

Scrap Recycling Facilities and the Multi-Sector General Permit (MSGP)

The MSGP is a permit designed to prevent stormwater pollution from entering into our surface waters. The operations at scrap and waste recycling facilities have a high risk of contaminating stormwater where both storage and processing of materials occur outdoors. The sources of stormwater pollution are as varied as the products handled. Heavy metals, PCBs, organic pollutants (such as benzene), oil, antifreeze, petroleum products, sediment, and particulate matter can all be found in runoff from these facilities. Incorporating the following BMPs into the facility's Stormwater Pollution Prevention Plan can prevent these potential pollution sources from contaminating stormwater. The BMPs listed

BMPs reduce, eliminate or prevent stormwater pollution from reaching Vermont's rivers and streams

What is a Stormwater BMP?

Best Management Practices, commonly referred to as BMPs, are effective ways to reduce the amount of pollution in stormwater leaving your facility. There are two types of BMPs:

- Structural BMPs are things that can be built on site and include physical structures like berms, settling ponds, oil-water separators, and storm resistant shelters.
- Behavioral BMPs are changes that can be made in the way a person operates their business. Behavioral BMPs include conducting regular inspections, regular maintenance of vehicles and machinery, prohibition of certain activities, and employee training.

An effective Stormwater Pollution Prevention Plan (SWPPP) will include both types of BMPs.

Stormwater BMPs for Scrap Recycling Facilities— Sector N

The following list of suggested BMPs is organized by activity and can be included in your facility's Stormwater Pollution Prevention Plan (SWPPP). The BMPs cover the following operations:

- Materials Storage (Liquids, Solids, and Recyclables)
- Inbound Materials
- Facility Operations
- Individual Drum and Container Storage
- Scrap and Waste Stockpiles
- Scrapping or Recycling Lead Acid Batteries
- Spill Prevention and Response
- Vehicle and Equipment Maintenance
- Training



Inbound Materials

- Develop and enforce recyclable material acceptance policies. Clearly state what materials the facilities does and does not accept. Make this information readily available to the public.
- Inspect incoming scrap materials for potential fluid contents and batteries.
- Separate lead acid batteries from other materials.
- Insist that supplies of scrap, waste, and other salvageable materials drain residual fluids prior to arrival at the facility.
- Establish clear procedures for handling, storage, and disposal of hazardous and non-hazardous wastes and residual fluids.
- Establish an acceptance program for handling, storage and disposal of lead-acid batteries. Procedures should describe the handling of broken and cracked batteries.
- Establish procedures to properly handle industrial turnings and cuttings to prevent cutting oils and metallic fines from coming in contact with runoff.



Materials Storage (Liquids, Solids, and Recyclables)

- Store materials indoors. Store the daily average volume of recyclables indoors.
- Frequently inspect liquid storage area for fluids such as oils, transmission fluids, antifreeze, brake fluid and fuels. Establish handling, storage, and disposal procedures for these materials
- Drain fluids in a designated area. Always drain fluids in a covered, impervious, or bermed area.



- Store liquids in a covered, impervious area. Disconnect or cover storm drains.
- Use curbs, berms, containment trenches, diversion ditches or dikes, or surface grading to direct runoff away from all storage areas.
- Store materials such as glass and plastic bottles, aluminum cans, etc. in tightly sealed bins. Locate bins in a roofed area.
- Avoid storing materials in highly erosive areas such as steep slopes. Stockpiles should be at least 50 ft away from streams and drainage course ways
- Cover baled waste paper with weighted tarps, tarpaulins or awnings.
- Frequently and regularly sweep storage areas. Never wash down storage areas.
- Locate storage areas on elevated concrete pads.

Materials Storage Continued

- Install catch basin inserts, oil/water separators or dead end sumps in liquid storage areas.
- Install oil water separators in vehicle transmission and engine storage areas.
- Stabilize erosion prone areas surrounding storage locations. Seed, mulch, or use geotextiles to reduce erosion.
- Use silt fences, sediment traps, or swales to control sediment around storage areas.
- Dispose of non-salvageable or non-recyclable liquids and solids. Reducing the amount of materials stored on site reduces the likelihood of spills and stormwater contamination.

Facility Operations

- Frequently clean scrap processing equipment to remove residues and accumulated fluids.
- Inspect equipment for spills or leakage of oil, fuel, hydraulic and other fluids. Drain fluids in a designated, impervious area and always use drip pans.
- Establish a preventative maintenance schedule for all outdoor processing equipment.
- Site process equipment on elevated concrete pads or under cover (i.e., roofs).
- Conduct processing activities (such as baling or compacting) indoors. Conduct processing activities that generate visible amounts of particulate residue or involve residual fluids and/or grease indoor or in a contained, impervious area.
- Never dump wash or mop water from tipping floors or other processing areas down the storm drains.
- Use berms, containment trenches, surface grading, swales, drainage ditches, or other diversion structure to direct runoff away from processing equipment.

