

APPENDIX I.N - Storm Water Discharges Associated with Industrial Activity from Scrap Recycling and Waste Recycling Facilities

A. Coverage of This Section.

1. Discharges Covered Under This Section. The requirements listed under this Part shall apply to storm water discharges from the following activities:

Table I.N.1 – Sector N: Scrap Recycling and Waste Recycling Facilities

SIC Code	Activity Represented
5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
	Source-separated Recycling Facility

2. Sector Specific Limitations on Coverage. There are no additional limitations on coverage other than those listed in *Part I.C.*
3. Sector Specific Prohibition of Non-Stormwater Discharges. In addition to those non-storm water discharges prohibited under *Part I.D.*, this permit does not authorize the discharge of:
 - a. Discharges from turnings containment areas. Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate *UPDES* permit.

B. Sector Specific Control Measures and Effluent Limits.

In addition to the control measures and effluent limits in *Part III*, the permittee shall implement the following to minimize pollutant discharges, as applicable:

1. Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable). The following requirements have been established for those facilities and operations that receive, process, and provide wholesale distribution of non-source separated, nonliquid recyclable wastes (i.e. ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section of the permit is not intended for those facilities that accept recyclables *only* from primarily non-industrial and residential sources.
 - a. Inbound Recyclable and Waste Material Control. The permittee shall minimize the chance of accepting materials that may be significant sources of pollutants through implementing control measures, such as the following, where feasible:
 - 1) Providing information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (i.e. from vehicles and equipment engines, radiators, and transmissions, oil-filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility;
 - 2) Procedures minimize the potential of any residual fluids from coming into contact with precipitation or stormwater;
 - 3) Procedures for accepting scrap lead-acid batteries. Additional requirements for the handling, storage and disposal or recycling of batteries shall be in accordance with *Part B.I.F* of *Appendix I.N*;
 - 4) Providing training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and

- 5) Procedures to ensure liquid wastes, including use oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with RCRA and other state and local requirements.
- b. Scrap and Waste Material Stockpiles and Storage (Outdoor). The permittee shall minimize contact of stormwater with stockpiled materials, processed materials, and nonrecyclable wastes through implementation of control measures such as the following, where feasible:
 - 1) Permanent or semi-permanent covers;
 - 2) Sediment traps, vegetated swales and strips, and catch basin filters and sand filters to facilitate settling or filtering of pollutants;
 - 3) Dikes, berms containment trenches, culverts, and surface grading to divert stormwater from storage areas;
 - 4) Silt fencing; and
 - 5) Oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiles (i.e. automobile storage areas).
- c. Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage). The permittee shall minimize contact of stormwater with residual cutting fluids by implementing the following, where feasible:
 - 1) Store all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or establish dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas shall be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (i.e. berms, curbing, elevated pads) to prevent contact with stormwater run-on.

Stormwater from these areas can be discharged, provided that any stormwater is first collected and treated by an oil and water separator or its equivalent. The permittee shall regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.
- d. Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage). The permittee shall minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with stormwater through the implementation of control measures such as the following, where feasible:
 - 1) Good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, and mercury spill kits for spills from storage of mercury switches;
 - 2) Not allowing wash water from tipping floors or other processing areas to discharge to the storm sewer system; and
 - 3) Disconnecting or sealing off all floor drains connected to the storm sewer system.
- e. Scrap and Recyclable Waste Processing Areas. The permittee shall minimize stormwater from coming into contact with scrap processing equipment. In the case of operations that generate visible amounts of particulate residue (i.e. shredding), control measures shall minimize the contact of accumulated particulate matter and residual fluids with stormwater (i.e. through good housekeeping, preventative maintenance). The permittee shall minimize the discharges of pollutants through the implementation of control measures such as the following, where feasible:

