

GENERAL PERMIT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STORMWATER DISCHARGE PERMIT
Department of Environmental Quality
811 S.W. Sixth Avenue, Portland, OR 97204
Telephone: (503) 229-5630 or 1-800-452-4011 toll free in Oregon
Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:

SOURCES THAT ARE REQUIRED TO OBTAIN COVERAGE UNDER THIS PERMIT

A facility that may discharge stormwater from a point source to the Columbia Slough or to conveyance systems that discharge to the Columbia Slough.

- 1) The stormwater is associated with an industrial activity identified in *Table 1: Sources Covered* on p. 3 or *Table 2: Additional Industrial Activities Covered* on p. 4 below; or
- 2) The facility is notified in writing by the Director that coverage under this permit is required for its stormwater discharges (see Note 1 below).

Note 1:

- 1) Facility is designated by the Director as needing a stormwater permit pursuant to 40 CFR §122.26(a)(9)(i)(D). Facility discharges stormwater associated with an industrial activity that is not described in *Table 1: Sources Covered* on p. 3 below.
- 2) Facilities may apply for conditional exclusion from the requirement to obtain coverage under this permit if there is no exposure of industrial activities and materials to stormwater pursuant to 40 CFR §122.26(g); see Permit Coverage and Exclusion from Coverage on p. 5 below.
- 3) The following activities are not required to obtain coverage under this permit:
 - (i) Construction activities; asphalt mix batch plants; concrete batch plants; and Standard Industrial Classification code 14, Mining and Quarrying of Nonmetallic Minerals, Except Fuels. These activities are required to obtain coverage under separate general permits.
 - (ii) Any source that has obtained an individual NPDES permit for the discharge, unless the source is otherwise eligible for coverage under this permit and DEQ has approved the source's application for coverage under it.
 - (iii) Any source that discharges to a sanitary sewer system and the discharge is approved by the sanitary sewer operator.

Greg Aldrich, Administrator
Water Quality Division

Issuance Date: Oct. 1, 2011
Amended Date: March 28, 2012

PERMITTED ACTIVITIES

Until this permit expires, is modified or revoked, the permit registrant is authorized to construct, install, modify, or operate stormwater treatment or control facilities, and to discharge stormwater and non-stormwater discharges specifically authorized by the permit to public waters in conformance with all the requirements, limitations, and conditions set forth in the following schedules:

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Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.

Schedule F contains General Conditions that are included in all general permits issued by DEQ. Should conflicts arise between Schedule F and any other schedule of the permit, the requirements in Schedule F will not apply.

Table 1. Sources Covered

Types of Industrial Sources Required to Obtain Coverage Under this Permit
<p>Facilities with the following primary Standard Industrial Classification (SIC) codes:</p> <ul style="list-style-type: none"> 10 Metal Mining 12 Coal Mining 13 Oil and Gas Extraction 20 Food and Kindred Products 21 Tobacco Products 22 Textile Mill Products 23 Apparel and Other Finished Products Made From Fabrics and Similar Material 24 Lumber and Wood Products, Except Furniture and 2491 Wood Preserving. (Activities with SIC 2411 Logging that are defined in 40 CFR §122.27 as silvicultural point source discharges are covered by this permit.) 25 Furniture and Fixtures 26 Paper and Allied Products 27 Printing, Publishing and Allied Industries 28 Chemicals and Allied Products (excluding 2874 Phosphate Fertilizer Manufacturing) 29 Petroleum Refining and Related Industries 30 Rubber and Miscellaneous Plastics Products 31 Leather and Leather Products 32 Stone, Clay, Glass, and Concrete Products 33 Primary Metal Industries 34 Fabricated Metal Products, Except Machinery and Transportation Equipment 35 Industrial and Commercial Machinery and Computer Equipment 36 Electronic and Other Electrical Equipment and Components, Except Computer Equipment 37 Transportation Equipment 38 Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks 39 Miscellaneous Manufacturing Industries 4221 Farm Product Warehousing and Storage 4222 Refrigerated Warehousing and Storage 4225 General Warehousing and Storage 5015 Motor Vehicle Parts, Used 5093 Scrap and Waste Materials
<p>Facilities with the following primary SIC codes that have vehicle maintenance shops (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations:</p> <ul style="list-style-type: none"> 40 Railroad Transportation 41 Local and Suburban Transit and Interurban Highway Passenger Transportation 42 Motor Freight Transportation and Warehousing (excluding 4221 Farm Product Warehousing and Storage, 4222 Refrigerated Warehousing and Storage, and 4225 General Warehousing and Storage) 43 United States Postal Service 44 Water Transportation 45 Transportation by Air 5171 Petroleum Bulk Stations and Terminals, except as provided in Note 1 below.
<p>Facilities storing, transferring, formulating, or packaging bulk petroleum products or vegetable oils, except as provided in the note below.</p>
<p>Steam Electric Power Generation including coal handling sites</p>
<p>Landfills, land application sites and open dumps</p>
<p>Hazardous Waste Treatment, Storage and Disposal Facilities.</p>
<p>Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, recycling, and reclamation of municipal or domestic sewage (including land dedicated to the disposal of sewage sludge that are located within the confines of the facility) with the design flow capacity of 1.0 mgd or more, or required to have a pretreatment program under 40 CFR §403.</p>

Note 1: Exemption for facilities storing, transferring, formulating, or packaging bulk petroleum products or vegetable oils:

A discharge permit is not needed if discharges are only from:

- 1) Stormwater that contacts oil-filled electrical equipment in transformer substations that are equipped with properly functioning oil spill prevention measures such as containment areas or oil/water separators.
- 2) Stormwater that contacts petroleum product receiving or dispensing areas or product dispensing equipment from which product is dispensed to final users, whether or not the stormwater is treated by an oil/water separator.
- 3) Stormwater that collects in a secondary containment area at a petroleum product dispensing site, where the secondary containment area is associated with storage tanks from which product is dispensed only to final users, and the discharge from the containment area is treated by an oil/water separator.
- 4) Stormwater that collects in a secondary containment area at a bulk petroleum product storage site, where the total storage capacity at the site does not exceed 150,000 gallons, and the discharge from the containment area is treated by an oil/water separator. A site with multiple containment areas is considered a single site for determining total storage capacity.

In addition to the industrial sources listed in Table 1, facilities with the following industrial activities listed in Table 2 below are required to obtain permit coverage under the NPDES 1200-COLS permit:

Table 2. Additional Industrial Activities Covered

Vehicle, machinery, equipment, and trailer maintenance including repairs, servicing, washing, and painting
Vehicle, machinery, equipment, and trailer storage including rental, sales, wrecked vehicles, fleet, and general storage (Note: Disposal/refuse containers are considered equipment and, when stored by a disposal/refuse contractor/vendor, are industrial activities covered by this permit.)
Materials storage including raw materials; bulk fuels, chemicals, detergents, and plastic pellets; finished materials; lumber and food products; wholesale gravel, sand, and soil stockpiles; and bulk liquids other than water
Waste handling, including recycled product storage, composting, tires, and bulk hazardous waste
Commercial animal operations such as kennels, race tracks, veterinarians not covered under a Confined Animal Feeding Operation permit
Fuel distribution and sales including bulk stations, fuel oil dealers, retail stations (manned and unmanned), fleet fueling, mobile fueling, and truck stops

PERMIT COVERAGE AND EXCLUSION FROM COVERAGE

1. New Discharger to Impaired Waters (see Schedule D.3, Definitions)

- a. A new discharger to an impaired water without a Total Maximum Daily Load (TMDL) for pollutant(s) must meet the following conditions to obtain coverage under this permit, cease the discharge or obtain an individual permit:
 - i. Prevent all exposure to stormwater of the pollutant(s) for which the waterbody is impaired and document in the Stormwater Pollution Control Plan (SWPCP) procedures taken to prevent exposure onsite;
 - ii. Document in SWPCP that the pollutant(s) for which the waterbody is impaired is not present at the site, or
 - iii. Provide data and other technical information that demonstrates that the discharge is not expected to cause or contribute to an exceedance of the water quality standard for which the waterbody is impaired at the point of discharge to the waterbody if the pollutant(s) for which the waterbody is impaired are likely to be present at the site and DEQ has not issued a TMDL for the pollutant(s).
- b. A new discharger to an impaired water with a TMDL for pollutant(s) must meet the following conditions to obtain coverage under the permit:
 - i. DEQ presumes that compliance with the terms and conditions of the permit complies with the TMDL and will grant the owner or operator coverage under the permit, unless the TMDL establishes wasteload allocation(s) and additional requirements for industrial stormwater discharges.
 - ii. DEQ will inform the applicant if any additional limits or controls are necessary to be consistent with the assumptions of the wasteload allocation(s) in the TMDL(s), or if coverage under an individual permit is necessary.
- c. Conditions 1.a and b above do not apply if the waterbody is impaired for:
 - i. Biological communities and no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment; or
 - ii. Temperature, hydrologic modifications, or impaired hydrology.

2. New Application for Permit Coverage

- a. The following facilities that are required to obtain coverage under this permit must:
 - i. New facility – Submit to DEQ or Agent (see Schedule D.4 for description of Agent) at least 60 calendar days before the planned activity that requires permit coverage, unless a later date is approved by DEQ or Agent, a complete application that includes the following:
 1. DEQ-approved application form;
 2. One paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 3. Applicable permit fees.
 - ii. Existing facility with stormwater discharges associated with industrial activities identified in *Table 1: Sources Covered* on p. 3 or *Table 2: Additional Industrial Activities Covered* on p. 4 operating without coverage under any NPDES permit for those discharges – Immediately submit to DEQ or Agent, unless a later date is approved by DEQ or Agent, a complete application that includes the following:
 1. DEQ-approved application form;
 2. One paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 3. Applicable permit fees.
 - iii. Existing facility that is designated by the Director as needing a stormwater permit pursuant to 40 CFR §122.26(a)(9)(i)(D) or is conducting an industrial activity that is not described in

Table 1: Sources Covered on p. 3 or *Table 2: Additional Industrial Activities Covered* on p. 4 that is notified by the Director that coverage under this permit is required (see Note 1 of the cover page of the permit) – Within 90 calendar days of being notified by DEQ that permit coverage is required, submit to DEQ or Agent a complete application that includes the following:

1. DEQ-approved application form;
 2. One paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 3. Applicable permit fees.
- iv. Existing facility operating under permit coverage that intends to change industrial processes at the site to a new primary industrial sector – Submit to DEQ or Agent at least 60 calendar days before the planned change, unless a later date is approved by DEQ or Agent, a complete application that includes the following:
1. DEQ-approved application form;
 2. One paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 3. Applicable permit fees.
- v. Existing facility whose stormwater discharges are authorized by an individual NPDES permit and seeks coverage under this permit – Submit to DEQ or Agent a complete application that includes the following:
1. DEQ-approved application form;
 2. One paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 3. Applicable permit fees.
- b. Registration
- i. Prior to granting the applicant registration under this permit, DEQ will provide a 30-calendar day public review period. DEQ will respond in writing to any public comments on the applicant's SWPCP.
 - ii. DEQ or Agent will notify the applicant in writing if registration is granted or denied.
 - iii. If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030.

3. Renewal Application Requirements for Facilities that DID NOT Exceed Benchmark(s) Based on the 4th year Benchmark Evaluation of Data Collected pursuant to Schedule A.9 of 1200-COLS permit that expired August 31, 2011.

- a. To ensure uninterrupted permit coverage for industrial stormwater discharges, an owner or operator of a facility registered under the 1200-COLS permit that expired on August 31, 2011 must submit an updated SWPCP that meets the requirements of the new permit to DEQ or Agent, by December 31, 2011, unless a later date is approved in writing. Submit one paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP.
- b. Registration
- i. Prior to granting the applicant registration under this permit, DEQ will provide a 30-calendar day public review period.
 - ii. DEQ or Agent will notify the applicant in writing if registration is approved or denied.
 - iii. If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit. If the applicant applies for an individual permit in accordance with OAR 340-045-0030, the applicant's coverage under this permit will continue until DEQ grants or denies the applicant's individual permit application.

4. Renewal Application Requirements for Facilities that Exceed Benchmark(s) based on the 4th year Benchmark Evaluation pursuant to Schedule A.9 of 1200-COLS permit that expired August 31, 2011.

- a. To ensure uninterrupted permit coverage for industrial stormwater discharges, an owner or operator of a facility registered under the 1200-COLS permit that expired on August 31, 2011 must submit an updated SWPCP that meets the requirements of the new permit to DEQ or Agent, by March 31, 2012, unless a later date is approved in writing. Submit one paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP.
- b. The owner or operators must include additional treatment measures in the SWPCP, which may include a combination of source control and treatment measures, with the goal of achieving the benchmark(s) in Schedule A.9 of this permit in future discharges. Include in the SWPCP the rationale for the selection of the measures and the projected reduction of pollutant concentration(s). A licensed professional engineer (PE) or certified engineering geologist (CEG) shall design and stamp the portion of the SWPCP that addresses the treatment measures.
- c. The owner or operator may request a waiver from including the additional treatment measures in the SWPCP if:
 - i. The benchmark exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site (see Schedule D.3, Definitions). The updated SWPCP must include the investigation and analysis used to demonstrate that the exceedances are due to natural background conditions and include any data collected by the permit registrant or others (including literature studies) that describe the levels of natural background pollutants in the discharge.
 - ii. Owner or operator implements or has implemented volume reduction measures, such as low impact development practices, that have or will result in reductions of the mass load of pollutants in the discharge below the mass equivalent of the benchmarks in Schedule A.9 of the permit. The updated SWPCP must include data and analysis to support this determination, including the description of the measure(s), date(s) implemented or expected to be implemented and the mass load analysis.
- d. Registration
 - i. Prior to granting the applicant registration under this permit, DEQ will provide a 30-calendar day public review period. DEQ will respond in writing to any public comments on the applicant's updated SWPCP.
 - ii. DEQ or Agent will notify the applicant in writing if registration is approved or denied.
 - iii. If registration is denied or the applicant does not wish to be regulated by this permit, the applicant may apply for an individual permit in accordance with OAR 340-045-0030. If the applicant applies for an individual permit in accordance with OAR 340-045-0030, the applicant's coverage under this permit will continue until DEQ grants or denies the applicant's individual permit application.

5. Name Change or Transfer of Permit Coverage

- a. For a name change or transfer of permit coverage between legal entities, the owner or operator must submit to DEQ or Agent within 30 calendar days of the name change or planned transfer, a complete application that includes the following:
 - i. DEQ-approved Name Change or Permit Transfer application form;
 - ii. An updated SWPCP, if revisions are necessary to address changed conditions. Submit one paper copy and one electronic PDF of the SWPCP. If an Agent is receiving the application materials, submit two copies of the SWPCP; and
 - iii. Applicable permit fees.

- b. DEQ or Agent will notify the applicant in writing if the transfer is approved or denied. DEQ will transfer coverage under the permit after DEQ approves the application.
- c. For a name change or transfer of permit coverage between legal entities that intend to change industrial processes at the site to a new primary industrial sector, the owner or operator must submit a new application for coverage under this permit as required in condition 2.a.iv above.

