

State of Michigan Industrial Storm Water Program

Determining if a Facility is Required to Obtain Permit Coverage

SECTOR N - SCRAP & WASTE RECYCLING FACILITIES

Michigan Department of Environmental Quality (DEQ)
Water Resources Division (WRD)
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Federal regulation (Title 40, Code of Federal Regulations, Part 122.26) requires that a regulated facility apply for industrial storm water permit coverage if storm water runoff exposed to industrial materials and/or industrial activities discharges to surface waters of the state. Surface waters of the state include rivers, lakes, streams, and wetlands. This requirement also includes facilities that discharge storm water runoff to a private or municipal separate storm sewer system which conveys storm water to surface waters of the state. A permit application is not required for facilities whose storm water is discharged into a sewer system designed to combine storm water runoff and sanitary wastewater (called a combined sewer) which leads to a wastewater treatment plant (WWTP). Combined sewers are common in several large cities in Michigan. Contact the local WWTP to determine if the sewerage system is served by combined or separate storm sewer system. Scrap and waste recycling facilities engage in a number of industrial activities that are covered under the regulations.

Facilities must perform a 3 step process to determine if storm water permit coverage is applicable. The 3 steps are:

Step 1: Is the primary Standard Industrial Classification (SIC) code federally regulated?

SIC codes, prepared by the Federal Office of Management and Budget, describe the primary industrial activity at a facility. The federally regulated SIC code list can be viewed at the DEQ-WRD industrial storm water website (www.michigan.gov/deq/stormwater) then click on Industrial Program). A

facility's SIC code can be found on the corporate tax returns under Schedule K listed as either "Business Activity Code" or "Manufacturers Identity Code". To determine primary industrial activity, use the value of net revenues. If such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most net revenue or employs the most personnel is the operation in which the facility is primarily engaged. If a facility uses a North American Industry Classification System (NAICS) number instead of an SIC code, a conversion website is available. Please see the link on the Industrial Program website.

Storm Water

Michigan's Storm Water Program
The goal of Michigan's Storm Water Program is to protect and preserve Michigan's water resources. We strive to accomplish this goal through a two step process. First of all, we have been delegated the regulatory authority to implement a storm water discharge permit program for the state of Michigan. Secondly, we have developed and implemented an educational component of our permitting process.

This page can be accessed as www.mi.gov/deqstormwater.

Information

- [Municipal Program / MS4 Compliance Assistance](#)
- [MS4 Frequently Asked Questions](#) PDF
- [Construction Site Program](#)
- [Industrial Program](#)
- [Summary of NPDES Fees for storm water discharges](#) PDF
- [Storm Water Staff Contact Information](#)

Several regulated SIC codes are listed in the federal storm water regulations. The following regulated SIC code relates to scrap and waste recycling facilities:

5093 Scrap and Waste Materials

Establishments primarily engaged in assembling, breaking up, sorting, and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts are classified in SIC code 5015, which is also regulated by the storm water regulations.

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| <i>Automobile wrecking for scrap-wholesale</i> | <i>Oil, waste-wholesale</i> |
| <i>Bag reclaiming reclaiming-wholesale</i> | <i>Plastics scrap-wholesale</i> |
| <i>Bottles, waste-wholesale</i> | <i>Rags-wholesale</i> |
| <i>Boxes, waste-wholesale</i> | <i>Rubber scrap-wholesale</i> |
| <i>Fur cuttings and scraps-wholesale</i> | <i>Scavengering-wholesale</i> |
| <i>Iron and steel scrap-wholesale</i> | <i>Scrap and waste materials-wholesale</i> |
| <i>Junk and scrap, general line-wholesale</i> | <i>Textile waste-wholesale</i> |
| <i>Metal waste and scrap-wholesale</i> | <i>Wastepaper, including paper recycling-wholesale</i> |
| <i>Nonferrous metals scrap-wholesale</i> | <i>Wiping rags, including washing and reconditioning-wholesale</i> |

Step 2: Where does the storm water go?

Most industrial properties are set up and graded to shed rain water and snow melt, with a discharge to either ground water or surface water. Storm sewer systems, ditches, pipes, etc. are conveyance systems that are designed to shed rain water and snow melt. If the storm water conveyance system at a regulated facility is designed to direct the rain water and snow melt to a surface waters of the state or to a separate storm sewer system that discharges to a surface water of the state, further evaluation is needed to determine if a permit is necessary.

Step 3: Are industrial materials and/or activities exposed to storm water runoff?

