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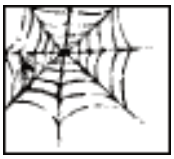

The Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (2000 MSGP), issued in October 2000, expired at midnight on October 30, 2005. A new permit, the 2008 Multi-Sector General Permit (2008 MSGP) was issued on September 29, 2008. Visit www.epa.gov/npdes/stormwater/msgp to view the final 2008 MSGP and supporting documents.

United States Environmental Protection Agency (EPA)
National Pollutant Discharge Elimination System (NPDES)

MULTI-SECTOR GENERAL PERMITS FOR STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY (MSGP)

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 U.S.C. 1251 *et seq.*), any operator who:

- develops and implements a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Part 2,
- submits a complete Notice of Intent (NOI) in accordance with Part 1.5.1,
- for a discharge of stormwater associated with industrial activities,
- that is located in a state, territory or Indian Country where EPA is the permitting authority (see Appendix C for a detailed list), and
- that is eligible for permit coverage under Part 1.2

is authorized to discharge stormwater to waters of the United States in accordance with the requirements set forth herein. Definitions of permit-specific terms used in this permit are provided in Appendix A. Standard permit conditions applicable to all authorized discharges are included in Appendix B.

This permit becomes effective on **[insert date of FR publication]**.

This permit and the authorization to discharge expire at midnight, **[insert date 5 years]**.

Signed and issued this day of , 2006
Name
Title, Region 1

Signed and issued this day of , 2006
Name
Title, Region 2

Signed and issued this day of , 2006
Name
Title, Region 2, Caribbean Office

Signed and issued this day of , 2006
Name
Title, Region 3

Signed and issued this day of , 2006
Name
Title, Region 5

Signed and issued this day of , 2006
Name
Title, Region 6

Signed and issued this day of , 2006
Name
Title, Region 9

Signed and issued this day of , 2006
Name
Title, Region 10

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1. Coverage under this Permit.

1.1 Permit Structure.

This permit is structured as follows:

- general requirements that apply to all facilities are found in Parts 1 through 3;
- industry sector-specific conditions are found in Part 4; and
- specific requirements applicable to individual States or Tribes are found in Part 5.

The Appendices (A through H) contain detailed information on additional permit conditions. Please note that permit numbers are assigned by the location of the facility. You can find your permit location number in Appendix C.

1.2 Eligibility.

In order to be eligible for coverage under this permit you must meet the eligibility requirements described below. If you do not meet the eligibility requirements then resulting discharges will be considered unpermitted discharges.

1.2.1 Facilities Covered.

Your may obtain authorization to discharge under this permit only for discharges from facilities in the 30 "sectors" of industrial activity summarized in Appendix D.

Co-located Activities. If you have other industrial activities on-site in addition to your primary industrial activity, you must also comply with any sector-specific requirements of this permit for those co-located industrial activities.

1.2.2 Allowable Stormwater Discharges.

The following discharges are eligible for coverage under this permit:

1.2.2.1 Stormwater discharges associated with the industrial categories of activity detailed in Appendix D;

1.2.2.2 Discharges designated by EPA as needing a stormwater permit to implement an approved TMDL or to address exceedances of water quality standards as outlined in 40 CFR 122.26(a)(9)(C) or (D); and

1.2.2.3 Discharges that are not required to obtain NPDES permit authorization, but are co-mingled with discharges that are authorized under this permit.

1.2.2.4 Discharges subject to any of the stormwater-specific effluent limitations guidelines listed in Table 1-1, below;

1.2.2.5 For any facility where the New Source Performance Standards (NSPS) identified in Table 1-1 apply (i.e., where facilities commenced operation after the promulgation of that industry's NSPS), you must obtain and retain the following with your SWPPP, prior to submitting your NOI:

- documentation from EPA of "No Significant Impact"; or
- a completed Environmental Impact Statement in accordance with an environmental review conducted by EPA pursuant to 40 CFR 6.102(a)(6).

Table 1-1. Stormwater-Specific Effluent Limitations Guidelines

40 CFR Part/Subpart	Eligible Discharges	Affected MSGP Sector	Applicable NSPS?
Part 411, Subpart C	Runoff from material storage piles at cement manufacturing facilities	E	Yes
Part 418, Subpart A	Runoff from phosphate fertilizer manufacturing facilities	C	Yes
Part 423	Coal pile runoff at steam electric generating facilities	O	Yes
Part 429, Subpart I	Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	A	Yes
Part 436, Subpart B	Mine dewatering discharges at crushed stone mines	J	No
Part 436, Subpart C	Mine dewatering discharges at construction sand and gravel mines	J	No
Part 436, Subpart D	Mine dewatering discharges at industrial sand mines	J	No
Part 443, Subpart A	Runoff from asphalt emulsion facilities	D	Yes
Part 445, Subparts A and B	Runoff from landfills	K, L	Yes

1.2.3 Allowable Non-Stormwater Discharges.

The following non-stormwater discharges are authorized under this permit:

- Discharges from fire-fighting activities;
- Fire hydrant flushings;
- Potable water, including water line flushings;
- Uncontaminated air conditioning or compressor condensate;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer's instructions;
- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building washdown that does not use detergents;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

1.2.4 Limitations on Coverage.

1.2.4.1 ***Discharges Mixed with Non-Stormwater.*** You are not authorized to discharge stormwater that is mixed with sources of non-stormwater other than those listed in Part 1.2.3.

1.2.4.2 ***Stormwater Discharges Associated with Construction Activity.*** You are not authorized for stormwater discharges associated with construction activity unless in conjunction with mining activities, provided the applicable sector-specific requirements for construction stormwater discharges as specified in Sector G and Sector J of this permit are met. Construction activity is defined in 40 CFR 122.26(b)(14)(x) or 40 CFR 122.26(b)(15). These activities are covered by EPA's Construction General Permit (www.epa.gov/npdes/cgp).

1.2.4.3 ***Discharges Currently or Previously Covered by another Permit.*** You are not authorized to discharge:

- Stormwater discharges associated with industrial activity that are currently covered under an individual permit or an alternative general permit;
- Discharges previously covered by an individual permit or alternative general permit where that permit established site-specific numeric water quality-based limitations developed for the stormwater component of the discharge (except

generic pH range limitations not included to address a known exceedances of water quality standards);

- Discharges previously covered by an individual permit or alternative general permit where the permittee fails to implement Best Management Practices (BMPs) that provide equal or better pollution prevention or pollutant removal as required by the previous permit; or
- Discharges from facilities where any NPDES permit has been or is in the process of being denied, terminated, or revoked by EPA (this does not apply to the routine reissuance of permits every five years).

1.2.4.4 ***Wasteload Allocations.*** You are not authorized for discharges when a Total Maximum Daily Load (TMDL) specifically articulates a wasteload allocation requiring more stringent controls than required by this permit, OR when a Total Maximum Daily Load (TMDL) applies a wasteload allocation of zero (0) to your discharge (either specifically or by category). In a situation where an EPA-approved or established TMDL has specified a general wasteload allocation applicable to industrial storm water discharges, but no specific requirements for individual sites have been identified in the TMDL**,** you should consult with the State or Federal TMDL authority to confirm that adherence to a SWPPP that meets the requirements of the MSGP will be consistent with the approved TMDL.

1.2.4.5 ***Discharges Subject to Effluent Limitations Guidelines.*** You are not authorized for discharges subject to any effluent limitation guideline (i.e., discharges identified in 40 CFR, Subchapter N) that is not identified in Table 1-1.

1.2.4.6 ***Endangered and Threatened Species and Critical Habitat Protection.*** Coverage under this permit is available only if your stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to jeopardize the continued existence of any species that are federally-listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is federally-designated as critical under the ESA ("critical habitat"). In order to be eligible for coverage under this permit you must certify that you meet one or more of the six criteria (A-F) detailed in Appendix E, Endangered Species Act Procedures, PRIOR to submitting your Notice of Intent.

1.2.4.7 ***Historic Properties Preservation.*** Coverage under this permit is available only if your stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are in compliance with the National Historic Preservation Act (NHPA). In order to be eligible for coverage under this permit, you must certify that you meet one or more of the four criteria (A-D) detailed in Appendix F, National Historic Preservation Act Procedures, PRIOR to submitting your Notice of Intent.

1.2.4.8 ***Hazardous Substances.*** Discharges of a hazardous substance or oil in excess of reporting quantities caused by a non-stormwater discharge (e.g., a spill of oil into a separate storm sewer) are not authorized by this permit. In the event of a spill, the requirements of Section 311 of the CWA and other applicable provisions of Sections 301

and 402 of the CWA continue to apply. In addition, the reporting requirements of Part 3.6.3, Reporting Unauthorized Releases or Discharges, of this permit apply.

1.2.4.9 ***New Discharges to Water Quality Impaired Receiving Waters.*** The provisions of this part apply to operators of new discharges, as defined in Appendix A, proposing to discharge to an impaired water for which a TMDL has not yet been developed. To satisfy the requirements of 40 CFR 122.4(i) that the discharge from the construction or operation of a new discharger not cause or contribute to a violation of water quality standards, the operator of the facility that is the new discharger must: 1) eliminate all exposure to stormwater of the pollutant(s) for which the waterbody is impaired, and properly document no exposure in the SWPPP, or 2) obtain written clarification from the appropriate State or Tribal water quality agency that the discharge is not expected to cause or contribute to a violation of a water quality standard, and file such notification with the SWPPP.

1.2.4.10 ***Stormwater Discharges Subject to Anti-degradation Water Quality Standards.*** New dischargers, as defined in Appendix A, are not authorized for discharges that do not comply with the applicable State or Tribal anti-degradation policy for water quality standards.

1.3 Permit Compliance.

Any noncompliance with the requirements of this Permit constitutes a violation of the Clean Water Act. For provisions specifying a time period to remedy noncompliance (including, but not limited to, Parts 2.2, 2.3 and 3.3), the initial BMP or SWPPP deficiency constitutes a violation of the Permit and the Clean Water Act (unless specifically otherwise stipulated), and subsequent failure to remedy such deficiencies within the specified time periods constitutes an independent, additional violation of the Permit and Clean Water Act. Therefore, any time periods specified for remedying noncompliance do not absolve parties of the initial underlying noncompliance.

To provide clarity for operators, there are additional reminders in certain sections of this permit about what constitutes a permit violation. The absence of such a reminder in a particular section does not mean that failure to meet that requirement is not a permit violation.

Where requirements and schedules for taking corrective actions are included, the time intervals are not grace periods, but are time limits considered reasonable for making repairs and improvements. They are included in the permit to ensure that inadequacies are not allowed to persist indefinitely.

1.4 Water Quality Provisions.

Pursuant to Clean Water Act § 301(b)(1)(C) and 402(p)(3)(A), as well as 40 CFR 122.44(d), this permit includes provisions to ensure that discharges do not cause or contribute to exceedances of water quality standards. This permit sets technology-based limitations in the form of Best Management Practices that apply to all pollutants associated with industrial activity,

and some numeric effluent limitations (effluent limit guidelines, coal pile runoff) more specifically targeted to specific activities.

1.4.1 Numeric Effluent Limitations.

This permit stipulates numeric effluent limitations for coal pile runoff and effluent limitation guidelines (Part 3.2.3). Failure to comply with the effluent limitations applicable to your discharge is a violation of this permit.

1.4.2 Benchmarks.

This permit stipulates pollutant benchmark concentrations applicable to your discharge (Part 3.2.2). The benchmark concentrations do not constitute direct numeric effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use (and EPA's use as described in Part 1.4.3) to determine the overall effectiveness of your SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If the average of four quarterly discharge samples exceed a benchmark concentration you must review your Stormwater Pollution Prevention Plan (SWPPP) and your BMPs to determine whether any improvement or additional controls are needed to reduce that pollutant in your stormwater discharge(s). Failure to undertake and document the review, take the necessary corrective actions, or follow the EPA notification procedures stipulated in this permit are violations of this permit.

1.4.3 Water Quality Standards.

If at any time you or EPA determine(s) that your discharge causes or contributes to an exceedance of applicable water quality standards, you must take corrective actions and conduct follow-up monitoring. If you discover or are informed (by an entity other than EPA) of the exceedances you must take corrective action and conduct follow-up monitoring as stipulated in Parts 3.3 and 3.4; you must also report the exceedances(s) to EPA as stipulated in Part 3.4. If EPA makes the determination that your discharge causes or contributes to an exceedance of a water quality standard, you must comply with any requirements or schedules, including submitting additional information concerning the potential cause of the exceedance, provided by EPA, and those requirements and schedules will supercede those of Parts 3.3 and 3.4, where such requirements conflict. In addition, one of the following will apply: EPA may continue to authorize your coverage under this permit after you modify your SWPPP and your BMPs to adequately reduce pollutants in your discharge, and verify through monitoring. Alternatively, EPA may notify you that an individual permit application is necessary in accordance with Part 1.8.1. On a case by case basis EPA may look at monitoring data as well as background concentrations in the stream, State mixing zone policies, if available, and other relevant information to determine whether the discharge has the reasonable potential to cause or contribute to a violation of the established water quality standard. Failure to take the appropriate action is a violation of this permit.

1.4.4 Water Quality Impaired Receiving Waters.

Impaired waters include both those with established TMDLs, and those for which TMDL development has been identified as necessary, but for which one has not yet been established. For a more detailed definition see Appendix A.

1.4.4.1 ***Discharge to an Impaired Water with an Established TMDL.*** If a wasteload allocation (WLA) has been established that applies to your discharge, you must develop the SWPPP accordingly (Part 2.1.3.2), and implement all necessary controls to meet that allocation. You must verify that your discharge complies with the WLA through the appropriate discharge monitoring (Part 3.2.5.2). Failure to comply with a relevant WLA is a violation of this permit.

If you have properly complied with the requirements of Part 2.1.3.2 and Part 5 of this permit, and find that the applicable TMDL does not specify a wasteload allocation or other requirements either individually or categorically for your discharge (including disallowing such discharge), compliance with this permit will be deemed adequate to meet the requirements of the TMDL.

1.4.4.2 ***Discharge to an Impaired Water without an Established TMDL.*** If a TMDL has not been established that applies to your discharge you must comply with the requirements of this permit and any additional conditions stipulated by EPA or your State or Tribe (Part 2.1.3.2 and Part 5). If you have properly complied with all such requirements then compliance with this permit will be deemed adequate to meet the requirements for discharging to an impaired water. You are also subject to the monitoring requirement of Part 3.2.5.1. Failure to comply with applicable conditions is a violation of this permit.

1.5 Authorization under this Permit.

1.5.1 How to Obtain Authorization.

To obtain authorization under this permit, you must:

- Meet the Part 1.2 eligibility requirements; and
- Develop and implement a SWPPP according to the requirements in Part 2 of this permit; and
- Submit a complete NOI in accordance with the requirements of Appendix G of this permit. All new and existing facilities must submit NOIs. NOIs must be submitted in accordance with the deadlines in Table 1-2.

Table 1-2. Deadlines for NOI Submittal for Coverage under this Permit	
Category	Deadline
Existing discharges covered under MSGP 2000	No later than 90 days after the effective date of MSGP 2006.
Existing discharges without permit coverage	No later than 90 days after the effective date of MSGP 2006.
New discharges	A minimum of 30 days prior to commencing operation of the facility.
New owner/operator of existing discharges	A minimum of 30 days prior to assuming operation of the facility.

You are strongly encouraged to apply for permit coverage using EPA's Electronic Notice of Intent (eNOI) system (www.epa.gov/npdes/eNOI). Submitting an electronic NOI is the fastest and easiest way to obtain permit coverage. Using the electronic system will ensure that your form is complete.

1.5.2 Effective Date of Permit Coverage.

You are authorized to discharge under the terms and conditions of this permit 30 days after EPA posts your complete NOI on EPA's website at: www.epa.gov/npdes/stormwater/noisearch, unless notified otherwise by EPA. EPA may extend the waiting period for further review, or deny coverage under this permit and require submission of an application for an individual NPDES permit based on a review of your NOI or other information (see Part 1.8). If your NOI is incomplete EPA will return it to you, and a new 30 day wait period will commence when EPA receives a complete NOI.

1.5.3 Continuation of the Expired General Permit.

If you are covered by MSGP 2000 on the effective date of this permit, your coverage is automatically extended under the 2000 general permit for a period of up to 120 days provided you submit a timely and complete NOI in accordance with the deadlines in Table 1-2.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissuance or replacement of this permit, following your timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit; or
- Your submittal of a Notice of Termination; or
- Issuance or denial of an individual permit for the facility discharges; or

- A formal permit decision by EPA not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

1.6 Terminating Coverage.

1.6.1 Submitting a Notice of Termination.

If you wish to terminate coverage under this permit, you must submit a Notice of Termination (NOT) in accordance with Appendix H. You must continue to comply with this permit until you submit an NOT. Your authorization to discharge under the permit terminates at midnight of the day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/noisearch).

1.6.2 When to Submit an NOT.

You may use the eNOI system to file your NOT. You must submit an NOT within 30 days after one or more of the following conditions have been met:

- a new owner or operator has assumed responsibility for the facility; or
- you have ceased operations at the facility and there no longer are discharges of stormwater associated with industrial activity from the facility and you have already implemented necessary sediment and erosion controls as required by Part 2.1.5.7; or
- you have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit.

1.6.3 Discharges After the NOT Is Submitted.

If you submit an NOT without meeting one or more of the conditions identified in Part 1.6.2, then your NOT is not valid and you must continue to comply with the requirements of this permit.

1.7 Conditional Exclusion for No Exposure.

If you are covered by this permit, and become eligible for a no exposure exclusion from permitting under 40 CFR 122.26(g), you may file a No Exposure Certification. You are no longer authorized by nor required to comply with this permit upon submission of a no exposure certification to EPA. If you are no longer required to have permit coverage because of a no exposure exclusion and have submitted a No Exposure Certification form to EPA, you are not required to submit an NOT. A copy of the No Exposure Certification form is available from EPA (www.epa.gov/npdes/stormwater/msgp). You may file your No Exposure Certification using the eNOI system.

1.8 Permit Exclusions.

1.8.1 EPA Requiring Coverage under an Alternate Permit.

EPA may require you to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition EPA to take action under this paragraph. If EPA requires you to apply for an individual NPDES permit, EPA will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and application information. In addition, if you are an existing permittee covered under this permit, the notice will set a deadline to file the application, and will include a statement that on the effective date of the individual NPDES permit, or the alternative general permit as it applies to you, coverage under this general permit will automatically terminate. EPA may grant additional time to submit the application following your request. If you are covered under this permit and fail to submit an individual NPDES permit application as required by EPA, then the applicability of this permit to you is automatically terminated at the end of the day specified by EPA as the deadline for application submittal. EPA may take appropriate enforcement action for the unpermitted discharge.

When an individual NPDES permit is issued to you, or you are authorized to discharge under an alternative NPDES general permit, your coverage under this permit is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.8.2 Permittee Requesting Coverage under an Alternate Permit.

You may request to be excluded from the coverage of this general permit by applying for an individual permit. In such a case, you must submit an individual permit application in accordance with the requirements of 40 CFR §122.26(c)(1)(ii), with reasons supporting the request, to EPA at the applicable EPA Regional Office listed in Part 3.7 of this permit. The request may be granted by issuance of an individual permit or an alternative general permit if your reasons are adequate to support the request.

When an individual NPDES permit is issued to you, or you are authorized to discharge under an alternative NPDES general permit, your coverage under this permit is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.8.3 Termination of Coverage under the MSGP.

EPA may terminate permit coverage for any reason specified in 40 CFR § 122.64. Terminating permit coverage shall not preclude any enforcement by EPA.

1.8.4 Modification or Revocation and Reissuance.

The permit may be modified or revoked for any reason stated in 40 CFR §§ 122.62 and 122.63. Permit modification or revocation will be in accordance with 40 CFR §124.5.

2. Stormwater Pollution Prevention Plan (SWPPP).

You must prepare and implement a SWPPP for your facility before submitting your Notice of Intent (NOI) for permit coverage. If you prepared a SWPPP for coverage under a previous MSGP you must review and update it to meet all provisions of this permit prior to submitting your NOI. Your SWPPP must include Best Management Practices (BMPs), economically reasonable and appropriate in light of current industry practices, that are selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce all pollutants in your discharge, as well as any more stringent measures necessary to meet the water quality standards provisions of Parts 1.4.3 and 1.4.4. EPA does not require you to use a registered professional engineer to prepare your SWPPP, but this may be independently required under State law and/or local ordinance. Your SWPPP must remain compliant with relevant State, Tribal and local regulations.

Your SWPPP must:

- identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from your facility;
- describe and ensure implementation of practices you will use to eliminate or reduce all pollutants in stormwater discharges from the facility;
- ensure compliance with the terms and conditions of this permit; and
- include all necessary measures to ensure that the discharge complies with all water quality provisions of Part 1.4.

2.1 Contents of the SWPPP.

2.1.1 Pollution Prevention Team.

You must identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team. Your pollution prevention team is responsible for assisting the facility manager in developing, implementing, maintaining, revising and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team must be identified and listed in the SWPPP. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and the SWPPP.

2.1.2 Site Description.

Your SWPPP must include the following:

- *Activities at the Facility.* Provide a description of the nature of the industrial activities at your facility.
- *Impervious Surface Estimate.* Provide an estimate of the percent imperviousness of your site:

$$\left[\frac{(\text{Area of Roofs} + \text{Area of Paved and Other Impervious Surfaces})}{}\right] \times 100$$

Total Area of Facility

- *Precipitation Information.* Provide average annual precipitation information for your locale (this can be obtained from almanacs or from the closest airport, etc.). Note which months or seasons are usually the wettest and include such details as expected rainfall and storm intensity, e.g., wet season: May - September; typical amount: 0.5 inches - 2 inches over 2 hours.
- *General location map*. Provide a general location map, e.g., U.S. Geological Survey (USGS) quadrangle map, with enough detail to identify the location of your facility and the receiving waters.
- *Site map.* Provide a map showing:
    - the size of the property in acres;
    - the location and extent of significant structures and impervious surfaces;
    - directions of stormwater flow (use arrows);
    - locations of all existing structural and source control BMPs;
    - locations of all surface water bodies within 1 mile of the site, including all receiving waters for your stormwater discharges;
    - locations of all stormwater conveyances including ditches, pipes and swales;
    - locations of potential pollutant sources identified under Part 2.1.4.2;
    - locations where significant spills or leaks identified under Part 2.1.4.3 have occurred;
    - locations of stormwater inlets and outfalls, and an approximate outline of the areas draining to each outfall;
    - municipal storm sewer systems, where your stormwater discharges to them;
    - locations and descriptions of all non-stormwater discharges;
    - locations of the following activities where such activities are exposed to precipitation:
        - fueling stations,
        - vehicle and equipment maintenance and/or cleaning areas,
        - loading/unloading areas,
        - locations used for the treatment, storage or disposal of wastes,
        - liquid storage tanks,
        - processing and storage areas,
        - access roads, rail cars, and tracks,
        - transfer areas for substances in bulk,
        - machinery; and
    - locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants. An evaluation of how the quality of the stormwater running onto your facility impacts your stormwater discharges must be included.