6. “No Exposure” Conditional Exclusion from Permit Coverage

- a. An owner or operator that applies under 40 CFR §122.26(g)(2) for a “no exposure” conditional exclusion from coverage under this permit must:
 - i. Protect industrial materials and activities from exposure to rain, snow, snow melt, and runoff by using a storm resistant shelter, except as provided in the Environmental Protection Agency (EPA) Guidance Manual for Conditional Exclusion from Stormwater Permitting Based on “No Exposure” of Industrial Activities to Stormwater (EPA 833-B-00-001, June 2000). Storm resistant shelters with unsealed zinc or copper roofing materials are not eligible for the “no exposure” conditional exclusion.
 - ii. Ensure that contaminated soil or materials from previous operations is not exposed.
 - iii. Complete and sign a certification, on a form approved by DEQ, that there is no stormwater exposure to industrial materials and activities from the entire facility, except as provided in 40 CFR §122.26(g)(2). The EPA Guidance Manual (EPA 833-B-00-001) may be used to determine whether the no exposure criteria are met.
 - iv. Submit the signed certification to DEQ or Agent once every five years. If DEQ or Agent does not comment on the “no exposure” certification within 30 days, the “no exposure” conditional exclusion is deemed approved. DEQ or Agent may notify the applicant in writing or by email of its approval. The owner or operator must keep a copy of the certification on site and any notification of approval on site.
 - v. Allow DEQ or Agent to inspect the facility to determine compliance with the “no exposure” conditions, and allow DEQ or Agent to make any “no exposure” inspection reports available to the public upon request.
 - vi. Submit a copy of the “no exposure” certification to the municipal separate storm sewer system (MS4) operator (i.e., local municipality, district), upon their request, if facility discharges through an MS4; and allow inspection and public reporting by the MS4 operator.
- b. Limitations for obtaining or maintaining the exclusion:
 - i. This exclusion is available on a facility-wide basis only, not for individual outfalls.
 - ii. If industrial materials or activities become exposed to rain, snow, snow melt, or runoff, the conditions for this exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally exempt discharger who anticipates changes in circumstances must apply for and obtain permit coverage before the change of circumstances.
 - iii. DEQ or Agent retains the authority to make a determination that the “no exposure” conditional exclusion no longer applies and require the owner or operator to obtain permit coverage.

7. Authorized Non-Stormwater Discharges

- a. Subject to the terms and conditions of the permit, the following non-stormwater discharges are authorized:
 - i. Discharges from fire-fighting activities.
 - ii. Fire hydrant flushings.
 - iii. Potable water, including water line flushings.

- iv. Uncontaminated condensate from air conditioners, coolers and other compressors, and from outside storage of refrigerated gases and liquids.
 - v. Irrigation drainage.
 - vi. Landscape watering, provided that all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions.
 - vii. Pavement wash waters where no detergents or hot water are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed), and surfaces are swept before washing.
 - viii. Vehicle washing that does not use detergents or hot water unless the 1700-A NPDES permit is required for the discharge.
 - ix. Routine external building washdown that does not use detergents or hot water.
 - x. Uncontaminated ground water or spring water.
 - xi. Foundation or footing drains where flows are not contaminated with process materials.
 - xii. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).
- b. Piping and drainage systems for interior floor drains and process wastewater discharge points must be separated from the storm drainage system to prevent inadvertent discharge of pollutants to waters of the state, unless the process wastewater discharge is authorized by another NPDES permit that allows commingled outfalls. Discharge from floor drains to the stormwater drainage system is a violation of this permit.
 - c. Any other wastewater discharge or disposal, including stormwater mixed with wastewater, must be permitted in a separate permit, unless the wastewater is reused or recycled without discharge or disposal, or discharged to the sanitary sewer with approval from the sanitary sewer system operator.

8. Limitations on Coverage

- a. Pursuant to OAR 340-045-0033(10), DEQ may deny permit coverage to an applicant or revoke a permit registrant's coverage under the permit and require the owner or operator to apply for and obtain an individual permit.
- b. Coverage under this permit is not available under the following circumstances:
 - i. The discharges are regulated by another NPDES permit, except a Municipal Separate Storm Sewer System (MS4) permit.
 - ii. The discharges were included in a permit that has been or is in the process of being denied, terminated or revoked unless the source is otherwise eligible for coverage under this permit and DEQ approves the source's application to register under it and simultaneously revokes coverage under the other permit.
 - iii. New discharger to waters designated as Outstanding Resource Waters for antidegradation purposes under 40 CFR 131.13(a)(3) and OAR 340-041-0004.
- c. Any operator not wishing to be covered or limited by this general permit may make application for an individual NPDES permit in accordance with the procedures in OAR 340-045-0030.

SCHEDULE A

TECHNOLOGY BASED EFFLUENT LIMITATIONS

1. Narrative Technology-Based Effluent Limits

The permit registrant must meet the following narrative technology based effluent limits and any additional sector specific limits in Schedule E of the permit.

- a. Minimize exposure - Minimize exposure of manufacturing, processing, material storage areas, including loading and unloading, disposal, cleaning, maintenance and fixed fueling areas, to rain, snow, snowmelt and runoff. To the extent technologically available and economically practicable and achievable in light of best industry practice, the permit registrant must do the following:
 - i. Locate materials and activities indoors or protect them with storm resistant covers if stormwater from affected areas discharges to surface waters. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps;
 - ii. Use grading, berming, or curbing to divert stormwater away from these areas and prevent stormwater contamination;
 - iii. Store all hazardous substances (see Schedule D.3, Definitions) within berms or other secondary containment devices to prevent leaks and spills from contaminating stormwater. If the use of berms or secondary containment devices is not possible, then store hazardous substances in areas that do not drain to the storm sewer system;
 - iv. Locate materials, equipment and activities in containment and diversion systems, including the storage of leaking or leak-prone vehicles and/or equipment awaiting maintenance, to prevent leaks and spills from contaminating stormwater;
 - v. Use drip pans or absorbents under or around leaking or leak-prone vehicles/equipment or store indoors. Drain fluids from equipment and vehicles prior to on-site storage or disposal;
 - vi. Perform all cleaning operations indoors, under cover or in bermed areas that prevent runoff and run-on and also captures overspray;
 - vii. Clean up spills or leaks promptly using absorbents or other effective methods to prevent discharge of pollutants and use spill/overflow protection equipment, and
 - viii. Ensure that all washwater drains to a proper collection system such as a closed-loop system or sanitary sewer and not discharged to the stormwater drainage system unless the washwater is an authorized non-stormwater discharge listed in condition 6 of the Permit Coverage and Exclusion from Coverage section of the permit.
- b. Oil and Grease - Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
- c. Waste Chemicals and Material Disposal - Recycle or properly dispose of wastes to eliminate or minimize exposure of pollutants to stormwater. Cover all waste contained in bins or dumpsters where there is a potential for drainage of stormwater through the waste to prevent exposure of stormwater to these pollutants. Acceptable covers include, but are not limited to, storage of bins or dumpsters under roofed areas and use of lids or temporary covers such as tarps.
- d. Erosion and Sediment Control - Stabilize exposed areas and contain runoff using structural and nonstructural controls to minimize erosion of soil at the site and sedimentation. Employ erosion control methods such as vegetating exposed areas, graveling or paving to minimize erosion of soil at the site. Employ sediment control methods such as detention facilities, vegetated filter strips, bioswales, flow velocity dissipation devices or other permanent erosion or sediment controls to minimize sediment loads in stormwater discharges. For activities that involve land disturbance, the permit registrant must contact the local municipality to determine if there are other applicable requirements related to stormwater control.

- e. Debris Control - Employ screens, booms, settling ponds, or other methods to eliminate or minimize waste, garbage and floatable debris in stormwater discharges and ensure that this debris is not discharged to receiving waters.
- f. Dust Generation and Vehicle Tracking of Industrial Materials - Minimize generation of dust and off-site tracking of raw, final or waste materials.
- g. Housekeeping - Routinely clean all exposed areas that may contribute pollutants to stormwater using such measures as sweeping at regular intervals, litter pick-up, keeping materials orderly and labeled, prompt clean up of spills and leaks, proper maintenance of vehicles and stowing materials in appropriate containers.
- h. Spill Prevention and Response Procedure - Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans that include methods for spill prevention and clean-up and notification procedures. At a minimum, the permit registrant must implement the following:
 - i. Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
 - ii. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
 - iii. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills and other releases. Make the methods and procedures available to appropriate personnel. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures. Have the necessary clean-up material on-site and readily available, and
 - iv. Procedures for notification of appropriate facility personnel, emergency agencies, and regulatory agencies. Contact information must be in locations that are readily accessible and available.
- i. Preventative Maintenance - Regularly inspect, clean, maintain, and repair all industrial equipment and systems and materials handling and storage areas that are exposed to stormwater to avoid situations that may result in leaks, spills, and other releases of pollutants discharged to receiving waters. Clean, maintain and repair all control measures, including stormwater structures, catch basins, and treatment facilities to ensure effective operation and in a manner that prevents the discharge of pollution.
- j. Employee Education - Develop and maintain an employee orientation and education program to inform personnel on the components and goals of the SWPCP. Train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel). Training must cover both the specific control measures used to achieve the narrative technology based effluent limits such as spill response procedures and good housekeeping practices, and the monitoring, inspection, reporting and documentation requirements in the permit. The education and training must occur within 30 calendar days of hiring an employee who works in areas where stormwater is exposed to industrial activities or conducts duties related to the implementation of the SWPCP, and annually thereafter.
- k. Non-Stormwater Discharges - Eliminate any non-stormwater discharges not authorized by a NPDES permit (see condition 7 of the Permit Coverage and Exclusion from Coverage section of the permit for a list of authorized non-stormwater discharges).

2. Numeric Technology Based Effluent Limits based on Stormwater Specific Effluent Limitations Guidelines - The permit registrant with the following activities must comply with the applicable limitations:

Table 2. Numeric Effluent Limits based on Effluent Limit Guidelines

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Schedule E.D.1
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Schedule E.E.3
Runoff from hazardous waste landfills	Part 445, Subpart A	See Schedule E.K.3
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Schedule E.L.7
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Schedule E.O.5

3. Control Measures for Technology Based Effluent Limits

- a. The permit registrant must select, design, install, implement and maintain control measures to meet the narrative and numeric technology based effluent limits in Schedule A.1, A.2 and Schedule E of the permit and described these measures in the SWPCP.
- b. For technology based effluent limits that require permit registrants to minimize pollutants in the discharge, permit registrants must reduce or eliminate pollutants to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice. In selecting the appropriate control measures to meet these limits, permit registrant may consider the age of the equipment and facilities involved, the processes employed, the engineering aspects of the application of various types of control techniques, the pollutant reductions likely to be achieved, any adverse environmental or energy effects of potential measures, and the costs of achieving pollutant reductions.
- c. The permit registrant must select, design, install, implement and maintain the control measures in accordance with good engineering practices and manufacturer's specifications. If the permit registrant deviates from manufacturer's specifications provide justification for such deviation in the SWPCP.
- d. DEQ or Agent may require the permit registrant to take corrective actions to meet the narrative and numeric technology based effluent limits in Schedule A.1, A.2 and Schedule E of the permit.
 - i. If the permit registrant is failing to implement the control measures in the SWPCP, they must take corrective actions and implement the measures before the next storm event if practicable, unless otherwise approved by DEQ or Agent.
 - ii. If modifications to the control measures are necessary to meet the technology limits in the permit, permit registrant must revise SWPCP within 30 days, unless otherwise approved by DEQ or Agent. Permit registrant must implement the corrective actions before the next storm event if practicable or no later than 60 days from discovering the violation, unless a later date is approved by DEQ or Agent.

WATER QUALITY BASED EFFLUENT LIMITATIONS

4. Water Quality Standards

- a. The permit registrant must not cause or contribute to a violation of instream water quality standards as established in OAR 340-041.
- b. If at any time the permit registrant becomes aware, or DEQ or Agent determines, that the discharge causes or contributes to an exceedance of water quality standards, permit registrant must take the following corrective actions:
 - i. Within 24 hours of discovering the violation:
 1. Investigate the conditions that triggered the violation and
 2. Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with the permit.
 - ii. Within 30 days of the discovering the violation, submit a Water Quality Standards Corrective Action report to DEQ or Agent that documents the following:
 1. The results of the investigation, including the date the violation discovered and a brief description of the conditions that triggered the violation;
 2. Corrective actions taken or to be taken, including date corrective action completed or expected to be completed, and
 3. Document whether SWPCP revisions are necessary. If permit registrant determines that SWPCP revisions are necessary based on the corrective action review, submit a revised SWPCP to DEQ or Agent with the report.
 - iii. Permit registrant must implement the corrective actions before the next storm event if practicable or no later than 60 days from discovering the violation, unless a later date is approved by DEQ or Agent.
- c. DEQ may impose additional water quality-based limitations on a site-specific basis, or require the permit registrant to obtain coverage under an individual permit, if information in the application, required reports, or from other sources indicates that the discharge is causing or contributing to a violation of water quality standards, either in the receiving waterbody or a downstream waterbody. If DEQ determines that additional site specific requirements are necessary, DEQ will require the permit registrant to revise the SWPCP. DEQ will hold a 30-calendar day public review period on the revised SWPCP.

5. Discharges to Impaired Waters.

- a. Existing Discharger to an Impaired Water with a TMDL for Pollutant(s)- Compliance with the terms and conditions of the permit complies with the Columbia Slough TMDL for pollutants approved by EPA on November 25, 1998. Permit registrant must meet Schedule A.4 and B.1.b of the permit. If DEQ revises the existing Columbia Slough TMDL or develops new TMDLs for other pollutants in the watershed after the issuance date of this permit that identify wasteload allocation(s) for pollutants and additional requirements for industrial stormwater discharges, DEQ will inform the permit registrant if any additional limits or controls are necessary to be consistent with the assumptions of the wasteload allocation(s) in the TMDL(s), or if coverage under an individual permit is necessary. If DEQ determines that additional site specific requirements are necessary, DEQ will require the permit registrant revise the SWPCP to incorporate the requirements. DEQ will hold a 30-calendar day public review period on the revised SWPCP.
- b. Existing Discharger to an Impaired Water without a TMDL for Pollutant(s)- Permit registrant that discharges to an impaired water on the 303(d) list in effect at the time of permit assignment without a TMDL for the pollutant(s) must meet Schedule A.4 and B.1.b of the permit.
- c. New Discharger to an Impaired Water - New discharges to impaired waters authorized to discharge under this permit must implement and maintain any control measures or conditions on the site that enabled the permit registrant to become eligible for permit coverage and modify such

measures or conditions as necessary pursuant to corrective action requirements in the permit. Permit registrant must meet Schedule A.4 and B.1.b of the permit.

STORMWATER POLLUTION CONTROL PLAN

6. Preparation and Implementation of SWPCP

- a. The SWPCP must be prepared by a person knowledgeable in stormwater management and familiar with the facility.
- b. The SWPCP must be signed and certified in accordance with 40 CFR §122.22.
- c. Permit registrants must implement the SWPCP and any revisions to the plan. Failure to implement any of the control measures or practices described in the SWPCP is a violation of the permit.
- d. The SWPCP must be kept current and updated as necessary to reflect any changes to the site. Update the SWPCP within 30 days of making the changes.

