air Photo/Map of the Yard

Attached Figure F-1 includes the following:

- 1. Locations of major activities and storage areas.
- 2. Identification of drainage patterns and potential stormwater runoff source and discharge areas.
- 3. Identification of any wetlands and/or waterways on-site or nearby.
- 4. Identification of Municipal Separate Storm Sewer System (MS4) connections and where this portion of the MS4 system drains.

#### C. Overview

This SWPPP covers the operations at the City of Stoughton's Public Works/Parks Department facility. This SWPPP describes the facility's and associated operations, identifies potential sources of stormwater pollution, recommends appropriate best management practices (BMPs) or pollution control measures to reduce the discharge of pollutants in stormwater runoff, and provides for periodic review of this SWPPP with the annual report. The Public Works Department has planned to move locations in 2018. The recommendations stated in this plan are intended to be incorporated into the design of the new site. If the move to the new location is delayed, the City should implement the recommendations herein at the current location.

The primary goal of the stormwater permit program is to improve the quality of surface waters in the City's MS4 by reducing the amount of pollutants potentially contained in the stormwater runoff. The purpose of this SWPPP is to provide the following:

- 1. Identification of potential sources of stormwater and non-stormwater contamination to the MS4 system from the facilities.
- 2. Identification of and recommendation of appropriate "source area control" BMPs designed to reduce or prevent stormwater contamination.
- 3. Identification of and recommendation of "stormwater treatment" BMPs to reduce potential pollutants within contaminated stormwater prior to discharging to the MS4 system and to Waters of the State.

## D. Information

1. Inventory of Potential Sources of Contamination at the Public Works/Parks
Department Facility

The following have been identified as potential sources of contamination at the Public Works/Parks facility.

- a. Salt storage shed—The City's deicing and snow removal operations are described in Section 3.01 F. 4. and Table 3.01-2. The City applies salt to local roads to improve driving conditions. The salt is delivered in bulk to the site and loaded into the salt storage shed. The material is covered in the shed but is exposed to the elements during delivery.
- b. Used oil- One 300 gallon aboveground plastic storage tank stores used motor oil. The waste oil tank is protected and enclosed within a steel structure. Waste oil is removed from the tank by a private contractor every eight to ten months.
- c. Used oil filter container—Used oil filters are disposed of in a designated container. The oil filters are drained for one to two weeks and then disposed of by a licensed disposal company.
- d. Exterior materials storage area—A number of materials are stored on the site in uncovered areas of the parking lot. These include stone aggregate, wood chips, steel street sign posts, cast iron castings, electronic recyclable equipment, and miscellaneous equipment.
- e. Enclosed materials storage area—The Public Works Department Building is an enclosed facility with ten overhead doors for storing large equipment within the facility. Vehicle maintenance materials are also stored within the facility. These materials (shown in Table 1) are properly stored, used, and disposed of and are not a stormwater contamination threat.

Material	Quantity
New motor oil	One 55-gallon drum, One 150-gallon tank
Diesel fuel	One 250-gallon tank
Used motor oil	One 300-gallon tank
Hydraulic fluid	One 150-gallon tank, two 10-gallon tank
Hydraulic oil	One 55-gallon drum
Transmission fluid	One 10-gallon tank, One 55-gallon drum
Transmission oil	One 55-gallon drum
Antifreeze	One 55-gallon drum
Bar and chain saw oil	One 55-gallon drum
Used oil dry	One 55-gallon drum
Used antifreeze	One 55-gallon drum
Used oil filters	One 55-gallon drum container
Road striping paint	Varies, 10-12 gallons stored at a time (30-40 gallons per
	year)
Athletic field striping paint	10-gallon container
Diesel fuel additive	Two 5-gallon buckets
Diesel exhaust fluid	20 gallon
Hydraulic fluids	3 5-gallon buckets
Gear lubricant	One 30-gallon drum
Vehicles and equipment with fuel tanks	Eleven
Oil dry	One 55-gallon drum
Grease, lubricating	6 boxes
Brake cleaner	24 cans
Penetrating fluid	12 cans
Degreaser	One 5-gallon bucket
Roundup	10-gallon container
Sidewalk salt	20 bags depending on the winter season
Cleaning supplies	Varies, stored in closed cabinet
Gas cans	Varies, stored in closed fire proof cabinet

**Table 1 Stoughton Public Works/Parks Department Materials Summary** 

Various materials require a Material Safety Data Sheet (MSDS) such as brake cleaner, solvents, and lubricants. A full list of these items along with their MSDS is available at this facility.