2.1.3 Receiving Waters and Wetlands.

You must provide the name(s) of all surface waters that receive discharges from your site, including intermittent streams, dry sloughs, and arroyos. You must also provide the size and description of wetlands or other "special aquatic sites" (see Appendix A for definition) that may receive discharges from your facility. If your facility discharges through any municipal separate storm sewer system(s) (MS4), you must identify the MS4 operator(s), and the receiving water to which the MS4 discharges.

2.1.3.1 ***Water Quality Standards.*** Your SWPPP must identify the water quality standards applicable to your receiving waters. Applicable water quality standards are compiled at http://www.epa.gov/waterscience/standards/states/ and are also available from your state environmental protection or water quality regulatory agency.

2.1.3.2 ***Water Quality Impaired Receiving Waters.*** Your SWPPP must identify if any receiving water into which you discharge is on your state's or tribe's impaired waters (see definition in Appendix A) list, and/or has an approved TMDL. Information on impaired waters and approved TMDLs is compiled at http://cfpub.epa.gov/surf/locate/index.cfm. You may need to contact your State or Tribal water quality agency for up-to-date information or for clarification. Those contacts are provided at http://www.epa.gov/npdes/stormwater/contacts. Your SWPPP must specify the relevant waterbodies, the pollutants for which they are impaired, and your potential to discharge any of those pollutants.

- *Receiving Waters with an Approved TMDL.* You must determine the specific TMDL-related requirements applicable to your discharge. If not stipulated in Part 5 (State and Tribal Requirements) of this permit, you must ascertain from your State or Tribal environmental agency: the wasteload allocation (WLA) applicable to your discharge, the corresponding effluent limitation with which you must comply, and the monitoring requirements with which you must comply. Your SWPPP must include appropriate BMPs, and monitoring (Part 3.2.5.2) to verify that you are meeting the WLA. Your SWPPP must document any consultation with state or federal authorities on TMDL-related requirements and activities.

- *Impaired Waters without an Established TMDL.* If not stipulated in Part 5 (State and Tribal Requirements) of this permit, you must ascertain from your State or Tribal environmental agency if there are any discharge standards with which you must comply for the pollutant for which your receiving water is impaired. If your State or Tribal environmental agency specifies no additional requirements, you must comply with all general provisions of this permit, including the additional discharge monitoring requirements of Part 3.2.5.1. Your SWPPP must document any consultation with state or federal authorities on water quality impairment-related requirements and activities.

2.1.4 Summary of Potential Pollutant Sources.

You must identify each area at your facility where industrial materials or activities are exposed to stormwater. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; intermediate products, by-products, final products and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product and waste product. For each area identified, the description must include:

2.1.4.1 ***Activities in the area.*** A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steel beams).

2.1.4.2 ***Pollutants.*** For each identified activity, a list of the associated pollutant(s) or pollutant constituents(s) (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents). The pollutant list must include all significant materials handled, treated, stored, or disposed that have been exposed to stormwater in the 3 years prior to the date you prepare or amend your SWPPP. This list must include any hazardous substances or oil at the facility.

2.1.4.3 ***Spills and Leaks.*** You must identify where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s). You must document in your SWPPP all significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance in the 3 years prior to the date you prepare or amend your SWPPP.

Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA §311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

2.1.4.4 ***Elimination of Unauthorized Discharges.*** Non-stormwater discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be eliminated (see Part 2.1.4.5 below for SWPPP requirements regarding allowable non-stormwater discharges).

- *Signature and Certification.* Your SWPPP must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-stormwater, and that all unauthorized discharges have been eliminated. The certification must be signed in accordance with Subsection 11 of Appendix B of this permit (General Permit Provisions, Signatory Requirements) and must include:

- the date of any testing and/or evaluation,
- a description of the evaluation criteria or testing method used,
- a list of the outfalls or onsite drainage points that were directly observed during the test,
- a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, i.e. identification of unauthorized discharge(s) origin and composition,
- the action(s) taken to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for a cooling water discharge.

- *Previous Certifications.* You do not need to sign a new certification if you completed one for the 2000 version of the MSGP, provided conditions relating to non-stormwater discharges at your facility have not changed. The previous certification must be included in your SWPPP. If prior certification pre-dates your coverage under the MSGP 2000, you must provide a new certification.

- *Notification of EPA.* If you are unable to provide the certification required for the non-stormwater discharge test and elimination in your SWPPP this will not be deemed a violation of this permit provided that you notify EPA (Part 3.7) no more than 14 days after you submit your NOI:

  - why certification was not possible,
  - the procedure that you followed in any test attempted,
  - the results of such test or other relevant observations, and
  - any potential sources of non-stormwater discharges that have not been eliminated.

  Failure to provide this notification to EPA is a violation of this permit.

2.1.4.5 ***Allowable Non-Stormwater Discharges.*** Discharges of certain sources of non-stormwater are allowed under this permit (see Part 1.2.3, Allowable Non-Stormwater Discharges). For each allowable non-stormwater source (except flows from fire-fighting activities) your SWPPP must include:

- the discharge location(s); and
- descriptions of appropriate BMPs for each source.

If mist blown from cooling towers is one of your allowable non-stormwater discharges, you must specifically evaluate the discharge for the presence of chemicals used in the cooling tower. These data must be included in your SWPPP.

Allowable non-stormwater discharges are subject to all of the provisions of this permit, including numeric effluent limitations, benchmarks and monitoring requirements.

2.1.4.6 ***Salt Storage.*** Identification of any storage piles containing salt used for deicing or other commercial or industrial purposes.

2.1.4.7 ***Monitoring Data.*** You must provide a summary of existing stormwater discharge sampling data previously taken at your facility. The summary must include, at a minimum, any data collected during the previous permit term.

2.1.5 Stormwater Controls. You must implement BMPs for all areas identified in Part 2.1.4 to prevent or control pollutants in your stormwater discharges. You must also take all reasonable steps to control or address the quality of discharges from your site that may not originate at your facility. In your SWPPP describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to stormwater.

Consider the following when selecting BMPs:

- that preventing stormwater from coming into contact with polluting materials is much more effective than trying to remove pollutants from stormwater;
- BMPs generally must be used in combination with each other for most effective water quality protection;
- the type and quantity of pollutants, including their potential to impact receiving water quality;
- that minimizing impervious areas at your facility will reduce runoff and improve groundwater recharge and stream base flows in local streams (taking into account the potential for ground water contamination).
- flow attenuation by use of open vegetated swales and natural depressions,
- diverting flow from areas of materials handling, storage or use,
- conservation or restoration of riparian buffers,
- infiltration of runoff onsite, (including bioretention cells, green roofs, and pervious pavement),
- treatment interceptors (e.g., swirl separators and sand filters).

You **must** implement all of the following types of BMPs to prevent and control pollutants in your stormwater discharges, unless you demonstrate that such controls are not relevant to your discharge (e.g., you have no storage piles containing salt). You must keep abreast of new BMPs or new applications of existing BMPs for the most effective means of achieving water quality protection, and include these in your SWPPP as appropriate.

2.1.5.1 ***Good Housekeeping.*** You must keep clean all exposed areas that are potential sources of pollutants. Typical problem areas are around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. You must include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

2.1.5.2 ***Eliminating and Minimizing Exposure.*** To the extent practicable locate industrial materials and activities inside, or protect them with storm-resistant coverings to prevent

exposure to rain, snow, snowmelt and runoff (although significant enlargement of impervious surface area is not recommended). Note that if you are able to eliminate exposure at all industrial areas you may be eligible for the "No Exposure" exclusion and not need to have a permit (see 40 CFR 122.26(g) and the *Guidance Manual for Conditional Exclusion from Stormwater Permitting Based on "No Exposure" of Industrial Activities to Stormwater* found at www.epa.gov/npdes/stormwater).

2.1.5.3 ***Preventive Maintenance.*** You must have a preventive maintenance program that includes regular inspecting, testing, maintaining and repairing of all industrial equipment and systems to avoid situations that may result in leaks, spills and other releases. These measures are in addition to specific BMP maintenance as required under Part 2.2 (Maintenance of BMPs).

2.1.5.4 ***Spill Prevention and Response Procedures.*** Describe your procedures for preventing and responding to spills and leaks.

- Preventive measures include barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
- Response procedures must include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks must be consistent with applicable Resource Conservation and Recovery Act (RCRA) regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your Pollution Prevention Team.
- Include in your SWPPP, and in other locations where it will be readily available, contact information for individuals and agencies that must be notified in the event of a spill. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC, metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 as soon as you have knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency, public health or drinking water supply agencies.

2.1.5.5 ***Routine Facility Inspections.*** Qualified facility personnel (for definition see Appendix A) must regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater, and assess how well stormwater BMPs are operating (in addition to the comprehensive site evaluation required under Part 3.1). Qualified facility personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of BMPs selected. At least one member of your Pollution Prevention Team must participate in routine facility inspections. Routine inspections must occur at least monthly unless you document in your SWPPP the justification that another

inspection frequency is adequate to ensure that BMPs are operating properly. Some types of equipment, processes and BMPs will require more frequent checks than others. Your SWPPP must specify the relevant inspection schedules. All inspections and inspection findings must be documented in your SWPPP.

2.1.5.6 ***Employee Training.*** You must implement a stormwater employee training program. Include a schedule for all types of necessary training. Document all training sessions and the employees who received the training. All employees who work in areas where industrial materials or activities are exposed to stormwater, or are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel), must participate in the training, as must all members of your Pollution Prevention Team. Training must cover the components and goals of your SWPPP, and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance, etc.

2.1.5.7 ***Erosion and Sedimentation Controls.*** You must identify the areas at your facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion, and implement structural, vegetative, and/or stabilization BMPs to prevent or control on-site erosion and sedimentation.

2.1.5.8 ***Management of Runoff.*** You must describe the stormwater runoff management practices, i.e., permanent structural BMPs for your facility. These are typically used to divert, infiltrate, reuse, contain or otherwise reduce pollutants in your discharges. Such BMPs may be required by a state or local authority. Structural BMPs associated with wetlands may require a separate permit under section 404 of the CWA before installation.

2.1.5.9 ***Salt Storage Piles or Piles Containing Salt.*** For storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, you must enclose or cover these piles to prevent exposure to precipitation. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered only if stormwater from the pile is not discharged directly or indirectly to waters of the United States or discharges from the piles are authorized and controlled under another NPDES permit.

2.1.5.10 ***Sector Specific BMPs.*** You must develop and implement all controls stipulated in the relevant sector-specific section(s) of Part 4 of this permit.

2.1.5.11 ***Controls on Other Specific Activities.***

- You must implement controls to ensure that no solid materials, including floatable debris, are discharged to waters of the United States, except as authorized by a permit issued under section 404 of the CWA.
- The generation of dust, along with off-site vehicle tracking of raw, final or waste materials, or sediments, must be minimized.

- The introduction of raw, final or waste materials to exposed areas must be minimized.
- Flow velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

2.1.5.12 ***Other Necessary Controls.*** You must implement any additional BMPs that are economically reasonable and appropriate in light of current industry practice, and that are necessary to eliminate or reduce pollutants in your stormwater discharges.

2.1.6 Additional Documentation.

2.1.6.1 ***Documentation Regarding Endangered Species.*** Your SWPPP must include documentation supporting your determination with regard to Part 1.2.4.6 (Endangered and Threatened Species and Critical Habitat Protection), including:

- information on whether listed endangered or threatened species, or critical habitat are found in proximity to your facility;
- whether such species or habitat may be affected by your stormwater discharges or stormwater discharge-related activities, i.e., BMP installation;
- results of your Appendix E endangered species screening determinations; and
- a description of the measures you must implement to protect listed endangered or threatened species, or critical habitat, including any conditions imposed under the eligibility requirements of Part 1.2.4.6 and detailed in Appendix E. If you fail to document and implement such measures, your discharges are ineligible for coverage under this permit and you cannot submit a Notice of Intent.

2.1.6.2 ***Documentation Regarding Historic Properties.*** Your SWPPP must include documentation supporting your determination with regard to Part 1.2.4.7 (Historic Properties Preservation), including:

- information on whether your stormwater discharges, allowable non-stormwater discharges, or stormwater discharge-related activities would have an effect on a property that is listed or eligible for listing on the National Register of Historic Properties (NRHP);
- where such effects may occur and any written documents you have sent to or written agreements you have made with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other Tribal representative to mitigate those effects;
- results of your Appendix F historic places screening investigations; and
- a description of the measures you must implement to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed under the eligibility requirements of Part 1.2.4.7 and detailed in Appendix F. If you fail to document and implement such measures, your discharges are ineligible for coverage under this permit and you cannot submit a Notice of Intent.

2.1.7 SWPPP Signature.

You must sign and date your SWPPP in accordance with subpart 11 of Appendix B, including the date of signature. A signature and date is required both for initial plan preparation and for any revisions to the plan.

2.2 Maintenance of BMPs.

You must maintain all BMPs identified in your SWPPP and implemented at your facility in effective operating condition at all times. Failure to do so is a violation of this permit. Your SWPPP must describe procedures and a regular schedule for preventive maintenance of all BMPs, including the amount of time required for maintenance and repair, and what back-up practices you have in place should a run-off event occur while a BMP is off-line. Nonstructural BMPs must also be diligently maintained (e.g., spill response supplies available, personnel trained).

When, during inspections required by Parts 2.1.5.5 or 3.1, or any other event or observation, you identify BMPs that are not operating effectively, they must be repaired or maintained before the next anticipated storm event. If maintenance prior to the next storm event is not possible, maintenance must be completed as soon as possible, and you must document in your SWPPP the justification for the extended repair schedule. In the interim, you must have back-up measures in place to ensure that the quality of your stormwater discharge is not diminished. There is no grace period for making BMP repairs.

You must document all maintenance and repairs in your SWPPP. Dates of regular maintenance should be documented. For repairs, the date of deficiency discovery and the date on which the BMP was restored to full-function should also be documented in the SWPPP.

2.3 Maintaining an Updated SWPPP.

You must review, and amend your SWPPP as appropriate whenever there is: construction or a change in design, operation or maintenance at your facility such that these situations have a significant impact on the discharge, or potential for discharge, of pollutants from your facility; whenever your routine inspection or compliance evaluation determines deficiencies in your BMPs; whenever an inspection by a local, State, Tribal or Federal (other than EPA, see Part 2.5) official determines that modifications to your SWPPP are necessary; whenever you have a spill, leak or other release at your facility; or any time there is an unauthorized discharge from your facility.

SWPPP modifications must be made within 14 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in 2.2) must be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by EPA. The amount of time taken to modify a BMP or implement additional BMPs must be documented in your SWPPP.

If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release; the circumstances leading to the release and actions taken in response to the release; and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part 3.5.2 of this permit.

2.4 SWPPP Availability.

You must retain a copy of the current SWPPP required by this permit at the facility, and it must be immediately available to EPA; a State, Tribal or local agency approving stormwater management plans; the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an on-site inspection or upon request. Also, you must provide a copy of your SWPPP to any member of the public who makes such a request in writing. Confidential Business Information (CBI) may not be withheld from regulatory agencies, but may be withheld from the public. All portions of the SWPPP not justifiably considered CBI, must be provided to the public upon request.

2.5 Notification by EPA of Inadequacy.

EPA may notify you at any time that your SWPPP, your BMPs or other components of your stormwater program do not meet one or more of the requirements of this permit. This notification may be the result of comments on your SWPPP that EPA receives from the public. The notification will identify specific provisions of this permit that are not being met, and may include required modifications to your stormwater program, stipulated deadlines, additional monitoring requirements and special reporting requirements.

3. Compliance Evaluations, Monitoring, Corrective Action, Reporting, and Record Keeping.

3.1 Comprehensive Site Compliance Evaluation.

3.1.1 Frequency of Comprehensive Site Compliance Evaluations.

You must conduct comprehensive site compliance evaluations at least once a year. An inspection frequency of greater than once a year is recommended, and should be documented in the SWPPP.

3.1.2 Personnel Qualified to Perform Comprehensive Site Compliance Evaluations.

Comprehensive site compliance evaluations must be conducted by qualified personnel. Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of BMPs selected. At least one member of your Pollution Prevention Team must participate in comprehensive site compliance evaluations.

3.1.3 Scope of the Compliance Evaluation.

Your inspections must cover all the areas identified in Part 2.1.4 where industrial materials or activities are exposed to stormwater, along with areas where spills and leaks have occurred in the past 3 years. Inspectors must examine the following: (a) industrial materials, residue or trash that may have or could come into contact with stormwater; (b) leaks or spills from industrial equipment, drums, tanks and other containers; (c) offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site; (d) tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas; (e) evidence of, or the potential for, pollutants entering the drainage system; and (f) evidence of pollutants discharging to surface waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring.

Inspectors must consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Stormwater BMPs identified in your SWPPP must be observed during active operation, i.e., during a stormwater runoff event, to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

3.1.4 Credit as a Routine Facility Inspection.

When compliance evaluation schedules overlap with routine facility inspections required under Part 2.1.5.5, your annual compliance evaluation may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

3.1.5 Compliance Evaluation Report.

You must generate a report of your compliance evaluation that includes: the date and scope of the inspection, the names of inspectors, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part 3.1.3 (a) through (f). You must incorporate this report into your SWPPP and retain it for at least 3 years from the date permit coverage expires or is terminated. Observations include such things as the locations of discharges of pollutants from the site; locations of previously unidentified sources of pollutants; locations of BMPs needing maintenance or repair; locations of failed BMPs that need replacement; and locations where additional BMPs are needed. The report must also document any incidents of noncompliance observed. If there is no noncompliance, you must include a certification stating the facility is in compliance with the SWPPP and permit. Compliance evaluation reports and compliance certifications must be signed in accordance with subsection 11 of Appendix B.

3.2 Monitoring.

There are several types of monitoring requirements your facility may be subject to under this permit:

- visual inspection (see Part 3.2.1 for details),
- benchmark monitoring (see Part 3.2.2 for details),
- effluent limitations monitoring (see Part 3.2.3 for details), and
- area-specific monitoring for limitations required by a state or tribe, including area-specific water quality standards; antidegradation and water quality certification requirements; and monitoring requirements for impaired waters (see Part 3.2.5 for details).

Part 4, Section A through Section AD of this permit specifies monitoring requirements applicable to each sector of industrial activity. You must comply with the requirements stipulated in the relevant sector-specific section. When stormwater from co-located activities is co-mingled, you must comply with monitoring requirements for all applicable sectors.

Part 5 contains additional requirements that apply selectively to facilities located in particular States or Indian Country lands. You must comply with the requirements of the relevant State or Indian Country land.

Unlike previous MSGPs, all eligible dischargers have some form of routine analytical monitoring requirement under this permit. Unless otherwise specified, limitations and monitoring requirements under Part 3, and any additional requirements in Parts 4 and 5, are additive.

Where more than one limitation for a specific parameter applies to a discharge, compliance with the more restrictive limitation is required. When monitoring requirements overlap, e.g., total suspended solids once per year for an effluent limitation and once per quarter for benchmark monitoring, you may use a single sample to satisfy both monitoring requirements.

3.2.1 Quarterly Visual Monitoring of Discharges.

The requirements and procedures for quarterly visual monitoring are applicable to all facilities covered under this permit, regardless of your sector of industrial activity.

- You must perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except as provided for in Part 3.2.6.3, Adverse Weather Conditions. The visual examination must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual monitoring requirement for that quarter, provided you document in your monitoring records that no runoff occurred. You must sign and certify the documentation in accordance with Subpart 11 of Appendix B.

- Your visual examinations must be made on samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period. The examination must document observations of:

    - color
    - odor
    - clarity
    - floating solids,
    - settled solids,
    - suspended solids,
    - foam,
    - oil sheen,
    - and other obvious indicators of stormwater pollution.

- The examination must be conducted in a well-lit area. Where possible, the same individual should carry out the collection and examination of discharges for the entire permit term.

- You must maintain your visual examination reports onsite with the SWPPP. The report must include the examination date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of

stormwater pollution), and probable sources of any observed stormwater contamination.

- You may exercise a waiver of the visual monitoring requirement at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater. If you do not plan to commence industrial activities at the site, you may submit a No Exposure Certification (Part 1.7), and terminate coverage under this permit.

- *Representative Outfalls.* If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, you may conduct visual monitoring of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s). For this to be permissible, you must describe in the SWPPP the following: locations of the outfalls, why the outfalls are expected to discharge substantially identical effluents, estimates of the size of the drainage area (in square feet) for each of the outfalls, and an estimate of the runoff coefficient of the drainage areas (low: under 40 percent; medium: 40 to 65 percent; high: above 65 percent). This provision is available only for quarterly visual monitoring (and benchmark monitoring per Part 3.2.2.5), and does not apply to other monitoring requirements in this permit.

3.2.2. Benchmark Monitoring and Reporting.

You must monitor for all benchmark parameters specified for the industrial sector(s) (Part 4) applicable to your discharge. Your industry-specific benchmark concentrations are listed in the tables in the sector-specific sections of Part 4. Monitoring for all benchmark parameters must be conducted according to the procedures in Part 3.2.6.

3.2.2.1 ***Benchmark Monitoring Schedule.*** Unless otherwise specified in Part 4 (Section A – Section AD), benchmark monitoring must be conducted in each of the first four quarters of permit coverage, except as provided in Parts 3.2.2.4 and 3.2.2.5. Quarters correspond to the 3-month intervals beginning in January, April, July and October. If your permit coverage becomes effective less than 1 month from the end of a quarter, your first monitoring quarter starts with the next respective monitoring quarter. In arid and semi-arid climates where limited rainfall occurs during many parts of the year, the four monitoring events may be distributed during seasons when precipitation occurs. In areas subject to snow, one monitoring event should be scheduled to capture the first snowmelt discharge. If quarterly monitoring extends beyond the first year of permit coverage, the same quarters apply in subsequent years.

3.2.2.2 ***Benchmark Data Reporting.*** You must submit results from all benchmark monitoring to EPA. Discharge monitoring reports (DMRs) must be submitted electronically via the e-

NOI Center or in paper form to the DMR address in Part 3.7 no later than 30 days after you have received your lab results.

3.2.2.3 ***Data Not Exceeding Benchmarks.*** Following 4 quarters of benchmark monitoring, if the average of the 4 monitoring values does not exceed the benchmark, you have fulfilled your monitoring requirements for that parameter for the permit term.

3.2.2.4 ***Data Exceeding Benchmarks.*** If the average of the 4 monitoring values exceeds the benchmark you must review your SWPPP within 14 days to determine if it satisfies the requirements of Part 2 of this permit. You must document the date and findings of your review in your SWPPP. If you determine that your SWPPP satisfies the requirements of Part 2 you must document the justification for this determination in your SWPPP. Following this determination you may reduce monitoring for that pollutant to once per year for the duration of the permit term. If you determine that your SWPPP does not satisfy the requirements of Part 2 you must initiate the Corrective Action provisions of Part 3.3; and continue quarterly benchmark monitoring for the relevant pollutant(s) for an additional 4 quarters.