7. Required Elements

- a. Title Page - The title page of the SWPCP must contain the following information:
 - i. Name of the site.
 - ii. Name of the site operator or owner.
 - iii. The name of the person(s) preparing the SWPCP.
 - iv. Site or file number as indicated on the permit.
 - v. Contact person's name and telephone number.
 - vi. Physical address, including county, and mailing address if different.
- b. Site Description - The SWPCP must contain the following information, including any information required in Schedule E of the permit:
 - i. A general location map showing the location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features.
 - ii. A site map including the following:
 1. drainage patterns;
 2. drainage and discharge structures (piping, ditches, etc.);
 3. outline of the drainage area for each stormwater outfall;
 4. paved areas and buildings within each drainage area;
 5. areas used for outdoor manufacturing, treatment, storage, or disposal of significant materials;
 6. existing structural control measures for minimizing pollutants in stormwater runoff;
 7. structural features that reduce flow or minimize impervious areas;
 8. material handling and access areas;
 9. hazardous waste treatment, storage and disposal facilities;
 10. location of wells including waste injection wells, seepage pits, drywells, etc.;
 11. location of springs, wetlands and other surface waterbodies both on site and adjacent to the site;
 12. location of groundwater wells;
 13. location and description of authorized non-stormwater discharges;
 14. location of sampling points; and
 15. location of spill prevention and cleanup materials.
 - iii. A description of industrial activities conducted at the site and significant materials stored, used, treated or disposed of in a manner that allows exposure to stormwater. Include in the description the methods of storage, usage, treatment or disposal.

- iv. For each area of the site where a reasonable potential exists for contributing pollutants to stormwater runoff, a description of the potential pollutant sources that could be present in stormwater discharges.
 - v. A description of control measures installed and implemented to meet the technology and water quality based requirements in Schedule A.1 –A.5 and any applicable sector specific requirements in Schedule E of the permit. Include in the description how the stormwater control measures address potential pollutant sources from industrial activities and significant materials on-site, spills and leaks and authorized non-stormwater discharges.
 - vi. An estimate of the amount of impervious surface area (including paved areas and building roofs) and the total area drained by each stormwater outfall to be reported in area units.
 - vii. The name(s) of the receiving water(s) for stormwater drainage. If drainage is to a municipal storm sewer system, the name(s) of the ultimate receiving waters and the name of the municipality.
 - viii. The identification of the discharge outfall(s) and the point(s) where stormwater monitoring will occur as required by Schedule B.2.c. If multiple discharge outfalls exist but will not all be monitored, include a description of the outfalls and data or analysis supporting that the outfalls are representative as described in Schedule B.2.c.ii of the permit.
- c. Procedures and Schedules -The SWPCP must contain the following information to meet the technology based effluent limits in Schedule A.1 of the permit
- i. Spill Prevention and Response Procedure - Procedures for preventing and responding to spills and clean-up and notification procedures. Spills prevention plans required by other regulations may be substituted for this provision provided that stormwater management concerns are adequately addressed and the plan is kept onsite and included with the SWPCP. The location of clean-up materials must either be shown on the site drawings or indicated in the text of the SWPCP.
 - ii. Preventative Maintenance - Preventative maintenance procedures for conducting inspections, maintenance and repairs to prevent leaks, spills, and other releases and a schedule for regular pickup and disposal of waste materials, and inspections for leaks and conditions of drums, tanks and containers.
 - iii. Employee Education – Schedule for employee training.
- d. Monitoring - If an existing facility is renewing its coverage under this permit and included the benchmarks from the previous permit in the SWPCP, update the SWPCP to reflect the benchmarks in Schedule A.9 and any applicable sector specific benchmarks in Schedule E of the permit.

8. SWPCP Revisions

- a. Permit registrants must prepare SWPCP revisions in compliance with condition A.6 and clearly identify changes to activities on site and control measures.
- b. Submission of all SWPCP revisions is not required. SWPCP revisions must be submitted only if they are made for any of the following reasons:
 - i. Change in site contact(s);
 - ii. In response to a corrective action or inspection;
 - iii. Changes to the site or control measures that may significantly change the nature of pollutants present in stormwater discharge; or significantly increase the pollutant(s) levels, discharge frequency, discharge volume or flow rate, and
 - iv. Changes to the monitoring locations or outfalls.
- c. If submission of SWPCP revisions is required, permit registrant must submit the revised pages of the SWPCP or site map to DEQ or Agent within 30 days of making the revisions.
- d. Review of the revisions by DEQ or Agent prior to implementation is not required, except revision to location of monitoring locations. If the permit registrant does not receive a response to the

revisions from DEQ or Agent within 30 days of receipt, the proposed revisions are deemed accepted.

- e. DEQ or Agent may require the permit registrant revise the SWPCP at any time. The permit registrant must submit the revisions within 30 days, unless a later date is approved by DEQ or Agent.
- f. SWPCP revisions are not subject to public notice and comment unless they are made in response to the water quality based effluent limit requirements in Schedule A.4 and A.5 of the permit.

STORMWATER DISCHARGE BENCHMARKS

9. Benchmarks

Benchmarks and reference concentrations for impairment pollutants are guideline concentrations, not limitations; a benchmark or reference concentration exceedance, therefore, is not a permit violation. They are designed to assist the permit registrant in determining whether its site controls are effectively reducing pollutant concentrations in stormwater discharged from the site. For facilities that are subject to federal limitations in Schedule A.2 of the permit, benchmarks apply to only those pollutants that are not limited by the federal regulations.

The following statewide benchmarks apply to each point source discharge of stormwater associated with industrial activity:

Table 3. Statewide Benchmarks

Parameter	Benchmark
Total Copper	0.036 mg/L
Total Lead	0.060 mg/L
Total Zinc	0.24 mg/L
pH*	5.5 – 8.5 SU
Total Suspended Solids*	50 mg/L
Total Oil & Grease*	10 mg/L
E. coli	406 counts/100 ml
BOD ₅	33 mg/L
Total Phosphorus	0.16 mg/L

* See Schedule A.2 for list of facilities subject to federal limitations.

See Schedule E of the permit for the sector specific benchmarks that apply to certain industrial sectors/subsectors.

Permit registrants who also discharge stormwater from industrial activities covered under this permit to surface waters outside the Columbia Slough or to conveyance systems that discharge surface waters outside the Columbia Slough can apply the 1200-Z benchmarks to those discharges and are not required to obtain coverage under the 1200-Z permit.

**CORRECTIVE ACTIONS FOR IMPAIRMENT POLLUTANTS
AND BENCHMARKS EXCEEDANCES**

10. Tier I Corrective Action Response to Exceedances of Impairment Pollutants and Benchmarks:

- a. If stormwater sampling results exceed any of the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, the permit registrant must within 30 calendar days of obtaining the monitoring results:
 - i. Investigate the cause of the elevated pollutant levels.
 - ii. Review the SWPCP and the selection, design, installation and implementation of control measures to ensure compliance with the permit. If permit registrant determines that SWPCP revisions are necessary based on corrective action review, submit the revised pages of the SWPCP to DEQ or Agent, including a schedule for implementing the control measures.
 - iii. Summarize the following information in a Tier I report that is retained on site and submitted to DEQ or Agent upon request:
 1. The results of the investigation.
 2. Corrective actions taken or to be taken, including date corrective action completed or expected to be completed. Where the permit registrant determines that corrective action is not necessary, provide the basis for this determination.
 3. Document whether SWPCP revisions are necessary.
- b. Implement the corrective actions before the next storm event if possible or as soon as practicable.
- c. Permit registrants are exempt from the Tier I corrective action requirements for exceedances of benchmark parameters addressed by the Tier II corrective actions requirements in Schedule A.11 and A.12 below.

11. Tier II Corrective Actions for Facilities that exceeded Benchmarks based on 4th year Benchmark Compliance Evaluation required by 1200-COLS permit that expired August 2011 (see Condition 4 of Permit Coverage and Exclusion section)

- a. Permit registrants are exempt from the Tier II corrective action requirements in condition A.12 of the permit.
- b. No later than two years after obtaining permit coverage, the permit registrant must install and implement the stormwater treatment measures.
- c. After the stormwater treatment measures are implemented, if sampling results continue to exceed the same benchmark parameter(s) that triggered the Tier II corrective action requirements, permit registrant must within 30 days of obtaining the sample results, evaluate whether the treatment measures were properly installed, maintained and implemented and whether modifications to these measures are necessary. Summarize these findings in a Tier II Benchmark Exceedance report that is retained on site and submitted to DEQ or Agent annually with the Discharge Monitoring Report form.

12. Tier II Corrective Action Response based on 2nd year Geometric Mean Benchmark Evaluation

- a. Permit registrants must evaluate the sampling results collected during the 2nd year of permit coverage and determine if the geometric mean of the samples collected at each monitored outfall exceeds any benchmark in Schedule A.9 of the permit. The permit registrant must report this information in the Discharge Monitoring Report form for that monitoring year. Permit registrants are not required to conduct this evaluation for the benchmark parameter(s) where DEQ has granted a monitoring waiver in Schedule B.4 of the permit.
- b. For the pH benchmark, Tier II corrective action requirements are triggered if more than three samples collected during the first two years of permit coverage are outside of the pH benchmark range.

- c. If the geometric mean of the sampling results for any outfall monitored exceeds any statewide benchmark (or if more than three samples for any outfall monitored are outside of the pH benchmark range), permit registrant must:
- i. Revised SWPCP
 1. Revise the SWPCP to include additional stormwater treatment measures, which may include a combination of source control and treatment measures, with the goal of achieving the benchmark(s) in Schedule A.9 of the permit in future discharges. Include in the SWPCP the rationale for the selection of the measures, the projected reduction of pollutant concentration(s) and the schedule for implementing these measures.
 2. Have a licensed professional engineer (PE) or certified engineering geologist (CEG) design and stamp the portion of the SWPCP that addresses the stormwater treatment measures.
 3. Submit the revised SWCP to DEQ or Agent by December 31st of the 3rd year of permit coverage. If the permit registrant does not receive a response from DEQ or Agent within 30 days of receipt, the proposed revisions are deemed accepted.
 - ii. Tier II Deadline - Implement the treatment measures by June 30th of the 4th year of permit coverage.
 - iii. After the stormwater treatment measures are implemented, if sampling results continue to exceed the same benchmark parameter(s) that triggered the Tier II corrective action requirements, permit registrant must within 30 days of obtaining the sample results, evaluate whether the treatment measures were properly installed, maintained and implemented and whether modifications to these measures are necessary. Summarize these findings in a Tier II Benchmark Exceedance report that is retained on site and submitted to DEQ or Agent annually with the Discharge Monitoring Report form.
- d. Tier II Waiver - Permit registrants may request a waiver from the requirements in Schedule A.12.c above if:
- i. The benchmark exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site (see Schedule D.3, Definitions). The Tier II waiver report must include the investigation and analysis used to demonstrate that the exceedances are due to natural background conditions and include any data collected by the permit registrant or others (including literature studies) that describe the levels of natural background pollutants in the discharge.
 - ii. Permit registrant implements or has implemented volume reduction measures, such as low impact development practices, that have or will result in reductions of the mass load of pollutants in the discharge below the mass equivalent of the benchmarks in Schedule A.9 of the permit. The Tier II Waiver report must include data and analysis to support this determination, including the description of the measure(s), date(s) implemented or expected to be implemented and the mass load analysis.
 - iii. Permit registrant must submit a Tier II Waiver report to DEQ or Agent by December 31st of the 3rd year of permit coverage. DEQ or Agent will grant or deny the waiver request within 60 days of its receipt.

13. Permit Compliance

- a. Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act. Failure to take any required corrective actions in Schedule A.10 through A.12 of the permit constitute an independent, additional violation of this permit and the Clean Water Act. Any actions and time periods specified for remedying noncompliance do not absolve parties of the initial underlying violations.
- b. Where corrective action is triggered by an event that does not itself constitute a violation, such as a benchmark exceedance, there is no permit violation for the corrective actions provided that the permit registrant takes the corrective action within the deadlines identified in the permit.
- c. A new permit registrant with a new facility (that begins operation after October 1, 2011) or an existing facility (that was in operation before October 1, 2011 without a stormwater discharge permit) must implement stormwater control measures to meet new technology and water quality based requirements in Schedule A.1 – A.5, including applicable sector specific requirements in Schedule E of the permit, within 90 days of receiving permit coverage. Control measures that require capital improvements must be completed in accordance with the schedule set forth in the SWPCP, but must be completed within two years of receiving permit coverage.

SCHEDULE B MONITORING REQUIREMENTS

1. Pollutant Parameters

- a. Benchmarks - Permit registrants must monitor for the benchmark pollutants identified in Schedule A.9 of the permit. Permit registrants must also monitor for benchmarks specified for industrial sector(s), both the primary industrial activity and any co-located industrial activities, applicable to the discharge in Schedule E of the permit.
- b. Impairment Pollutants
 - i. Permit registrants that discharge to an impaired water without a TMDL for pollutant(s) must monitor for impairment pollutants for which a standard analytical method exists (see 40 CFR Part 136). Permit registrants that discharge to an impaired water with a TMDL are not required to monitor for impairment pollutant addressed by the TMDL, unless the TMDL establishes wasteload allocation(s) and additional requirements for industrial stormwater discharges.
 - ii. Before granting coverage under the permit, DEQ will identify in the permit assignment letter the impairment pollutants that the permit registrants is required to monitor and reference concentrations for these pollutants. The reference concentrations will be based on the acute aquatic life criteria, if criteria are approved for the pollutant. If there is not an acute criteria for the pollutant, DEQ will use the chronic criteria. If there is not a chronic criteria for the pollutant, DEQ will use the human health criteria.
 1. If the pollutant for which the waterbody is impaired is suspended solids, turbidity or sediment/sedimentation, permit registrants must monitor for Total Suspended Solids (TSS).
 2. If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, permit registrants must monitor for that indicator or surrogate pollutant.
 3. No monitoring is required when a waterbody's impairment is due to one of the following:
 - (a) Biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment.
 - (b) When a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.
- c. Numeric Effluent limits pursuant to Federal Effluent Limit Guidelines - Permit registrants subject to effluent limit guidelines must monitor for the parameters in Schedule A.2 of the permit at each outfall containing the discharges from activities identified in the guidelines.
- d. Additional pollutants - There are no benchmarks, reference concentrations or numeric effluent limits for these pollutants. The purpose of this monitoring is to determine to what extent the pollutants are present in industrial stormwater discharges.
 - i. Permit registrants must monitor for cadmium, nickel, chromium.
 - ii. Permit registrants with the Industrial Sector M (Auto Salvage Facilities, SIC code 5015) as a primary industrial activity and any co-located industrial activities must sample for mercury.
 - iii. Permit registrants with the Sector N (Scrap Recycling Facilities, SIC code 5093), as a primary industrial activity and any co-located industrial must sample for mercury and PCBs.

2. Sampling Procedures

- a. Grab Sampling
 - i. For each outfall monitored, collect a single grab sample of stormwater discharge or a series of composite samples. Grab composite or time or flow weighted composite samples may be used as an alternative, except when monitoring for pH, oil and grease and E. coli. Samples must be collected from same storm event.