## E. <u>Recommendations to Prevent Polluted Runoff From Reaching Nearby Water</u> Resources

Stormwater management controls or BMPs will be implemented to reduce the amount of pollutants associated with the Public Works/Parks Department facility from entering the City's MS4 from and reaching nearby water resources.

## 1. Source Area Control

To the maximum extent practicable and where cost-effective, source area control BMPs designed to prevent stormwater from becoming contaminated will be used.

#### a. Erosion Control Measures

Material storage areas prone to erosion shall be protected and the material prevented from entering the storm sewer and discharging from the site. Currently, the materials at the Public Works facility are stockpiled in a sloped

area that drains toward the Yahara River. Potential improvements are shown on Figure F-1 including perimeter sediment reduction devices (ie: silt sock).

### b. Good Housekeeping

Good housekeeping practices are designed to maintain a clean and orderly work environment. This will reduce the potential for significant materials to come in contact with stormwater. The following practices are included in the Public Works Department's good housekeeping efforts.

- 1) Routine sweeping is done weekly in the Public Works Department Building garage area.
- 2) Oil dry is located in the Public Works Department Building and disposed of through a licensed disposal company.
- 3) Used oil rags are collected and stored in a specific steel container and disposed of through a licensed disposal company.
- 4) Used vehicle parts and scrap metal are recycled.
- 5) Oil filters are stored in a drum container inside the Public Works Department building and are removed by a licensed contractor on an as-needed basis.

#### c. Preventive Maintenance

Preventive maintenance involves the inspection, testing, and cleaning of facility equipment and operational systems before use. These inspections will help to uncover conditions that might lead to a release of materials. The following equipment/activities are included in the inspection schedule outlined in Section H.

- 1) Vehicles
- 2) Equipment
- 3) Catch basin sumps/oil separator

#### d. Spill Prevention and Response Procedures

Spills and leaks together are the largest source of stormwater pollution. Thus, this SWPPP specifies material handling procedures and storage requirements for significant materials. Equipment and procedures necessary for spill cleanup and prevention of spilled materials from being discharged have also been identified. All employees should be made aware of the proper procedures. The following procedures have been developed for spill response for the Public Works Department facility.

- 1) Emergency-dial 911 (Major spills are defined as an emergency condition and generally include hazardous materials).
- 2) Nonemergency–Utilize on-site materials to contain the spill and pick up (floor dry or oil sorb napkins). Dispose in an appropriate container and contact licensed contractor to remove from site.

#### e. Bulk Storage

At the Public Works Department facility, dry bulk storage is limited on the site. Salt is stored in a covered storage shed located on grass adjacent to the paved

parking lot. The State of Wisconsin inspects the storage shed annually. Bulk storage of various stone aggregates are stored uncovered in the Public Works Yard.

Liquid bulk storage at the Public Works Department site is utilized for used oil. Two 6,000 gallon silos located in the yard contain brine and a 1,000-gallon tank in the yard contains emulsion fluid. Tank containment is described in Section E (2) (c).

#### 2. Stormwater Treatment Best Management Practices

Structural control measures may be necessary to control pollutants that are still present in the stormwater after the nonstructural controls have been implemented. These types of controls are physical features that control and prevent stormwater pollution. Structural controls can include a range of application such as preventive measures, collection structures, or stormwater treatment systems. Structural controls may require the construction of a physical feature or barrier.

#### a. Preventive Measures

Preventive measures are controls that are intended to prevent the exposure of stormwater to contaminants. The following preventive measures have been chosen for the Public Works Department facility.

(a) Perimeter sediment reduction devices (ie: silt sock) are recommended on the downhill side of external storage areas as shown on Figure F-1.



Figure F-2 Example of perimeter sediment reduction device

#### b. Diversions

Diversion structures (including grading and paving) are used to divert stormwater runoff away from high risk areas and prevent contaminants from coming in contact with stormwater runoff or to channel contaminated stormwater to a treatment facility or containment area. Diversions are currently not identified as an appropriate control at the Public Works Department Building site.