3.2.2.5 ***Special Exceptions to Benchmark Monitoring***

- *Inactive and Unstaffed Sites*. You may exercise a waiver of the benchmark monitoring requirement at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater. You must sign and certify the waiver in accordance with Part 11 of Appendix B. If you do not plan to commence industrial activities at the site, you may submit a No Exposure Certification (Part 1.7), and terminate coverage under this permit.

- *Representative Outfalls.* If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, you may test the effluent of just one of the outfalls and report that the quantitative data also apply to the substantially identical outfall(s). For this to be permissible, you must describe in the SWPPP the following: locations of the outfalls, why the outfalls are expected to discharge substantially identical effluents, estimates of the size of the drainage area (in square feet) for each of the outfalls, and an estimate of the runoff coefficient of the drainage areas (low: under 40 percent; medium: 40 to 65 percent; high: above 65 percent). This provision is available only for benchmark monitoring (and quarterly visual monitoring per Part 3.2.1), and does not apply to other monitoring requirements in this permit.

3.2.3 Effluent Limitations Monitoring and Reporting.

3.2.3.1 ***Coal Pile Runoff Effluent Limitations.*** If your facility has discharges of stormwater from coal storage piles, you must comply with the limitations and monitoring requirements of Table 3-2 for all discharges containing the coal pile runoff, regardless of your facility's sector of industrial activity. You must monitor annually, and your monitoring year begins the day that your discharge is authorized. You must collect and analyze samples for TSS and pH at least once during each monitoring year in which you maintain coverage under this permit.

You must not dilute coal pile runoff with stormwater or other flows to meet this limitation. 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. Monitoring for all benchmark parameters must be conducted according to the procedures in Parts 3.2.6. You must submit results from all monitoring to EPA. Discharge monitoring reports must be submitted electronically or in paper form (see Part 3.7) no later than 30 days after you have received your lab results. If at any time your monitoring data exceed an effluent limitation for TSS or pH you are subject to the Corrective Action requirements of Part 3.3 and the Follow-up Monitoring and Reporting requirements of Part 3.4.

Table 3-2. Effluent Limitations for Coal Pile Runoff

Parameter	Limitation	Monitoring Frequency	Sample Type
Total Suspended Solids (TSS)	50 mg/l, max.	1/year	Grab
pH	6.0 min. - 9.0 max.	1/year	Grab

3.2.3.2 ***Effluent Limitation Guidelines.*** Table 1-1 of Part 1.2.2 of the permit identifies stormwater discharges subject to effluent limitation guidelines that are authorized for coverage under the permit. Facilities subject to stormwater effluent limitation guidelines are required to conduct compliance monitoring of their discharges for these parameters. Your effluent limitations are specified in your industry's sector specific section of Part 4. Compliance monitoring for effluent limitation guideline parameters is required once per year for the entire term of the permit, and your monitoring year begins the day that your discharge is authorized. Monitoring for all parameters must be conducted according to the procedures in Parts 3.2.6. You must submit results from all monitoring to EPA. Discharge monitoring reports must be submitted electronically or in paper form (see Part 3.7) no later than 30 days after you have received your lab results. If at any time your monitoring data exceed a relevant effluent limitation you are subject to the Corrective Action requirements of Part 3.3 and the Follow-up Monitoring and Reporting requirements of Part 3.4.

3.2.4 State or Tribe Provisions Monitoring and Reporting.

You must monitor for any pollutant for which a discharge limitation applicable to your discharge has been established in Part 5, or in fulfillment of any monitoring requirements applicable to your discharge stipulated in Part 5. If a monitoring frequency is not stipulated in Part 5, you must monitor once per year for the entire permit term, and your monitoring year begins the day that your discharge is authorized. Monitoring for all parameters must be conducted according to the procedures in Parts 3.2.6. You must submit results from all monitoring to EPA. Discharge monitoring reports must be submitted electronically or in paper form (see Part 3.7) no later than 30 days after you have received your lab results.

If at any time your monitoring data exceed a discharge limitation specified in Part 5 you are subject to the Corrective Action requirements of Part 3.3 and the Follow-up Monitoring and Reporting requirements of Part 3.4.

3.2.5 Discharges to Impaired Receiving Waters Monitoring and Reporting.

Monitoring is required for discharges to impaired waters (See Appendix A for definition) identified under Part 2.1.3.2. Monitoring for all parameters must be conducted according to the procedures in Parts 3.2.6. You must submit results from all monitoring to EPA. Discharge monitoring reports must be submitted electronically or in paper form (see Part 3.7) no later than 30 days after you have received your lab results.

3.2.5.1 ***Discharges to impaired waters with no applicable wasteload allocation.*** For discharges that are conveyed directly or indirectly to impaired waters, monitoring for the pollutant of concern must be conducted at a minimum of once each permit year throughout the term of the permit unless this permit already assigns your discharge an effluent limitation or a benchmark for the pollutant of concern, or specific monitoring requirements in Part 5, in which case you must follow the effluent limitation, benchmark, or Part 5 monitoring schedule. Your monitoring year begins on the day that your discharge is authorized.

This monitoring requirement is waived after one year if the pollutant of concern is not detected in your stormwater discharge, and you document in your SWPPP that there is no exposure of the pollutant of concern to stormwater at your site.

3.2.5.2 ***Discharges to impaired waters with an applicable wasteload allocation.*** For discharges that are conveyed directly or indirectly to waters for which EPA has approved or established a TMDL with a wasteload allocation applicable to your discharge (either specifically or categorically), monitoring for the wasteload allocation pollutant of concern must be conducted, consistent with any instructions in TMDL documentation. If the TMDL documentation does not specify specific monitoring requirements, monitoring for the pollutant of concern must be conducted at a minimum of once each permit year throughout the term of the permit, unless this permit already assigns your discharge an effluent limitation or a benchmark for the pollutant of concern, in which case you must follow the effluent limitation or benchmark monitoring schedule. Your monitoring year

begins on the day your discharge is authorized. This monitoring must be conducted in addition to all other monitoring requirements prescribed in this permit. Monitoring of a pollutant of concern for which your discharge has been assigned a wasteload allocation cannot be waived unless the WLA is specified *only* in terms of BMPs, in which case the monitoring requirement is waived after one year if the pollutant of concern is not detected in your stormwater discharge and you document in your SWPPP that you have adopted the required BMPs.

If at any time your monitoring data exceed a relevant waste load allocation you are subject to the Corrective Action requirements of Part 3.3 and the Follow-up Monitoring and Reporting requirements of Part 3.4.

3.2.6 Monitoring Instructions.

3.2.6.1 ***Collection and Analysis of Samples***. You must collect samples for relevant parameters at all outfalls. You must collect and analyze your samples in accordance with the requirements of Subsection 12.D of Appendix B of the permit. In addition, you must sample in accordance with the following provisions:

- *When and How to Sample*. Take a minimum of one grab sample from a discharge resulting from a storm event with at least 0.1 inch of precipitation (defined as a "measurable" event), provided the interval since the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived when the preceding measurable storm did not yield a measurable discharge, or if you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

  Take the grab sample during the first 30 minutes of the discharge. If it is not possible to take the sample during the first 30 minutes, sample during the first hour of discharge and describe why a grab sample during the first 30 minutes was not possible. Submit this information on or with the Discharge Monitoring Report. If the sampled discharge co-mingles with discharges not authorized under this permit prior to reaching the receiving water body, attempt to sample the stormwater discharge before it mixes with other waste streams.

- *Approved Collection and Analytical Methods.* Sample collection, preservation and analysis must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the relevant section of Part 4 of this permit.

3.2.6.2 ***Storm Event Data.*** Along with the results of your monitoring, you must provide the date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates (in inches) of the storm event that generated the sampled runoff, the duration between the storm event samples and the end of the previous measurable (greater than 0.1 inch rainfall) storm event, and an estimate of the total volume (in liters) of the discharge samples.

3.2.6.3 ***Adverse Weather Conditions***. When adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, take a substitute sample during the next qualifying storm event. Adverse conditions (i.e., those that are dangerous or create inaccessibility for personnel) may include events such as local flooding, high winds, electrical storms, or situations that otherwise make sampling illogical, such as drought or extended frozen conditions.

3.2.7 Monitoring Required by EPA.

EPA may provide written notice requiring additional discharge monitoring. Any such notice will briefly state the reasons for the monitoring, locations and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

3.3 Corrective Actions.

You must take corrective action whenever:

- your routine facility inspections, comprehensive site compliance evaluations, or any other process, observation or event result in discovery of any deficiency; or
- there is any exceedance of an effluent limitation (including coal pile runoff), water quality standard, or requirement stipulated in Part 5; or
- following a benchmark exceedance, based on the average of 4 quarterly monitoring events, you determine as a result of reviewing your SWPPP that your SWPPP does not meet the requirements of Part 2 of this permit.

You must review your SWPPP and modify it as necessary to address the deficiency(ies). You must complete revisions to the SWPPP within 14 calendar days following the discovery. When BMPs need to be modified or added (distinct from regular preventive maintenance of existing BMPs described in 2.2), implementation must be completed before the next anticipated storm event if possible, but no later than 60 days after discovering the deficiency, or as otherwise provided or approved by EPA. The amount of time taken to modify a BMP or implement additional BMPs must be documented in your SWPPP.

Failure to undertake the necessary corrective actions within the stipulated time frames constitutes a violation of your permit. The underlying cause of the inadequacy or discharge standard exceedance, e.g., failure to properly implement the SWPPP, may also constitute an independent violation of the permit.

Any corrective actions taken as a result of your inspections must be documented and retained for the 3-year period following permit expiration or termination. Reports of corrective actions must be signed in accordance with subsection 11 of Appendix B.

3.4 Follow-up Monitoring and Reporting.

If at any time your monitoring results indicate that your discharge exceeds an effluent limitation or a specific wasteload allocation, or you become aware that your discharge causes or

contributes to an exceedance of a water quality standard, you must take immediate steps to eliminate the exceedances in accordance with Part 3.3, Corrective Actions. Within 30 calendar days of implementing the relevant corrective action(s) (or during the next qualifying runoff event, should none occur within 30 calendar days) you must undertake additional monitoring to verify that your modified BMPs are effectively protecting water quality. You need only conduct follow-up monitoring for pollutant(s) with prior exceedances unless you have reason to believe that your modifications may have reduced pollutant prevention or removal capacity for other pollutants of concern.

If the follow-up monitoring value does not exceed the effluent limitation or other relevant standard, you must submit the follow-up monitoring data to EPA no later than 30 days after you have received your lab results. In this case, no additional follow-up monitoring for this monitoring event is required.

Should the follow-up monitoring indicate that the effluent limitation, wasteload allocation, water quality standard or other relevant standard is still being exceeded, you must submit an Exceedance Report no later than 30 days after you have received your lab results. Your report must include your permit identification number; facility name, address and location; receiving water; monitoring data from this and the preceding monitoring event(s); an explanation of the situation; what you have done and intend to do (should your corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number. You must continue to conduct follow-up monitoring at an appropriate frequency, but no less often than quarterly, until your discharge no longer exceeds the standard, unless the requirement for additional follow-up monitoring is waived by EPA.

Failure to complete follow-up monitoring and reporting within the stipulated time frames constitutes a violation of your permit.

Additional monitoring following benchmark exceedances is address in Part 3.2.2.4.

3.5 Additional Reporting.

In addition to reporting requirements stipulated in this Part, you are also subject to the standard permit reporting provisions of Appendix B, Section 12. You must submit any reports required by this permit to EPA at the address of the appropriate Regional Office listed in Part 3.7 or using EPA's eNOI reporting system, as applicable.

3.5.1 Unauthorized Releases or Discharges Report.

Any unauthorized release or discharge must be reported to EPA within 30 days. However, if the discharge or release has the potential to or will endanger human health or the environment, it must be reported orally to the appropriate EPA regional office within 24 hours from the time you become aware of the circumstances. You must provide detailed information on such unauthorized releases or discharges to EPA in a written report within 5 days. The report should include all information specified in Appendix B, Section 12.

3.6 Recordkeeping.

You must retain copies of your SWPPP (including any modifications made during the term of this permit), all reports, monitoring data, and certifications required by this permit, along with records of all data used to complete the NOI, for a period of at least 3 years from the date that the facility's coverage under this permit expires or is terminated. The administrative records of the facility must accurately reflect:

- a traceable record of BMP installation, maintenance, and monitoring results;
- revision of structural control and non-structural practices implemented; and
- the data collected to support continued maintenance of those practices or their abandonment in lieu of more effective control mechanisms.

3.7 EPA Addresses.

Discharge monitoring reports, follow-up monitoring reports and Exceedance Reports may be submitted electronically, via EPA's eNOI center. If you choose to send paper copies of these reports, please send them via U.S. mail to:

U.S. Environmental Protection Agency
Office of Water, Water Permits Division
Mail Code 4203M
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Notices of Intent and Notices of Termination should be sent to EPA's NOI Center (see Appendix G.

All other written correspondence concerning discharges in any State, Indian Country land, Territory, or from any Federal facility covered under this permit and directed to the EPA, including individual permit applications, must be sent to the address of the appropriate EPA Regional Office listed below:

3.7.1 Region 1: Connecticut, Massachusetts, Maine, and New Hampshire, Rhode Island, Vermont.

U.S. EPA Region 1
Office of Ecosystem Protection
One Congress Street - CIP
Boston, MA 02114

3.7.2 Region 2: New Jersey, New York, Puerto Rico, and Virgin Islands.

U.S. EPA Region 2
Caribbean Environmental Protection Division
Environmental Management Branch
Centro Europa Building
1492 Ponce de Leon Avenue, Suite 417
San Juan, PR 00907-4127

3.7.3 Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.

U.S. EPA Region 3
Water Protection Division (3WP13)
Stormwater Coordinator
1650 Arch Street
Philadelphia, PA 19103

3.7.4 Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee.

(Coverage Not Available under This Permit.)

U.S. EPA Region 4
Clean Water Act Enforcement Section
Water Programs Enforcement Branch
Water Management Division
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, GA 30303

3.7.5 Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.

U.S. EPA Region 5
Water Division
NPDES Programs Branch
77 W. Jackson Blvd.
Mail Code WN16J
Chicago, IL 60604

3.7.6 Region 6: Arkansas, Louisiana, Oklahoma, Texas, and New Mexico (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands).

Note: no coverage under this permit is available in Arkansas.

U.S. EPA Region 6
Stormwater Staff
Compliance Assurance and Enforcement Division (6EN-WC)
EPA SW MSGP
P.O. Box 50625
Dallas, TX 75205

3.7.7 Region 7: Iowa, Kansas, Missouri, Nebraska.

(Coverage Not Available under This Permit.)

U.S. EPA - Region 7
901 N. 5th Street
Kansas City, KS 66101

3.7.8 Region 8: Colorado, Montana, North Dakota, South Dakota, Wyoming, Utah (except see Region 9 for Goshute Reservation and Navajo Reservation lands), the Ute Mountain Reservation in New Mexico, and the Pine Ridge Reservation in Nebraska.

(Coverage Not Available under This Permit.)

U.S. EPA Region 8
Stormwater Coordinator (8P-W-P)
999 18th Street, Suite 300
Denver, CO 80202-2466

3.7.9 Region 9: Arizona, California, Hawaii, Nevada, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in Utah and Nevada, the Navajo Reservation in Utah, New Mexico, and Arizona, the Duck Valley Reservation in Idaho, Fort McDermitt Reservation in Oregon.

U.S. EPA Region 9
Water Management Division, WTR-5
Stormwater Staff
75 Hawthorne Street
San Francisco, CA 94105

3.7.10 Region 10: Alaska, Idaho, Oregon (except see Region 9 for Fort McDermitt Reservation), Washington.

U.S. EPA Region 10
Office of Water OW-130
Stormwater Staff
1200 6th Avenue
Seattle, WA 98101

3.8 State and Tribal Addresses.

See Part 5 (States and Tribes) for the addresses of applicable States or Tribes that require submission of information to their agencies.

Part 4 - Sector-Specific Requirements
Subsection A - Sector - Specific Requirements for Industrial Activity -Sector A - Timber Products.

A.1 Covered Stormwater Discharges.

The requirements in Subsection A apply to stormwater discharges associated with industrial activity from timber products facilities as identified by the SIC Codes specified under Sector A in Table D-1 of Appendix D of the permit.

A.2 Industrial Activities Covered by Sector A.

The types of activities that permittees under Sector A are primarily engaged in are:

A.2.1 cutting timber and pulpwood (those that have log storage or handling areas);

A.2.2 mills, including merchant, lath, shingle, cooperage stock, planing, plywood, and veneer;

A.2.3 producing lumber and wood basic materials;

A.2.4 wood preserving;

A.2.5 manufacturing finished articles made entirely of wood or related materials except wood kitchen cabinet manufacturers (covered under Appendix W); and

A.2.6 manufacturing wood buildings or mobile homes.

A.3 Limitation on Coverage

A.3.1 *Prohibition of Discharges.* (See also Part 1.2.4) Not covered by this permit: stormwater discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate NPDES permit.

A.3.2 *Authorized Non-Stormwater Discharges.* (See also Part 1.2.3) Also authorized by this permit, provided the non-stormwater component of the discharge is in compliance with SWPPP requirements in Part 2.1.5 (Stormwater Controls): discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage.

A.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

A.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

A.4.2 *Inventory of Exposed Materials.* (See also Part 2.1.5.2) Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, identify 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.

A.4.3 *Description of Stormwater Management Controls.* (See also Part 2.1.5) Describe and implement measures 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 BMPs for these activities.

A.4.4 *Good Housekeeping.* (See also Part 2.1.5.1) 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.

A.4.5 *Inspections.* (See also Part 2.1.5.5) If your facility performs wood surface protection and preservation activities, inspect processing areas, transport areas, and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with stormwater discharges.

A.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table A-1. Sector-specific Numeric Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines[2]
General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120.0 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Zinc[3]	0.12 mg/L	--
Wood Preserving (SIC 2491)	Total Recoverable Arsenic	0.15 mg/L	--
	Total Recoverable Copper[4]	0.014 mg/L	--

Table A-1. Sector-specific Numeric Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
	Total Recoverable Chromium[5]	1.8 mg/L	–
	Phenols	0.016 mg/L[6]	--
	Total Suspended Solids (TSS)	100 mg/L	--
Log Storage and Handling (SIC 2411)	Total Suspended Solids (TSS)	100 mg/L	--
Wet Decking Discharges at Log Storage and Handling Areas (SIC 2411)	pH	--	6.0 - 9.0 s.u
	Total Suspended Solids (TSS)	100.0 mg/L	--
	Debris (woody material such as bark, twigs, branches, heartwood, or sapwood)	--	No discharge of debris that will not pass through a 2.54-cm (1-in.) diameter round opening
Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120.0 mg/L	--
	Total Suspended Solids (TSS)	100.0 mg/L	--
Nailed Wood Boxes and Shook (SIC 2441)	Total Suspended Solids (TSS)	100.0 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year.

[3] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table A-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(0.8473)(\ln 175) + 0.884]})/1000$$
$$= (e^{5.26})/1000$$
$$= 192.51/1000$$
$$= 0.19 \text{ mg/L}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

[4] The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table A-1 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln \textit{hardness}) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(0.9422)(\ln 175) - 1.700]})/1000$$
$$= (e^{3.166})/1000$$
$$= 23.72/1000$$
$$= 0.024 \text{ mg/L}$$

The following are example benchmark values for copper:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.014
125	0.017
150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

[5] The benchmark value of chromium is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table A-1 (i.e. 1.8 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either

did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for chromium:

$$\text{Benchmark} = (e^{[(0.8190)(\ln \textit{hardness}) + 3.7256]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8190)(\ln 175) + 3.7256]})/1000 \\ &= (e^{7.96})/1000 \\ &= 2851.4/1000 \\ &= 2.9 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for chromium:

Hardness (mg/L)	Benchmark value (mg/L)
100	1.8
125	2.2
150	2.5
175	2.9
200	3.2
225	3.5
250	3.8

[6]Benchmark cutoff concentration for phenols based on ML for the reference method times 3.18.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection B - Sector B - Paper and Allied Products Manufacturing.

B.1 Covered Stormwater Discharges.

The requirements in Subsection B apply to stormwater discharges associated with industrial activity from paper and allied products manufacturing facilities, as identified by the SIC Codes specified under Sector B in Table D-1 of Appendix D of the permit.

B.2 Industrial Activities Covered by Sector B.

Permittees under Sector B are primarily engaged in the following types of activities

B.2.1 manufacture of pulps from wood and other cellulose fibers and from rags;

B.2.2 manufacture of paper and paperboard into converted products (e.g., paper coated off the paper machine, paper bags, paper boxes, paper envelopes) and

B.2.3 manufacture of bags of plastic film and sheet.

B.3 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table B-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Paperboard Mills (SIC Code 2631)	Total Suspended Solids (TSS)	100 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--
Pulp Mills; Paper Mills; Paperboard Containers and Boxes; and Converted Paper and Paperboard Products, except Containers and Boxes (SIC 2611, 2621, 2652-2657, 2671-2679)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector - Specific Requirements for Industrial Activity
Subsection C - Sector C - Chemical and Allied Products Manufacturing.

C.1 Covered Stormwater Discharges.

The requirements in Subsection C of Attachment 1 apply to stormwater discharges associated with industrial activity from Chemical and Allied Products Manufacturing facilities, as identified by the SIC Codes specified under Sector C in Table D-1 of Appendix D of the permit.

C.2 Industrial Activities Covered by Sector C.

The requirements listed under this Part apply to stormwater discharges associated with industrial activity from a facility engaged in manufacturing the following products

C.2.1 basic industrial inorganic chemicals;

C.2.2 plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other human-made fibers, except glass;

C.2.3 soap and other detergents, including facilities producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations;

C.2.4 paints (in paste and ready-mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers, and sealers; paint and varnish removers; paint brush cleaners; and allied paint producers;

C.2.5 industrial organic chemicals;

C.2.6 industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastic materials; explosives; printing ink, including gravure, screen process, and lithographic inks; miscellaneous chemical preparations such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry soaps, writing and stamp pad ink, industrial compounds such as boiler and heat insulating compounds, and chemical supplies for foundries;

C.2.7 ink and paints, including china painting enamels, India ink (a type of drawing ink), platinum paints for burnt wood or leather work, paints for china painting, artist's paints and water colors; and

C.2.8 nitrogenous and phosphatic basic fertilizers, mixed fertilizers, pesticides, and other agricultural chemicals.

C.3 Limitations on Coverage.

C.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) The following are not covered by this permit: non-stormwater discharges containing inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank, or container rinsing and cleaning.

C.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

C.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: processing and storage areas; access roads, rail cars, and tracks; areas where substances are transferred in bulk; and operating machinery.