- ii. Permit registrants may use a single grab sample to satisfy multiple pollutant parameter monitoring requirements (e.g., required to monitor for zinc as benchmark and impairment pollutant).
- b. Representative Sample - Samples must be representative of the discharge. Unless approved in writing by DEQ or Agent, all samples must be taken at monitoring points specified in the SWPCP before the stormwater joins or is diluted by stormwater from a different drainage area of the facility or areas outside the facility; wastewater, or any other wastestream, body of water or substance unless:
 - i. Otherwise approved in writing by DEQ or Agent; or
 - ii. On-site stormwater flows are combined to utilize a common treatment facility (for example, filter or settling pond). In this case, monitor the discharge from the treatment facility.
- c. Multiple Point Source Discharges - Each stormwater outfall must be monitored unless:
 - i. Outfall serves an area with no exposure of stormwater to industrial activities; or
 - ii. Outfall has effluent that is substantially similar to the effluent(s) of a monitored outfall and the same BMPs are implemented and maintained at the similar outfalls or drainage areas that lead to the outfalls. Substantially similar effluent(s) are discharges from drainage areas serving comparable activities where the discharges are expected to be similar in composition. The determination of substantial similarity or effluent(s) must be based on past monitoring or an analysis of industrial activities and site characteristics. The data or analysis supporting that the outfalls are representative must be included in the SWPCP. This provision does not apply to outfall(s) covered by a numeric effluent limit.
- d. Timing - Monitor the discharge during the first 12 hours of the discharge event, which is a measurable storm event resulting in an actual discharge from a site. If it is not practicable to collect the sample within this period, collect the sample as soon as practicable and provide documentation with the Discharge Monitoring Report form why it was not practicable to take samples within the period. Permit registrant is not required to sample outside of regular business hours or during unsafe conditions. Regular business hours are from 8 am to 5 pm on week days, unless the permit registrant specifies different hours in the SWPCP.
- e. Monitoring Frequency - Permit registrants must monitor their stormwater discharge according to the frequency described in Table 4 below, unless a monitoring variance or waiver is granted by DEQ or Agent.
 - i. Monitoring year is from July 1st to June 30th. The stormwater samples must be collected at least 14 days apart.
 - ii. Permit registrant may collect more samples than the minimum frequency described below, but must report this additional data in the Discharge Monitoring Report form. These additional samples must be included to establish a monitoring waiver in Schedule B.4 or to conduct the geometric mean evaluation in Schedule A.12 of the permit.
 - iii. Exceedance of Numeric Effluent Limit in Schedule A.2 of the permit - Conduct follow-up monitoring of any pollutant that exceeds the numeric effluent limit(s) within 30 days (or during the next measurable storm event should none occur within 30 days) of receiving the monitoring results. If the follow-up monitoring exceeds the numeric effluent limit, the permit registrant must monitor the discharge four times per year until compliance with the numeric effluent limit.

Table 4: Monitoring Frequency

Pollutant Category	Minimum Frequency
Benchmarks in Schedule A.9, and any applicable sector specific benchmarks in Schedule E	Four times per Year Two samples on or before Dec. 31 and two samples on or after Jan. 1.
Impairment Pollutants, if applicable	Two times per Year One sample on or before Dec. 31 and one sample on or after Jan. 1.
Numeric Effluent Limits Guidelines, if applicable	One time per Year, unless exceedance occurs
Additional Pollutants:	
Mercury and PCBs for facilities with SIC 5093	Four times over the first three years of permit coverage Two samples on or before Dec. 31 and two samples on or after Jan.1.
Mercury for facilities with SIC 5015	Four times over the first three years of permit coverage Two samples on or before Dec. 31 and two samples on or after Jan. 1.
Cadmium, Chromium and Nickel	Eight times over the first three years of permit coverage Two samples on or before Dec. 31 and two samples on or after Jan. 1.

3. Monitoring Variance

- a. Permit registrants that obtain permit coverage after April 1st are granted a monitoring variance for any applicable impairment pollutants, additional pollutants or sector specific benchmarks or numeric effluent limitations for the remainder of the monitoring year, which ends on June 30th. For new facilities that were not registered under the previous permit or existing facilities that obtained a monitoring waiver for benchmark(s) in the previous permit, this variance also applies to the benchmarks in Schedule A.9.
- b. Permit registrants may request a monitoring variance for missed samples due to no discharge from the site if one of the following criteria is met:
 - i. State or federal authorities declared the year a drought year.

- ii. Demonstrate that rainfall in the area where the permit registrant's facility is located was 20% or more below the three-year average rainfall for that area.
 - iii. Demonstrate to DEQ or Agent's satisfaction that discharge did not occur due to use of on-site retention system or other stormwater treatment system, or infrequent storm events of sufficient magnitude to produce run-off during normal business hours and safe conditions.
- For each missed sample, report in the Discharge Monitoring Report form that no discharge occurred and include supporting data and analysis demonstrating why the monitoring did not occur.

4. Monitoring Waiver

- a. Benchmark and Impairment Pollutant Monitoring
 - i. A monitoring waiver may be requested in the following circumstances:
 - 1. If the geometric mean of four consecutive sampling results is below the statewide benchmarks in Schedule A.9 of the permit, sector specific benchmarks in Schedule E of the permit, or reference concentrations for impairment pollutants identified in the permit assignment letter, the permit registrant is not required to monitor for these pollutant(s) for the remainder of the permit term. The permit registrant must submit to DEQ or Agent the analytical laboratory results from the four sampling events.
 - (a) Results from sampling events cannot be averaged.
 - (b) Monitoring waivers may be allowed for individual parameters.
 - 2. If the exceedance(s) is attributed solely to the presence of the pollutant(s) in natural background and is not associated with industrial activities at the site, DEQ or Agent will consider these samples as being below the benchmark(s) or reference concentrations for impairment pollutant(s). Permit registrant must submit a Natural Background Waiver report to DEQ that describes the investigation and analysis to demonstrate that the exceedances are due to natural background conditions and includes any data collected by the permit registrant or others (including literature studies) that describe the levels of natural background pollutants in the discharge.
 - 3. If a facility is inactive and unstaffed and no industrial materials or activities are exposed to stormwater, the permit registrant is not required to conduct monitoring for the remainder of the permit term.
 - (a) Permit registrant must provide documentation with the DMR indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii).
 - (b) The statement must be signed and certified in accordance with Schedule F of the permit.
 - ii. The permit registrant must submit to DEQ or Agent a request to exercise the monitoring waiver based on the conditions above and include the documentation to support the request. If DEQ or Agent does not comment within 30 calendar days, the monitoring waiver is deemed approved.
 - 1. There is no reduction in monitoring allowed for:
 - (a) Visual observations, unless the site is inactive or unstaffed and there are no industrial materials or activities exposed to stormwater and permit registrant meets requirements in Schedule B.4.a.i.3 of the permit.
 - (b) Monitoring for federal numeric effluent limit guidelines.
 - 2. Revocation of Monitoring Waiver
 - (a) The permit registrant must reinstate the monitoring of stormwater discharge if:
 - (i) Prior monitoring efforts used to establish the monitoring waiver were improper or sampling results were incorrect;

- (ii) Changes to site conditions are likely to affect stormwater discharge characteristics;
 - (iii) Additional monitoring occurs and the sampling results exceed benchmark(s), or
 - (iv) For inactive or unstaffed sites, the facility becomes active and/or staffed or industrial materials or activities become exposed to stormwater
- (b) DEQ or Agent will notify the permit registrant in writing if the monitoring waiver is revoked.
- 5. Additional Monitoring-** DEQ may notify permit registrants in writing of additional discharge monitoring requirements. Any such notice will state the reasons for the monitoring, locations and pollutants to be monitored, frequency and period of monitoring, sample types and reporting requirements.
- 6. A New Permit Registrant Discharging to Clackamas River, McKenzie River above Hayden Bridge (River Mile 15) or North Santiam River** (For potential or existing dischargers that did not have a permit prior to January 28, 1994, and existing dischargers that have a NPDES stormwater discharge permit but request an increased load limitation.)
- a. Not later than 180 calendar days after obtaining permit coverage, permit registrant must submit to DEQ a monitoring and water quality evaluation program. This program must be effective in evaluating the in-stream impacts of the discharge as required by OAR 340-041-0350.
 - b. Within 30 calendar days of DEQ approval, the permit registrant must implement the monitoring and water quality evaluation program.

INSPECTIONS

- 7. Permit registrant must meet the following inspection requirements:**
- a. Conduct inspections on a monthly basis when the facility is in operation of areas where industrial materials or activities are exposed to stormwater and areas where stormwater control measures, structures, catch basins, and treatment facilities are located.
 - i. Inspect the facility for the following:
 - 1. Industrial materials, residue, or trash that may have or could come into contact with stormwater;
 - 2. Leaks or spills from industrial equipment, drums, tanks, and other containers;
 - 3. Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site, excluding employee only entrances and exits;
 - 4. Tracking or blowing of raw, final, or waste materials;
 - 5. Evidence of, or the potential for, pollutants entering the drainage system;
 - 6. Evidence of pollutants discharging to receiving waters at all outfall(s), unless outfalls are representative as described in Schedule B.2.c.ii, and the condition of and around the outfall;
 - 7. Presence of floating solids (associated with industrial activity), foam, visible oil sheen, discoloration of the stormwater discharge at all outfall(s), unless outfalls are representative as described in Schedule B.2.c.ii. Conduct visual observations when stormwater discharge is occurring during regular business hours and safe conditions, and
 - 8. Properly functioning stormwater control measures.
 - ii. Exception for inactive or unstaffed sites as long as there are no industrial materials or activities exposed to stormwater. If circumstances change and industrial materials or activities become exposed to stormwater or the facility becomes active and/or staffed, this exception no longer applies and permit registrant must immediately resume monthly facility inspections.

- iii. For exceptionally large facilities where monthly inspections of all areas identified above are infeasible, DEQ or Agent may approve in writing a modified inspection frequency.
- b. Document the following in an inspection report that is retained on-site and submitted to DEQ or Agent upon request:
 - i. The inspection date and time;
 - ii. Control measures needing cleaning, replacement, maintenance, reconditioning or repair;
 - iii. The condition of the drainage/conveyance system and need for maintenance;
 - iv. Previously unidentified sources of pollutants, and
 - v. Stormwater discharge observations and whether discharge contained floating solids (associated with industrial activity), foam, visible oil sheen, and was discolored. If these pollutants are present in the discharge, describe corrective action taken or will be taken to remedy the problem.

REPORTING AND RECORDKEEPING REQUIREMENTS

8. Reporting Monitoring Data

- a. The permit registrant must submit a DEQ-approved Discharge Monitoring Report (DMR) form to DEQ or Agent by July 31st of each year. Identify in the DMR the sampling results for the previous monitoring year and include the laboratory results from the testing laboratory.
- b. The permit registrant must report the minimum detection level and analytical methods for the parameters analyzed. Non-detections must be reported as “ND” with the detection level in mg/L parentheses, e.g., ND (0.005 mg/L). In calculating the geometric mean, one-half of the detection level must be used for non-detections.

9. Exceedance Report for Numeric Effluent Limits

If follow-up monitoring pursuant to Schedule B.2.e.iii of the permit exceeds a numeric effluent limit, permit registrant must submit an Exceedance Report to DEQ or Agent no later than 30 calendar days after receiving the lab results. The report must include the monitoring data from this monitoring event and the preceding monitoring event(s) and an explanation of the situation; what the permit registrant has done to correct the violation or intends to do if the corrective actions are not complete.

10. Record Keeping Procedures- Permit registrant must record and maintain at the facility the following information. All records must be retained by the permit registrant for at least three (3) years and made available to DEQ, Agent or local municipality upon request.

- a. A copy of the SWPCP and any revisions, corrective actions reports, and monthly inspection reports.
- b. Inspection, maintenance, repair and education activities.
- c. Spills or leaks of significant materials (See Schedule D.3, Definitions) that impacted or had the potential to impact stormwater or surface waters. Include the corrective actions to clean up the spill or leak as well as measures to prevent future problems of the same nature.

SCHEDULE D SPECIAL CONDITIONS

1. **Releases in Excess of Reportable Quantities.** This permit does not relieve the permit registrant of the reporting requirements of 40 CFR §117 Determination of Reportable Quantities for Hazardous Substances and 40 CFR §302 Designation, Reportable Quantities, and Notification.
2. **Availability of SWPCP and Monitoring Data.** The Stormwater Pollution Control Plan (SWPCP) or stormwater monitoring data must be made available to government agencies responsible for stormwater management in the permit registrant's area.
3. **Definitions**
 - a. Capital Improvements means the following improvements that require capital expenditures:
 - i. Treatment best management practices including but not limited to settling basins, oil/water separation equipment, grassy swales, detention/retention basins, and media filtration devices.
 - ii. Manufacturing modifications that incur capital expenditures, including process changes for reduction of pollutants or wastes at the source.
 - iii. Concrete pads, dikes and conveyance or pumping systems utilized for collection and transfer of stormwater to treatment systems.
 - iv. Roofs and appropriate covers for manufacturing areas.
 - v. Volume reduction measures, including low impact development control measures.
 - b. Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.
 - c. Co-located Industrial Activities means any industrial activities, excluding the primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i - ix, xi) and OAR 340-045-0033(5), and identified in *Table 1: Sources Covered* on page 3 of the permit. An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified in Table 1 of the permit.
 - d. Control Measure means any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the state.
 - e. Existing Discharger means an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.
 - f. Impaired Waters means those waters identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards for one or more pollutants. This may include both waters with approved TMDLs, and those for which a TMDL has not yet been approved.
 - g. Hazardous Substances as defined in 40 CFR §302 Designation, Reportable Quantities, and Notification.
 - h. High Quality Waters means those waters that meet or exceed levels that are necessary to support the propagation of fish, shellfish, and wildlife; recreation in and on the water; and other designated beneficial uses for a given pollutant. Waters identified on the 303(d) list as not meeting applicable state water quality standards for a given pollutant are not high quality waters.
 - i. Industrial Activity means the categories of industrial activities included in the definition of “stormwater discharges associated with industrial activity” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).
 - j. Industrial Stormwater means stormwater runoff from industrial activity.