Industrial materials include but are not limited to material handling equipment (bins, boxes, pallets, racking, etc.), industrial machinery, raw materials, intermediate products, by-products, final products, and waste products. Industrial activities include but are not limited to storage, loading and unloading, transportation or conveyance of raw, intermediate, final, or waste products.

The table below indicates activities, pollutant sources and pollutants commonly found at scrap and waste recycling facilities. The table is from the United States Environmental Protection Agency Industrial Stormwater Fact Sheet Series.

| Activity | Pollutant Source | Pollutant |
|---|---|---|
| Scrap and Waste Recycling Facilities (non-source separated, non-liquid recyclable materials) | | |
| Stockpiling and storage of materials (including loading and unloading) | <p>-Leaking of various fluids from used automotive engines, radiators, brake fluid reservoirs, transmission housings, other vehicle parts, and lead-acid from batteries</p> <p>-Deterioration/corrosion of materials</p> | PCBs, oil and grease, lubricants, paint pigments or additives, heavy metals, ionizing radioactive isotopes, transmission and brake fluids, fuel, battery acid, lead acid, antifreeze, benzene, chemical residue, heating oil, petroleum products, solvents, ionizing radioactive isotopes, infectious/bacterial contamination, asbestos, metals, total Kjeldahl nitrogen (TKN), battery acid, oily wastes, chemical residue |
| Material processing: Air pollution equipment (including incinerators, furnaces, wet scrubbers, filter houses, and bag houses) | Normal equipment operations that include the collection and disposal of filter bag material and ash, process wastewater from scrubbers, accumulation of particulate matter around leaking joint connections, malfunctioning pumps and motors (e.g., leaking gaskets, seals or pipe connections, leaking oil-filled transformer casings) | Hydraulic fluids, oils, fuels, grease and other lubricants, accumulated particulate matter, chemical additives, and PCBs from oil-filled electrical equipment |
| Material processing: Combustion engines | Spills and/or leaks from fuel tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections, worn gaskets, leaking transmissions, crankcases, and brake systems (if applicable), leaking battery casings and/or corroded terminals | Accumulated particulate matter, oil/lubricants, gas/diesel fuel, fuel additives, antifreeze (ethylene glycol), battery acid, and products of incomplete combustion |
| Material processing: Material handling systems (forklifts, cranes, and conveyors) | <p>-Spills and leaks from fuel tanks, hydraulic and oil reservoirs due to malfunction parts (e.g., worn gaskets and parts, leaking hose connections, and faulty seals).</p> <p>-Damaged or faulty electrical switches (mercury filled).</p> <p>-Damaged or leaking battery casings, including exposed corroded battery terminals.</p> | Hydraulic fluids, oils, fuels and fuel additives, grease and other lubricants, accumulated particulate matter, chemical additives, mercury, lead, battery acid |

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| | -Damaged or worn bearing housings | |
| Material processing: Stationary scrap processing facilities (balers, briquetters, shredders, shearers, compactors, engine block/cast iron breakers, wire chopper, turnings crusher) | Leaks from hydraulic reservoirs, hose and fitting connections, worn gaskets, spills or leaks from fuel tanks, particulates/residue from scrap processing, malfunctioning pumps and motors (e.g., leaking gaskets, seals or pipe connections, leaking oil-filled transformer casings) | Heavy metals (e.g., zinc, copper, lead, cadmium, chromium) and hydraulic fluids, PCBs |
| Material processing: Hydraulic equipment and systems, balers/briquetter, shredders, shearers, compactors, engine block/cast iron breaker, wire chopper, turnings crusher | Particulate/residue from material processing, spills and/or leaks from fuel tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections/fittings, leaking gaskets | Hydraulic fluids/oils, lubricants, particulate matter from combustion engines, PCBs (oil filled electrical equipment components), heavy metals (nonferrous, ferrous) |
| Material processing: Electrical control systems (transformers, electrical switch gear, motor starters) | Oil leakage from transformers, leakage from mercury float switches, faulty detection devices | PCBs, mercury (float switches), ionizing radioactive material (fire/smoke detection systems) |
| Material processing: Torch cutting | Residual/accumulated particulates | Heavy metal fragments, fines |
| Material handling systems | Spills and/or leaks from fuel tanks, spills/leaks from oil/hydraulic fuel reservoirs, faulty/leaking hose connections/fittings, leaking gaskets | Accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), oil/lubricants, PCBs (electrical equipment), mercury (electrical controls), lead/battery acids |
| Vehicle maintenance | Parts cleaning, waste disposal of rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluids, brake fluids, coolants, lubricants, degreasers, spent solvents | Gas/diesel fuel, fuel additives, oil/lubricants, heavy metals, brake fluids, transmission fluids, chlorinated solvents, arsenic |
| Vehicle fueling | Spills and leaks during fuel transfer, spills due to "topping off" tanks, runoff from fueling areas, wash down of fueling areas, leaking storage tanks, spills of oils, brake fluids, transmission fluids, engine coolants | Gas/diesel fuel, fuel additives, oil, lubricants, heavy metals |