C.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe the following sources and activities that have potential pollutants associated with them: loading, unloading, and transfer of chemicals; outdoor storage of salt, pallets, coal, drums, containers, fuels, and fueling stations; vehicle and equipment maintenance and cleaning areas; areas where the treatment, storage, or disposal (on- or off-site) of waste and wastewater occur; storage tanks and other containers; processing and storage areas; access roads, rail cars, and tracks; areas where the transfer of substances in bulk occurs; and areas where machinery operates.

C.4.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1) As part of your good housekeeping program, include a schedule for regular pickup and disposal of garbage and waste materials, or adopt other appropriate measures to reduce the potential for discharging stormwater that has contacted garbage or waste materials. Routinely inspect the condition of drums, tanks, and containers for potential leaks.

C.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table C-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR §418.10) - applies to precipitation runoff that, during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products, or waste product (SIC 2874)	Total Phosphorus (as P)	--	105.0 mg/L, daily maximum
			35 mg/L, 30-day avg.
	Fluoride	--	75.0 mg/L, daily maximum
			25.0 mg/L, 30-day avg.
	Total Suspended Solids (TSS)	100 mg/L	--
Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
	Total Recoverable Lead[3]	0.082 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Zinc[4]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Phosphorus	2.0 mg/L	--
Industrial Inorganic Chemicals (SIC 2812-2819)	Total Recoverable Aluminum	0.75 mg/ L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Zinc[4]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 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	--
	Total Recoverable Zinc[4]	0.12 mg/L	--

Table C-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
	Total Suspended Solids (TSS)	100 mg/L	--
Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Recoverable Zinc[4]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances, Biological Products (except Diagnostic Substances); Paints, Varnishes, Lacquers, Enamels, and Allied Products; Industrial Organic Chemicals; Miscellaneous Chemical Products; and 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 (SIC 2833-2836, 2851, 2861-2869, 2891-2899, 3952 (limited to list))	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year.

[3] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table C-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$$
$$= (e^{5.1148})/1000$$
$$= 166.46/1000$$
$$= 0.17 \text{ mg/L}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[4] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table C-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000 \\ &= (e^{5.26})/1000 \\ &= 192.51/1000 \\ &= 0.19 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

Part 4 - Sector - Specific Requirements for Industrial Activity
Subsection D - Sector D - Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

D.1 Covered Stormwater Discharges.

The requirements in Subsection D of Attachment 1 apply to stormwater discharges associated with industrial activity from asphalt paving and roofing materials and lubricant manufacturing facilities, as identified by the SIC Codes specified under Sector D in Table D-1 of Appendix D of the permit.

D.2 Industrial Activities Covered by Sector D.

Permittees under Sector D are primarily engaged in the following types of activities:

D.2.1 manufacturing asphalt paving and roofing materials;

D.2.2 portable asphalt plant facilities; and

D.2.3 manufacturing lubricating oils and greases.

D.3 Limitations on Coverage.

The following stormwater discharges associated with industrial activity are not authorized by this permit

D.3.1 discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products that are classified as SIC Code 2911; or

D.3.2 discharges from oil recycling facilities; or

D.3.3 discharges associated with fats and oils rendering.

D.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

D.4.1 *Inspections.* (See also Part 2.1.5.5) Inspect at least once per month, as part of the maintenance program, the following areas: material storage and handling areas; liquid storage tanks, hoppers, and silos; vehicle and equipment maintenance, cleaning, and fueling areas; and material handling vehicles, equipment, and processing areas. Ensure that appropriate action is taken in response to the inspection by implementing tracking or follow-up procedures.

D.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table D-1. Sector-specific Numeric Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines[2]
Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	100 mg/L	--
Discharges from Areas Where Production of Asphalt Paving and Roofing Emulsions Occurs (SIC 2951, 2952)	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.
Miscellaneous Products of Petroleum and Coal (SIC 2992, 2999)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection E - Sector E - Glass, Clay, Cement, Concrete, and Gypsum Products.

E.1 Covered Stormwater Discharges.

The requirements in Subsection E of Attachment 1 apply to stormwater discharges associated with industrial activity from glass, clay, cement, concrete, and gypsum products facilities, as identified by the SIC Codes specified under Sector E in Table D-1 of Appendix D of the permit.

E.2 Industrial Activities Covered by Sector E.

The requirements listed under this permit apply to stormwater discharges associated with industrial activity from a facility engaged in either manufacturing the following products or performing the following activities

E.2.1 flat, pressed, or blown glass or glass containers;

E.2.2 hydraulic cement;

E.2.3 clay products, including tile and brick;

E.2.4 pottery and porcelain electrical supplies;

E.2.5 concrete products;

E.2.6 gypsum products;

E.2.7 minerals and earths, ground or otherwise treated;

E.2.8 non-clay refractories;

E.2.9 lime manufacturing;

E.2.10 cut stone and stone products;

E.2.11 asbestos products; and

E.2.12 mineral wool and mineral wool insulation products.

E.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

E.3.1 *Drainage Area Site Map*. (See also Part 2.1.2) Identify 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.3.2 *Good Housekeeping Measures.* (See also Part 2.1.5.1) 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 SWPPP the frequency of sweeping or equivalent measures. Determine the frequency from 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.3.3 *Inspections.* (See also Part 2.1.5.5) Perform inspections while the facility is in operation and include all of the following areas exposed to stormwater: material handling areas; above-ground storage tanks, hoppers, or silos; dust collection and containment systems; and truck wash down and equipment cleaning areas.

E.3.4 *Certification.* (See also Part 2.1.4.4) For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge certification a description of measures that ensure that process waste water resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES requirements or are recycled.

E.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table E-1. Sector-specific Numeric Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Cutoff Concentration[1]**	**Effluent Limitation Guidelines[2]**
Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
Cement Manufacturing Facility, Material Storage Runoff: Any discharge composed of runoff that derives from the storage of materials, including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement.	Total Suspended Solids (TSS)	--	50 mg/L, daily maximum
	pH	--	6.0 - 9.0 s.u.
Flat Glass; Glass and Glassware, Pressed or Blown; Glass Products Made of Purchased Glass; Hydraulic Cement; Cut Stone and Stone Products; and Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products (SIC 3211, 3221, 3229, 3231, 3241, 3281, 3291-3299)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection F - Sector F - Primary Metals

F.1 Covered Stormwater Discharges.

The requirements in Subsection F of Attachment 1 apply to stormwater discharges associated with industrial activity from primary metals facilities, as identified by the SIC Codes specified under Sector F in Table D-1 of Appendix D of the permit.

F.2 Industrial Activities Covered by Sector F.

Facilities under Sector F are primarily engaged in the following types of activities

F.2.1 steel works, blast furnaces, and rolling and finishing mills, including steel wire drawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel pipes and tubes;

F.2.2 iron and steel foundries, including gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified;

F.2.3 primary smelting and refining of nonferrous metals, including primary smelting and refining of copper, and primary production of aluminum;

F.2.4 secondary smelting and refining of nonferrous metals;

F.2.5 rolling, drawing, and extruding of nonferrous metals, including rolling, drawing, and extruding of copper; rolling, drawing, and extruding of nonferrous metals except copper and aluminum; and drawing and insulating of nonferrous wire;

F.2.6 nonferrous foundries (castings), including aluminum die-casting, nonferrous die-casting except aluminum, aluminum foundries, copper foundries, and nonferrous foundries except copper and aluminum;

F.2.7 miscellaneous primary metal products, not elsewhere classified, including metal heat treating and primary metal products not elsewhere classified;

Activities covered include but are not limited to stormwater discharges associated with cooking operations, sintering plants, blast furnaces, smelting operations, rolling mills, casting operations, heat treating, extruding, drawing, or forging all types of ferrous and nonferrous metals, scrap, and ore.

F.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

F.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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 that could result in a discharge of pollutants to waters of the United States.

F.3.2 *Inventory of Exposed Material.* (See also Part 2.1.5.2) 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.

F.3.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1) 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 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.

F.3.4 *Inspections.* (See also Part 2.1.5.5) Conduct inspections monthly and 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.

F.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table F-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Cutoff Concentration[1]**	**Effluent Limitation Guidelines**
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Iron and Steel Foundries (SIC 3321-3325)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Copper[3]	0.014 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Zinc[2]	0.12 mg/L	--
Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Recoverable Copper[3]	0.014 mg/L	–
	Total Recoverable Zinc[2]	0.12 mg/L	–
	Total Suspended Solids (TSS)	100 mg/L	--
Nonferrous Foundries (SIC 3363-3369)	Total Recoverable Copper[3]	0.014 mg/L	--
	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Primary Smelting and Refining of Nonferrous Metals; Secondary Smelting and Refining of Nonferrous Metals; and Miscellaneous Primary Metal Products (SIC 3331-3339, 3341, 3398, 3399)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not

exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table F-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000\\ &= (e^{5.26})/1000\\ &= 192.51/1000\\ &= 0.19 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

[3] The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table F-1 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln \textit{hardness}) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.9422)(\ln 175) - 1.700]})/1000\\ &= (e^{3.166})/1000\\ &= 23.72/1000\\ &= 0.024 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for copper:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.014
125	0.017

150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection G - Sector G - Metal Mining

G.1 Covered Stormwater Discharges.

The requirements in Subsection G apply to stormwater discharges associated with industrial activity from metal mining facilities, including mines abandoned on Federal lands, as identified by the SIC Codes specified under Sector G in Table D-1 of Appendix D. Coverage is required for metal mining facilities that discharge stormwater contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

G.1.1 Covered Discharges from Inactive Facilities. All stormwater discharges.

G.1.2 Covered Discharges from Active and Temporarily Inactive Facilities. Only the stormwater discharges from the following areas are covered: waste rock and overburden piles if composed entirely of stormwater and not combining with mine drainage; topsoil piles; offsite haul and access roads; onsite haul and access roads constructed of waste rock, overburden, or spent ore if composed entirely of stormwater and not combining with mine drainage; onsite haul and access roads not constructed of waste rock, overburden, or spent ore except if mine drainage is used for dust control; runoff from tailings dams or dikes when not constructed of waste rock or tailings and no process fluids are present; runoff from tailings dams or dikes when constructed of waste rock or tailings and no process fluids are present, if composed entirely of stormwater and not combining with mine drainage; concentration building if no contact with material piles; mill site if no contact with material piles; office or administrative building and housing if mixed with stormwater from industrial area; chemical storage area; docking facility if no excessive contact with waste product that would otherwise constitute mine drainage; explosive storage; fuel storage; vehicle and equipment maintenance area and building; parking areas (if necessary); power plant; truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active mining area; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially or inadequately reclaimed areas or areas not released from reclamation bonds.

G.1.3 Covered Discharges from Exploration and Development of Metal Mining and/or Ore Dressing Facilities: All stormwater discharges.

G.1.4 Covered Discharges from Facilities at Mining Sites and Undergoing Reclamation. All stormwater discharges.

G.2 Industrial Activities Covered by Sector G.

NOTE: “metal mining” will connote any of the separate activities listed in Part G.2. Permittees under Sector G are primarily engaged in the following types of activities:

G.2.1 exploring for metallic minerals (ores), developing mines, and the mining of ores;

G.2.2 ore dressing and beneficiating, whether performed at collocated, dedicated mills, or at separate (i.e., custom) mills.

G.2.3 reclamation of mining sites.

G.3 Limitations on Coverage.

G.3.1 *Prohibition of Stormwater Discharges.* Stormwater discharges not authorized by this permit: discharges from active metal mining facilities that are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

NOTE: Discharges that come in contact with overburden or waste rock are subject to 40 CFR Part 440, providing that the discharges drain to a point source (either naturally or as a result of intentional diversion) and they combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. Discharges from overburden or waste rock can be covered under this permit if they are composed entirely of stormwater, do not combine with sources of mine drainage that are subject to 40 CFR Part 440, and meet other eligibility criteria contained in Part 1.2.2.1.

G.3.2 *Prohibition of Non-Stormwater* Discharges. Not authorized by this permit: adit drainage and contaminated springs or seeps. Contaminated seeps and springs discharging from waste rock dumps that do not directly result from precipitation events are not authorized by this permit (see also the standard Limitations on Coverage in Part 1.2.4).

G.4 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).

G.4.1 *Mining operation* - typically consists of three phases, any one of which individually qualifies as a "mining activity." The phases are the exploration and development phase, the active phase, and the reclamation phase.

G.4.2 *Exploration and Development phase* - entails exploration and land disturbance activities to determine the financial viability of a site. Development includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals.

G.4.3 *Active phase* - activities including each step from extraction through production of a salable product.

G.4.4 *Reclamation phase* - activities intended to return the land to its pre-mining use

G.4.5 *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.

G.4.6 *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.

G.4.7 *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.

G.4.8 *Final Stabilization* - a site or portion of a site is "finally stabilized" when:

a. All soil disturbing activities at the site have been completed and either of the two following criteria are met:

i. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

ii. Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

b. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 70 percent of 50 percent (0.70 x 0.50 = 0.35) would require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

G.5 Clearing, Grading, and Excavation Activities.

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

G.5.1 Management Practices for Clearing, Grading, and Excavation Activities.

G.5.1.1 *Selecting and installing control measures*. A combination of erosion and sedimentation control measures are required to achieve maximum pollutant prevention and removal. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices.

G.5.1.2 *Removal of Sediment*. If sediment escapes the site, off-site accumulations of sediment must be removed at a frequency sufficient to prevent off-site impacts.

G.5.1.3 *Good Housekeeping*. Litter, debris, and chemicals must be prevented from becoming a pollutant source in stormwater discharges.

G.5.1.4 *Velocity Dissipation*. Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from disturbed areas and from any stormwater retention or detention facilities to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

G.5.1.5 *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 those side slope boundaries deemed appropriate as dictated by 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.

G.5.1.6 *Temporary Stabilization of Disturbed Areas*. Stabilization measures must be initiated immediately in portions of the site where development activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until full vegetative stabilization is achieved, interim measures such as blankets and tackifiers must be employed.

G.5.2 Requirements for Inspection of Clearing, Grading, and Excavation Activities.

G.5.2.1 *Inspection Frequency*. Inspections must be conducted 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 conditions (e.g., site is covered with snow, ice, or the ground is frozen), or construction is occurring during seasonal arid periods in arid areas and semi-arid areas.

G.5.2.2 *Qualified Personnel for Inspections*. Inspections must be conducted by qualified personnel. "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment control who possesses the skills to assess conditions at the construction site that could impact stormwater quality

and the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the clearing, grading, and excavation activities.

G.5.2.3 *Location of Inspections*. Inspections must include all areas of the site disturbed by clearing, grading, and excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures identified in the SWPPP 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 off-site sediment tracking.

G.5.2.4 *Inspection Reports*. For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:

a. The inspection date;

b. Names, titles, and qualifications of personnel making the inspection;

c. Weather information for the period since the last inspection (or note if it is the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;

d. Weather information and a description of any discharges occurring at the time of the inspection;

e. Location(s) of discharges of sediment or other pollutants from the site;

f. Location(s) of BMPs that need to be maintained;

g. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;

h. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and

i. Corrective action(s) required, including any changes to the SWPPP necessary and implementation dates.

A record of each inspection and of any actions taken in accordance with this Part must be retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the clearing, grading, and excavation activities are in compliance with the SWPPP and this permit. The report must be signed in accordance with Subpart 11 of Appendix B.

G.5.3 Maintenance of Controls for Clearing, Grading, and Excavation Activities

G.5.3.1 *Maintenance of BMPs*. All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If site inspections required by Section G.5.2 identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of stormwater controls.

G.5.3.2 *Modification of BMPs*. Existing BMPs need to be modified or, if additional BMPs are necessary for any reason, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.

G.5.3.3 *Maintenance of sediment traps and ponds*. Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.

G.5.4 Requirements for Cessation of Clearing, Grading, and Excavation Activities.

G.5.4.1 *Inspections and Maintenance.* Inspections and maintenance of 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.

G.5.4.2 *Final Stabilization.* Stabilization measures must be initiated immediately in portions of the site where development activities have permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has permanently ceased. In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved temporary stabilization measures, such as blankets and tackifiers, must be used.

G.6 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

The SWPPP requirements in Part G.6 are applicable for active metal mining facilities, inactive mining facilities, temporarily inactive metal mining facilities, temporarily inactive metal mining facilities, and sites undergoing reclamation. In addition to the following requirements, you must also comply with the requirements listed in Part 2 in the permit.

G.6.1 *Nature of Industrial Activities*. (See also Part 2.1.2.) Briefly describe 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**.**

G.6.2 *Site Map*. (See also Part 2.1.2) Also identify 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.

G.6.3 *Potential Pollutant Sources.* (See also Part 2.1.4) 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 SWPPP with this information.

G.6.4 *Site Inspections.* (See also Part 2.1.5.5 and G.5.2) Inspect sites at least monthly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are designated as outstanding waters or waters which are impaired for parameters listed in Table G-2 must be inspected monthly.

G.6.5 *Employee Training.* (See also Part 2.1.5.6) Conduct employee training at least annually at active and temporarily inactive sites. All employee training(s) must be documented in the SWPPP.

G.6.6 *Stormwater Controls.* (See also Part 2.1.5) Consider each of the following BMPs. The potential pollutants identified in Part G.6.3 shall determine the priority and appropriateness of the BMPs selected. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP.

G.6.6.1 *Stormwater Diversions*: Consider diverting stormwater away from potential pollutant sources. Following are some BMP 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.

G.6.6.2 *Sediment and Erosion Control*: (See also Part 2.1.5.7) Consider a range of erosion controls within the broad categories of: flow diversion (e.g., swales); stabilization (e.g., temporary or permanent seeding); and structural controls (e.g., sediment traps, dikes, silt fences).

G.6.6.3 *Management of Runoff*: (See also Part 2.1.5.8) Consider the potential pollutant sources given in Part G.6.3 when determining reasonable and appropriate measures for managing runoff.

G.6.6.4 *Capping*: When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.

G.6.6.5 *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. 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).

G.6.6.6 *Certification of Discharge Testing*: (See also Part 2.1.4.4) 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 certify in your SWPPP 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. 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.

G.7 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

G.7.1 *Analytic Monitoring for 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 G-1.

Table G-1 Sector-specific Numeric Effluent Limitations and Benchmark Monitoring for Copper Ore Mining and Dressing Facilities			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Copper Ore Mining and Dressing Facilities (SIC 1021)	Total Suspended Solids (TSS)	100 mg/L	--
	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--

[1] You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

G.7.2 Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Sites, Inactive Sites, and Sites Undergoing Reclamation. For discharges from waste rock and overburden piles, perform analytic monitoring quarterly in the first year of your coverage for the parameters listed in Table G-2 (see Part 3.2.2.1). Permittees must also conduct analytic monitoring quarterly in the first year of your coverage for the parameters listed in Table G-3 (see Part 3.2.2.1). The monitoring schedule is specified in Part 3.2.2.1. The Director 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 G-2. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring for Discharges from Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities, and Sites Undergoing Reclamation			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Cutoff Concentration[1]**	**Effluent Limitation Guidelines**
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)	Total Suspended Solids (TSS)	100 mg/L	--
	Turbidity	50 NTU	--
	pH	6.0-9.0 s.u.	--
	Hardness (as $CaCO_3$; calc. From Ca, Mg)[2]	no benchmark value	--
See above, as applicable (when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and	Total Recoverable Antimony	0.64 mg/L	--
	Total Recoverable Arsenic	0.15 mg/ L	--

Table G-2. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring for Discharges from Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities, and Sites Undergoing Reclamation			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Cutoff Concentration[1]**	**Effluent Limitation Guidelines**
have hardness calculated than to require hardness analysis separately)	Total Recoverable Beryllium	0.13 mg/L	--
	Total Recoverable Cadmium[3]	0.0021 mg/L	--
	Total Recoverable Copper[4]	0.014 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Lead[5]	0.082 mg/L	--
	Total Recoverable Mercury	0.0014 mg/L	--
	Total Recoverable Nickel[6]	0.47 mg/L	--
	Total Recoverable Selenium	0.005 mg/L	--
	Total Recoverable Silver[7]	0.0038 mg/L	--
	Total Recoverable Zinc[8]	0.12 mg/L	--

[1] You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Benchmark monitoring cutoff concentrations for hardness dependent elements are based on a nominal hardness of 100 mg/L $CaCO_3$.

[3] The benchmark value of cadmium is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.0021 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for cadmium:

$$\text{Benchmark} = (e^{[(1.0166)(\ln \textit{hardness}) - 3.924]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.0166)(\ln 175) - 3.924]})/1000$$
$$= (e^{1.327})/1000$$
$$= 3.76/1000$$
$$= 0.0038 \text{ mg/L}$$

The following are example benchmark values for cadmium:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.0021
125	0.0027
150	0.0032
175	0.0038
200	0.0043
225	0.0049
250	0.0054

[4] The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln \textit{hardness}) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.9422)(\ln 175) - 1.700]})/1000 \\ &= (e^{3.166})/1000 \\ &= 23.72/1000 \\ &= 0.024 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for copper:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.014
125	0.017
150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

[5] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$$
$$= (e^{5.1148})/1000$$
$$= 166.46/1000$$
$$= 0.17 \text{ mg/L}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[6] The benchmark value of nickel is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.47 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for nickel:

$$\text{Benchmark} = (e^{[(0.8460)(\ln \textit{hardness}) + 2.255]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(0.8460)(\ln 175) + 2.255]})/1000$$
$$= (e^{6.624})/1000$$
$$= 753.26/1000$$
$$= 0.75 \text{ mg/L}$$

The following are example benchmark values for nickel:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.47
125	0.57
150	0.66
175	0.75
200	0.84
225	0.93
250	1.02

[7] The benchmark limitation value of silver is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.0038 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for silver:

$$\text{Benchmark} = (e^{[(1.72)(\ln \textit{hardness}) - 6.59]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.72)(\ln 175) - 6.59]})/1000$$
$$= (e^{2.293})/1000$$
$$= 9.909/1000$$
$$= 0.0099 \text{ mg/L}$$

The following are example benchmark values for silver:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.0038
125	0.0056
150	0.0076
175	0.0099
200	0.013
225	0.015
250	0.018

[8] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table G-2 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(0.8473)(\ln 175) + 0.884]})/1000$$
$$= (e^{5.26})/1000$$
$$= 192.51/1000$$
$$= 0.19 \text{ mg/L}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

G.7.3 *Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles*. Table G-3 contains additional monitoring requirements for specific ore mine categories. Perform the monitoring quarterly in the first year of coverage (see Part

3.2.2.1). The monitoring schedule is specified in Part 3.2.2.1. The initial sampling event for a pollutant parameter required in Table G-2 satisfies the requirement for the first sample of any pollutant measurement in Table G-3.

Table G-3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities, Inactive Sites, and Sites Undergoing Reclamation			
Supplemental Requirements			
Type of Ore Mined	**Pollutants of Concern**		
	Total Suspended Solids (TSS)	**pH**	**Metals, Total Recoverable**
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, Zinc (H)
Copper, Lead, Zinc, Gold, Silver, and Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead, Mercury, Zinc (H)
Uranium, Radium, and Vanadium	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: (H) indicates that hardness must also be measured when this pollutant is measured.