- 1) A schedule of periodic inspections for leaks, spills, malfunctioning, worn, or corroded parts or equipment;
 - 2) Establishing a preventive maintenance program for processing equipment;
 - 3) Using dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches;
 - 4) Installing of low-level alarms or other equivalent devices, or secondary containment that can hold the entire volume of the reservoir;
 - 5) Implementing containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater with outdoor processing equipment or stored materials;
 - 6) Using oil and water separators or sumps;
 - 7) Installing permanent or semi-permanent covers in processing areas where there are residual fluids and grease; and
 - 8) Using retention or detention ponds or basins, sediment traps, vegetated swales or strips, and/or catch basin filters or sand filters for pollutant settling and filtration.
- f. Scrap Lead-Acid Battery Program. The permittee shall minimize the discharge of pollutants in stormwater from lead-acid batteries, by properly handling, storing, and disposing of scrap lead-acid batteries, and implementing control measures such as the following, where feasible:
- 1) Segregating scrap lead-acid batteries from other scrap materials;
 - 2) Handling, storing, and disposing of cracked or broken batteries;
 - 3) Collecting and disposing of leaking lead-acid battery fluid;
 - 4) Minimizing and eliminating, where possible, exposure of scrap lead-acid batteries to precipitation or stormwater; and
 - 5) Providing employee training for the management of scrap batteries.
- g. Spill Prevention and Response Procedures. The permittee shall install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus adequate freeboard for precipitation may be used.
- A mercury spill kit shall be used for any release of mercury from switches, anti-lock brake systems, and switch storage areas.
- h. Supplier Notification Program. The permittee shall notify major suppliers, as appropriate, about which scrap materials will not be accepted at the facility or will be accepted but only under certain conditions.
2. Waste Recycling Facilities (Liquid Recyclable Materials). The following requirements have been established for those facilities that reclaim and recycle liquid wastes (i.e. used oil, antifreeze, mineral spirits, and industrial solvents).
- a. Waste Material Storage (Indoor). The permittee shall minimize or eliminate contact between residual liquids from waste materials stored indoors and from stormwater. The permittee shall address measures and controls to minimize and/or eliminate residual liquids from waste materials stored indoors from coming in contact with surface runoff. The permittee may refer to applicable portions of other existing plans such as SPCC plans required under *40 CFR Part*

112. To minimize the discharge of pollutants in stormwater from indoor waste material storage areas, the permittee shall implement control measures, such as the following, where feasible:
- 1) Implementing procedures for material handling (including labeling and marking);
 - 2) Cleaning up spills and leaks with dry absorbent materials and/or a wet vacuum system;
 - 3) Installing appropriate containment structures (e.g., trenching, curbing, gutters, etc.); and
 - 4) Installing a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. Discharges from these areas may require coverage under a separate *UPDES* permit or industrial user permit under the pretreatment program.
- b. Waste Material Storage (Outdoor). The permittee shall minimize contact between stored residual liquids and precipitation or stormwater. Discharges of stormwater from containment areas containing used oil shall be in accordance with applicable sections of 40 CFR Part 112. To minimize discharges of pollutants in stormwater from outdoor waste material storage areas, appropriate controls measures, such as the following, shall be implemented, where feasible:
- 1) Appropriate containment structures (i.e. dikes, berms, curbing, pits) to store the volume of the largest single tank and should include sufficient freeboard for precipitation;
 - 2) Drainage control and other diversionary structures;
 - 3) Corrosion protection and/or leak detection systems for storage tanks; and
 - 4) Dry-absorbent materials or a wet vacuum system to collect spills.
- c. Trucks and Rail Car Waste Transfer Areas. The permittee shall minimize pollutants in stormwater discharged from truck and rail car loading and unloading areas, including installing measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. To minimize discharges of pollutants in stormwater from truck and rail car waste transfer areas, control measures, such as the following, shall be implemented, where feasible:
- 1) Containment and diversionary structures to minimize contact with precipitation or stormwater; and
 - 2) Dry clean-up methods, wet vacuuming, roof coverings, and/or stormwater controls.
3. Recycling Facilities (Source-Separated Materials). The following requirements are for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.
- a. Inbound Recyclable Material Control. The permittee shall minimize the likelihood of receiving non-recyclable materials (i.e. hazardous materials) that may be a significant source of pollutants through the implementation of controls measures, such as the following, where feasible:
- 1) Providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials;
 - 2) Training drivers responsible for pickup of recycled material;
 - 3) Clearly marking public drop-off containers regarding which materials can be accepted;
 - 4) Rejecting nonrecyclable wastes or household hazardous wastes at the source; and
 - 5) Establishing procedures for handling and disposal of nonrecyclable materials.

