

SAGINAW COUNTY ROAD COMMISSION

COUNTY OPERATIONS AND MAINTENANCE ACTIVITIES

The MDEQ 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 BMPs to address new and existing operation and maintenance activities. This inventory will be updated by either Saginaw County Road Commission's appointed Stormwater Program Manager and/or the County's designee. Any updates will be included in future progress reports submitted to the Michigan Department of Environmental Quality (MDEQ).

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)

From the above activities, Saginaw County Road Commission is responsible for the following:

- 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)

Please refer to Table 1 below for a list of Saginaw County Road Commission'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.

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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, parking lot, and sidewalk maintenance	Debris and pollutants from the road, sediment, left over materials, vehicular petroleum-based products	Medium	Catch Basin (CBs) Sumps, Vegetated Buffers, Vegetated Open Channels/ Road Side Ditches, Sweeping as Needed, Spill Cleanup, Silt Fence, Stormwater Inlet Protection (Self implement Part 91 BMPs for SESC using authority as an Authorized Public Agency)
Bridge maintenance	Debris and pollutants from the road, sediment, left over materials, vehicular petroleum-based products, specialized deicers	Medium	Turbidity curtain (if applicable), Dust Control, Sweeping as Needed, Stormwater Inlet Protection (Self implement Part 91 BMPs for SESC using authority as an Authorized Public Agency)
Right-of-way Maintenance	Debris and pollutants from the road, sediment, left over materials	Medium	Sweeping/Dust Control, Silt Fence, Vegetated Open Channels/ Road Side Ditches, Stormwater Inlet Protection, Soil Management, Seeding, Mulching (Self-implement Part 91 BMPs for SESC using authority as an Authorized Public Agency)
Cold Weather Operations	Debris and pollutants from the road, salt/ deicers	Low	<p>Plowing is done as to minimize scraping of the pavement. Plowing is for public safety and is performed on an “as needed basis”. Snow is plowed and disposed of with the intent of preventing discharge to any stormwater structural controls.</p> <p>Snow is either plowed to the side of the road and left in place or hauled to vegetated areas. Salt application equipment is calibrated every year and maintained for optimum function; SCRC uses deicer minimization protocols.</p> <p>Winter Road Management BMP</p>

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Vehicle washing and maintenance of applicant-owned vehicles	Detergents and debris from vehicles	Low	All Road Commission owned vehicles are washed inside at Road Commission facility in a Combined Sewer district.
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Cold Weather Operations

Cold weather operations in all the areas within Saginaw County Road Commission’s jurisdictional boundaries are performed on an as needed basis from the time the snow starts in the fall until the snowfall ceases in the spring (Approximately October - March).

The Saginaw County Road Commission 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. The Saginaw County Road Commission currently prioritizes its roads in the following manner:

1. Emergency Routes – Mutually agreed upon routes that emergency vehicles use throughout the County.
2. Primary Roads – Generally identified as county roads that have line striping.
3. High-Priority Local Roads – Local roads where schools and fire stations are located.
4. High-Volume Local Roads – Section line roads that are identified through traffic count reports; need to be cleared as soon as possible.
5. Local Roads – Section line roads throughout the County that may be surfaced with gravel, asphalt or concrete.
6. Subdivision Roads – Generally the last roads to be plowed and can take up to two (2) to three (3) days after a snow event to get these roads plowed.

Fully up-to-date equipment capable of completing the work shall be used according to the manufacturers' operating instructions and to protect water quality. Furthermore, there is no designated storage for the snow that is removed. Snow is pushed to the sides of the roads, always taking the public's safety as its primary concern. If intersections are cleared for visibility, the snow will be hauled to designated staging areas that are well vegetated and selected based on grading that will not cause flow to a municipal separate storm sewer system or surface water drain.

PRIORITIZATION OF SWEEPING

The Saginaw County Road Commission prioritizes the sweeping of its roads in all the Urbanized Areas within Saginaw County political boundary in a manner aimed at reducing the introduction of sediments and

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other pollutants to their MS4 and any waters of the state. The Road Commission only sweeps the sections of their road system that have curb and gutter. Two sweepers are owned and operated by the Saginaw County Road Commission, Vac Sweeper 118: 2015 Elgin and Mechanical Sweeper 128: 2016 Elgin Eagle. The Mechanical Sweeper is able to pick up larger debris (i.e. leaves, pinecones, twigs) while the Vac Sweeper can collect more of the fine sediments. Properly maintained street sweeping **equipment capable of completing the work shall be used according to the manufacturers' operating instructions and to protect water quality**. Saginaw County Road Commission has been making an effort to improve their street sweeping schedule/ frequency as a way to reduce the amount of sediments needing to be removed during catch basin cleaning. The goal of completing 3 complete rounds of sweeping (making it through the sweeping order 3 times) during a single year has been achieved or close to complete the past few years

Please refer to Table 2 below for a list of prioritization and frequency of the Saginaw County Road Commission’s sweeping schedule. The Saginaw County Road Commission also has maps of sweeping locations listed in the schedule.

Table 2. Street Sweeping Schedule and Frequency

Sweeping Order	Street/Location	Priority Ranking (Low, Med, High)	Frequency and Timing
1	SCRC maintained bridges within the Urbanized Area	High	Spring and Fall of each year and one other between the months of April and October
2	D-2 Curb and Gutter	Medium	2-3 Times between the months of April and October
3	Freeland and Tittabawassee Townships Curb and Gutter	Medium	2-3 Times between the months of April and October
4	Carrollton, Kochville, and Zilwaukee Townships Curb and Gutter	Medium	2-3 Times between the months of April and October
5	Saginaw Township Curb and Gutter	Medium	2-3 Times between the months of April and October

Priority A (High):

The Saginaw County Road Commission currently prioritizes the sweeping of its bridges within the Urbanized Area above any other section of road in their jurisdiction. Bridges are swept in the spring and fall of each year and one other time, weather permitting.

Priority B (Medium):

Curb and gutter in section D-2 receive priority sweeping upon completion of bridge deck sweeping followed by those in Freeland and Tittabawassee Townships, then in Carrollton, Kochville, and Zilwaukee Townships, and finally curb and gutter in Saginaw Township. The Road Commission prioritizes sweeping

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based on the volume of traffic and on an as needed basis. Generally, the Road Commission sweeps these areas three (3) times per year following this set order.

Priority C (Low):

Within the Urbanized Areas in Saginaw County, there are no designated low priority sweeping areas. Roads swept by the Road Commission that have a low priority ranking would be any low to medium volume county road with curb and gutter that lies outside of the above listed townships.

The Saginaw County Road Commission's procedure for dewatering and disposal of materials from street sweeping maintenance activities consists of using the above-mentioned Sweeper trucks to do the initial cleaning.

Street sweeping wastes will be hauled to a licensed landfill or stored temporarily in an area approved for temporary storage by EGLE Saginaw Bay District Staff. An alternative plan for temporary storage of the street sweeping material will be submitted to EGLE Saginaw Bay District Staff in 2020.

Measurable Goals:

- Number of complaints received each year.
- Pollutant runoff reduction on a yearly basis.
- Conditions of roads (paved and unpaved), parking lots and sidewalks at the end of each year.