G.7.4 *Reporting Requirements for Stormwater Discharges from Waste Rock and Overburden Piles.* Submit monitoring results for each outfall discharging stormwater from waste rock and overburden piles, or certifications in accordance with Part 3.6.

Table G-4. Applicability of the Multi-Sector General 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

Table G-4. Applicability of the Multi-Sector General Permit to Stormwater Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation	
Power plant	
Truck wash area	Except when excessive contact with waste product that would otherwise constitute mine drainage
Reclamation-related areas	
Any disturbed area (unreclaimed)	Only if not in active mining area
Reclaimed areas released from reclamation bonds prior to Dec. 17, 1990	
Partially/inadequately reclaimed areas or areas not released from reclamation bond	
Note: Stormwater runoff from these sources are subject to the NPDES program for stormwater unless mixed with discharges subject to the 40 CFR Part 440 that are not 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 Part I.B. of the permit. Permit applicants bear the initial responsibility for determining the applicable technology-based standard for such discharges. EPA recommends that permit applicants contact the relevant NPDES permit issuance authority for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.	

G.8. Termination of Permit Coverage

G.8.1 *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, provided that the covered stormwater discharges do not have the potential to cause or contribute to violations of state water quality standards. 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 Part G.8.2.

G.8.2 *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 stormwater runoff that comes into contact with 1) 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.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection H - Sector H - Coal Mines and Coal Mining-Related Facilities.

H.1 Covered Stormwater Discharges.

The requirements in Subsection H apply to stormwater discharges associated with industrial activity from coal mines and coal mining-related facilities as identified by the SIC Codes specified under Sector H in Table D-1 of Appendix D.

H.2 Industrial Activities Covered by Sector H.

Stormwater discharges from the following areas of coal mines may be eligible for this permit.

H.2.1 haul roads (nonpublic roads on which coal or coal refuse is conveyed);

H.2.2 access roads (nonpublic roads providing light vehicular traffic within the facility property and to public roadways);

H.2.3 railroad spurs, siding, and internal haulage lines (rail lines used for hauling coal within the facility property and to offsite commercial railroad lines or loading areas);

H.2.4 conveyor belts, chutes, and aerial tramway haulage areas (areas under and around coal or refuse conveyer areas, including transfer stations); and

H.2.5 equipment storage and maintenance yards, coal handling buildings and structures, and inactive coal mines and related areas (abandoned and other inactive mines, refuse disposal sites, and other mining-related areas).

H.3 Limitations on Coverage.

H.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) Not covered by this permit: discharges from pollutant seeps or underground drainage from inactive coal mines and refuse disposal areas that do not result from precipitation events, and discharges from floor drains in maintenance buildings and other similar drains in mining and preparation plant areas.

H.3.2 *Discharges Subject to Stormwater Effluent Guidelines.* (See also Part 1.2.4.5) Not authorized by this permit: stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 434.

H.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

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 in the SWPPP (directly or by reference).

H.4.2 *Drainage Area Site Map.* (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: all applicable mining-related areas described in Part H.2; acidic spoil, refuse, or unreclaimed disturbed areas; and liquid storage tanks containing pollutants such as caustics, hydraulic fluids, and lubricants.

H.4.3 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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.

H.4.4 *Good Housekeeping Measures.* (See also Part 2.1.5.1) 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.

H.4.5 *Preventive Maintenance.* (See also Part 2.1.5.3) 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.

H.4.6 *Inspections of Active Mining-Related Areas and Inactive Areas Under SMCRA Bond Authority.* (See also Part 2.1.5.5) Perform quarterly inspections of 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.

H.4.7 *Sediment and Erosion Control.* (See also Part 2.1.5.7) As indicated in Part H.4.1, SMCRA requirements regarding sediment and erosion control measures are primary requirements of the SWPPP for mining-related areas subject to SMCRA authority.

H.4.8 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Your evaluation 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.

H.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table H-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Coal Mines and Related Areas (SIC 1221-1241)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection I - Sector I-Oil and Gas Extraction and Refining.

I.1 Covered Stormwater Discharges.

The requirements in Subsection I apply to stormwater discharges associated with industrial activity from Oil and Gas Extraction and Refining facilities as identified by the SIC Codes specified under Sector I in Table D-1 of Appendix D of the permit.

I.2 Industrial Activities Covered By Sector I.

Permittees under Sector I are primarily engaged in the following types of activities:

I.2.1 oil and gas exploration, production, processing or treatment operations, or transmission facilities; and

I.2.2 extraction and production of crude oil, natural gas, oil sands, and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply, and repair industries.

I.3 Limitations on Coverage.

I.3.1 *Stormwater Discharges Subject to Effluent Limitation Guidelines.* This permit does not authorize stormwater discharges from petroleum refining or drilling operations that are subject to nationally established effluent limitation guidelines found at 40 CFR Parts 419 and 435, respectively.

NOTE: Most contaminated discharges at petroleum refining and drilling facilities are subject to these effluent guidelines and are not eligible for coverage by this permit. (e.g., stormwater runoff which comes into contact with any raw material, intermediate produce, finished product, by-product or waste product located on petroleum refinery property, deck drainage (which includes stormwater) from oil and gas extraction facilities in the Offshore and Coastal Subcategories, etc.).

I.3.2 *Non-Stormwater Discharges.* Discharges of vehicle and equipment washwater, including tank cleaning operations, are not authorized by this permit. Alternatively, washwater discharges must be authorized under a separate NPDES permit, or be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

I.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

I.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

I.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Also describe 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 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).

I.4.3 *Inspections.* (See also Part 2.1.5.5)

I.4.3.1 *Inspection Frequency*. Inspect all equipment and areas addressed in the SWPPP at least monthly. Also inspect equipment and vehicles that store, mix (including all on- and offsite mixing tanks), or transport chemicals or hazardous materials (including those transporting supplies to oil field activities) on a monthly basis.

I.4.3.2 *Temporarily or Permanently Inactive Oil and Gas Extraction Facilities*. For facilities that are remotely located and unstaffed, perform the inspections at least annually.

I.4.4 *Erosion and Sedimentation Control.* (See also Part 2.1.5.7.) Unless covered by the current Construction General Permit (CGP), the additional sediment and erosion control requirements for well drillings and sand/shale mining areas include the following:

I.4.4.1 *Site Description*. Also include a description 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. All erosion and sedimentation control measures must be inspected every 7 days.

I.4.4.2 *Vegetative Controls*. Describe and 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.

I.4.5 *Contact with Waste Water Pollutants at Exploration and Production Facilities.* Take measures necessary to prevent discharge of stormwater coming into contact with waste water pollutants from any sources associated with production, field exploration, drilling, well completion, or well treatment (i.e., produced water, drilling muds, drill cuttings, and produced sand).

I.4.5.1 *Vehicle and Equipment Storage Areas*. Confine vehicles and equipment awaiting or having undergone maintenance to designated areas (as marked on the site map). Describe and implement measures to minimize contaminants from these areas (e.g., drip pans under equipment, indoor storage, use of berms or dikes, or other equivalent measures).

I.4.5.2 *Material and Chemical Storage Areas*. Maintain these areas in good condition to prevent contamination of stormwater. Plainly label all hazardous materials.

I.4.5.3 *Chemical Mixing Areas*. (See also Part 2.1.4.) Describe and implement measures that prevent or minimize contamination of stormwater runoff from chemical mixing areas.

I.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table I-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Oil and Gas Extraction and Refining (SIC 1311, 1321, 1381-1389, 2911)	Total Suspended Solids (TSS)	100 mg/L	--
Oil Refining (SIC 2911)	Total Recoverable Lead[2]	0.082 mg/L	--
	Total Recoverable Nickel[3]	0.47 mg/L	--
	Total Recoverable Zinc[4]	0.12 mg/L	--
	Ammonia Nitrogen	19 mg/L	--
	Nitrate+Nitrite Nitrogen	0.68 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table I-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln hardness) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000\\ &= (e^{5.1148})/1000\\ &= 166.46/1000\\ &= 0.17 \text{ mg/L}\end{aligned}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[3] The benchmark value of nickel is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table I-1 (i.e. 0.47 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for nickel:

$$\text{Benchmark} = (e^{[(0.8460)(\ln hardness) + 2.255]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8460)(\ln 175) + 2.255]})/1000\\ &= (e^{6.624})/1000\\ &= 753.26/1000\\ &= 0.75 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for nickel:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.47
125	0.57
150	0.66
175	0.75
200	0.84
225	0.93
250	1.02

[4] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table I-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100

mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000 \\ &= (e^{5.26})/1000 \\ &= 192.51/1000 \\ &= 0.19 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection J - Sector J-Mineral Mining and Dressing

J.1 Covered Stormwater Discharges.

The requirements in Subsection J apply to stormwater discharges associated with industrial activity from active and inactive mineral mining and dressing facilities as identified by the SIC Codes specified under Sector J in Table D-1 of Appendix D of the permit.

J.1.1 Covered Discharges from Inactive Facilities. All stormwater discharges.

J.1.2 *Covered Discharges from Active and Temporarily Inactive Facilities*. Only the stormwater discharges from the following areas are covered: waste rock and overburden piles if composed entirely of stormwater and not combining with mine drainage; topsoil piles; offsite haul and access roads; onsite haul and access roads constructed of waste rock or overburden if composed entirely of stormwater and not combining with mine drainage; onsite haul and access roads not constructed of waste rock or overburden, except if mine drainage is used for dust control; runoff from dams or dikes when not constructed of waste rock and no process fluids are present; runoff from dams or dikes when constructed of waste rock and no process fluids are present, if composed entirely of stormwater and not combining with mine drainage; concentration building if no contact with material piles; mill site if no contact with material piles; office or administrative building and housing if mixed with stormwater from industrial area; chemical storage area; docking facility if no excessive contact with waste product that would otherwise constitute mine drainage; explosive storage; fuel storage; vehicle and equipment maintenance area and building; parking areas (if necessary); power plant; truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active mining area; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially or inadequately reclaimed areas or areas not released from reclamation bonds.

J.1.3 Covered Discharges from Exploration and Development of Mineral Mining Facilities. All stormwater discharges.

J.1.4 Covered Discharges from Facilities at Mining Sites and Undergoing Reclamation. All stormwater discharges.

J.2 Industrial Activities Covered by Sector J.

Permittees under Sector J are primarily engaged in the following types of activities:

J.2.1 exploring for minerals (e.g., stone, sand, clay, chemical and fertilizer minerals, non-metallic minerals), developing mines, and the mining of minerals; and

J.2.2 mineral dressing and non-metallic mineral services, and

J.2.3 reclamation of mining sites.

J.3 Limitations on Coverage.

Most stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 436 are not authorized by this permit. The exceptions to this limitation, which are covered by this permit, are mine dewatering discharges composed entirely of stormwater or ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities in Regions 1, 2, 3, 6, 8, 9, and 10.

J.3.1 *Prohibition of Stormwater Discharges.* Stormwater discharges not authorized by this permit: discharges from active mineral mining facilities that are subject to effluent limitation guidelines for the Mineral Mining and Processing Point Source Category (40 CFR Part 436).

NOTE: Discharges that come in contact with overburden or waste rock are subject to 40 CFR Part 436, providing that the discharges drain to a point source (either naturally or as a result of intentional diversion) and they combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. Discharges from overburden or waste rock can be covered under this permit if they are composed entirely of stormwater, do not combine with sources of mine drainage that are subject to 40 CFR Part 440, and meet other eligibility criteria contained in Part 1.2.2.1.

J.3.2 *Prohibition of Non-Stormwater Discharges*. Not authorized by this permit: adit drainage and contaminated springs or seeps. Contaminated seeps and springs discharging from waste rock dumps that do not directly result from precipitation events are not authorized by this permit (see also the standard Limitations on Coverage in Part 1.2.3).

J.4 Definitions.

J.4.1 *Mining operation* - typically consists of three phases, any one of which individually qualifies as a "mining activity." The phases are the exploration and construction phase, the active phase, and the reclamation phase.

J.4.2 *Exploration and construction phase* - entails exploration and land disturbance activities to determine the financial viability of a site. Construction includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals.

J.4.3 *Active phase* - activities including each step from extraction through production of a salable product.

J.4.4 *Reclamation phase* - activities intended to return the land to its pre-mining state.

NOTE: 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).

J.4.5 *Active Mineral Mining Facility* - a place where work or other activity related to the extraction, removal, or recovery of minerals is being conducted. This definition does not

include any land where grading has returned the earth to a desired contour and reclamation has begun.

J.4.6 *Inactive Mineral Mining Facility* - a site or portion of a site where mineral mining and/or dressing occurred in the past but that is not an active facility as defined above, and where the inactive portion is not covered by an active permit issued by the applicable State or Federal government agency.

J.4.7 *Temporarily Inactive Mineral Mining Facility* - a site or portion of a site where mineral mining and/or dressing occurred in the past but that is not currently being actively undertaken, and where the facility is covered by an active mining permit issued by the applicable State or Federal government agency.

J.4.8 *Final Stabilization* - a site or portion of a site is "finally stabilized" when:

a. All soil disturbing activities at the site have been completed and either of the two following criteria are met:
   i. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
   ii. Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

b. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 70 percent of 50 percent (0.70 x 0.50 = 0.35) would require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

J.5 Clearing, Grading, and Excavation Activities.

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

J.5.1 *Management Practices for Clearing, Grading, and Excavation Activities*.

J.5.1.1 *Selecting and installing control measures*. A combination of sediment and erosion control measures are required to achieve maximum pollutant removal. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices.

J.5.1.2 *Removal of Sediment*. If sediment escapes the site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

J.5.1.3 *Good Housekeeping.* Litter, debris, and chemicals that could be exposed to stormwater must be prevented from becoming a pollutant source in stormwater discharges.

J.5.1.4 *Velocity Dissipation*. Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from disturbed areas and from any stormwater retention or detention facilities to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

J.5.1.5 *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 those side slope boundaries deemed appropriate as dictated by 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.

J.5.1.6 *Temporary Stabilization of Disturbed Areas*. Stabilization measures must be initiated as soon as practicable in portions of the site where development activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures is not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as practicable.

J.5.2 *Requirements for Inspection of Clearing, Grading, and Excavation Activities*.

J.5.2.1 *Inspection Frequency*. Inspections must be conducted 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 conditions (e.g., site is covered with snow, ice, or the ground is frozen), or construction is occurring during seasonal arid periods in arid areas and semi-arid areas.

J.5.2.2 *Qualified Personnel for Inspections*. Inspections must be conducted by qualified personnel. "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment control who possesses the skills to assess conditions at the construction site that could impact stormwater quality and the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the clearing, grading, and excavation activities.

J.5.2.3 *Location of Inspections*. Inspections must include all areas of the site disturbed by clearing, grading, and excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures identified in the SWPPP 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 off-site sediment tracking.

J.5.2.4 *Inspection Reports*. For each inspection required above, you must complete an inspection report. At a minimum, the inspection report must include:

a. The inspection date;
b. Names, titles, and qualifications of personnel making the inspection;
c. Weather information for the period since the last inspection (or note if it is the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred;
d. Weather information and a description of any discharges occurring at the time of the inspection;
e. Location(s) of discharges of sediment or other pollutants from the site;
f. Location(s) of BMPs that need to be maintained;
g. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
h. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
i. Corrective action(s) required, including any changes to the SWPPP necessary and implementation dates.

A record of each inspection and of any actions taken in accordance with this Part must be retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the clearing, grading, and excavation activities are in compliance with the SWPPP and this permit. The report must be signed in accordance with Subpart 11 of Appendix B.

J.5.3 *Maintenance of Controls for Clearing, Grading, and Excavation Activities*

J.5.3.1 *Maintenance of BMPs*. All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If site inspections required by Section J.5.2 identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of stormwater controls.

J.5.3.2 *Modification of BMPs*. Existing BMPs need to be modified or, if additional BMPs are necessary for any reason, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.

J.5.3.3 *Maintenance of sediment traps and ponds*. Sediment from sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.

J.5.4 *Requirements for Cessation of Clearing, Grading, and Excavation Activities*. Inspections and maintenance of 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.

J.6 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

The SWPPP requirements in Part J.6 are applicable for active mineral mining facilities, inactive mining facilities, temporarily inactive mineral mining facilities, temporarily inactive mineral mining facilities, and sites undergoing reclamation. In addition to the following requirements, you must also comply with the requirements listed in Part 2 in the permit.

J.6.1 *Nature of Industrial Activities*. (See also Part 2.1.2) Briefly describe 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**.**

J.6.2 *Site Map*. (See also Part 2.1.2.) Also identify 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; 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.

J.6.3 *Potential Pollutant Sources.* (See also Part 2.1.4) 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 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 waste rock or overburden characterization data and test results for potential generation of acid rock.

J.6.4 *Site Inspections.* (See also Part 2.1.5.5 and J.5.2.) Inspect sites at least monthly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are designated as outstanding waters or waters which are impaired for sediment or nitrogen must be inspected monthly.

J.6.5 *Employee Training.* (See also Part 2.1.5.6) Conduct employee training at least annually at active and temporarily inactive sites. All employee training(s) must be documented in the SWPPP.

J.6.6 *Stormwater Controls.* (See also Part 2.1.5) Consider each of the following BMPs. The potential pollutants identified in Part J.6.3 shall determine the priority and appropriateness of the BMPs selected. If BMPs are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP.

J.6.6.1 *Stormwater Diversions*: Consider diverting stormwater away from potential pollutant sources. Following are some BMP 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.

J.6.6.2 *Erosion and Sedimentation Control*: (See also Part 2.1.5.7) Consider a range of erosion controls within the broad categories of: flow diversion (e.g., swales); stabilization (e.g., temporary or permanent seeding); and structural controls (e.g., sediment traps, dikes, silt fences).

J.6.6.3 *Management of Runoff*: (See also Part 2.1.5.8) Consider the potential pollutant sources given in Part J.6.3 when determining reasonable and appropriate measures for managing runoff.

J.6.6.4 *Capping*: When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.

J.6.6.5 *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. 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 Mineral Mining and Processing Point Source Category (40 CFR Part 436).

J.6.6.6 *Certification of Discharge Testing*: (See also Part 2.1.4.4) 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 436), such as mine drainage or process water. Alternatively (if applicable), you may certify in your SWPPP 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. 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.

J.7 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table J-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines[2]
Mine Dewatering Activities at Construction Sand and Gravel; Industrial Sand; and Crushed Stone Mining Facilities (SIC 1422-1429, 1442, 1446)	Total Suspended Solids (TSS)	100 mg/L	25 mg/L, monthly avg.
			45 mg/L, daily maximum
	pH	--	6.0 - 9.0
Sand and Gravel Mining (SIC 1442, 1446)	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L	--
Clay, Ceramic, and Refractory Materials; Chemical and Fertilizer Mineral Mining (SIC 1455, 1459, 1474-1479)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year.

J.7.2 Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Sites, Inactive Sites, and Sites Undergoing Reclamation. For discharges from waste rock and overburden piles, perform analytic monitoring quarterly as explained in Part 3.2.1.2 of the 2005 MSGP for the parameters listed in Table J-1. The Director 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.

J.7.3 *Reporting Requirements for Storm Water Discharges From Waste Rock and Overburden Piles.* Submit monitoring results for each outfall discharging storm water from waste rock and overburden piles, or certifications in accordance with Part 3.2.4. Submit monitoring reports on DMR forms postmarked no later than 60 days after collection for each sampling event.

J.8. Termination of Permit Coverage

J.8.1 *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, provided that the covered storm water discharges do not have the potential to cause or contribute to violations of state water quality standards. 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 Part J.8.2.

J.8.2 *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 storm water runoff that comes into contact with 1) 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 storm water 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.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection K - Sector K-Hazardous Waste Treatment, Storage, or Disposal Facilities

K.1 Covered Stormwater Discharges.

The requirements in Subsection K apply to stormwater discharges associated with industrial activity from hazardous waste treatment, storage, or disposal facilities (TSDFs) as identified by the Activity Code HZ specified under Sector K in Table D-1 of Appendix D of the permit.

K.2 Industrial Activities Covered by Sector K.

This permit authorizes stormwater discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA.

K.3 Limitations on Coverage.

K.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

K.3.2 *Limitations on Coverage for Facilities Providing Commercial TSDF Services.* For facilities located in Region 6 (see Appendix C) coverage is limited to hazardous waste TSDFs that are self-generating (including occasionally accepting wastes from community household hazardous waste collection events as public service), handle only residential wastes, and/or only store hazardous wastes and do not treat or dispose of them. Coverage under this permit is not available to commercial waste disposal and treatment facilities located in Region 6 that dispose and treat on a commercial basis any produced hazardous wastes (i.e., not their own) as a service to commercial or industrial generators.

K.4 Definitions.

K.4.1 *Contaminated stormwater* - stormwater that comes in direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part K.4.5. 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.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

K.4.3 *Land treatment facility* - a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are considered disposal facilities if the waste will remain after closure.

K.4.4 *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.4.5 *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, noncontaminated 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.4.6 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

K.4.7 *Noncontaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part K.4.5. Noncontaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

K.4.8 *Pile* - any noncontainerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

K.4.9 *Surface impoundment* - a facility or part of a facility that is a natural topographic depression, human-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

K.5 Numeric Limitations, Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table K-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines[2]
ALL - Industrial Activity Code "HZ" (Note: permit coverage limited in some States)	Ammonia	19 mg/L	--
	Total Recoverable Magnesium	0.064 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--
	Total Recoverable Arsenic	0.15 mg/L	--
	Total Recoverable Cadmium[3]	0.0021 mg/L	--
	Total Cyanide	0.022 mg/ L	--
	Total Recoverable Lead[4]	0.082 mg/ L	--
	Total Recoverable Mercury	0.0014 mg/ L	--
	Total Recoverable Selenium	0.005 mg/L	--
	Total Recoverable Silver[5]	0.0038 mg/ L	--
	Total Suspended Solids (TSS)	100 mg/L	--
ALL - Industrial Activity Code "HZ" Subject to the Provisions of 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)	100 mg/L	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

Table K-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
		--	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
	Total Recoverable Arsenic	0.15 mg/L	1.1 mg/L, daily maximum
		--	0.54 mg/L, monthly avg. maximum
	Total Recoverable Chromium	--	1.1 mg/L, daily maximum
		--	0.46 mg/L, monthly avg. maximum

Table K-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
	Total Recoverable Zinc	--	0.535 mg/L, daily maximum
		--	0.296 mg/L, monthly avg. maximum
	pH	--	Within the range of 6-9 pH units

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2]Monitor once per year for each monitoring year. 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.