- b. Outdoor Storage. The permittee shall minimize exposure of recyclables to precipitation and stormwater by using good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. To minimize exposure, the permittee shall implement control measures, such as the following, where feasible:
 - 1) Providing totally enclosed drop-off containers for the public;
 - 2) Installing a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system;
 - 3) Providing dikes and curbs for secondary containment (i.e. around bales of recyclable waste paper);
 - 4) Diverting stormwater away from outside material storage areas;
 - 5) Providing covers over containment bins, dumpsters, and roll-off boxes; and
 - 6) Storing the equivalent of one day's volume of recyclable material indoors.
- c. Indoor Storage and Material Processing. The permittee shall minimize the release of pollutants from indoors storage and processing areas through implementation of control measures, such as the following, where feasible:
 - 1) Scheduling routine good housekeeping measures for all storage and processing areas;
 - 2) Prohibiting tipping floor wash water from draining to the storm sewer system; and
 - 3) Providing employee training on pollution prevention practices.
- d. Vehicle and Equipment Maintenance. The permittee shall minimize the discharge of pollutants in stormwater from areas where vehicle and equipment maintenance occur outdoors through the implementation of control measures, such as the following, where feasible:
 - 1) Minimizing or eliminating outdoor maintenance areas;
 - 2) Establishing spill prevention and clean-up procedures in fueling areas;
 - 3) Avoiding topping off fuel tanks;
 - 4) Diverting stormwater from fueling areas;
 - 5) Storing lubricants and hydraulic fluids indoors; and
 - 6) Providing employee training on proper handling and storage of hydraulic fluids and lubricants.

C. Sector Specific Inspection Requirements.

In addition to the inspection requirements in *Part IV.A*, the permittee shall also inspect the following areas, if they are located at the facility:

1. Waste Recycling Facilities. All areas where waste is generated, received, stored, treated, or disposed of that are exposed to either precipitation or stormwater.

D. Sector Specific Plan Requirements.

1. Site Map. In addition to the requirements in *Part VII.D.3*, the site map shall also include the location of the following, if applicable:
 - a. Scrap and waste material storage;

- b. Outdoor scrap and waste processing equipment; and
 - c. Containment areas for turnings exposed to cutting fluids.
2. **Preventative Maintenance.** In addition to the requirements in *Part VII.D.5.b*, the Plan preventative maintenance procedures shall also include the following if the facility stockpiles turnings outdoors that are or have been exposed to cutting fluids:
- a. Procedures to collect, handle, and dispose of or recycle residual fluids.

E. **Monitoring Requirements.**

1. **Analytical Benchmark Monitoring.** The following analytical benchmark monitoring parameters shall apply specifically to sector N facilities. Parameters found in this Part apply to both primary industrial activities and any co-located industrial activities. The facility may be subject to the requirements of more than one of the following:

Table I.N.2 – Analytical Benchmark Monitoring Parameters for Scrap Recycling and Waste Recycling Facilities Except Those Only Receiving Source-separate Recyclable Materials Primarily from Non-Industrial and Residential Sources (SIC 5093)

Parameter	Benchmark Monitoring Concentration
Chemical Oxygen Demand	120 mg/L
Total Suspended Solids ¹	100 mg/L
Total Recoverable Aluminum	1.1 mg/L
Total Recoverable Copper (freshwater)	0.00519 mg/L
Total Recoverable Copper (saltwater) ²	0.0048 mg/L
Total Recoverable Lead (freshwater)	Hardness Dependent ³
Total Recoverable Lead (saltwater) ²	0.210 mg/L
Total Recoverable Zinc (freshwater)	Hardness Dependent ³
Total Recoverable Zinc (saltwater) ²	0.090 mg/L

¹. Sampling for total suspended solids is not required for stormwater discharges that are infiltrating to groundwater.

². Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

³. The freshwater analytical benchmark monitoring values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water to identify the applicable 'hardness range' for determining the analytical benchmark monitoring value applicable to the facility. Hardness dependent analytical benchmark monitoring shall follow the table below:

Freshwater Hardness Range	Lead (mg/L)	Zinc (mg/L)
0.00 – 24.99 mg/L	0.014	0.037
25 – 24.99 mg/L	0.024	0.052
50 – 74.99 mg/L	0.045	0.080
75 – 99.99 mg/L	0.069	0.107
100 – 124.99 mg/L	0.095	0.132
125 – 149.99 mg/L	0.123	0.157
150 – 174.99 mg/L	0.152	0.181
175 – 199.99 mg/L	0.182	0.204
200 – 224.99 mg/L	0.213	0.227
225 – 249.99 mg/L	0.246	0.249
250+ mg/L	0.262	0.260

If hardness cannot be determined (groundwater or inaccessible waterbodies), use the most conservative values (0-24.99 mg/L range).

2. Numeric Effluent Limitation Monitoring. There are no numeric effluent limitation parameters for Sector N facilities in this permit. Any additional monitoring and reporting requirements shall be based on the nature of activities at the facility and the facility stormwater discharges, in accordance with *Part V.D.2*.