Facility Operations Continued

- Direct runoff from contained areas to a sump, oil/water separator, media filter or detention basins.
- Stabilize high traffic areas around processing equipment. Use gravel, pavement, or seed and mulch soil surface.



Individual Drum and Container Storage

- Use non-corrosive, non-leaking, durable drums and containers. Always use tightly sealed drums and containers. Label all drums and containers.
- Store drums on an impervious surface, in a roofed or three sided structure, or cover with weighted tarps or awnings.
- Provide secondary containment for drum storage areas. Use berms, dikes, or other physical barriers to contain 110% of the total volume of all drums.
- Incorporate swales, drainage ditches, curbing, or grading to direct stormwater away from drum storage
- Put individual containers on pallets. Limit the stack height of individual containers/ drums.
- Use straps or plastic wrap to stabilize containers.
- Provide adequate clearance to allow material movement and access by material

Scrap and Waste Stockpiles

- Locate stockpiles at least 50 ft from surface waters and drainage courses.
- Locate stockpiles in stabilized areas (i.e., where surface erosion is unlikely).
- Install sediment traps and catch basin filters in stockpile areas. Consider installing oil/water separators
- Locate silt fences and vegetated swales



Scraping or Recycling Lead Acid Batteries

- Establish inspection and acceptance procedures for scrap lead-acid batteries. Inform suppliers of batteries of acceptable practices.
- Store batteries in a leak proof, corrosion resistant container in a covered, impervious area.
- Collect and dispose of leaked or spilled lead acid battery fluids.
- Neutralize acid leaks from cracked or broken batteries with sodium carbonate, soda ash, or other absorbent material.
- Store batteries on pallets (off the floor) on an impervious surface or in a leak proof container. Batteries should not protrude over the edge of the pallets
- Batteries stored on pallets should be stacked upright, up to 3 rows high, with cardboard between the layers.

Scraping or Recycling Lead Acid Batteries Continued

- Batteries should not protrude over the edge of the pallets
- Wrap batteries to be shipped in plastic. These batteries should also be stacked on a pallet or stored in leak-proof, corrosion resistant containers.

Spill Prevention and Response

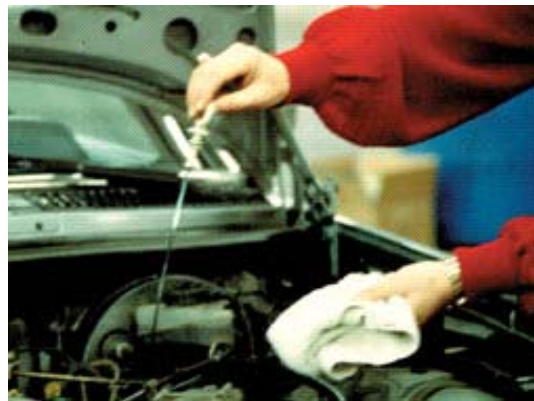
- Develop a spill prevention and response plan that clearly states procedures to stop the source of a spill and outlines the disposal of contaminated materials.
- Compile a list of all chemicals at the facility. Obtain a Material Safety Data Sheet (MSDS) for each one. Make this information readily available to all employees.
- Frequently inspect storage tanks and material storage areas for leaks.
- Locate spill kits in high activity or high risk areas (such as liquid storage areas).
- Install high level alarm on tanks to prevent overfilling.
- Clean up all spills immediately upon discovery. Have mercury spill kits on hand for spills from the storage of mercury switches.
- Store basic safety equipment and spill clean up material in all storage areas. Provide adequate lighting, a telephone, and a list of emergency numbers.
- Use dry clean up methods (such as granular absorbents, absorbent socks, absorbent pads). Never wash down pavement or other surfaces where spills have occurred.

Vehicle and Equipment Maintenance

- Use drip pans under all vehicles and equipment waiting for maintenance.
- Regularly inspect for filling or full drip pans.
- Avoid pouring liquid waste down floor drains, sinks, or outdoor storm drain inlets.
- Properly dispose of greasy rags, oil filters, air filters, batteries, spent coolant, fluids and degreasers. Promptly transfer used fluids to an appropriate storage container.
- Fuel vehicles on impervious surfaces. Use funnels and drip pans to reduce spillage.
- Wash vehicles at a commercial facility or wash vehicles on an impervious surface. Use only non-phosphorous soaps.
- Wash water must be directed away from any on site streams, stormwater drains, or drainage ditches. Direct wash water to a vegetated area.
- Label and track recycling of waste materials (batteries, solvent, used oil).
- Drain oil filters before disposal or recycling.
- Drain all fluids from all parts or components that will become scrap material or secondhand parts.

Training

- Inform employees of stormwater pollution sources, prevention, and applicable BMPs.
- Ensure that all employees are familiar with the facility's spill prevention and response plan.
- Educate employees in the proper filling and transfer procedures and waste control and disposal.
- Train employees to properly and completely inspect incoming materials.
- Employees must be trained in the appropriate handling, storage, and disposal of lead acid batteries.



Questions or Assistance with your Stormwater SWPPP, contact:

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