

6.0 VEHICLE MAINTENANCE AND FUELING

6.1 OVERVIEW

Traditional and non-traditional MS4s have vehicle maintenance and fueling operations to support their department of public works or agency operations. Chemicals used for maintenance could include large volumes of fuels such as gasoline, diesel, hydraulic fluids, various oils, grease, and other petroleum products. During the life cycle of a new product to becoming a used waste; the use of these products and their associated operations are required to be managed in such a way to prevent discharges.



Provided by the Muncie Sanitary District.

6.2 SITE ASSESSMENT

6.2.1 Fueling Operations

Regulation: 327 IAC 15-13-17 (b) (2) (D)	Controls for reducing or eliminating the discharge of pollutants from operational areas, including appropriate controls for (D) Standard operating procedures for spill prevention and cleanup during fueling operations.
Implementation BMPs	<ul style="list-style-type: none"> • Create and maintain written documents/procedures for fueling operations. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Provide and maintain procedures for fueling operations at specific locations. • Provide list of petroleum, oils, and lubricants at each specific location. This could be included in the facility SWPPP, P2&GHM or other written document. • Provide a facility map with the location and type of fueling operations. • Documentation of all drain locations and types (sanitary and storm) at each fueling area. • Implement employee training on fueling operations (refer to Section 2.0 for more information on training requirements). • Outdoor aboveground storage tanks are required to have secondary containment. • Provide sufficient spill materials to properly cleanup a spill. • A SWPPP is to be placed in a visible and easily accessible location.
Programmatic Indicator	<ul style="list-style-type: none"> • Number and location of new municipal fueling areas. • Number and location of municipal refueling areas that replaced existing tank systems that have installed stormwater BMPs.
Possible Measurable Goals	<ul style="list-style-type: none"> • Minimizing or eliminating contact of hazardous materials with stormwater can significantly reduce pollution of downstream waters. • Inspect fuel tanks, containment or area, and loading and unloading operations at least annually.
Documentation	Maintain documentation for spills and facility inspections.

Advanced BMPs (optional)	<ul style="list-style-type: none"> • Fuel vehicles only in designated areas that are covered. • Maintain documentation for fuel usage. • Avoid topping off fuel tanks to prevent spills from overfilling. • Prevent run-on of stormwater into fueling areas using diversion dikes, berms, curbing, surface grading, or other measures. • Use catch basin inserts to prevent discharge into storm drains. • Provide barriers around fuel pumps to prevent collisions with vehicles. • Use fueling hoses with check valves to prevent hose drainage after filling. • Use drip pans, drain boards, and drying racks to direct drips back to a fluid holding tank for reuse or proper disposal. • Do not pour liquid waste into sinks, floor drains, outdoor storm drain inlets, or other storm drains or sewer connections.
Additional Resources	Minnesota Pollution Control Agency – Stormwater Program for MS4s

6.2.2 Vehicle Maintenance

Regulation: 327 IAC 15-13-17 (b) (2) (E)	Controls for reducing or eliminating the discharge of pollutants from operational areas, including appropriate controls for (E) BMPs for vehicular maintenance activities.
Implementation BMPs	<ul style="list-style-type: none"> • Provide a sufficient amount of spill materials to cleanup a spill. • A SWPPP, P2&GHM or other documents is to be placed in a visible and easily accessible location. • Perform routine maintenance on vehicles and equipment to prevent spills and leaks. • Provide a list of petroleum, oils, and lubricants at each specific location. This could be included in the facility SWPPP, P2&GHM, or other written document. • Provide a facility map with the location and type of storage facilities for each maintenance location. • Documentation of all drain locations and types (sanitary and storm) at each maintenance location. • Do not pour liquid waste into sinks, floor drains, outdoor storm drain inlets or other storm drains or sewer connections. • Implement employee training on vehicle maintenance (refer to Section 2.0 for more information on training requirements). • Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers per state and federal requirements (refer to Section 9).
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> • Minimizing or eliminating contact of hazardous materials with stormwater can significantly reduce pollution of downstream waters. • Maintain an inventory of all raw and waste materials to identify leakage and order new materials only when needed. • Inspect maintenance areas annually to ensure BMPs are implemented. • Document through vehicle maintenance reports, work orders, or other documents for the maintenance performed on vehicles and equipment recording oil change, date and time, tires air pressure checked, rotated, and condition, fluids checked – coolant, window shield cleaner, etc.
Documentation	<ul style="list-style-type: none"> • Document maintenance activities on vehicles and equipment on work orders or by other means as applicable. • Document facility inspections.

Advanced BMPs (optional)	<ul style="list-style-type: none"> • Provide weekly log for vehicles and types of maintenance. • Use drip pans under leaking vehicles and equipment.
Additional Resources	Minnesota Pollution Control Agency – Stormwater Program for MS4s

6.2.3 Vehicle Washing

Regulation: 327 IAC 15-13-17 (b) (2) (F)	Controls for reducing or eliminating the discharge of pollutants from operational areas, including appropriate controls for (F) Prohibition of equipment or vehicle wash waters and concrete or asphalt hydrodemolition waste waters into stormwater run-off except under the allowance of an appropriate NPDES wastewater permit.
Implementation BMPs	<ul style="list-style-type: none"> • Provide and maintain written documents/procedures for vehicle washing. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Establish a designated wash/rinse area onsite or at an offsite location. • Establish if vehicles/equipment will be washed or rinsed in each established area. • Implement employee training on vehicle washing (refer to Section 2.0 for more information on training requirements).
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> • Maintain a water and detergent usage log. • Inspect vehicle washing areas annually to ensure BMPs are implemented. • Document through vehicle maintenance reports, work orders or other documents of when vehicles and equipment were washed, the date and time.
Documentation	<ul style="list-style-type: none"> • Maintain procedures.
Advanced BMPs (optional)	<ul style="list-style-type: none"> • Clean equipment and vehicles regularly to remove accumulated dust and residue. • Perform all cleaning operations indoors or under cover when possible. • Water used for cleaning and decontamination shall not be allowed to enter storm drains or watercourses and shall be collected and disposed of in accordance with state and federal regulations (refer to Section 9). • Install covered wash racks that discharge wash water to the sanitary sewer, or contract the services of commercial car washes. • Route washing area drains to oil/water separators or the sanitary sewer. • Avoid detergents whenever possible. If detergents are necessary, a phosphate-free, non-toxic, biodegradable soap is recommended. Detergents should be avoided if an oil/water separator is used for pretreatment prior to discharge to the sanitary sewer.
Additional Resources	<ul style="list-style-type: none"> • USEPA – Municipal Vehicle and Equipment Washing • Minnesota Pollution Control Agency – Stormwater Program for MS4s