- k. Material Handling Activities include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.
- l. Minimize means reduce or eliminate, or both, to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.
- m. New Discharger means a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, that is not a new source, and that has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.
- n. New Source means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of that commenced: after promulgation of standards of performance under section 306 of the CWA that are applicable to such source, or after proposal of standards of performance in accordance with section 306 of the CWA that are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.
- o. Outstanding Resource Waters means those waters designated by the commission where existing high quality waters constitute an outstanding state or national resource based on their extraordinary water quality or ecological values or where special water quality protection is needed to maintain critical habitat areas.
- p. No exposure means all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).
- q. Natural background pollutants include substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring.
- r. Operator means any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:
 - i. The entity has operational control over industrial activities, including the ability to modify those activities; or
 - ii. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).
- s. Point Source Discharge means a discharge from any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, or conduit.
- t. Primary industrial activity means any activities performed on-site that are (1) identified by the facility’s primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.
- u. Significant Materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.
- v. Stormwater Associated With Industrial Activity includes, but is not limited to, stormwater discharges from the following:
 - i. Industrial plant yards;

- ii. Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
- iii. Material handling sites (Material handling activities include the storage, loading and unloading, transportation or conveyance of raw material, intermediate product, finished product, by-product or waste product.);
- iv. Refuse sites;
- v. Sites used for the application or disposal of process waste waters (as defined in 40 CFR § 401);
- vi. Sites used for storage or maintenance of material handling equipment;
- vii. Sites used for residual treatment, storage, or disposal; shipping and receiving areas;
- viii. Manufacturing buildings;
- ix. Storage areas (including tank farms) for raw materials, and intermediate and finished products;
- x. Areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. Significant materials includes, but are not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges; and
- xi. Stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility.
- w. Stormwater Conveyance means a sewer, ditch, or swale that is designed to carry stormwater; a stormwater conveyance may also be referred to as a storm drain or storm sewer.
- x. Total Maximum Daily Load (TMDL) is the sum of the individual Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and background. See OAR 340-041-0002(65) and OAR 340-042-0030(15).
- y. Treatment measures mean Best Management Practices that are intended to remove pollutants from stormwater. These measures include, but are not limited to: settling basins, oil/water separation equipment, detention/retention basins, media filtration devices, electrocoagulation, constructed wetlands and bioswales.
- z. Wasteload Allocation (WLA) means the portion of receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation. See OAR 340-041-0002(67).

4. **Local Public Agencies Acting as DEQ's Agent**

DEQ has authorized certain local governments and special districts to act as its Agent in implementing portions of this permit. The Agent may be authorized to conduct the following activities, including but not limited to: application and SWPCP review, inspections, monitoring data review, stormwater and wastewater monitoring, and verification and approval of no-exposure certifications. Where DEQ has entered into such an agreement, DEQ or its Agent will notify the permit registrant of where to submit no-exposure certifications, and other notifications or correspondence associated with this permit.

**SCHEDULE E
 SECTOR SPECIFIC REQUIREMENTS**

1. Sector Specific Requirements

Permit registrants must meet the sector-specific requirements in Schedule E of the permit associated with their primary industrial activity and any co-located industrial activities, as defined in Schedule D of the permit. The sector-specific requirements apply to the areas of the facility where the sector-specific activities occur. Facilities may be subject to more than one sector/subsector requirement.

2. These sector-specific requirements in Schedule E are in addition to the requirements in Schedule A and B of the permit.
3. If there is a conflict with requirements in the “Sources that are Required to Obtain Coverage under the Permit” section or the “Permit Coverage and Exclusion from Coverage” section of the permit, the requirements in Schedule E will not apply.
4. Table E-1 below identifies the sectors/subsectors that are required to meet the sector specific requirements in Schedule E of the permit.

Table E-1. Sectors of Industrial Activity with Sector Specific Requirements

SIC Code or Activity Code	Activity Represented
SECTOR A: TIMBER PRODUCTS	
2421	General Sawmills and Planing Mills
2411	Log Storage and Handling
2426	Hardwood Dimension and Flooring Mills
2429	Special Product Sawmills, Not Elsewhere Classified
2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood
2448	Wood Pallets and Skids
2449	Wood Containers, Not Elsewhere Classified
2451, 2452	Wood Buildings and Mobile Homes
2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified
2441	Nailed and Lock Corner Wood Boxes and Shook
SECTOR B: PAPER AND ALLIED PRODUCTS	
2631	Paperboard Mills
2611	Pulp Mills
2621	Paper Mills
2652-2657	Paperboard Containers and Boxes
2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes

Table E-1. Sectors of Industrial Activity with Sector Specific Requirements

SIC Code or Activity Code	Activity Represented
SECTOR C: CHEMICALS AND ALLIED PRODUCTS	
2873-2879	Agricultural Chemicals
2812-2819	Industrial Inorganic Chemicals
2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
2861-2869	Industrial Organic Chemicals
2891-2899	Miscellaneous Chemical Products
3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
2911	Petroleum Refining
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS	
2951, 2952	Asphalt Paving and Roofing Materials
2992, 2999	Miscellaneous Products of Petroleum and Coal
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS (some 1200-A)	
3251-3259	Structural Clay Products
3261-3269	Pottery and Related Products
3271-3275	Concrete, Gypsum, and Plaster Products
3211	Flat Glass
3221, 3229	Glass and Glassware, Pressed or Blown
3231	Glass Products Made of Purchased Glass
3241	Hydraulic Cement
3281	Cut Stone and Stone Products
3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products
SECTOR F: PRIMARY METALS	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
3321-3325	Iron and Steel Foundries
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
3363-3369	Nonferrous Foundries (Castings)
3331-3339	Primary Smelting and Refining of Nonferrous Metals

Table E-1. Sectors of Industrial Activity with Sector Specific Requirements

SIC Code or Activity Code	Activity Represented
3341	Secondary Smelting and Refining of Nonferrous Metals
3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)	
1021	Copper Ore and Mining Dressing Facilities
1011	Iron Ores
1021	Copper Ores
1031	Lead and Zinc Ores
1041, 1044	Gold and Silver Ores
1061	Ferroalloy Ores, Except Vanadium
1081	Metal Mining Services
1094, 1099	Miscellaneous Metal Ores
SECTOR H: COAL MINES AND COAL MINING-RELATED FACILITIES	
1221-1241	Coal Mines and Coal Mining-Related Facilities
SECTOR I: OIL AND GAS EXTRACTION AND REFINING	
1311	Crude Petroleum and Natural Gas
1321	Natural Gas Liquids
1381-1389	Oil and Gas Field Services
SECTOR J: MINERAL MINING AND DRESSING- Discharges Covered by 1200-A General Permit	
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	
HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS	
LF	All Landfill, Land Application Sites and Open Dumps
LF	All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
SECTOR M: AUTOMOBILE SALVAGE YARDS	
5015	Automobile Salvage Yards
SECTOR N: SCRAP RECYCLING FACILITIES	
5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
5093	Source-separated Recycling Facility
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	
SE	Steam Electric Generating Facilities, including coal handling sites

Table E-1. Sectors of Industrial Activity with Sector Specific Requirements

SIC Code or Activity Code	Activity Represented
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING	
4011, 4013	Railroad Transportation
4111-4173	Local and Highway Passenger Transportation
4212-4231	Motor Freight Transportation and Warehousing
4311	United States Postal Service
5171	Petroleum Bulk Stations and Terminals
SECTOR Q: WATER TRANSPORTATION	
4412-4499	Water Transportation Facilities
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS	
3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES	
4512-4581	Air Transportation Facilities
SECTOR T: TREATMENT WORKS	
TW	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403.
SECTOR U: FOOD AND KINDRED PRODUCTS	
2041-2048	Grain Mill Products
2074-2079	Fats and Oils Products
2011-2015	Meat Products
2021-2026	Dairy Products
2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
2051-2053	Bakery Products
2061-2068	Sugar and Confectionery Products
2082-2087	Beverages
2091-2099	Miscellaneous Food Preparations and Kindred Products
2111-2141	Tobacco Products

Table E-1. Sectors of Industrial Activity with Sector Specific Requirements

SIC Code or Activity Code	Activity Represented
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS	
2211-2299	Textile Mill Products
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
3131-3199	Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing)
SECTOR X: PRINTING AND PUBLISHING	
2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES	
3011	Tires and Inner Tubes
3021	Rubber and Plastics Footwear
3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
3081-3089	Miscellaneous Plastics Products
3931	Musical Instruments
3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
3991-3999	Miscellaneous Manufacturing Industries
SECTOR Z: LEATHER TANNING AND FINISHING	
3111	Leather Tanning and Finishing
SECTOR AA: FABRICATED METAL PRODUCTS	
3411-3499 (except 3479)	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
3911-3915	Jewelry, Silverware, and Plated Ware
3479	Fabricated Metal Coating and Engraving

Subpart A – Sector A – Timber Products.

E.A.1 Additional Technology-Based Effluent Limits.

E.A.1.1 Good Housekeeping. In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

E.A.2 Additional SWPCP Requirements.

E.A.2.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

E.A.2.2 Inventory of Exposed Materials. Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in your SWPCP the following: areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with stormwater runoff.

E.A.2.3 Description of Stormwater Management Controls. Document measures implemented to address the following activities and sources: log, lumber, and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If your facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

E.A.3 Sector-Specific Benchmarks

Table E.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.A-1

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120.0 mg/L
Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Pallets and Skids; Wood Containers, not elsewhere classified; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart B – Sector B – Paper and Allied Products.

E.B.1 Sector-Specific Benchmarks.

Table E.B-1 identifies benchmarks that apply to the specific subsectors of Sector B. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.B-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Paperboard Mills (SIC Code 2631)	Chemical Oxygen Demand (COD)	120 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart C – Sector C – Chemical and Allied Products Manufacturing, and Refining.

E.C.1 Sector-Specific Benchmarks

Table E.C-1 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.C-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Iron	1.0 mg/L
Industrial Inorganic Chemicals (SIC 2812-2819)	Total Aluminum	0.75 mg/ L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart D – Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

E.D.1 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.D-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.D-1¹

Industrial Activity	Parameter	Effluent Limit
Discharges from asphalt emulsion facilities.	Total Suspended Solids (TSS)	23.0 mg/L, daily maximum 15.0 mg/L, 30-day avg.
	pH	6.0 - 9.0 s.u.
	Oil and Grease	15.0 mg/L, daily maximum
		10 mg/L, 30-day avg.

¹Monitor annually.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart E – Sector E – Glass, Clay, Cement, Concrete, and Gypsum Products.

E.E.1 Additional Technology-Based Effluent Limits.

E.E.1.1 Good Housekeeping Measures. With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in your SWPCP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. You must also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings, or under other covering.

E.E.2 Additional SWPCP Requirements.

E.E.2.1 Drainage Area Site Map. Document in the SWPCP the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

E.E.3 Sector-Specific Benchmarks.

Table E.E-1 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.E-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Aluminum	0.75 mg/L
Concrete and Gypsum Manufacturers (SIC 3271-3275)	Total Iron	1.0 mg/L

E.E.4 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.E-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.E-2¹

Industrial Activity	Parameter	Effluent Limit
Discharges from material storage piles at cement manufacturing facilities	Total Suspended Solids (TSS)	50 mg/L, daily maximum
	pH	6.0 - 9.0 s.u.

¹Monitor annually.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart F – Sector F – Primary Metal

E.F.1 Additional Technology-Based Effluent Limits

E.F.1.1 Good Housekeeping Measures. As part of your good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using stormwater management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

E.F.2 Additional SWPCP Requirements.

E.F.2.1 Drainage Area Site Map. Identify in the SWPCP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.

E.F.2.2 Inventory of Exposed Material. Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible

E.F.3 Additional Inspection Requirements. As part of conducting your monthly inspections address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

E.F.4 Sector-Specific Benchmarks.

Table E.F-1 identifies benchmarks that apply to the specific subsectors of Sector F. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.F-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Aluminum	0.75 mg/L
Iron and Steel Foundries (SIC 3321-3325)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart G – Sector G – Metal Mining.

E.G.1 Definitions.

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

- E.G.1.1 Mining operation - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.
- E.G.1.2 Exploration phase - Entails exploration and land disturbance activities to determine the viability of a site. The exploration phase is not considered part of “mining operations.”
- E.G.1.3 Construction phase - Includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals. The construction phase is not considered part of “mining operations.”
- E.G.1.4 Active phase - Activities including the extraction, removal or recovery of metal ore. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a). The active phase is considered part of “mining operations.”
- E.G.1.5 Reclamation phase - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the “active phase”, intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements. The reclamation phase is considered part of "mining operations."
- E.G.1.6 Active metal mining facility - A place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a).
- E.G.1.7 Inactive metal mining facility - A site or portion of a site where metal mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal agency. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.
- E.G.1.8 Temporarily inactive metal mining facility - A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency.
- E.G.1.9 Final Stabilization - A site or portion of a site is “finally stabilized” when it has implemented all applicable Federal and State reclamation requirements.

E.G.2 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities are covered under this permit.

E.G.2.1 Management Practices for Clearing, Grading, and Excavation Activities.

E.G.2.1.1 Selecting and installing control measures. For all areas affected by clearing, grading, and excavation activities, you must select, design, install, and implement control measures that meet applicable effluent limits in Schedule A of the permit.

E.G.2.1.2 Good Housekeeping. Litter, debris, and chemicals must be prevented from becoming a pollutant source in stormwater discharges.

E.G.2.1.3 Retention and Detention of Stormwater Runoff. For drainage locations serving more than one acre, sediment basins and/or temporary sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for side slope boundaries as necessary based on individual site conditions) of the development area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided. You are required to remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent. Due to high sediment discharges from some Sector G facilities, permittees may need to implement a combination of structural BMP approaches to sufficiently decrease discharge of sediment from their facilities.

E.G.2.2 Inspection of Clearing, Grading, and Excavation Activities.

E.G.2.2.1 Inspection Frequency. Inspections must be conducted either at least once every 7 calendar days, or at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. Inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized, if runoff is unlikely due to winter (e.g., site is covered with snow or ice) or frozen conditions, or construction is occurring during seasonal dry periods in arid areas and semi-arid areas.

E.G.2.2.2 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to surface waters of the state, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

E.G.2.2.3 Inspection Reports. For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include the information required in Schedule B.7 of the permit.

E.G.2.3 Requirements for Cessation of Clearing, Grading, and Excavation Activities.

- E.G.2.3.1 Inspections and Maintenance. Inspections and maintenance of control measures, including BMPs, associated with clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area, or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.
- E.G.2.3.2 Temporary Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where clearing, grading and/or excavation activities have temporarily ceased, but in no case more than 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. In arid, semiarid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.
- E.G.2.3.3 Final Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where exploration and/or construction activities have permanently ceased, but in no case more than 14 days after the exploration and/or construction activity in that portion of the site has permanently ceased. In arid, semiarid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

E.G.3 Additional Technology-Based Effluent Limits.

- E.G.3.1 Stormwater Controls. Apart from the control measures you implement to meet your effluent limits, consider implementing the following control measures at your site. The potential pollutants identified in Schedule E.G.4.3 shall determine the priority and appropriateness of the control measures selected.
- E.G.3.1.1 Stormwater Diversions: Consider diverting stormwater away from potential pollutant sources. Following are some options: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.
- E.G.3.1.2 Capping: When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.

E.G.3.1.3 Treatment: If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged where practicable. Treated runoff may be discharged as a stormwater source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

E.G.3.2 Certification of Discharge Testing. Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-stormwater discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. Alternatively (if applicable), you may keep a certification with your SWPCP consistent with Schedule E.G.4.5.

E.G.4 Additional SWPCP Requirements.

E.G.4.1 Nature of Industrial Activities. Briefly document in your SWPCP the mining and associated activities that can potentially affect the stormwater discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

E.G.4.2 Site Map. Document in your SWPCP the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each stormwater outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles and ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

E.G.4.3 Potential Pollutant Sources. For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update your SWPCP with this information.

E.G.4.4 Documentation of Control Measures. Document all control measures that you implement consistent with Schedule E.G.3.1. If control measures are implemented or planned but are not listed in Schedule E.G.3.1 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPCP.