[3] The benchmark value of cadmium is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table K-1 (i.e. 0.0021 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for cadmium:

$$\text{Benchmark} = (e^{[(1.0166)(\ln hardness) - 3.924]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.0166)(\ln 175) - 3.924]})/1000$$
$$= (e^{1.327})/1000$$
$$= 3.76/1000$$
$$= 0.0038 \text{ mg/L}$$

The following are example benchmark values for cadmium:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.0021
125	0.0027
150	0.0032
175	0.0038
200	0.0043
225	0.0049
250	0.0054

[4] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table K-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$$
$$= (e^{5.1148})/1000$$
$$= 166.46/1000$$
$$= 0.17 \text{ mg/L}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[5] The benchmark limitation value of silver is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table K-1 (i.e. 0.0038 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for silver:

$$\text{Benchmark} = (e^{[(1.72)(\ln \textit{hardness}) - 6.59]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.72)(\ln 175) - 6.59]})/1000$$
$$= (e^{2.293})/1000$$
$$= 9.909/1000$$
$$= 0.0099 \text{ mg/L}$$

The following are example benchmark values for silver:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.0038
125	0.0056
150	0.0076
175	0.0099
200	0.013
225	0.015
250	0.018

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection L - Sector L-Landfills, Land Application Sites, and Open Dumps.

L.1 Covered Stormwater Discharges.

The requirements in Subsection L apply to stormwater discharges associated with industrial activity from landfills and land application sites and open dumps as identified by the Activity Code specified under Sector L in Table D-1 of Appendix D of the permit.

L.2 Industrial Activities Covered by Sector L.

This permit may authorize stormwater discharges for Sector L facilities associated with waste disposal at landfills, land application sites, and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA.

L.3 Limitations on Coverage.

L.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

L.4 Definitions.

L.4.1 *Contaminated stormwater* - stormwater that comes in 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.

L.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

L.4.3 *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.

L.4.4 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

L.4.5 *Non-contaminated stormwater* - stormwater that does not come in 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.

L.5 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

L.5.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

L.5.2 *Summary of Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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.

L.5.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1) As part of your good housekeeping program, consider providing protected storage areas for pesticides, herbicides, fertilizer, and other significant materials.

L.5.4 *Preventive Maintenance Program.* (See also Part 2.1.5.3) As part of your preventive maintenance program, maintain the following: all containers used for outdoor chemical and significant materials storage, to prevent leaking; 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.

L.5.5 *Inspections.* (See also Part 2.1.5.5)

L.5.5.1 *Inspections of Active Sites.* 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 seasonally arid (annual rainfall averages from 0 to 10 inches) or semi-arid (annual rainfall averages from 10 to 20 inches), conduct inspections at least once every month.

L.5.5.2 *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.

L.5.6 *Recordkeeping and Internal Reporting.* Implement a tracking system for 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.

L.5.7 *Non-Stormwater Discharge Test Certification.* (See also Part 2.1.4.4) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

L.5.8 *Erosion and Sedimentation Control.* (See also Part 2.1.5.7) 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.

L.5.9 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Evaluate areas contributing to a stormwater discharge associated with industrial activities at landfills, open dumps, and land application sites for evidence of, or the potential for, pollutants entering the drainage system.

L.6 Numeric Limitations, Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table L-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code "LF")	Total Suspended Solids (TSS)	100 mg/L	--
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 Recoverable Iron	1.0 mg/L	--
All Landfills Subject to the Requirements of 40 CFR Part 445 Subpart B (Industrial Activity Code "LF").	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

Table L-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines[2]**
			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 Recoverable Zinc	--	0.20 mg/L, daily maximum
			0.11 mg/L, monthly avg. maximum
	pH	--	Within the range of 6-9 pH units

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] Monitor once per year for each monitoring year. 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.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection M - Sector M-Automobile Salvage Yards

M.1 Covered Stormwater Discharges.

The requirements in Subsection M apply to stormwater discharges associated with industrial activity from automobile salvage yards as identified by the Activity Code specified under Sector M in Table D-1 of Appendix D of this permit.

M.2 Industrial Activities Covered by Sector M.

The types of activities that permittees under Sector M are primarily engaged in are dismantling or wrecking used motor vehicles for parts recycling or resale and for scrap.

M.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2.

M.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Indicate the location of each monitoring point and estimate the total acreage used for industrial activity including, but not limited to, 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.

M.3.2 *Potential Pollutant Sources.* (See also Part 2.1.4) 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.

M.3.3 *Spill and Leak Prevention Procedures.* (See also Part 2.1.4.3) 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.

M.3.4 *Inspections.* (See also Part 2.1.5.5) 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.

M.3.5 *Employee Training.* (See also Part 2.1.5.6) 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.

M.3.6 *Management of Runoff.* (See also Part 2.1.5.8) 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.

M.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table M-1. Sector-specific Numeric Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Lead[2]	0.082 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table M-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000\\ &= (e^{5.1148})/1000\\ &= 166.46/1000\\ &= 0.17 \text{ mg/L}\end{aligned}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection N - Sector N-Scrap Recycling and Waste Recycling Facilities.

N.1 Covered Stormwater Discharges.

The requirements in Subsection N apply to stormwater discharges associated with industrial activity from scrap recycling and waste recycling facilities as identified by the SIC Codes specified under Sector N in Table D-1 of Appendix D of the permit.

N.2 Industrial Activities Covered by Sector N.

Permittees under Sector N are primarily engaged in the following types of activities:

N.2.1 processing, reclaiming, and wholesale distribution of scrap and waste materials, such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, and animal hides; and

N.2.2 reclaiming and recycling of liquid wastes, such as used oil, antifreeze, mineral spirits, and industrial solvents.

N.3 Limitation on Coverage.

Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, and aluminum and tin cans). This includes recycling facilities commonly referred to as material recovery facilities (MRF).

N.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) Non-stormwater discharges from turnings containment areas are not covered by this permit (see also Part N.4.2.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES permit.

N.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the MSGP. Part N.4.1 contains a requirement that applies to all recycling facilities and is followed by Parts N.4.2 to N.4.4.4, which have requirements for specific types of recycling facilities. Implement and describe in your SWPPP a program to address those items that apply. Included are lists of BMP options that, along with any functional equivalents, should be considered for implementation. Selection or deselection of a particular BMP or approach is up to the best professional judgment (BPJ) of the operator, as long as the objective of the requirement is met.

N.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

N.4.2 *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 nonindustrial and residential sources.

N.4.2.1 *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 BMP 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 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 N.4.2.6); (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 RCRA.

N.4.2.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor)*. Minimize contact of stormwater runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some BMP 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).

N.4.2.3 *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage).* Minimize contact of surface runoff with residual cutting fluids. Following are two BMP options that can be used singularly or in combination: (a) store all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover. Stormwater discharges from these areas are permitted, provided the runoff is first treated by an oil and water separator or its equivalent. Identify procedures to collect, handle, and dispose of or recycle residual fluids that may be present; (b) establish dedicated containment areas for all turnings that have been exposed to cutting fluids. Stormwater runoff from these areas can be

discharged, provided that the containment areas are constructed of concrete, asphalt, or other equivalent types of impermeable material; there is a barrier around the perimeter of the containment areas (e.g., berms, curbing, elevated pads) to prevent contact with stormwater runon; there is a drainage collection system for runoff generated from containment areas; you have a schedule to maintain the oil and water separator (or its equivalent); and you identify procedures for properly disposing of or recycling collected residual fluids.

N.4.2.4 *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 BMP 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.

N.4.2.5 *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 BMP 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) remove mercury switches from the hood and trunk lighting units, and remove anti-lock brake system units containing mercury switches (d) 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; and (e) 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; (f) 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; (g) oil and water separators or sumps; (h) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (i) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); and (j) catch basin filters or sand filters.

N.4.2.6 *Scrap Lead-Acid Battery Program.* Properly handle, store, and dispose of scrap lead-acid batteries. Following are some BMP 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.

N.4.2.7 *Spill Prevention and Response Procedures.* (See also Part 2.1.5.4) Minimize stormwater contamination at loading and unloading areas, and from equipment or container failures. Following are some BMP options (a) prevention and response measures for areas that are potential sources of fluid leaks or spills and (b) immediate containment and clean up of spills and leaks. If malfunctioning equipment is responsible for the spill or leak, repairs also should be conducted as soon as possible; (c) cleanup measures, including the use of dry absorbents. If this method is employed, an adequate supply of dry absorbent materials should be kept onsite, and used absorbent must be properly disposed of; (d) store drums containing liquids — especially oil and lubricants — indoors, in a bermed area, in overpack containers or spill pallets, or in other containment devices; (e) install overfill prevention devices on fuel pumps or tanks; and (f) place drip pans or equivalent measures under leaking stationary equipment until the leak is repaired. The drip pans should be inspected for leaks and potential overflow, and all liquids must be properly disposed of (as per RCRA); and (g) 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.

N.4.2.8 *Inspections.* (See also Part 2.1.5.5) Inspect all designated areas of the facility and equipment identified in the plan monthly.

N.4.2.9 *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.

N.4.3 Waste Recycling Facilities (Liquid Recyclable Materials).

N.4.3.1 *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, Containment, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some BMP options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system, or a mercury spill kit (never vacuum spilled or leaking mercury); (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.

N.4.3.2 *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 BMP 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.

N.4.3.3 *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 BMP 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.

N.4.3.4 *Inspections.* (See also Part 2.1.5.5) The inspections must be performed monthly and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or stormwater runoff.

N.4.4 *Recycling Facilities (Source-Separated Materials).* The following identifies considerations for facilities that receive only source-separated recyclables, primarily from nonindustrial and residential sources.

N.4.4.1 *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 BMP options (a) providing information and education measures to inform suppliers of recyclables which materials are acceptable and which are not, (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.

N.4.4.2 *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 BMP 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.

N.4.4.3 *Indoor Storage and Material Processing.* Minimize the release of pollutants from indoor storage and processing areas. Following are some BMP 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.

N.4.4.4 *Vehicle and Equipment Maintenance.* Following are some BMP 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.

N.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table N-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Scrap Recycling Facility (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Copper[2]	0.014 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Lead[3]	0.082 mg/L	--
	Total Recoverable Zinc[4]	0.12 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table N-1 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100

mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln hardness) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.9422)(\ln 175) - 1.700]})/1000\\ &= (e^{3.166})/1000\\ &= 23.72/1000\\ &= 0.024 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for copper:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.014
125	0.017
150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

[3] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table N-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln hardness) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000\\ &= (e^{5.1148})/1000\\ &= 166.46/1000\\ &= 0.17 \text{ mg/L}\end{aligned}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[4] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table N-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000 \\ &= (e^{5.26})/1000 \\ &= 192.51/1000 \\ &= 0.19 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection O - Sector O - Steam Electric Generating Facilities.

O.1 Covered Stormwater Discharges.

The requirements in Subsection O apply to stormwater discharges associated with industrial activity from Steam Electric Power Generating Facilities as identified by the Activity Code specified under Sector O in Table D-1 of Appendix D.

O.2 Industrial Activities Covered by Sector O.

This permit authorizes stormwater discharges from the following industrial activities at Sector O facilities

O.2.1 steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, including coal handling areas;

O.2.2 coal pile runoff, including effluent limitations established by 40 CFR Part 423; and

O.2.3 dual fuel co-generation facilities.

O.3 Limitations on Coverage.

O.3.1 *Prohibition of Non-Stormwater Discharges.* Non-stormwater discharges subject to effluent limitations guidelines are not covered by this permit.

O.3.2 *Prohibition of Stormwater Discharges.* The following are not covered by this permit: stormwater discharges from ancillary facilities (e.g., fleet centers, gas turbine stations and substations) that are not contiguous to a stream electric power generating facility and heat capture co-generation facilities.

O.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 in the permit.

O.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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).

O.4.2 *Good Housekeeping Measures*. (See also Part 2.1.5.1)

O.4.2.1 *Fugitive Dust Emissions.* Describe and implement measures that prevent or 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.

O.4.2.2 *Delivery Vehicles.* Describe and implement measures that prevent or 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.

O.4.2.3 *Fuel Oil Unloading Areas.* Describe and implement measures that prevent or minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider, at a minimum (or their equivalents), 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 (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).

O.4.2.4 *Chemical Loading and Unloading.* Describe and implement measures that prevent or minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider, at a minimum (or their equivalents), using containment curbs at chemical loading and unloading areas to contain spill, 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.

O.4.2.5 *Miscellaneous Loading and Unloading Areas.* Describe and implement measures that prevent or minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider, at a minimum, covering the loading area; grading, berming, or curbing around the loading area to divert runon; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

O.4.2.6 *Liquid Storage Tanks.* Describe and implement measures that prevent or minimize contamination of surface runoff from above-ground liquid storage tanks. Consider, at a minimum, protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

O.4.2.7 *Large Bulk Fuel Storage Tanks.* Describe and implement measures that prevent or minimize contamination of surface runoff from large bulk fuel storage tanks. Consider, at a minimum, containment berms (or its equivalent). You must also comply with applicable State and Federal laws, including SPCC.

O.4.2.8 *Spill Reduction Measures.* Describe and implement measures to reduce the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. At a minimum, visually inspect, on a weekly basis, the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment, and effect any necessary repairs immediately.

O.4.2.9 *Oil-Bearing Equipment in Switchyards.* Describe and implement measures that prevent or 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.

O.4.2.10 *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, as soon as practicable, vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

O.4.2.11 *Ash Loading Areas.* Describe and implement procedures to reduce or control the tracking of ash and residue from ash loading areas. When practicable, clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

O.4.2.12 *Areas Adjacent to Disposal Ponds or Landfills.* Describe and implement measures that prevent or minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Develop procedures to 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.

O.4.2.13 *Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites.*

Address these areas in your SWPPP and include appropriate BMPs as referred to in Part 2 of the permit.

O.4.2.14 *Vehicle Maintenance Activities.* For vehicle maintenance activities performed on the plant site, use the applicable BMPs outlined in Attachment 1, Subsection P.

O.4.2.15 *Material Storage Areas.* Describe and implement measures that prevent or minimize contamination of stormwater runoff from material storage areas (including areas used for temporary storage of miscellaneous products and construction materials stored in lay-down areas). Consider the following (or their equivalents): using flat yard grades; collecting runoff in graded swales or ditches; using erosion protection measures at steep outfall sites (e.g., concrete

chutes, riprap, stilling basins); covering lay-down areas; storing materials indoors; and covering materials temporarily with polyethylene, polyurethane, polypropylene, or hypalon. Stormwater runon may be minimized by constructing an enclosure or building a berm around the area.

O.4.3 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) As part of your evaluation, 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.

O.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table O-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Steam Electric Generating Facilities (Industrial Activity Code "SE")	Total Recoverable Iron	1.0 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection P - Sector P-Land Transportation and Warehousing

P.1 Covered Stormwater Discharges.

The requirements in Subsection P apply to stormwater discharges associated with industrial activity from Land Transportation and Warehousing facilities as identified by the SIC Codes in Major Groups 40, 41, 42, 43 and SIC 5171, as specified under Sector P in Table D-1 of Appendix D of the permit, namely motor freight transportation facilities (SIC 4212-4231); passenger transportation facilities (SIC 4111-4173); petroleum bulk oil stations and terminals (SIC 5171); rail transportation facilities (SIC 4011, 4013); and United States Postal Service facilities (SIC 4311).

P.2 Industrial Activities Covered by This Permit.

The types of activities that Land Transportation and Warehousing facilities are primarily engaged in are vehicle and equipment fluid changes; mechanical repairs; parts cleaning; Sanding, refinishing and painting; fueling and lubrication; locomotive sanding (loading sand for traction); storage of vehicles and equipment waiting for repair or maintenance; storage of the related materials and waste materials, such as oil, fuel, batteries, tires, or oil filters; and equipment cleaning operations, including areas where the following types of activities take place: vehicle exterior wash down; interior trailer washouts; tank washouts; rinsing of transfer equipment.

P.3 Limitation on Coverage

P.3.1 *Prohibited Discharges* (see also Part 1.2.4 and P.4.6) This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be authorized under a separate NPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

P.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the requirements contained in Part 2 of the permit, the following specific elements must be included in any SWPPP for a land transportation or warehousing facility authorized under this permit:

P.4.1 *Drainage Area Site Map*. (See also Part 2.1.2) The site map must also identify 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.

P.4.2 *Potential Pollutant Sources*. (See also Part 2.1.4) Describe and 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.

P.4.3 *Good Housekeeping Measures*. (See also Part 2.1.5.1) The SWPPP must describe the specific good housekeeping control measures used in each of the following facility areas. Recommended measures are discussed as indicated:

P.4.3.1 *Vehicle and Equipment Storage Areas*. Confine the storage of leaky or leak-prone vehicles/equipment awaiting maintenance to designated areas. Consider the following (or other equivalent measures): The 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. *Note: The discharge of vehicle and equipment washwater, including tank cleaning operations, are not authorized by this permit and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.*

P.4.3.2 *Fueling Areas*. Implement and describe measures that prevent or 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 runon/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

P.4.3.3 *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.

P.4.3.4 *Vehicle and Equipment Cleaning Areas*. Implement and describe measures that prevent or 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 unless NPDES permitted); treating and/or recycling collected stormwater runoff, or other equivalent measures.

P.4.3.5 *Vehicle and Equipment Maintenance Areas*. Implement and describe measures that prevent or 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.

P.4.3.6 *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.

P.4.4 *Inspections*. (See also Part 2.1.5.5) 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.

P.4.5 *Employee Training*. (See also Part 2.1.5.6) Train personnel at least once a year and 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.

P.4.6 *Vehicle and Equipment Washwater Requirements*. Attach to or reference in your SWPPP, 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, attach a copy to your SWPPP. In any case, describe and implement all non-stormwater discharge permit conditions or pretreatment conditions in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the plan.

P.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table P-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Land Transportation and Warehousing (SIC 4011, 4013, 4111-4173, 4212-4231, 4311, 5171)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection Q - Sector Q - Water Transportation

Q.1 Covered Stormwater Discharges.

The requirements in Subsection Q apply to stormwater discharges associated with industrial activity from Water Transportation facilities as identified by the Activity Code specified under Sector Q in Table D-1 of Appendix D of the permit.

Q.2 Industrial Activities Covered by Sector Q.

The requirements listed under this part apply to stormwater discharges associated with the following activities

Q.2.1 water transportation facilities classified in SIC Code Major Group 44 that have vehicle (vessel) maintenance shops and/or equipment cleaning operations, including

Q.2.1.1 water transportation industry, including facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters;

Q.2.1.2 marine cargo handling operations;

Q.2.1.3 ferry operations;

Q.2.1.4 towing and tugboat services; and

Q.2.1.5 marinas.

Q.3 Limitations on Coverage.

Q.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

Q.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

Q.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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).

Q.4.2 *Summary of Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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, painting.)

Q.4.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

Q.4.3.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES permit. Describe the following in the SWPPP: the measures to collect or contain the discharges from the pressures washing area, the method for the removal of the visible solids, the methods of disposal of the collected solids, and where the discharge will be released.

Q.4.3.2 *Blasting and Painting Area.* Implement and describe measures to prevent spent abrasives, paint chips, and overspray from discharging into the receiving water or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to prevent or minimize 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. Detail in the SWPPP 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).

Q.4.3.3 *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. Implement and describe measures to prevent or 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.

Q.4.3.4 *Engine Maintenance and Repair Areas.* Implement and describe measures to prevent or 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.

Q.4.3.5 *Material Handling Area.* Implement and describe measures to prevent or 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.

Q.4.3.6 *Drydock Activities.* Describe your procedures for routinely maintaining and cleaning the drydock to prevent or 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.

Q.4.3.7 *General Yard Area.* Implement and describe a schedule for routine yard maintenance and cleanup. Regularly remove from the general yard area scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc.

Q.4.4 *Preventive Maintenance*. (See also Part 2.1.5.3) 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.

Q.4.5 *Inspections.* (See also Part 2.1.5.5) 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.

Q.4.6 *Employee Training.* (See also Part 2.1.5.6) 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.

Q.4.7 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Conduct regularly scheduled evaluations at least once a year and address areas contributing to a stormwater discharge associated with industrial activity (e.g., pressure washing area, blasting and sanding areas, painting areas, material storage areas, engine maintenance and repair areas, material handling areas, and drydock area). Inspect these sources for evidence of, or the potential for, pollutants entering the drainage system.

Q.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table Q-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Water Transportation Facilities (SIC 4412-4499)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Lead[2]	0.082 mg/L	--
	Total Recoverable Zinc[3]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Q-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000\\ &= (e^{5.1148})/1000\\ &= 166.46/1000\\ &= 0.17 \text{ mg/L}\end{aligned}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

[3] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Q-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for

100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000 \\ &= (e^{5.26})/1000 \\ &= 192.51/1000 \\ &= 0.19 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection R - Sector R-Ship and Boat Building and Repair Yards

R.1 Covered Stormwater Discharges.

The requirements in Subsection R apply to stormwater discharges associated with industrial activity from ship and boat building and repair yards as identified by the Activity Codes specified under Sector R in Table D-1 of Appendix D of the permit.

R.2 Industrial Activities Covered by Sector R.

Permittees under Sector R are primarily engaged in the following types of activities:

R.2.1 ship building and repairing and boat building and repairing[1]

R.3 Limitations on Coverage.

R.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) Discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels are not covered by this permit.

R.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

R.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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).

R.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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, painting).

[1]According to the U.S. Coast Guard, a vessel 65 feet or greater in length is referred to as a ship, and a vessel smaller than 65 feet is a boat.

R.4.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

R.4.3.1 *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.

R.4.3.2 *Blasting and Painting Area.* Implement and describe measures to prevent spent abrasives, paint chips, and overspray from 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. Detail in the SWPPP 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).

R.4.3.3 *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. Implement and describe measures to prevent or 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.

R.4.3.4 *Engine Maintenance and Repair Areas*. Implement and describe measures to prevent or 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.

R.4.3.5 *Material Handling Area.* Implement and describe measures to prevent or 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 runon to material handling areas.

R.4.3.6 *Drydock Activities.* Describe your procedures for routinely maintaining and cleaning the drydock to prevent or 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, 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.

R.4.3.7 *General Yard Area.* Implement and describe a schedule for routine yard maintenance and cleanup. Regularly remove from the general yard area scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc.

R.4.4 *Preventive Maintenance.* (See also Part 2.1.5.3) 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.

R.4.5 *Inspections.* (See also Part 2.1.5.5) 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.

R.4.6 *Employee Training.* (See also Part 2.1.5.6) 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.

R.4.7 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Conduct regularly scheduled evaluations at least once a year and address areas contributing to a stormwater discharge associated with industrial activity (e.g., pressure washing, blasting and sanding, painting, material storage, engine maintenance and repair, material handling, and drydock areas). These areas must be visually inspected for evidence of, or the potential for, pollutants entering the drainage system.

R.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table R-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Ship and Boat Building and Repairing Yards (SIC 3731, 3732)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection S - Sector S-Air Transportation

S.1 Covered Stormwater Discharges.

The requirements in Subsection S apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes in Major Group 45, as specified under Sector S in Table D-1 of Appendix D of the permit, namely air transportation, scheduled, and air courier (SIC 4512 and 4513); air transportation, non scheduled (SIC 4522); airports, flying fields, except those maintained by aviation clubs, and airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations; and airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing/repairing, except on a factory basis; vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport and aircraft deicing/anti-icing. (SIC 4581)

S.2 Industrial Activities Covered by Sector S.

