City Of Zilwaukee Municipal Operations and Maintenance Activities

The EGLE NPDES Phase II MS4 Discharge Permit Application requires a procedure for assessing the applicant's operation and maintenance activities for the potential to discharge pollutants to surface waters of the state. The assessment shall identify all pollutants that could be discharged from each applicable operation and maintenance activity and the BMPs being implemented or to be implemented to prevent or reduce pollutant runoff.

This inventory will be updated annually as facilities add/remove BMP to address new and existing operation and maintenance activities.

The procedure shall include assessing the following municipal operation and maintenance activities if applicable:

- Road, parking lot, and sidewalk maintenance (e.g., pothole, sidewalk, and curb and gutter repair)
- Bridge maintenance
- Right-of-way maintenance
- Unpaved road maintenance
- Cold weather operations (e.g., plowing, sanding, application of deicing agents, and snow pile disposal)
- Vehicle washing and maintenance of applicant-owned vehicles (e.g., police, fire, school bus, public works)
- Managing vegetative properties

The City of Zilwaukee is responsible for all the above listed municipal operations and maintenance activities. Due to limited DPW staffing in the City of Zilwaukee, sweeping of roads, bridge maintenance and cleaning of catch basins are contracted out. Please see Table 1 on the next page for a list of the City of Zilwaukee's Operation and Maintenance Activities, pollutants that could potentially be discharged, the pollution potential and the BMPs implemented to prevent and/or reduce pollutant runoff.

Table 1. Operation and Maintenance Activities

Municipal Operation and Maintenance Activity	Pollutants that could be Discharged	Pollution Potential (High, Med., Low)	BMPs Implemented to Prevent and/or Reduce Pollutant Runoff
Road Maintenance	Debris and pollutants from the road, sediment, left over materials	Med.	DPW staff maintain the roads. Sweeping performed by nearby MDOT TSC.
Bridge Maintenance	Debris and pollutants from the road, sediment, left over materials	Medium	No bridges under City jurisdiction.
Right-of-Way Maintenance (Vegetation mgt)	Sediment	Low	Seasonal DPW staff manage vegetated properties. Area in front of occupied private property is managed by the property owner.
Driveway, Parking Lot and Sidewalk Maintenance	Sediments, debris deicing agents, vehicle fluids	Medium	Driveway, Parking Lot and Sidewalk Maintenance
Cold Weather Operations	Debris and pollutants from the road, sediment, and runoff of deicing agents	Low	Snow is plowed to the sides of the road. Plowing is for public safety. Salt application equipment is calibrated every year and maintained for optimum function. Please see the PIPP for additional information concerning runoff of deicing agents from onsite storage. For nonroad areas, snow is either plowed to the side of the parking lots or sidewalks and left in place or hauled to adjacent vegetated areas. (see below) Use of deicers is minimized and they are only used in key areas for safety concerns.
Vehicle Washing and Maintenance	Detergents and debris from vehicles	Low	All DPW owned vehicles are all washed at a local car wash.
Managing vegetative Properties (other than road right-of-way	Grass clippings, pesticides, fertilizers (if used)	Low	Seasonal DPW staff manage vegetated properties.

The City of Zilwaukee's DPW prioritizes the cold weather operations of snow removal of its roads in the urbanized area based on the volume of traffic, emergency routes, and on a time permitting basis. Updating/revising the prioritization is to be completed annually following the construction of a new road or other applicant-owned or operated impervious surface, or within 30 days of identifying a need to revise a priority level. The City of Zilwaukee's DPW currently prioritizes its roads in the following manner:

- 1. Emergency Routes Mutually agreed upon routes that emergency vehicles use throughout the city.
- 2. Primary Roads Generally identified as city roads that have curb and gutter.
- 3. High-Priority local Roads Local roads where schools and fire stations are located.
- 4. Local Roads that do not have curb and gutter.

All these areas are snow plowed on an as needed basis from the time the snow starts in the fall until the snowfall ceases in the spring (October 1st-March 30th). Salt is applied for deicing when necessary using properly maintained equipment capable of completing the work according to the manufacturers' operating instructions and to protect water quality.

Snow removal form driveways, parking lots, and sidewalks on City properties is conducted by DPW staff. Snow is pushed to the sides of the roadway, parking lots, sidewalks or driveways on vegetation adjacent to the paved surface. The City's primary concern in this matter is always the public's safety. If intersections are cleared for visibility, or if there is too much snow accumulation at the administrative office the snow will be hauled to a vegetated area where the old DPW building was located on the corner of Johnson Street and Franklin Streets. This is a flat vegetated area without catch basins selected based on grading that will not cause flow to an MS4 or surface water drain.

Vehicle washing and maintenance activities are performed on an as-needed basis. Vehicles are washed at a local car wash where wash water is discharge to the sanitary sewer.

Managing of the vegetated properties is conducted by seasonal staff.

Updating/revising the prioritization is done annually following the construction of a new street, parking lot, or other applicant-owned or operated impervious surface, or annually if there is a need to revise a priority level.

Sweeping of the City of Zilwaukee's streets and parking lots is contracted out to the nearby MDOT TSC. Sweeping is conducted in the spring and fall. Vacuum assisted sweepers are used. Sweeping of roads is prioritized in the following manner:

- 1. Adams Street (leads to the Zilwaukee Bridge)
- 2. Industrial Park (Bridgeview South Street, Bridgeview North Street, Bridgeview Center Street)
- 3. Other streets with curb and gutter (Venoy Street, Fisher Street)
- 4. Streets without curb and gutter are not swept.

Measurable Goals

- Number of complaints received each year.Pollutant runoff reduction on a yearly basis.