E.G.4.5 Certification of Permit Coverage for Commingled Non-Stormwater Discharges: If you are able, consistent with Schedule E.G.3.2 above, to certify that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate NPDES permit, and

that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, retain such certification with your SWPCP. This certification must identify the non-stormwater discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

E.G.5 Additional Inspection Requirements.

Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Schedule E.G.2.2.1, inspect sites at least monthly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are impaired for sediment or nitrogen must be inspected monthly.

E.G.6 Monitoring and Reporting Requirements.

E.G.6.1 Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities. Active copper ore mining and dressing facilities, must sample and analyze stormwater discharges for the pollutants listed in Table E.G-1.

Table E.G-1

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Active Copper Ore Mining and Dressing Facilities (SIC 1021)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L

E.G.6.2 Benchmark Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities. For discharges from waste rock and overburden piles, perform benchmark monitoring once in the first year for the parameters listed in Table E.G-2, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. You are also required to conduct analytic monitoring for the parameters listed in Table E.G-3 in accordance with the requirements in Schedule E.G.4.3. DEQ may also notify you that you must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from your waste rock and overburden piles.

Table E.G-2.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099)	Turbidity	50 NTU
	Hardness (as CaCO ₃ ; calc. from Ca, Mg) ¹	no benchmark value
	Total Antimony	0.64 mg/L
	Total Arsenic	0.15 mg/ L

Table E.G-2.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Note: when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and have hardness calculated than to require hardness analysis separately.	Total Beryllium	0.13 mg/L
	Total Cadmium	0.001 mg/L
	Total Iron	1.0 mg/L
	Total Mercury	0.0014 mg/L
	Total Nickel	0.5 mg/L
	Total Selenium	0.005 mg/L
	Total Silver	0.0005 mg/L

E.G.6.3 Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities. In addition to the monitoring required in Schedule E.G.6.2 for discharges from waste rock and overburden piles, you must also conduct monitoring for additional parameters based on the type of ore you mine at your site. Where a parameter in Table E.G-3 is the same as a pollutant you are required to monitor for in Table E.G-2 (i.e., for all of the metals, you must use the corresponding benchmark in Table E.G-2 and you may use any monitoring results conducted for Schedule E.G.6.2 to satisfy the monitoring requirement for that parameter for Schedule E.G.6.3. For radium and uranium, which do not have corresponding benchmarks in Table E.G-2, there are no applicable benchmarks.)

Table E.G-3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles

Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Aluminum Ore	X	X	Iron
Mercury Ore	X	X	Nickel (H)
Iron Ore	X	X	Iron (Dissolved)
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H)
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H)
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H)
Uranium, Radium, and Vanadium Ore	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: An "X" indicated for TSS and/or pH means that you are required to monitor for those parameters. (H) indicates that hardness must also be measured when this pollutant is measured.

E.G.6.4 Inactive and Unstaffed Sites –As a Sector G facility, if you are seeking to exercise a monitoring or inspection waiver, you are conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in Schedule B.4 of the permit. This exemption is conditioned on the following:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the monitoring and inspection requirements; and
- DEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

Table E.G-4. Applicability of the Permit to Stormwater Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation

Discharge/Source of Discharge	Note/Comment
Piles	
Waste rock/overburden	If composed entirely of stormwater and not combining with mine drainage. See note below.
Topsoil	--
Roads constructed of waste rock or spent ore	
Onsite haul roads	If composed entirely of stormwater and not combining with mine drainage. See note below.
Offsite haul and access roads	--
Roads not constructed of waste rock or spent ore	
Onsite haul roads	Except if mine drainage is used for dust control
Offsite haul and access roads	--
Milling/concentrating	
Runoff from tailings dams and dikes when constructed of waste rock/tailings	Except if process fluids are present and only if composed entirely of stormwater and not combining with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock and tailings	Except if process fluids are present
Concentration building	If stormwater only and no contact with piles
Mill site	If stormwater only and no contact with piles
Ancillary areas	
Office and administrative building and housing	If mixed with stormwater from the industrial area
Chemical storage area	--
Docking facility	Except if excessive contact with waste product that would otherwise constitute mine drainage
Explosive storage	--
Fuel storage (oil tanks/coal piles)	--
Vehicle and equipment maintenance area/building	--
Parking areas	But coverage unnecessary if only employee and visitor-type parking
Power plant	
Truck wash area	Except when excessive contact with waste product that would otherwise constitute mine drainage

Table E.G-4. Applicability of the Permit to Stormwater Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation

Reclamation-related areas	
Any disturbed area (unreclaimed)	Only if not in active mining area
Reclaimed areas released from reclamation requirements prior to Dec. 17, 1990	--
Partially/inadequately reclaimed areas or areas not released from reclamation requirements	--

Note: Stormwater runoff from these sources are subject to the NPDES program for stormwater unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-stormwater discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless: (1) it drains naturally (or is intentionally diverted) to a point source; and (2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in the permit.

E.G.7. Termination of Permit Coverage

- E.G.7.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Schedule E.G.7.2.

- E.G.7.2 Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990. A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart H – Sector H – Coal Mines and Coal Mining-Related Facilities.

E.H.1 Definitions

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

- E.H.1.1 Mining operation - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.
- E.H.1.2 Exploration phase - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of “mining operations.”
- E.H.1.3 Construction phase - Includes the building of site access roads and removal of overburden and waste rock to expose mineable coal. The construction phase is not considered part of “mining operations.”
- E.H.1.4 Active phase - Activities including the extraction, removal or recovery of coal. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 434.11(b). The active phase is considered part of “mining operations.”
- E.H.1.5 Reclamation phase - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the “active phase”, intended to return the land to an appropriate post-mining land use. The reclamation phase is considered part of "mining operations."
- E.H.1.6 Active coal mining facility - A place where work or other activity related to the extraction, removal, or recovery of coal is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 434.11(b).
- E.H.1.7 Inactive coal mining facility - A site or portion of a site where coal mining and/or milling occurred in the past but is not an active facility as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable State or Federal agency. An inactive coal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.
- E.H.1.8 Temporarily inactive coal mining facility - A site or portion of a site where coal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable State or Federal agency.
- E.H.1.9 Final Stabilization - A site or portion of a site is “finally stabilized” when it has implemented all applicable Federal and State reclamation requirements.

E.H.2 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities are covered under this permit.

E.H.2.1 Management Practices for Clearing, Grading, and Excavation Activities.

- E.H.2.1.1 Selecting and installing control measures. For all areas affected by clearing, grading, and excavation activities, you must select, design, install, and implement control measures that meet applicable Part 2 effluent limits.
- E.H.2.1.2 Good Housekeeping. Litter, debris, and chemicals must be prevented from becoming a pollutant source in stormwater discharges.
- E.H.2.1.3 Retention and Detention of Stormwater Runoff. For drainage locations serving more than one acre, sediment basins and/or temporary sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and side slope boundaries as necessary based on individual site conditions) of the development area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided. You are required to remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent. Due to high sediment discharges from some Sector H facilities, permittees may need to implement a combination of structural BMP approaches to sufficiently decrease discharge of sediment from their facilities.

E.H.2.2 Inspection of Clearing, Grading, and Excavation Activities.

- E.H.2.2.1 Inspection Frequency. Inspections must be conducted either at least once every 7 calendar days, or at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. Inspection frequency may be reduced to at least once every month if the entire site is temporarily stabilized, if runoff is unlikely due to winter (e.g., site is covered with snow or ice) or frozen conditions, or construction is occurring during seasonal dry periods in arid areas and semi-arid areas.
- E.H.2.2.2 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

E.H.2.3 Requirements for Cessation of Clearing, Grading, and Excavation Activities.

- E.H.2.3.1 Inspections and Maintenance. Inspections and maintenance of control measures, including BMPs, associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of a mining operation

must continue until final stabilization has been achieved on all portions of the disturbed area.

- E.H.2.3.2 Temporary Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where clearing, grading and/or excavation activities have temporarily ceased, but in no case more than 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased. In arid, semiarid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.
- E.H.2.3.3 Final Stabilization of Disturbed Areas. Stabilization measures should be initiated immediately in portions of the site where exploration and/or construction activities have permanently ceased, but in no case more than 14 days after the exploration and/or construction activity in that portion of the site has permanently ceased. In arid, semiarid, and drought-stricken areas, or in areas subject to snow or freezing conditions, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after mining, exploration, and/or construction activity has permanently ceased, temporary vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

E.H.3 Additional Technology-Based Effluent Limits.

- E.H.3.1 Good Housekeeping Measures. As part of your good housekeeping program, consider using sweepers and covered storage, watering haul roads to minimize dust generation, and conserving vegetation (where possible) to minimize erosion.
- E.H.3.2 Preventive Maintenance. Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid, and slurry to prevent leaks due to deterioration or faulty connections.

E.H.4 Additional SWPCP Requirements.

- E.H.4.1 Other Applicable Regulations. Most active coal mining-related areas (SIC Codes 1221-1241) are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation Act (SMCRA). OSM has granted authority to most coal-producing states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of stormwater-related pollutant discharges must be addressed and then documented with the SWPCP (directly or by reference).
- E.H.4.2 Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: haul and access roads; railroad spurs, sliding, and internal

hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas; acidic spoil, refuse, or unreclaimed disturbed areas; and liquid storage tanks containing pollutants such as caustics, hydraulic fluids, and lubricants.

E.H.4.3 Potential Pollutant Sources. Document in your SWPCP the following sources and activities that have potential pollutants associated with them: truck traffic on haul roads and resulting generation of sediment subject to runoff and dust generation; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid, or other potential harmful liquids; and loading or temporary storage of acidic refuse or spoil.

E.H.5 Additional Inspection Requirements.

E.H.5.1 Inspections of Active Mining-Related Areas. Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Schedule E.H.2.2.1, perform monthly inspections of active mining areas covered by this permit, corresponding with the inspections as performed by SMCRA inspectors, of all mining-related areas required by SMCRA. Also maintain the records of the SMCRA authority representative.

E.H.5.2 Sediment and Erosion Control. Meet SMCRA inspection requirements for sediment and erosion control measures for areas subject to SMCRA authority.

E.H.5.3 Site Inspections. Your inspection program must include inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected are haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas.

E.H.6 Sector-Specific Benchmarks.

Table E.H-1 identifies benchmarks that apply to the specific subsectors of Sector H. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.H-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Coal Mines and Related Areas (SIC 1221-1241)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

E.H.6.1 Inactive and Unstaffed Sites –If you are seeking to exercise a monitoring or inspection waiver for inactive and unstaffed sites (including temporarily inactive sites), you are conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in Schedule B.4 of the permit.

E.H.6.1.1 If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the monitoring and inspection; and

- E.H.6.1.2 DEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause or contribute to an instream excursion above an applicable water quality standard, including designated uses.

E.H.7 Termination of Permit Coverage

- E.H.7.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed.
- E.H.7.2 Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990. A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart I – Sector I – Oil and Gas Extraction.

E.I.1 Additional Technology-Based Effluent Limits.

E.I.1.1 Vegetative Controls. Implement vegetative practices designed to preserve existing vegetation, where attainable, and revegetate open areas as soon as practicable after grade drilling. Consider the following (or equivalent measures): temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, and tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

E.I.2 Additional SWPCP Requirements.

E.I.2.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: Reportable Quantity (RQ) releases; locations used for the treatment, storage, or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for “No Discharge” in accordance with 40 CFR 435.32; and the structural controls to achieve compliance with the “No Discharge” requirements.

E.I.2.2 Potential Pollutant Sources. Also document in your SWPCP the following sources and activities that have potential pollutants associated with them: chemical, cement, mud, or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the reportable quantity (RQ) release that triggered the permit application requirements: the nature of the release (e.g., spill of oil from a drum storage area), amount of oil or hazardous substance released, amount of substance recovered, date of the release, cause of the release (e.g., poor handling techniques and lack of containment in the area), areas affected by the release (i.e., land and water), procedure to clean up release, actions or procedures implemented to prevent or improve response to a release, and remaining potential contamination of stormwater from release (taking into account human health risks, the control of drinking water intakes, and the designated uses of the receiving water).

E.I.2.3 Erosion and Sedimentation Control. Unless covered by the NPDES Construction Stormwater 1200-C General Permit, the additional documentation requirements for sediment and erosion controls for well drillings and sand/shale mining areas include the following:

E.I.2.3.1 Site Description. Also include a description in your SWPCP of the nature of the exploration activity, estimates of the total area of site and area disturbed due to exploration activity, an estimate of runoff coefficient of the site, a site drainage map, including approximate slopes, and the names of all receiving waters.

E.I.2.3.2 Vegetative Controls. Document vegetative practices used in the SWPCP.

E.I.3 Additional Inspection Requirements.

All erosion and sedimentation control measures must be inspected every 7 days.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart K – Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities.

E.K.1 Definitions.

- K.1.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in E.K.1.4. Some specific areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.
- K.1.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.
- K.1.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.
- K.1.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.
- K.1.5 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.
- K.1.6 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in E.K.1.4. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

E.K.2 Sector-Specific Benchmarks.

Table E.K-1 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.K-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
ALL - Industrial Activity Code "HZ" Benchmarks only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A.	Ammonia	2.14 mg/L
	Total Magnesium	0.064 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Arsenic	0.15 mg/L
	Total Cadmium	0.001 mg/L
	Total Cyanide	0.022 mg/L
	Total Nickel	0.5 mg/L
	Total Mercury	0.0014 mg/L
	Total Selenium	0.005 mg/L
	Total Silver	0.0005 mg/L

E.K.3 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.K-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.K-2¹		
Industrial Activity	Parameter	Effluent Limit
Discharges from hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart A.	Biochemical Oxygen Demand (BOD ₅)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum

Table E.K-2 ¹		
Industrial Activity	Parameter	Effluent Limit
	Total Arsenic	1.1 mg/L, daily maximum
		0.54 mg/L, monthly avg. maximum
	Total Chromium	1.1 mg/L, daily maximum
		0.46 mg/L, monthly avg. maximum
	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
pH	Within the range of 6-9 standard pH units (s.u.)	

¹ Monitor annually. As set forth at 40 CFR Part 445 Subpart A, these numeric limitations apply to contaminated stormwater discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N) except for any of the following facilities:

- (a) landfills operated in conjunction with other industrial or commercial operations when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
- (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart L – Sector L – Landfills, Land Application Sites, and Open Dumps.

E.L.1 Definitions.

- E.L.1.1 Contaminated stormwater - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.
- E.L.1.2 Drained free liquids - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.
- E.L.1.3 Landfill wastewater - as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated stormwater; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.
- E.L.1.4 Leachate - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.
- E.L.1.5 Non-contaminated stormwater - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

E.L.2 Additional Technology-Based Effluent Limits.

- E.L.2.1 Preventive Maintenance Program. As part of your preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.
- E.L.2.2 Erosion and Sedimentation Control. Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.
- E.L.2.3 Unauthorized Discharge Test Certification. The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

E.L.3 Additional SWPCP Requirements.

- E.L.3.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.
- E.L.3.2 Summary of Potential Pollutant Sources. Document in your SWPCP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

E.L.4 Additional Inspection Requirements.