The types of activities that Air Transportation facilities are primarily engaged in are:

- Servicing, repairing, or maintaining aircraft and ground vehicles
- Equipment cleaning and maintenance (including vehicle and equipment rehabilitation mechanical repairs, painting, fueling, and lubrication)
- Deicing/anti-icing operations which conduct the above described activities

Note: "deicing" will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

S.3 Limitation on Coverage

S.3.1 *Limitations on Coverage*. This permit authorizes stormwater discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

S.3.2 *Prohibition of Non-Stormwater Discharges*. (See also Part 1.2.4 and Part S.4) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate NPDES permit(s).

S.3.3 *Hazardous Substances or Oil*. (See also Part 2.1.4.3) Each individual permittee is required to report spills equal to or exceeding the reportable quantity (RQ) levels specified at 40 CFR 110, 117 and 302 as described at Part 2.1.4.3. If an airport authority is the sole permittee under this permit, then the sum total of all spills at the airport must be assessed against the RQ. I f the airport authority is a co-permittee with other deicing operators at the airport (such as numerous different airlines), the assessed amount must be

the summation of spills by each co-permittee. If separate, distinct individual permittees exist at the airport, then the amount spilled by each separate permittee must be the assessed amount for the RQ determination.

S.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the requirements contained in Part 2, the following specific elements must be included in any SWPPP for a air transportation facility authorized under this permit. An airport authority and tenants of the airport are encouraged to work in partnership in the development and implementation of a stormwater pollution prevention plan. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from his own areas of the airport, that SWPPP must be coordinated and integrated with the plan SWPPP for the entire airport. 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.

S.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) The site map must also identify 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.

S.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) In your inventory of exposed materials, describe and assess 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 in any comprehensive airport SWPPPs.

S.4.2.1 Deicing Season. (See also S.4.4.) The SWPPP must define the average seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season.

S.4.3 *Good Housekeeping Measures.* (See also 2.1.5.1) The SWPPP must describe the specific good housekeeping control measures used in each of the following facility areas. Recommended measures are discussed as indicated:

S.4.3.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Describe and implement measures that prevent or 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.

S.4.3.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. (see also S.4.6) Clean equipment only in the areas identified in the SWPPP and site map and clearly demarcate these areas on the ground using signage or other appropriate means. Describe and implement measures that prevent or minimize the contamination of stormwater runoff from cleaning areas.

S.4.3.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only. Consider the following 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.

S.4.3.4 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.). Describe and implement measures that prevent or minimize contamination of precipitation/runoff from these areas. Consider the following BMPs (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

S.4.3.5 Airport Fuel System and Fueling Areas. Describe and implement measures that prevent or 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 BMPs (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.

S.4.3.6 Source Reduction. Consider all feasible alternatives to the use of urea and glycol-based deicing chemicals 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; anhydrous sodium acetate.

S.4.3.6.1 Runway Deicing Operation: Evaluate, at a minimum, whether over-application of deicing chemicals occurs by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also consider these BMP 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.

S.4.3.6.2 Aircraft Deicing Operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. EPA intends for this evaluation to be carried out by the personnel most familiar with the particular aircraft and flight operations in question (vice 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 BMP 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, thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

S.4.3.7 Management of Runoff. Where deicing operations occur, describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. Describe the controls used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow. Consider these BMP 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.

S.4.4 *Inspections.* (See also Part 2.1.5.5) Specify the frequency of inspections in your SWPPP. At a minimum they must be conducted monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which

deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, increase the frequency of your inspections to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels. The Director may specifically require you to increase inspections and SWPPP reevaluations as necessary.

S.4.5 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Using only qualified personnel, conduct your annual site compliance evaluations during periods of actual deicing operations, if possible. If not practicable during active deicing or the weather is too inclement, conduct the evaluations when deicing operations are likely to occur and the materials and equipment for deicing are in place.

S.4.6 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in your SWPPP, 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, attach a copy to your SWPPP. In any case, describe and implement all non-stormwater discharge permit conditions or pretreatment conditions in your SWPPP. 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 the plan.

S.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Monitor per the requirements in Table S-1. Collect a minimum of four (4) samples only during the timeframe defined in Part S.4.2.1 when deicing activities are occurring, for the year 1 of your permit coverage, and four times per year thereafter during the permit term, depending on comparison of monitoring results to benchmark monitoring cutoff concentrations.

Table S-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Facilities at airports that use more that 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport facility that collect runoff from areas where deicing/anti-icing activities occur (SIC 4512-4581).	Biochemical Oxygen Demand (BOD_5)	30 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--
	Ammonia	19 mg/L	--
	pH	6.0 - 9.0 s.u.	--
	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection T - Sector T-Treatment Works

T.1 Covered Stormwater Discharges.

The requirements in Subsection T apply to stormwater discharges associated with industrial activity from treatment works as identified by the Activity Code specified under Sector T in Table D-1 of Appendix D of the permit.

T.2 Industrial Activities Covered by Sector T.

The requirements listed under this part apply to all existing point source stormwater discharges associated with the following activities

T.2.1 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 million gallons per day (MGD) or more; or are required to have an approved pretreatment program under 40 CFR Part 403.

T.2.2 The following are not required to have permit coverage: farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility, or areas that are in compliance with Section 405 of the CWA.

T.3 Limitations on Coverage.

T.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

T.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

T.4.1 *Site Map.* (See also Part 2.1.2) Identify 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.

T.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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.

T.4.3 *Best Management Practices (BMPs).* (See also Part 2.1.5) In addition to the other BMPs, 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).

T.4.4 *Inspections.* (See also Part 2.1.5.5) 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.

T.4.5 *Employee Training.* (See also Part 2.1.5.6) 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.

T.4.6 *Wastewater and Washwater Requirements.* Attach to your SWPPP a copy of all your current NPDES permits issued for wastewater and industrial, vehicle, and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending applications. Address any requirements and conditions from the other permits, as appropriate, in the SWPPP. If the washwater is handled in another manner, the disposal method must be described and all pertinent documentation must be attached to the plan.

T.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table T-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Treatment Works (SIC TW)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection U - Sector U-Food and Kindred Products

U.1 Covered Stormwater Discharges.

The requirements in Subsection U apply to stormwater discharges associated with industrial activity from food and kindred products facilities as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

U.2 Industrial Activities Covered by Sector U.

Permittees under Sector U are primarily engaged in the following types of activities:

U.2.1 meat products;

U.2.2 dairy products;

U.2.3 canned, frozen, and preserved fruits, vegetables, and food specialties;

U.2.4 grain mill products;

U.2.5 bakery products;

U.2.6 sugar and confectionery products;

U.2.7 fats and oils;

U.2.8 beverages; and

U.2.9 miscellaneous food preparations and kindred products and tobacco products manufacturing.

U.3 Limitations on Coverage.

The following are not covered by this permit: stormwater discharges identified under Part 1.2.4 from industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residential wastewater treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; and storage areas for raw material and intermediate and finished products. This includes areas where industrial activity has taken place in the past and significant materials remain. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.

U.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) The following are not authorized by this permit: discharges subject to Part 1.2.2.2, which includes discharges

containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

U.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

U.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

U.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe, 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.

U.4.3 *Inspections.* (See also Part 2.1.5.5) 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.

U.4.4 *Employee Training.* (See also Part 2.1.5.6) Address pest control in the training program.

U.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table U-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L	--
Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD_5)	30 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--
	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--

Table U-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one Sector / Subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Meat Products; Dairy Products; Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties; Bakery Products; Sugar and Confectionery Products; Beverages; Miscellaneous Food Preparations and Kindred Products; and Tobacco Products (SIC 2011-2015, 2021-2026, 2032-2038, 2051-2053, 2061-2068, 2082-2087, 2091-2099, 2111-2141)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection V - Sector V-Textile Mills, Apparel, and Other Fabric Products

V.1 Covered Stormwater Discharges.

The requirements in Subsection V apply to stormwater discharges associated with industrial activity from textile mills, apparel, and other fabric product manufacturing as identified by the Activity Code specified under Sector V in Table D-1 of Appendix D of the permit.

V.2 Industrial Activities Covered by Sector V.

Permittees under Sector V are primarily engaged in the following types of activities:

V.2.1 textile mill product preparation, including preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; and the manufacture of broadwoven fabrics, narrow-woven fabrics, knit fabrics, and carpets and rugs from yarn;

V.2.2 processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel;

V.2.3 integrated manufacturing of knit apparel and other finished articles of yarn;

V.2.4 manufacturing of felt goods (e.g., wool), lace goods, non-woven fabrics, miscellaneous textiles, and other apparel products.

V.3 Limitations on Coverage.

V.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.2.4) The following are not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process), reused or recycled water, and waters used in cooling towers. If you have these types of discharges from your facility, you must cover them under a separate NPDES permit.

V.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 4 of the permit.

V.4.1 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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).

V.4.2 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

V.4.2.1 *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. Describe and implement measures that prevent or minimize contamination of the stormwater runoff from such storage areas, including a description of the containment area or enclosure for those materials stored outdoors. 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.

V.4.2.2 *Material Handling Areas.* Describe and implement measures that prevent or 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.

V.4.2.3 *Fueling Areas.* Describe and implement measures that prevent or minimize contamination of stormwater runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runon of stormwater to the fueling areas, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the fueling area.

V.4.2.4 *Above-Ground Storage Tank Area.* Describe and implement measures that prevent or 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; preparing the SPCC program to provide spill and overflow protection; 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.

V.4.3 *Inspections.* (See also Part 2.1.5.5) 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.

V.4.4 *Employee Training.* (See also Part 2.1.5.6) 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.

V.4.5 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Conduct regularly scheduled evaluations at least once a year, and address those areas contributing to a stormwater discharge associated with industrial activity for evidence of, or the potential for, pollutants entering the drainage system. Inspect, at a minimum, as appropriate: storage tank areas, waste disposal and storage areas, dumpsters and open containers stored outside, materials storage areas, engine maintenance and repair areas, and material handing areas and loading dock areas.

V.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table V-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Textile Mills, Apparel, and Other Fabric Product Manufacturing; and Leather and Leather Products (SIC 2211-2299, 2311-2399, 3131-3199, except 3111)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection W - Sector W-Furniture and Fixtures

W.1 Covered Stormwater Discharges.

The requirements in Subsection W apply to stormwater discharges associated with industrial activity from furniture and fixtures facilities as identified by the Activity Code specified under Sector W in Table D-1 of Appendix D of the permit.

W.2 Industrial Activities Covered by Sector W.

Permittees under Sector W are primarily engaged in are the manufacturing of the following types of products:

W.2.1 wood kitchen cabinets;

W.2.2 household furniture;

W.2.3 office furniture;

W.2.4 public buildings and related furniture;

W.2.5 partitions, shelving, lockers, and office and store fixtures; and

W.2.6 miscellaneous furniture and fixtures.

W.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of this permit.

W.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

W.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table W-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Furniture and Fixtures (SIC 2434, 2511-2599)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 -Sector-Specific Requirements for Industrial Activity
Subsection X - Sector X-Printing and Publishing

X.1 Covered Stormwater Discharges.

The requirements in Subsection X apply to stormwater discharges associated with industrial activity from printing and publishing facilities as identified by the Activity Code specified under Sector X in Table D-1 of Appendix D of the permit.

X.2 Industrial Activities Covered by Sector X

Permittees under Sector X are primarily engaged in the following types of activities:

X.2.1 book printing;

X.2.2 commercial printing and lithographics;

X.2.3 platemaking and related services;

X.2.4 commercial printing, gravure; and

X.2.5 commercial printing not elsewhere classified.

X.3 Stormwater Pollution Prevention Plan Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

X.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: above-ground storage tanks, drums, and barrels permanently stored outside.

X.3.2 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe the following additional sources and activities that have potential pollutants associated with them, as applicable: loading and unloading operations, outdoor storage activities, significant dust or particulate generating processes, and onsite waste disposal practices (e.g., blanket wash). Also identify the pollutant or pollutant parameter (e.g., oil and grease, scrap metal) associated with each pollutant source.

X.3.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

X.3.3.1 *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, fuel oil) in a protected area, away from drains. Describe and implement measures that prevent or minimize contamination of the stormwater runoff from such storage

areas, including a description of the containment area or enclosure for those materials stored outdoors. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

X.3.3.2 *Material Handling Area.* Describe and implement measures that prevent or 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.

X.3.3.3 *Fueling Areas.* Describe and implement measures that prevent or 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.

X.3.3.4 *Above Ground Storage Tank Area.* Describe and implement measures that prevent or 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, preparing the SPCC program, providing spill and overflow protection, 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.

X.3.4 *Employee Training.* (See also Part 2.1.5.6) 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.

X.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table X-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Printing and Publishing (SIC 2711-2796)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection Y - Sector Y-Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

Y.1 Covered Stormwater Discharges.

The requirements in Subsection Y apply to stormwater discharges associated with industrial activity from rubber, miscellaneous plastic products, and miscellaneous manufacturing industries facilities as identified by the SIC Codes specified under Sector Y in Table D-1 of Appendix D of the permit.

Y.2 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

Y.2.1 *Potential Pollutant Sources for Rubber Manufacturers.* (See also Part 2.1.4) Review the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater runoff.

Y.2.2 *Controls for Rubber Manufacturers*. (See also Part 2.1.5) Describe and implement specific controls to minimize the discharge of zinc in your stormwater discharges. Parts Y.2.2.1 to Y.2.2.5 give possible sources of zinc to be reviewed and list some specific BMPs to be considered for implementation (or their equivalents). Following are some general BMP 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.

Y.2.2.1 *Inadequate Housekeeping.* Review the handling and storage of zinc bags at your facility. Following are some BMP 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.

Y.2.2.2 *Dumpsters*. Reduce discharges of zinc from dumpsters. Following are some BMP options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.

Y.2.2.3 *Malfunctioning Dust Collectors or Baghouses*. Review dust collectors or baghouses as possible sources in zinc in stormwater runoff. Replace or repair, as appropriate, improperly operating dust collectors or baghouses.

Y.2.2.4 *Grinding Operations.* Review dust generation from rubber grinding operations and, as appropriate, install a dust collection system.

Y.2.2.5 *Zinc Stearate Coating Operations.* Detail appropriate measures to prevent or clean up drips and spills of zinc stearate slurry that may be released to the storm drain. One BMP option is to use alternative compounds to zinc stearate.

Y.2.3 *Controls for Plastic Products Manufacturers*. Describe and implement specific controls to minimize the discharge of plastic resin pellets in your stormwater discharges. BMPs 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.

Y.3 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table Y-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; and Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified (SIC 3011-3069, rubber manufacturing only)	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Recoverable Lead[3]	0.082 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	–
Miscellaneous Plastics Products (SIC 3081-3089); Musical Instruments (SIC 3931); Dolls, Toys, Games and Sporting and Athletic Goods (SIC 3942-3949); Pens, Pencils, and other Artists' Materials (SIC 3951-3955, except 3952 as Specified in Sector C); Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal (SIC 3961, 3965); and Miscellaneous Manufacturing Industries (SIC 3991-3999)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Y-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln hardness) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(0.8473)(\ln 175) + 0.884]})/1000$$
$$= (e^{5.26})/1000$$
$$= 192.51/1000$$
$$= 0.19 \text{ mg/L}$$

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

[3] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Y-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\text{Benchmark} = (e^{[(1.273)(\ln 175) - 1.460]})/1000$$
$$= (e^{5.1148})/1000$$
$$= 166.46/1000$$
$$= 0.17 \text{ mg/L}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection Z - Sector Z-Leather Tanning and Finishing

Z.1 Covered Stormwater Discharges.

The requirements in Subsection Z apply to stormwater discharges associated with industrial activity from leather tanning and finishing facilities as identified by the Activity Code specified under Sector Z in Table D-1 of Appendix D of the permit.

Z.2 Industrial Activities Covered by Sector Z.

Permittees under Sector Z are primarily engaged are leather tanning, currying, and finishing activities.

Z.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

Z.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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; and haul roads, access roads, and rail spurs.

Z.3.2 *Potential Pollutant Sources.* (See also Part 2.1.4) At a minimum, describe the following additional 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; chemical drums, bags, containers, and above-ground tanks; empty chemical containers and bags; spent solvents; floor sweepings and washings; refuse, waste piles, and sludge; and significant dust/particulate generating processes (e.g., buffing).

Z.3.3 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

Z.3.3.1 *Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products.* Pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings) should be stored indoors or protected by 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 runon and runoff.

Z.3.3.2 *Material Storage Areas*. Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials). Describe and implement measures that prevent or minimize contact with stormwater.

Z.3.3.3 *Buffing and Shaving Areas.* Describe and implement measures that prevent or 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.

Z.3.3.4 *Receiving, Unloading, and Storage Areas.* Describe and implement measures that prevent or 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.

Z.3.3.5 *Outdoor Storage of Contaminated Equipment.* Describe and implement measures that prevent or 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.

Z.3.3.6 *Waste Management.* Describe and implement measures that prevent or minimize contamination of stormwater runoff from waste storage areas. Consider the following (or their equivalents): establishing inspection and maintenance programs for leaking containers or spills, 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.

Z.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table Z-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Leather Tanning and Finishing (SIC 3111)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection AA - Sector AA-Fabricated Metal Products.

AA.1 Covered Stormwater Discharges.

The requirements in Subsection AA apply to stormwater discharges associated with industrial activity from fabricated metal products facilities as identified by the Activity Code specified under Sector AA in Table D-1 of Appendix D of the permit.

AA.2 Industrial Activities Covered by Sector AA.

Permittees under Sector AA are primarily engaged in the following types of activities:

AA.2.1 fabricated metal products; except for electrical related industries;

AA.2.2 fabricated metal products; except machinery and transportation equipment; and

AA.2.3 jewelry, silverware, and plated ware.

AA.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

AA.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify 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.

AA.3.2 *Spills and Leaks.* (See also Part 2.1.4.3) When listing significant spills and leaks, 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.

AA.3.3 *Potential Pollutant Sources.* (See also Part 2.1.4) Describe 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.

AA.3.4 *Good Housekeeping Measures.* (See also Part 2.1.5.1)

AA.3.4.1 *Raw Steel Handling Storage*. Describe and implement measures for controlling or recovering scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

AA.3.4.2 *Paints and Painting Equipment.* Describe and implement measures to prevent or minimize exposure of paint and painting equipment to stormwater.

AA.3.5 *Spill Prevention and Response Procedures*. (See also Part 2.1.5.4) Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed

AA.3.5.1 Metal Fabricating Areas. Describe and implement measures for maintaining clean, dry, orderly conditions in these areas. Consider using dry clean-up techniques.

AA.3.5.2 *Storage Areas for Raw Metal.* Describe and implement measures to keep these areas free of conditions that could cause 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.

AA.3.5.3 *Receiving, Unloading, and Storage Areas.* Describe and implement measures to prevent spills and leaks, plan for quick remedial clean up, and instruct employees on clean-up techniques and procedures.

AA.3.5.4 *Storage of Equipment.* Describe and implement measures for preparing equipment for storage and the proper storage of equipment. Consider the following (or their equivalents): protecting equipment with covers, storing equipment indoors, and cleaning potential pollutants from equipment to be stored outdoors.

AA.3.5.5 *Metal Working Fluid Storage Areas.* Describe and implement measures for storage of metal working fluids.

AA.3.5.6 *Cleaners and Rinse Water.* Describe and implement measures to 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.

AA.3.5.7 *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.

AA.3.5.8 *Chemical Storage Areas.* Describe and implement proper storage methods that prevent stormwater contamination and accidental spillage. Include a program to inspect containers and identify proper disposal methods.

AA.3.6 *Inspections.* (See also Part 2.1.5.5) 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.

AA.3.7 *Comprehensive Site Compliance Evaluation*. (See also Part 3.1) As part of your evaluation, 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.

AA.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table AA-1. Sector-specific Numeric Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--
Fabricated Metal Coating and Engraving (SIC 3479)	Total Recoverable Zinc[2]	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--
	Nitrate plus Nitrite Nitrogen	0.68 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table AA-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \textit{hardness}) + 0.884]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

Benchmark = $(e^{[(0.8473)(\ln 175) + 0.884]})/1000$

= $(e^{5.26})/1000$

= 192.51/1000

= 0.19 mg/L

The following are example benchmark values for zinc:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection AB - Sector AB-Transportation Equipment, Industrial and Commercial Machinery

AB.1 Covered Stormwater Discharges.

The requirements in Subsection AB apply to stormwater discharges associated with industrial activity from transportation equipment, industrial or commercial machinery facilities as identified by the Activity Code specified under Sector AB in Table D-1 of Appendix D of the permit.

AB.2 Industrial Activities Covered by Sector AB.

Permittees under Sector AB are primarily engaged in the following types of activities:

AB.2.1 Industrial and commercial machinery (except computer and office equipment) (see Sector AC) and

AB.2.2 Transportation equipment (except ship and boat building and repairing) (see Sector R);

AB.3 Stormwater Pollution Plan (SWPPP) Requirements.

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

AB.3.1 *Drainage Area Site Map.* (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

AB.3.2 *Non-Stormwater Discharges.* (See also Part 2.1.4.5) If your facility has a separate NPDES permit (or has applied for a permit) authorizing discharges of wastewater, attach a copy of the permit (or the application) to your SWPPP. Any new wastewater permits issued or reissued to you must then replace the old one in your SWPPP. If you discharge wastewater, other than solely domestic wastewater, to a Publicly Owned Treatment Works (POTW), you must notify the POTW of the discharge (identify the types of wastewater discharged, including any stormwater). As proof of this notification, attach to your SWPPP a copy of the permit issued to your facility by the POTW or a copy of your notification to the POTW.

AB.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table AB-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring			
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	**Parameter**	**Benchmark Monitoring Concentration[1]**	**Effluent Limitation Guidelines**
Transportation Equipment, Industrial, or Commercial Machinery (SIC 3511-3599, except 3571-3579, 3711-3799, except 3731and 3732)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection AC - Sector AC-Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

AC.1 Covered Stormwater Discharges.

The requirements in Subsection AC apply to stormwater discharges associated with industrial activity from facilities that manufacture electronic and electrical equipment and components, photographic and optical goods as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

AC.2 Industrial Activities Covered by Sector AC.

Permittees under Sector AC are primarily engaged in the manufacturing of the following types of products:

AC.2.1 measuring, analyzing, and controlling instruments;

AC.2.2 photographic, medical, and optical goods;

AC.2.3 watches and clocks;

AC.2.4 computer and office equipment; and

AC.2.5 electrical and electronic equipment and components.

AC.3 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

No additional sector-specific requirements apply.