#### c. Containment

Containment areas are structures designed to hold pollutants or contaminated stormwater runoff to prevent it from being discharged to nearby surface waters. Currently, the City's waste oil tank is protected and enclosed within a steel structure. Waste oil is removed from the tank by a private contractor as needed throughout the year.

The floors of the Public Works Department Building are sloped toward the center of the building where trench drains and catch basins collect potential contaminants within the facility. These catch basins contain water/oil separators and are connected to the sanitary sewer system to prevent these contaminants from reaching the storm sewer system. The catch basin structures located in the Public Works Department Building are cleaned three times a year by a licensed contractor. The Public Works Department facility is not equipped with a clear water or gray water plumbing system.

Vehicle washing operations are completed within buildings that drain to sanitary sewer or are washed at private vehicle washing companies in the City of Stoughton that have drains to sanitary sewer.

#### F. Suggested Retrofits to Current Stormwater Practices

No retrofits are currently recommended.

#### G. Installation/Implementation of Recommendations Timeline

It is recommended that the City Public Works/Parks Department implement the BMPs previously described and continue its current practices of preventing stormwater contamination from the site. Table 2 lists possible BMP activities and measurable goals the City may consider implementing.

Activity	Measurable Goal
Existing Public Works Department Building pollution	Continue to implement.
prevention activities.	
Install perimeter sediment control devices on	Install by April 15, 2017.
downhill side of external storage areas as shown on	
Figure F-1.	
Review existing spill prevention and response	Document potential improvements in the March
procedures for improvements	31, 2017, MS4 annual report.
Review existing Public Works Department staff	Document potential improvements in the March
training for stormwater pollution prevention at the	31, 2017, MS4 annual report. Provide training
Public Works/Parks Department Building for	annually on stormwater pollution prevention.
improvements	

Table 2 Public Works/Parks Department Building BMP Activities and Installation/Implementation Schedule

# H. <u>Inspection Frequency</u>

Table 3 provides the current inspection schedule implemented by Public Works Department staff. It is recommended that all items are inspected a minimum of two times a year supplemented with a full inspection of the Public Works/Parks Department Building yard once a year.

Facility/Potential Source of Contamination	Inspection Frequency
Salt storage shed	Inspected annually by State.
Drain oil and used oil	Inspect regularly.
Used oil filter container	Disposal by licensed contractor. Inspect regularly.
Public Works/Parks Department	Inspect regularly.
Building	
Vehicles	Wash vehicles indoors in areas that drain to sanitary sewer.
Equipment	As needed.
Catch basin sumps	Clean three times a year.
Various bulk liquid storage containers	Inspect regularly.

Table 3 Public Works/Parks Department Building Inspection Frequency Schedule

## I. <u>Employee Training</u>

The City's Public Works/Parks Department employees receive instruction for good housekeeping procedures, material storage techniques, and related topics. It is recommended employees receive training on an annual basis for spill prevention and response procedures, erosion control, and winter road maintenance, illicit discharge detection and reporting, and stormwater management practices. The City should review this existing program and consider improvements.

## J. <u>Spills Prevention Plan and Response Procedures</u>

The City of Stoughton has a Spills Prevention Program. The existing program provides procedures to prevent, contain, and respond to spills that may discharge into the MS4 and downstream receiving waters. The City should review this program and consider improvements constituting an updated Spills Prevention Program in the following areas.

- 1. Purpose
- 2. Contact Information
- 3. Spills Prevention
- 4. Spill Containment

# **Public Works/Parks Department Facility**



Front of Public Works/Parks Department Building



Public Works Department Garage and Heavy Vehicle Storage



Cold Mix Stored in the Public Woks Garage



Public Works Garage Floor Drain and Catch Basin Sump with an Oil Separator



Brine Storage



Waste Oil Storage



Hydraulic Fluid Storage



Vehicle Fuel Storage



Transmission and Hydraulic Fluid Storage



Various Vehicle Fluids Storage



Salt Storage Shed



Cold Storage Building



**Emulsion Storage Tank** 



Cast Iron Casting Storage



Stone Aggregate Storage behind Garage



Miscellaneous Recyclables Storage Area



Stone Aggregate Storage



Stone Aggregate Storage



Salt/Sand Mixture Storage



Wood Chips Storage