- E.L.4.1 Inspections of Active Sites. Except in arid and semi-arid climates, inspect operating landfills, open dumps, and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.
- E.L.4.2 Inspections of Inactive Sites. Inspect inactive landfills, open dumps, and land application sites at least monthly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

E.L.5 Additional Post-Authorization Documentation Requirements.

- E.L.5.1 Recordkeeping and Internal Reporting. Keep records with your SWPCP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

E.L.6 Sector-Specific Benchmarks

Table E.L-1 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.L-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration ¹
All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code “LF”)	Total Iron	1.0 mg/L

¹Benchmark monitoring required only for discharges not subject to effluent limitations in 40 CFR Part 445 Subpart B (see Table L-2 below).

E.L.7. Effluent Limitations Based on Effluent Limitations Guidelines

Table E.L-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.L-2¹

Industrial Activity	Parameter	Effluent Limit
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD ₅)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum
		0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
Total Zinc	0.20 mg/L, daily maximum	
	0.11 mg/L, monthly avg. maximum	
pH	Within the range of 6-9 standard pH units (s.u.)	

¹ Monitor annually. As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated stormwater discharges from MSWLFs that have not been closed in accordance with 40 CFR 258.60, and to contaminated stormwater discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities:

- (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
- (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart M – Sector M – Automobile Salvage Yards.

E.M.1 Additional Technology-Based Effluent Limits.

- E.M.1.1 Spill and Leak Prevention Procedures. Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks.
- E.M.1.2 Employee Training. If applicable to your facility, address the following areas (at a minimum) in your employee training program: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents.
- E.M.1.3 Management of Runoff. Consider the following management practices: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

E.M.2 Additional SWPCP Requirements.

- E.M.2.1 Drainage Area Site Map. Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.
- E.M.2.2 Potential Pollutant Sources. Assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

E.M.3 Additional Inspection Requirements. Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect monthly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect monthly for signs of leakage all vessels and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

E.M.4 Sector-Specific Benchmarks.

Table E.M-1 identifies benchmarks that apply to the specific subsectors of Sector M. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.M-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Automobile Salvage Yards (SIC 5015)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart N – Sector N – Scrap Recycling and Waste Recycling Facilities.

E.N.1 Additional Technology-Based Effluent Limits.

E.N.1.1 Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials). Requirements for facilities that receive, process, and do wholesale distribution of nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section is not intended for those facilities that accept recyclables only from primarily non-industrial and residential sources.

- E.N.1.1.1 Inbound Recyclable and Waste Material Control Program. Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., 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 your facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Schedule E.N.3.1.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).
- E.N.1.1.2 Scrap and Waste Material Stockpiles and Storage (Outdoor). Minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).
- E.N.1.1.3 Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage). Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. You must regularly

maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

- E.N.1.1.4 Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage). Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.
- E.N.1.1.5 Scrap and Recyclable Waste Processing Areas. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use 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; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.
- E.N.1.1.6 Scrap Lead-Acid Battery Program. Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.
- E.N.1.1.7 Spill Prevention and Response Procedures. (See also Schedule A.1.h) 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 room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.

- E.N.1.1.8 Supplier Notification Program. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.
- E.N.1.2 Waste Recycling Facilities (Liquid Recyclable Materials).
- E.N.1.2.1 Waste Material Storage (Indoor). Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); and (d) 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. These discharges may require coverage under a separate NPDES wastewater permit or industrial user permit under the pretreatment program.
- E.N.1.2.2 Waste Material Storage (Outdoor). Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.
- E.N.1.2.3 Trucks and Rail Car Waste Transfer Areas. Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.
- E.N.1.3 Recycling Facilities (Source-Separated Materials). The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.
- E.N.1.3.1 Inbound Recyclable Material Control. Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable

wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.

- E.N.1.3.2 Outdoor Storage. Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day's volume of recyclable material indoors.
- E.N.1.3.3 Indoor Storage and Material Processing. Minimize the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.
- E.N.1.3.4 Vehicle and Equipment Maintenance. Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.

E.N.2 Additional SWPCP Requirements.

- E.N.2.1 Drainage Area Site Map. Document in your SWPCP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.
- E.N.2.2 Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities. If you are subject to Schedule E.N.1.1.3, your SWPCP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

E.N.3 Sector-Specific Benchmarks.

Table E.N-1 identifies benchmarks that apply to the specific subsectors of Sector N. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.N-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities.

E.O.1 Additional Technology-Based Effluent Limits. The following good housekeeping measures are required in addition to Schedule A.4 of permit:

- E.O.1.1 Fugitive Dust Emissions. Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, consider procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.
- E.O.1.2 Delivery Vehicles. Minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site. Consider procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.
- E.O.1.3 Fuel Oil Unloading Areas. Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).
- E.O.1.4 Chemical Loading and Unloading. Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.
- E.O.1.5 Miscellaneous Loading and Unloading Areas. Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.
- E.O.1.6 Liquid Storage Tanks. Minimize contamination of surface runoff from above-ground liquid storage tanks. Consider protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.
- E.O.1.7 Large Bulk Fuel Storage Tanks. Minimize contamination of surface runoff from large bulk fuel storage tanks. Consider containment berms (or their equivalent). You must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.
- E.O.1.8 Spill Reduction Measures. Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.

- E.O.1.9 Oil-Bearing Equipment in Switchyards. Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Consider using level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.
- E.O.1.10 Residue-Hauling Vehicles. Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.
- E.O.1.11 Ash Loading Areas. Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.
- E.O.1.12 Areas Adjacent to Disposal Ponds or Landfills. Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.
- E.O.1.13 Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites. Minimize the potential for contamination of runoff from these areas.

E.O.2 Additional SWPCP Requirements.

- E.O.2.1 Drainage Area Site Map. Document in your SWPCP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

E.O.3 Additional Inspection Requirements.

- E.O.3.1 Inspection. Inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

E.O.4 Sector-Specific Benchmarks

Table E.O-1 identifies benchmarks that apply to the specific subsectors of Sector O. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, which describe your site activities.

Table E.O-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Steam Electric Generating Facilities (Industrial Activity Code "SE")	Total Iron	1.0 mg/L

E.O.5 Effluent Limitations Based on Effluent Limitations Guidelines

Table E.O-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table E.O-2¹

Industrial Activity	Parameter	Effluent Limit
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/l ²
	pH	6.0 min - 9.0 max

¹ Monitor annually.

² If your facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing.

E.P.1 Additional Technology-Based Effluent Limits.

- E.P.1.1 Good Housekeeping Measures. In addition to the Good Housekeeping requirements in Schedule A.4 of the permit, you must do the following:
- E.P.1.1.1 Vehicle and Equipment Storage Areas. Minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Consider the following (or other equivalent measures): use of drip pans under vehicles/equipment, indoor storage of vehicles and equipment, installation of berms or dikes, use of absorbents, roofing or covering storage areas, and cleaning pavement surfaces to remove oil and grease.
 - E.P.1.1.2 Fueling Areas. Minimize contamination of stormwater runoff from fueling areas. Consider the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.
 - E.P.1.1.3 Material Storage Areas. Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., “Used Oil,” “Spent Solvents,” etc.). Consider the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.
 - E.P.1.1.4 Vehicle and Equipment Cleaning Areas. Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. Consider the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or other equivalent measures.
 - E.P.1.1.5 Vehicle and Equipment Maintenance Areas. Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. Consider the following (or other equivalent measures): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to maintenance areas.
 - E.P.1.1.6 Locomotive Sanding (Loading Sand for Traction) Areas. Consider the following (or other equivalent measures): covering sanding areas; minimizing stormwater run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

E.P.1.2 Employee Training. Address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

E.P.2 Additional SWPCP Requirements.

E.P.2.1 Drainage Area Site Map. Identify in the SWPCP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

E.P.2.2 Potential Pollutant Sources. Assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the stormwater conveyance system(s); and fueling areas. Describe these activities in the SWPCP.

E.P.3 Additional Inspection Requirements. Inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas and loading/unloading areas.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation.

E.Q.1 Additional Technology-Based Effluent Limits.

E.Q.1.1 Good Housekeeping Measures. You must implement the following good housekeeping measures in addition to requirements in Schedule A.1 of the permit:

- E.Q.1.1.1 Pressure Washing Area. Collect or contain the discharges from the pressures washing area so that they are not co-mingled with stormwater discharges authorized by this permit.
- E.Q.1.1.2 Blasting and Painting Area. Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.
- E.Q.1.1.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.
- E.Q.1.1.4 Engine Maintenance and Repair Areas. Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.
- E.Q.1.1.5 Material Handling Area. Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.
- E.Q.1.1.6 Drydock Activities. Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to

flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

- E.Q.1.2 Employee Training. At a minimum, address the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.
- E.Q.1.3 Preventive Maintenance. As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

E.Q.2 Additional SWPCP Requirements.

- E.Q.2.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).
- E.Q.2.2 Summary of Potential Pollutant Sources. Document in the SWPCP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

E.Q.3 Additional Inspection Requirements.

Inspect pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

E.Q.4 Sector-Specific Benchmarks.

Table E.Q-1 identifies benchmarks that apply to the specific subsectors of Sector Q. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.Q-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Water Transportation Facilities (SIC 4412-4499)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart R – Sector R – Ship and Boat Building and Repair Yards.

E.R.1 Additional Technology-Based Effluent Limits.

E.R.1.1 Good Housekeeping Measures.

- E.R.1.1.1 Pressure Washing Area. If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate NPDES permit.
 - E.R.1.1.2 Blasting and Painting Area. Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. Consider containing all blasting and painting activities, or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.
 - E.R.1.1.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.
 - E.R.1.1.4 Engine Maintenance and Repair Areas. Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.
 - E.R.1.1.5 Material Handling Area. Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing stormwater run-on to material handling areas.
 - E.R.1.1.6 Drydock Activities. Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to clean up and contain any spills.
- E.R.1.2 Employee Training. As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal

of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

- E.R.1.3 Preventive Maintenance. As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

E.R.2 Additional SWPCP Requirements.

- E.R.2.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).
- E.R.2.2 Potential Pollutant Sources. Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).
- E.R.2.3 Documentation of Good Housekeeping Measures. Document in your SWPCP any good housekeeping measures implemented to meet the effluent limits in Schedule E.R.1.1.
- E.R.2.3.1 Blasting and Painting Areas. Document in the SWPCP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).
- E.R.2.3.2 Storage Areas. Specify in your SWPCP which materials are stored indoors, and consider containment or enclosure for those stored outdoors.

E.R.3 Additional Inspection Requirements.

Include the following in all monthly inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart S – Sector S – Air Transportation.

E.S.1 Additional Technology-Based Effluent Limits.

E.S.1.1 Good Housekeeping Measures.

- E.S.1.1.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.
- E.S.1.1.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater runoff from cleaning areas.
- E.S.1.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Consider the following control measures, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.
- E.S.1.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.
- E.S.1.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater runoff.
- E.S.1.1.6 Source Reduction. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.
 - E.S.1.1.6.1 Runway Deicing Operation: Minimize contamination of stormwater runoff from runways as a result of deicing operations. Evaluate whether

over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. Also consider these control measure options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

- E.S.1.1.6.2 Aircraft Deicing Operations. Minimize contamination of stormwater runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these control measure options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-E0s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.
- E.S.1.1.7 Management of Runoff. Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Consider these control measure options (or their equivalents): a dedicated deicing facility with a runoff collection/ recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.
- E.S.1.2 Deicing Season. You must determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If you meet the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the deicing season you identified is the timeframe during which you must obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH.

E.S.2 Additional SWPCP Requirements.

The airport authority and tenants of the airport are encouraged to work in partnership in the development of the SWPCP. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity. An airport tenant may obtain authorization under this permit and develop a SWPCP for discharges from his/her own areas of the airport.

- E.S.2.1 **Drainage Area Site Map.** Document in the SWPCP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- E.S.2.2 **Potential Pollutant Sources.** In your inventory of exposed materials, describe in your SWPCP the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPCPs.
- E.S.2.3 **Vehicle and Equipment Washwater Requirements.** Attach to or reference in your SWPCP, a copy of the NPDES permit issued for vehicle/equipment washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, include a copy in your SWPCP. In any case, if you are subject to another permit, describe your control measures for implementing all non-stormwater discharge permit conditions or pretreatment requirements in your SWPCP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in your SWPCP.
- E.S.2.4 **Documentation of Control Measures Used for Management of Runoff:** Document in your SWPCP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

E.S.3 Sector-Specific Benchmarks.

Table E.S-1 identifies benchmarks that apply to the specific subsectors of Sector S. These benchmarks apply to both your primary industrial activity and any co-located industrial activities, unless a facility has an Individual NPDES Permit for de-icing activities.

Table E.S-1.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Where a single permittee, or a combination of permitted facilities, use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor these parameters in outfalls that collect runoff from areas where deicing activities occur (SIC 4512-4581) and when deicing activities are occurring.	Chemical Oxygen Demand (COD)	120 mg/L
	Ammonia	2.14 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart T – Sector T – Treatment Works.

E.T.1 Additional Technology-Based Effluent Limits.

- E.T.1.1 Control Measures. In addition to the other control measures, consider the following: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).
- E.T.1.2 Employee Training. At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

E.T.2 Additional SWPCP Requirements.

- E.T.2.1 Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.
- E.T.2.2 Potential Pollutant Sources. Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

E.T.3 Additional Inspection Requirements.

Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products.

E.U.1 Additional Technology-Based Limitations.

E.U.1.1 Employee Training. Address pest control in your employee training program.

E.U.2 Additional SWPCP Requirements.

E.U.2.1 Drainage Area Site Map. Document in your SWPCP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

E.U.2.2 Potential Pollutant Sources. Document in your SWPCP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

E.U.3 Additional Inspection Requirements.

Inspect on a monthly basis, at a minimum, the following areas where the potential for exposure to stormwater exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

E.U.4 Sector-Specific Benchmarks.

Table E.U-1 identifies benchmarks that apply to the specific subsectors of Sector U. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.U-1.

Subsector (You may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration
Fats and Oils Products (SIC 2074-2079)	Chemical Oxygen Demand (COD)	120 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart V – Sector V – Textile Mills, Apparel, and Other Fabric Products.

E.V.1 Additional Technology-Based Limitations.

E.V.1.1 Good Housekeeping Measures.

- E.V.1.1.1 **Material Storage Areas.** Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.
 - E.V.1.1.2 **Material Handling Areas.** Minimize contamination of stormwater runoff from material handling operations and areas. Consider the following (or their equivalents): use of spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.
 - E.V.1.1.3 **Fueling Areas.** Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing run-on of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.
 - E.V.1.1.4 **Above-Ground Storage Tank Area.** Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; including measures for tanks, piping and valves explicitly in your SPCC program; minimizing runoff of stormwater from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.
- E.V.1.2 **Employee Training.** As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

E.V.2 Additional SWPCP Requirements.

- E.V.2.1 **Potential Pollutant Sources.** Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt

processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

E.V.2.2 Description of Good Housekeeping Measures for Material Storage Areas. Document in the SWPCP your containment area or enclosure for materials stored outdoors.

E.V.3 Additional Inspection Requirements.

Inspect, at least monthly, the following activities and areas (at a minimum): transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural management practices.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing.

E.X.1 Additional Technology-Based Effluent Limits.

E.X.1.1 Good Housekeeping Measures.