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| Vehicle and equipment cleaning and washing | Washing and steam cleaning | Solvent cleaners, oil/lubricants/additives, antifreeze (ethylene glycol) |
| Waste Recycling Facilities (Liquid Recyclable Materials) | | |
| Drum/individual container storage and handling | Leaks or spills due to faulty container/drum integrity (e.g., leaking seals or ports). Container materials incompatible with waste material. Improper stacking and storage of containers | Mineral spirits, industrial solvents, immersion cleaners, dry cleaner, solvents, paint solvents, spent antifreeze |
| Return and fill stations | Leaks, spills, or overflows from tanker truck transfer of wastes and hose drainage. Leaking pipes, valves, pumps, worn or deteriorated gaskets or seals | Mineral spirits, industrial solvents, immersion cleaners, dry cleaner, solvents, paint solvents, spent antifreeze |
| Storage tank operations | Overfill of storage tanks, leaking pipes, valves, worn or deteriorated pumps seals. Leaking underground storage tanks. | Mineral spirits, industrial solvents, immersion cleaners, dry cleaner, solvents, paint solvents, spent antifreeze |
| Material handling equipment | Leaking fuel lines, worn gaskets, leaking hydraulic lines and connections | Fuel, hydraulic fluid, oil and grease |
| Vehicle and equipment maintenance (if applicable) | Replacement of fluids such as transmission and brake fluids, antifreeze, oil and other lubricants, wash down of maintenance areas, dumping fluids down floor drains connected to storm sewer system, outside storage of fluids and oily rags and waste material | Oil and grease, fuel, accumulated particulate matter, antifreeze |
| Vehicle or equipment washing (if applicable) | Wash water or steam cleaning | Oil, detergents, chlorinated solvents, suspended solids and accumulated particulate matter |
| Recycling Facilities | | |
| Unknowing acceptance of nonrecyclable materials and/or small quantities of household hazardous wastes | Inbound recyclable materials | Dependant on material |
| Outdoor material storage | Deterioration of wastepaper and unprocessed aluminum beverage containers | Biochemical oxygen demand (BOD) |
| Processing and storage | Illicit connections or improper dumping to floor drains discharging | Dependant on material |

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| | to a storm sewer system Washing down tipping floor areas | |
| Vehicle maintenance | Replacement of fluids such as transmission and brake fluids, antifreeze, oil and other lubricants, wash down of maintenance areas, dumping fluids down floor drains connected to storm sewer system, outside storage of fluids and oily rags and waste material | Oil and grease, gas/diesel fuel, accumulated particulate matter, antifreeze (ethylene glycol) |

Summary:

If all three items above are applicable then industrial storm water permit coverage is required. A new facility can obtain coverage by submitted a complete Notice of Intent (NOI) to the DEQ-WRD. An existing facility which has been operating without required industrial storm water permit coverage must also enter into an Administrative Consent Order under the Certificate of Entry process. In order to submit a complete NOI the facility must first:

- Obtain the services of an Industrial Storm Water Certified Operator. This can be an employee at the facility or a consultant who has completed the DEQ-WRD Industrial Storm Water Certified Operator Training and has received a certification number.
- Develop a Storm Water Pollution Prevention Plan (SWPPP), preferably using the DEQ-WRD SWPPP template available at the DEQ-WRD industrial storm water website.
- Implement the nonstructural controls as described in the SWPPP.
- Complete construction and put into operation all structural controls as described in the SWPPP.
- Certify the facility has no unauthorized discharges.

Permit Evaluation Scenarios:

- If Step 1 does not apply, then no permit is needed.
- If Step 1 applies but not Step 2, then no is permit needed.
- If Step 1 and Step 2 apply, but not Step 3, then No Exposure Certification (NEC) conditional permit exclusion may be applicable. Complete and submit the NEC Form. See the DEQ-WRD industrial storm water website for more information on the conditions of NEC.

What if the facility or property is leased?

The facility operator rather than the property owner must apply for permit coverage.

What happens if the regulations are ignored?

If a required applicant ignores the permit application requirement, the individual may be in violation of federal and state law. Violations may result in fines, legal action, or expose the facility to citizen lawsuits. Federal and state statutes allow fines up to \$25,000 per day of violation.