- E.X.1.1.1 Material Storage Areas. Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.
 - E.X.1.1.2 Material Handling Area. Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Consider the following (or their equivalents): using spill and overflow protection, covering fueling areas, and covering or enclosing areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.
 - E.X.1.1.3 Fueling Areas. Minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.
 - E.X.1.1.4 Above Ground Storage Tank Area. Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regularly cleaning these areas, explicitly addressing tanks, piping and valves in the SPCC program, minimizing stormwater runoff from adjacent areas, restricting access to the area, inserting filters in adjacent catch basins, providing absorbent booms in unbermed fueling areas, using dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.
- E.X.1.2 Employee Training. As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

E.X.2 Additional SWPCP Requirements.

- E.X.2.1 Description of Good Housekeeping Measures for Material Storage Areas. In connection with Schedule E.X.1.1.1, describe in the SWPCP the containment area or enclosure for materials stored outdoors.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart Y – Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

E.Y.1 Additional Technology-Based Effluent Limits.

- E.Y.1.1 Controls for Rubber Manufacturers. Minimize the discharge of zinc in your stormwater discharges. Following are some general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize “puffing” losses when the container is opened, and using automatic dispensing and weighing equipment.
- E.Y.1.1.1 Zinc Bags. Ensure proper handling and storage of zinc bags at your facility. Following are some control measure options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.
- E.Y.1.1.2 Dumpsters. Minimize discharges of zinc from dumpsters. Following are some control measure options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.
- E.Y.1.1.3 Dust Collectors and Baghouses. Minimize contributions of zinc to stormwater from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.
- E.Y.1.1.4 Grinding Operations. Minimize contamination of stormwater as a result of dust generation from rubber grinding operations. One control measure option is to install a dust collection system.
- E.Y.1.1.5 Zinc Stearate Coating Operations. Minimize the potential for stormwater contamination from drips and spills of zinc stearate slurry that may be released to the storm drain. One control measure option is to use alternative compounds to zinc stearate.
- E.Y.1.2 Controls for Plastic Products Manufacturers. Minimize the discharge of plastic resin pellets in your stormwater discharges. Control measures to be considered for implementation (or their equivalents) include minimizing spills, cleaning up of spills promptly and thoroughly, sweeping thoroughly, pellet capturing, employee education, and disposal precautions.

E.Y.2 Additional SWPCP Requirements.

- E.Y.2.1 Potential Pollutant Sources for Rubber Manufacturers. Document in your SWPCP the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater runoff.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing.

E.Z.1 Additional Technology-Based Effluent Limits.

E.Z.1.1 Good Housekeeping Measures.

- E.Z.1.1.1 Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products. Minimize contamination of stormwater runoff from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Consider indoor storage or protection with polyethylene wrapping, tarpaulins, roofed storage, etc. Consider placing materials on an impermeable surface and enclosing or putting berms (or equivalent measures) around the area to prevent stormwater run-on and runoff.
- E.Z.1.1.2 Material Storage Areas. Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) minimize contact of such materials with stormwater.
- E.Z.1.1.3 Buffing and Shaving Areas. Minimize contamination of stormwater runoff with leather dust from buffing and shaving areas. Consider dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.
- E.Z.1.1.4 Receiving, Unloading, and Storage Areas. Minimize contamination of stormwater runoff from receiving, unloading, and storage areas. If these areas are exposed, consider the following (or their equivalents): covering all hides and chemical supplies, diverting drainage to the process sewer, or grade berming or curbing the area to prevent stormwater runoff.
- E.Z.1.1.5 Outdoor Storage of Contaminated Equipment. Minimize contact of stormwater with contaminated equipment. Consider the following (or their equivalents): covering equipment, diverting drainage to the process sewer, and cleaning thoroughly prior to storage.
- E.Z.1.1.6 Waste Management. Minimize contamination of stormwater runoff from waste storage areas. Consider the following (or their equivalents): covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulins or polyethylene, and minimizing stormwater runoff by enclosing the area or building berms around the area.

E.Z.2 Additional SWPCP Requirements.

- E.Z.2.1 Drainage Area Site Map. Identify in your SWPCP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.
- E.Z.2.2 Potential Pollutant Sources. Document in your SWPCP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

Schedule E – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

E.AA.1 Additional Technology-Based Effluent Limits.

E.AA.1.1 Good Housekeeping Measures.

E.AA.1.1.1 Raw Steel Handling Storage. Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

E.AA.1.1.2 Paints and Painting Equipment. Minimize exposure of paint and painting equipment to stormwater.

E.AA.1.2 Spill Prevention and Response Procedures. Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed

E.AA.1.2.1 Metal Fabricating Areas. Maintain clean, dry, orderly conditions in these areas. Consider using dry clean-up techniques.

E.AA.1.2.2 Storage Areas for Raw Metal. Keep these areas free of conditions that could cause, or impede appropriate and timely response to, spills or leakage of materials. Consider the following (or their equivalents): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

E.AA.2.2.3 Metal Working Fluid Storage Areas. Minimize the potential for stormwater contamination from storage areas for metal working fluids.

E.AA.1.2.4 Cleaners and Rinse Water. Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible.

E.AA.1.2.5 Lubricating Oil and Hydraulic Fluid Operations. Minimize the potential for stormwater contamination from lubricating oil and hydraulic fluid operations. Consider using monitoring equipment or other devices to detect and control leaks and overflows. Consider installing perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures.

E.AA.1.2.6 Chemical Storage Areas. Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

E.AA.1.3 Spills and Leaks. In your spill prevention and response procedures, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.

E.AA.2 Additional SWPCP Requirements.

E.AA.2.1 Drainage Area Site Map. Document in your SWPCP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas;

scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

E.AA.2.2 Potential Pollutant Sources. Document in your SWPCP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

E.AA.3 Additional Inspection Requirements

E.AA.3.1 Inspections. At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas. Also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

E.AA.4 Sector-Specific Benchmarks.

Table E.AA-1 identifies benchmarks that apply to the specific subsectors of Sector AA. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table E.AA-1

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Fabricated Metal Coating and Engraving (SIC 3479)	Nitrate plus Nitrite Nitrogen	0.68 mg/L

SCHEDULE F NPDES GENERAL CONDITIONS

SECTION A. STANDARD CONDITIONS

1. Duty to Comply

The permit registrant must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468B.025, the Clean Water Act and 40 Code of Federal Regulations (CFR) §122.41(a), and is grounds for enforcement action; for permit termination, revocation and/or reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Water Pollution and Permit Condition Violations

ORS 468.140 allows the Director to impose civil penalties up to \$25,000 per day for violation of a term, condition, or requirement of a permit. ORS 468.943 creates the criminal offense of unlawful water pollution in the second degree, for the criminally negligent violation of ORS chapter 468B or any rule, standard, license, permit or order adopted or issued under ORS chapter 468B. Unlawful water pollution in the second degree is punishable by a fine of up to \$25,000 or imprisonment for not more than one year, or both. In addition, OAR 468.946, creates the offense of unlawful water pollution of the first degree, which is a Class B felony.

3. Duty to Mitigate

The permit registrant must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit. In addition, upon request of the department, the permit registrant must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

4. Duty to Reapply

If the permit registrant wishes to continue an activity regulated by this permit after the expiration date of this permit, the permit registrant must apply for and have the permit registration renewed. The application must be submitted at least 180 days before the expiration date of this permit. The department may grant written permission to submit an application less than 180 days in advance but no later than the permit expiration date.

5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute
- b. Failure to pay fees when they are due
- c. Obtaining this permit by misrepresentation or failure to disclose fully all material facts
- d. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge
- e. The permit registrant is identified as a Designated Management Agency or allocated a wasteload under a Total Maximum Daily Load (TMDL)
- f. New information or regulations
- g. Modification of compliance schedules
- h. Requirements of permit re-opener conditions
- i. Correction of technical mistakes made in determining permit conditions
- j. Determination that the permitted activity endangers human health or the environment
- k. Other causes as specified in 40 CFR §§122.62, 122.64, and 124.5

DEQ will give permit registrant notice of the right to a contested case hearing in the event DEQ issues a Notice of Revocation, Suspension or Refusal to Renew the permit.

The filing of a request by the permit registrant for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permit registrant must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rules (OAR) 340-041-0033 for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. **Property Rights**
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to persons of property or invasion of any other private rights, nor any infringement of federal, tribal, state, or local laws or regulations.
8. **Permit References**
Except for effluent standards or prohibitions established under Section 307(a) of the Clean Water Act and OAR 340-041-0033 for toxic pollutants, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.
9. **Permit Fees**
The permit registrant must pay the fees required by OAR 340-045-0070 to 0075.
The permit registrant must pay annual compliance fees by the last day of the month prior to when the permit was issued. For example, if the permit was issued or last renewed in April, the due date will be March 31st. If the payment of annual fees is 30 days or more past due, the permit registrant must pay 9% interest per annum on the unpaid balance. Interest will accrue until the fees are paid in full. If DEQ does not receive payment of annual fees when they are due, DEQ will refer the account to the Department of Revenue or to a private collection agency for collection.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. **Proper Operation and Maintenance**
The permit registrant must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permit registrant to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permit registrant only when the operation is necessary to achieve compliance with the conditions of the permit.
2. **Duty to Halt or Reduce Activity**
For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permit registrant must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permit registrant in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
3. **Bypass of Treatment Facilities**
 - a. **Definitions**
 - (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The term "bypass" does not include nonuse of singular or multiple units or processes of a treatment works when the nonuse is insignificant to the quality or quantity of the effluent produced by the treatment works. The term "bypass" does not apply if the diversion does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities or treatment processes which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - b. **Prohibition of bypass.**
 - (1) Bypass is prohibited unless:
 - (a) Bypass was necessary to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (c) The permit registrant submitted notices and requests as required under General Condition B.3.c.
 - (2) The Director may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, when the Director determines that it will meet the three conditions listed above in General Condition B.3.b.(1).

- c. Notice and request for bypass.
 - (1) Anticipated bypass. If the permit registrant knows in advance of the need for a bypass, it must submit prior written notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permit registrant must submit notice of an unanticipated bypass as required in General Condition D.5.

4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permit registrant. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of General Condition B.4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permit registrant who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permit registrant can identify the causes(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permit registrant submitted notice of the upset as required in General Condition D.5, hereof (24-hour notice); and
 - (4) The permit registrant complied with any remedial measures required under General Condition A.3 hereof.
- d. Burden of proof. In any enforcement proceeding the permit registrant seeking to establish the occurrence of an upset has the burden of proof.

5. Treatment of Single Operational Event

For purposes of this permit, A Single Operational Event which leads to simultaneous violations of more than one pollutant parameter must be treated as a single violation. A single operational event is an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one Clean Water Act effluent discharge pollutant parameter. A single operational event does not include Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational event is a violation.

6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

- a. Definitions
 - (1) "Overflow" means the diversion and discharge of waste streams from any portion of the wastewater conveyance system including pump stations, through a designed overflow device or structure, other than discharges to the wastewater treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the conveyance system or pump station which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of an overflow.
 - (3) "Uncontrolled overflow" means the diversion of waste streams other than through a designed overflow device or structure, for example to overflowing manholes or overflowing into residences, commercial establishments, or industries that may be connected to a conveyance system.
- b. Prohibition of overflows. Overflows are prohibited unless:
 - (1) Overflows were unavoidable to prevent an uncontrolled overflow, loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the overflows, such as the use of auxiliary pumping or conveyance systems, or maximization of conveyance system storage; and
 - (3) The overflows are the result of an upset as defined in General Condition B.4. and meeting all requirements of this condition.
- c. Uncontrolled overflows are prohibited where wastewater is likely to escape or be carried into the waters of the State by any means.

d. Reporting required. Unless otherwise specified in writing by the Department, all overflows and uncontrolled overflows must be reported orally to the Department within 24 hours from the time the permit registrant becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D.5.

7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs, upon request by the Department, the permit registrant must take such steps as are necessary to alert the public about the extent and nature of the discharge. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

8. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR §136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit must, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years or both.

5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permit registrant

If the permit registrant monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR §136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (e.g., Total Chlorine Residual), only the average daily value must be recorded unless otherwise specified in this permit.

7. Averaging of Measurements
Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.
8. Retention of Records
Except for records of monitoring information required by this permit related to the permit registrant's sewage sludge use and disposal activities, which must be retained for a period of at least five years (or longer as required by 40 CFR §503), the permit registrant must retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
9. Records Contents
Records of monitoring information must include:
 - a. The date, exact place, time and methods of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
10. Inspection and Entry
The permit registrant must allow the Director, or an authorized representative upon the presentation of credentials to:
 - a. Enter upon the permit registrant's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
 - d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes
The permit registrant must comply with Oregon Administrative Rules (OAR) 340, Division 052, "Review of Plans and Specifications". Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers must be commenced until the plans and specifications are submitted to and approved by the Department. The permit registrant must give notice to the Department as soon as possible of any planned physical alternations or additions to the permitted facility.
2. Anticipated Noncompliance
The permit registrant must give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
3. Transfers
This permit may be transferred to a new permit registrant provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit must be transferred to a third party without prior written approval from the Director. The permit registrant must notify the Department when a transfer of property interest takes place.
4. Compliance Schedule
Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permit registrant must report any noncompliance which may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours, unless otherwise specified in this permit, from the time the permit registrant becomes aware of the circumstances. During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System).

A written submission must also be provided within 5 days of the time the permit registrant becomes aware of the circumstances. If the permit registrant is establishing an affirmative defense of upset or bypass to any offense under ORS 468.922 to 468.946, and in which case if the original reporting notice was oral, delivered written notice must be made to the Department or other agency with regulatory jurisdiction within 4 (four) calendar days. The written submission must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected;
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
- e. Public notification steps taken, pursuant to General Condition B.7.

The following must be included as information which must be reported within 24 hours under this paragraph:

- a. Any unanticipated bypass which exceeds any effluent limitation in this permit.
- b. Any upset which exceeds any effluent limitation in this permit.
- c. Violation of maximum daily discharge limitation for any of the pollutants listed by the Director in this permit.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. Other Noncompliance

The permit registrant must report all instances of noncompliance not reported under General Condition D.4 or D.5, at the time monitoring reports are submitted. The reports must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. Duty to Provide Information

The permit registrant must furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permit registrant must also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permit registrant becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it must promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department must be signed and certified in accordance with 40 CFR §122.22.

9. Falsification of Reports

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$100,000 per violation and up to 5 years in prison.

SECTION E. DEFINITIONS

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids.
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m³/d means cubic meters per day.

6. MGD means million gallons per day.
7. Composite sample means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow.
8. FC means fecal coliform bacteria.
9. Technology based permit effluent limitations means technology-based treatment requirements as defined in 40 CFR §125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
10. CBOD means five day carbonaceous biochemical oxygen demand.
11. Grab sample means an individual discrete sample collected over a period of time not to exceed 15 minutes.
12. Quarter means January through March, April through June, July through September, or October through December.
13. Month means calendar month.
14. Week means a calendar week of Sunday through Saturday.
15. Total residual chlorine means combined chlorine forms plus free residual chlorine.
16. The term "bacteria" includes but is not limited to fecal coliform bacteria, total coliform bacteria, and E. coli bacteria.
17. POTW means a publicly owned treatment works.