AC.4 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table AC-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Electronic, Electrical, Photographic, and Optical Goods (SIC 3571-3579, 3812-3873)	Total Suspended Solids (TSS)	100 mg/L	--
Electronic and Electrical Equipment and Components, except Computers (SIC 3612-3699)	Total Suspended Solids (TSS)	100 mg/L	--
	Total Recoverable Copper[2]	0.014 mg/L	--
	Total Recoverable Lead[3]	0.082 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

[2] The benchmark value of copper is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table AC-1 (i.e. 0.014 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for copper:

$$\text{Benchmark} = (e^{[(0.9422)(\ln hardness) - 1.700]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(0.9422)(\ln 175) - 1.700]})/1000 \\ &= (e^{3.166})/1000 \\ &= 23.72/1000 \\ &= 0.024 \text{ mg/L}\end{aligned}$$

The following are example benchmark values for copper:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.014
125	0.017
150	0.021
175	0.024
200	0.027
225	0.030
250	0.033

[3] The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table AC-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \textit{hardness}) - 1.460]})/1000$$

Example: Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned}\text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000 \\ &= (e^{5.1148})/1000 \\ &= 166.46/1000 \\ &= 0.17 \text{ mg/L}\end{aligned}$$

The following are example benchmark value for lead:

Hardness (mg/L)	Benchmark value (mg/L)
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection AD - Sector AD-Stormwater Discharges Designated by the Director as Requiring Permits.

AD.1 Covered Stormwater Discharges.

Sector AD is used to provide permit coverage for facilities designated by the Director as needing a stormwater permit, and any discharges of stormwater associated with industrial activity that do not meet the description of an industrial activity covered by Sectors A-AC.

AD.1.1 *Eligibility for Permit Coverage.* Because this sector is primarily intended for use by discharges designated by the Director as needing a stormwater permit (which is an atypical circumstance), and your facility may or may not normally be discharging stormwater associated with industrial activity, you must obtain the Director's written permission to use this permit prior to submitting an NOI. If you are authorized to use this permit, you will still be required to ensure that your discharges meet the basic eligibility provisions of this permit at Part 1.2.

AD.2 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

The Director will establish any additional site specific SWPPP requirements for your facility above and beyond those found in Part 2 prior to authorizing you to be covered by this permit. Additional requirements necessary for protection of water quality or compliance with the Act would be based on the nature of activities at your facility and your stormwater discharges.

AD.3 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Table AD-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Non-Classified Facilities, Others (SIC N/A)	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

The Director will establish any additional monitoring and reporting requirements for your facility prior to authorizing you to be covered by this permit. Additional monitoring requirements would be based on the nature of activities at your facility and your stormwater discharges.

Part 5. State and Tribal Specific Requirements

Permit conditions applicable to specific states, Indian country, or territories will be addressed in the final permit through the 401 certification process.

Appendix A
Definitions, Abbreviations and Acronyms

Appendix A. Definitions.

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 United States. 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.

Co-located Industrial Activities – occurs when a facility has industrial activities included in more than one industrial sector. Stormwater discharges from co-located activities must comply with requirements for all relevant sectors.

Control Measure - refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

Director - a regional administrator of the Environmental Protection Agency or an authorized representative.

Discharge - when used without qualification, means the "discharge of a pollutant."

Discharge of a pollutant - any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharge-related activities - activities which cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

Facility or Activity - any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

Impaired Water – a water is impaired if it does not meet its designated use(s). For purposes of this permit 'impaired' refers to threatened and impaired waters in categories 4a (those for which TMDLs have been established), 4b (those for which existing controls such as permits are expected to resolve the impairment), and 5 (those needing a TMDL) of a state's or tribe's integrated report on water quality. Impaired waters compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established.

Indian Country - (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-

of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian Tribe. (18 U.S.C. 1151)

Industrial Activity - the 11 categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity."

Industrial Stormwater - stormwater runoff associated with the definition of "stormwater discharges associated with industrial activity."

Municipal Separate Storm Sewer - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
(ii) Designed or used for collecting or conveying stormwater;
(iii) Which is not a combined sewer; and
(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

New Discharger - as used in this permit, means an operator applying for coverage under this permit for discharges not covered previously under an NPDES general or individual permit.

New Source - any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

No exposure - all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.

Owner or operator - the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

Person - an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Point source - any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Primary industrial activity - includes any activities performed on-site which are identified in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix); and activities which are identified by the facility's primary SIC code. [It is recommended that this determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged.] Narrative descriptions 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.

Pollutant - dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water.

Qualified Personnel - Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and who can also evaluate the effectiveness of BMPs.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts110, 177, and 302 for complete definitions and reportable quantities for which notification is required.

Runoff coefficient - the fraction of total rainfall that will appear at the conveyance as runoff.

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 the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

Special Aquatic Sites - sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally

recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Stormwater - stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Discharges Associated with Construction Activity - a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. (See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15) for the two regulatory definitions on regulated stormwater associated with construction sites.)

Stormwater Discharges Associated with Industrial Activity - the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; 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; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in Appendix D of this permit. The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point souce discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Waters of the United States - means:

- All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
- All interstate waters, including interstate "wetlands";
- All other waters, such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such waters
  a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
  b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  c. Which are or could be used for industrial purposes by industries in interstate commerce;
- All impoundments of waters otherwise defined as waters of the United States under this definition;
- Tributaries of waters identified in paragraphs (1) through (4) of this definition;
- The territorial sea; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1 through 6 of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds for steam electric generation stations as specified in 40 CFR 423) which also meet the criteria of this definition, are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

Water Quality Impaired – See 'Impaired Water'.

"You" and "Your" - as used in this permit, are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of "you" and "your" refers to a particular facility and not to all facilities operated by a particular entity. For example, "you must submit" means the permittee must submit something for that particular facility. Likewise, "all your discharges" would refer only to discharges at that one facility.

A.2. ABBREVIATIONS AND ACRONYMS

ACHP – Advisory Council on Historic Preservation

APA – Administrative Procedure Act

BAT – Best Available Technology Economically Achievable

BOD5 – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CAA – Clean Air Act

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CGP – Construction General Permit

COD – Chemical Oxygen Demand

CSGWPP – Comprehensive State Ground Water Protection Program

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

ELG – Effluent Limitations Guidelines

EPA – U. S. Environmental Protection Agency

EPCRA – Emergency Planning and Community Right-to-know Act

ESA – Endangered Species Act

FEMA – U. S. Federal Emergency Management Agency

FWS – U. S. Fish and Wildlife Service

LA – Load Allocation

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRHP – National Register of Historic Places

NSPS – New Source Performance Standard

NTU – Nephelometric Turbidity Unit

NURP – Nationwide Urban Runoff Program

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

OSM – U. S. Office of Surface Mining

POTW – Publicly Owned Treatment Works

PRA – Paperwork Reduction Act

RCRA – Resource Conservation and Recovery Act

RFA – Regulatory Flexibility Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SBREFA – Small Business Regulatory Enforcement Fairness Act

SDWA – Safe Drinking Water Act

SHPO – State Historic Preservation Officer

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasure

SWPPP – Stormwater Pollution Prevention Plan

THPO – Tribal Historic Preservation Officer

TMDL – Total Maximum Daily Load

TRI – Toxic Release Inventory

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

UMRA – Unfunded Mandates Reform Act

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard

Appendix B
Standard Permit Conditions

Appendix B. Standard Permit Conditions.

Standard permit conditions in Appendix B are consistent with the general permit provisions required under 40 CFR 122.41. Additional instructions may be included, however these standard conditions shall apply directly as incorporated from regulations.

B.1. Duty To Comply

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

A. You must comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

B. Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp.13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.

1. Criminal Penalties.

1.1 Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties or not more than $50,000 per day of violation or by imprisonment of not more than two years, or both.

1.2. *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a

knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

1.3. *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than $250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision be subject to a fine of not more than $1,000,000 and can fined up to $2,000,000 for second or subsequent convictions.

1.4. *False Statement.* The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that 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 non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

2. *Civil Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $32,500 per day for each violation).

3. *Administrative Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows

3.1. *Class I Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $11,000 per violation,

with the maximum amount of any Class I penalty assessed not to exceed $32,500).

3.2. *Class II Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $157,500).

B.2. Duty to Reapply

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain a new permit.

B.3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for you 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.

B.4. Duty to Mitigate

You must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

B.5. Proper Operation and Maintenance

You 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 you to achieve compliance with the conditions of this permit, including the requirements of your SWPPP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

B.6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B.7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privileges.

B.8. Duty to Provide Information

You must furnish to EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), within a reasonable time, any information which EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA upon request, copies of records required to be kept by this permit.

B.9. Inspection and Entry

You must allow EPA, or an authorized representative (including an authorized contractor acting as a representative of EPA), upon presentation of credentials and other documents as may be required by law, to:

A. Enter upon your 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 purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B.10. Monitoring and Records

A. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

B. You must retain records of all monitoring information, including all calibration and maintenance records and 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 five years from the date of the sample, measurement, report or application. This period may be extended by request of EPA at any time.

C. Records of monitoring information must include:

1. The date, exact place, and time of sampling or measurements;

2. The individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed

4. The individual(s) who performed the analyses;

5. The analytical techniques or methods used; and

6. The results of such analyses.

D. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.

E. 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 shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

B.11. Signatory Requirements

A. All applications, including NOIs, must be signed as follows:

1. For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

3. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

B. All reports, including SWPPPs, inspection reports, annual reports, monitoring reports, reports on training and other information required by this permit must be signed by a person described in Appendix B, Subsection 11.A above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described in Appendix B, Subsection 11.A;

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

3. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

C. Changes to Authorization. If an authorization under Appendix B, Subsection 11.B is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Subsection 11.B must be submitted to EPA prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Any person signing documents required under the terms of this permit must include the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

E. The CWA provides that 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 non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

B.12. Reporting Requirements

A. Planned changes. You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.42(a)(1).

B. Anticipated noncompliance. You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Transfers. This permit is not transferable to any person except after notice to EPA. EPA may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR §122.61; in some cases, modification or revocation and reissuance is mandatory.)

D. Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.

1. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms (paper or electronic) provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.

2. If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.

3. Calculations for all limitations which require averaging of measurements must use an arithmetic mean and non-detected results must be incorporated in calculations as the limit of quantitation for the analysis.

E. Compliance schedules. 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.

F. Twenty-four hour reporting.

1 You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2 The following shall be included as information which must be reported within 24 hours under this paragraph.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR §122.41(g).)

b. Any upset which exceeds any effluent limitation in the permit

c. Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA in the permit to be reported within 24 hours. (See 40 CFR §122.44(g).)

3. EPA may waive the written report on a case-by-case basis for reports under Appendix B, Subsection 12.F.2 if the oral report has been received within 24 hours.

G. Other noncompliance. You must report all instances of noncompliance not reported under Appendix B, Subsections 12.D, 12.E, and 12.F, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix B, Subsection 12.F.

H. Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.

B.13. Bypass

A. Definitions.

1. Bypass means the intentional diversion of waste streams from any portion of a treatment facility

2. Severe property damage means substantial physical damage to property, damage to the treatment facilities 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. Bypass not exceeding limitations. You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix B, Subsections 13.C and 13.D.

C. Notice–

1. Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass.

2. Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix B, Subsection 12.F (24-hour notice).

D. Prohibition of bypass.

1. Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:

a. Bypass was unavoidable 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 back-up 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 preventive maintenance; and

c. You submitted notices as required under Appendix B, Subsection 13.C.

2. EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix B, Subsection 13.D.1.

B.14. 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 your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive 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 Appendix B, Subsection 14.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 permittee 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 you can identify the cause(s) of the upset;

2. The permitted facility was at the time being properly operated; and

3. You submitted notice of the upset as required in Appendix B, Subsection 12.F.2.b (24 hour notice).

4. You complied with any remedial measures required under Appendix B, Subsection 4.

D. Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, has the burden of proof.

Appendix C
Areas Covered

Appendix C. Permit Area.

EPA can only provide permit coverage in these areas and for classes of discharges that are outside the scope of a State's NPDES program authorization. For stormwater discharges outside the areas of coverage identified below, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.1 EPA Region 1: Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 1:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
CTR0500I	Indian Country lands within the State of Connecticut
MAR050000	Commonwealth of Massachusetts, except Indian Country lands
MAR05000I	Indian Country lands within the Commonwealth of Massachusetts
MER05000I	Indian Country lands within the State of Maine
NHR050000	State of New Hampshire
RIR05000I	Indian Country lands within the State of Rhode Island
VTR05000F	Federal facilities in the State of Vermont

For stormwater discharges in EPA Region 1 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.2 EPA Region 2: New Jersey, New York, Puerto Rico, Virgin Islands.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 2:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
PRR050000	Commonwealth of Puerto Rico

For stormwater discharges in EPA Region 2 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.3 EPA Region 3: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 3:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
DCR050000	District of Columbia
DER05000F	Federal facilities in the State of Delaware

For stormwater discharges in EPA Region 3 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.4 EPA Region 4: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee (Coverage not available under this permit).

For stormwater discharges in EPA Region 4, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.5 EPA Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 5:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
MIR05000I	Indian Country lands within the State of Michigan
MNR05000I	Indian Country lands within the State of Minnesota
WIR05000I	Indian Country lands within the State of Wisconsin

For stormwater discharges in EPA Region 5 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.6 EPA Region 6: Arkansas, Louisiana, Oklahoma, Texas, and New Mexico (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands).

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 6:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
LAR05000I	Indian Country lands within the State of Louisiana
NMR050000	The State of New Mexico, except Indian Country lands
NMR05000I	Indian Country lands within the State of New Mexico, except Ute Mountain Reservation lands that are covered under Colorado permit COR05000I listed in Part C.8 and Navajo Reservation lands that are covered under Arizona permit AZR05000I listed in Part C.9.
OKR05000I	Indian Country lands within the State of Oklahoma

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
OKR05000F	Facilities in the State of Oklahoma not under the jurisdiction of the Oklahoma Department of Environmental Quality, except those on Indian Country lands. EPA jurisdiction facilities include SIC Codes 1311, 1381, 1382, 1389, and 5171 and point source (but not nonpoint source) discharges associated with agricultural production, services, and silviculture.
TXR05000F	Facilities in the State of Texas not under the jurisdiction of the Texas Commission on Environmental Quality, except those on Indian Country lands. EPA-jurisdiction facilities include SIC Codes 1311, 1321, 1381, 1382, and 1389 (other than oil field service company "home base" facilities).
TXR05000I	Indian Country lands within the State of Texas

For stormwater discharges in EPA Region 6 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.7 EPA Region 7: Iowa, Kansas, Missouri, Nebraska (Coverage not available under this permit).

For stormwater discharges in EPA Region 7, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.8 EPA Region 8: Colorado, Montana, North Dakota, South Dakota, Wyoming, Utah (Coverage not available under this permit).

For stormwater discharges in EPA Region 8 please contact EPA Region 8 or your State NPDES permitting authority to obtain an NPDES permit.

C.9 EPA Region 9: Arizona, California, Hawaii, Nevada, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Confederated Tribes of the Goshute Reservation in Utah and Nevada, Indian Country lands within the State of Arizona including the Navajo Reservation in Utah and New Mexico and Arizona, the Duck Valley Reservation in Idaho, and the Fort McDermitt Reservation in Oregon.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 9:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
ASR050000	The islands of American Samoa
AZR050000	The State of Arizona, except Indian Country lands
AZR05000I	Indian Country lands within the State of Arizona, including Navajo Reservation lands in New Mexico and Utah
CAR05000I	Indian Country lands within the State of California
GUR050000	The island of Guam

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
JAR050000	Johnston Atoll
MWR050000	Midway Island and Wake Island
NIR050000	Commonwealth of the Northern Mariana Islands
NVR05000I	Indian Country lands within the State of Nevada, including the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Confederated Tribes of the Goshute Reservation in Utah

For stormwater discharges in EPA Region 9 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

C.10 Region 10: Alaska, Idaho (except see Region 9 for Duck Valley Reservation lands), Oregon (except see Region 9 for Fort McDermitt Reservation), Washington.

This permit offers NPDES permit coverage for stormwater discharges associated with industrial activity from the following areas in EPA Region 10:

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority
AKR050000	The State of Alaska, except Indian Country lands
AKR05000I	Indian Country lands within Alaska
IDR050000	The State of Idaho, except Indian Country lands
IDR05000I	Indian Country lands within the State of Idaho, except Duck Valley Reservation lands, which are covered under Nevada permit NVR05000I listed in Part C.9
ORR05000I	Indian Country lands within the State of Oregon, except Fort McDermitt Reservation lands, which are covered under Nevada permit NVR05000I listed in Part C.9
WAR05000I	Indian Country lands within the State of Washington
WAR05000F	Federal facilities in the State of Washington, except those located on Indian Country lands

For stormwater discharges in EPA Region 10 outside the areas of coverage identified above, please contact your State NPDES permitting authority to obtain a State-issued NPDES permit.

Appendix D
Activities Covered

Appendix D. Facilities and Activities Covered

Your permit eligibility is limited to discharges from facilities in the "sectors" of industrial activity summarized in Table D-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to "sectors" in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

Table D-1. Sectors of Industrial Activity Covered by This Permit	
SIC Code or Activity Code[1]	**Activity Represented**
SECTOR A: TIMBER PRODUCTS	
2411	Log Storage and Handling (Wet deck storage areas authorized only if no chemical additives are used in the spray water or applied to the logs)
2421	General Sawmills and Planing Mills
2426	Hardwood Dimension and Flooring Mills
2429	Special Product Sawmills, Not Elsewhere Classified
2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W)
2441-2449	Wood Containers
2451, 2452	Wood Buildings and Mobile Homes
2491	Wood Preserving
2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified
SECTOR B: PAPER AND ALLIED PRODUCTS	
2611	Pulp Mills
2621	Paper Mills
2631	Paperboard Mills
2652-2657	Paperboard Containers and Boxes
2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes
SECTOR C: CHEMICALS AND ALLIED PRODUCTS	
2812-2819	Industrial Inorganic Chemicals
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
2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
2861-2869	Industrial Organic Chemicals
2873-2879	Agricultural Chemicals
2891-2899	Miscellaneous Chemical Products

Table D-1. Sectors of Industrial Activity Covered by This Permit	
SIC Code or Activity Code[1]	**Activity Represented**
3952 (limited to list)	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
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	
3211	Flat Glass
3221, 3229	Glass and Glassware, Pressed or Blown
3231	Glass Products Made of Purchased Glass
3241	Hydraulic Cement
3251-3259	Structural Clay Products
3261-3269	Pottery and Related Products
3271-3275	Concrete, Gypsum, and Plaster Products
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
3331-3339	Primary Smelting and Refining of Nonferrous Metals
3341	Secondary Smelting and Refining of Nonferrous Metals
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
3363-3369	Nonferrous Foundries (Castings)
3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)	
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
2911	Petroleum Refineries

Table D-1. Sectors of Industrial Activity Covered by This Permit	
SIC Code or Activity Code[1]	**Activity Represented**
SECTOR J: MINERAL MINING AND DRESSING	
1411	Dimension Stone
1422-1429	Crushed and Broken Stone, Including Rip Rap
1442, 1446	Sand and Gravel
1455, 1459	Clay, Ceramic, and Refractory Materials
1474-1479	Chemical and Fertilizer Mineral Mining
1481	Nonmetallic Minerals Services, Except Fuels
1499	Miscellaneous Nonmetallic Minerals, Except Fuels
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES	
HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS	
LF	Landfills, Land Application Sites, and Open Dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described in Table D-1) including those that are subject to regulation under subtitle D of RCRA
SECTOR M: AUTOMOBILE SALVAGE YARDS	
5015	Automobile Salvage Yards
SECTOR N: SCRAP RECYCLING FACILITIES	
5093	Scrap Recycling Facilities
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES	
SE	Steam Electric Generating Facilities, including coal handling sites
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
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

Table D-1. Sectors of Industrial Activity Covered by This Permit	
SIC Code or Activity Code[1]	**Activity Represented**
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. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA.
SECTOR U: FOOD AND KINDRED PRODUCTS	
2011-2015	Meat Products
2021-2026	Dairy Products
2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
2041-2048	Grain Mill Products
2051-2053	Bakery Products
2061-2068	Sugar and Confectionery Products
2074-2079	Fats and Oils
2082-2087	Beverages
2091-2099	Miscellaneous Food Preparations and Kindred Products
2111-2141	Tobacco Products
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 (except 3111)	Leather and Leather Products, Except Leather Tanning and Finishing (see Sector Z)
SECTOR W: FURNITURE AND FIXTURES	
2434	Wood Kitchen Cabinets
2511-2599	Furniture and Fixtures
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

Table D-1. Sectors of Industrial Activity Covered by This Permit	
SIC Code or Activity Code[1]	**Activity Represented**
3951-3955 (except 3952 facilities as specified in 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	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
3911-3915	Jewelry, Silverware, and Plated Ware
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY	
3511-3599 (except 3571-3579)	Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC)
3711-3799 (except 3731, 3732)	Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R)
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS	
3571-3579	Computer and Office Equipment
3612-3699	Electronic and Electrical Equipment and Components, Except Computer Equipment
3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks
SECTOR AD: NON-CLASSIFIED FACILITIES	
N/A	Other stormwater discharges designated by the Director as needing a permit (see 40 CFR 122.26(a)(9)(i)(C) & (D)) or any facility discharging stormwater associated with industrial activity not described by any of Sectors A-AC. NOTE: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.

[1] A complete list of SIC Codes (and conversions from the newer North American Industry Classification System" (NAICS)) can be obtained from the Internet at www.census.gov/epcd/www/naics.html or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

Appendix E
Eligibility and screening procedures relating to species listed and critical habitat designated under the Endangered Species Act

Appendix E. Eligibility and screening procedures relating to species listed and critical habitat designated under the Endangered Species Act.

You must meet one or more of the following six criteria (A-F) to be eligible for coverage under the permit:

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat are in proximity to your facility as defined in Addendum G; or

Criterion B. Consultation between a Federal agency and the Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the "Services") under section 7 of the ESA has been concluded. Consultations can be either formal or informal, and would have occurred only as a result of a separate federal action (e.g., during application for an individual wastewater discharge permit, the issuance of a wetlands dredge and fill permit, or as a result of a NEPA review).

The consultation must have addressed the effects of the facility's stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and resulted in either:

i. a biological opinion finding no jeopardy to federally-listed species or destruction/adverse modification of federally-designated critical habitat, or

ii. written concurrence from the Service(s) with a finding that the facility's stormwater discharges associated with industrial activity and allowable non-stormwater discharges are not likely to adversely affect federally-listed species or federally-designated critical habitat; or

Criterion C. The industrial activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of the stormwater discharges associated with industrial activity and allowable non-stormwater discharges on federally-listed species and federally-designated critical habitat; or

Criterion D. Coordination between the operator and the Fish and Wildlife Service and/or the National Marine Fisheries Service has been concluded. The coordination must have addressed the effects of the facility's storm water discharges associated with industrial activity and allowable non-storm water discharges on federally-listed threatened or endangered species and federally-designated critical habitat. The result of the coordination must be a written statement from the Services that there are not likely to be any adverse affects to federally-listed species or federally-designated critical habitat. Any conditions or prerequisites deemed necessary to achieve no adverse effects become eligibility conditions for MSGP coverage; or

Criterion E. Stormwater discharges associated with industrial activity and allowable non-stormwater discharges are not likely to adversely affect any federally-listed endangered and threatened ("listed") species or designated critical habitat ("critical habitat"); or

Criterion F. The facility's stormwater discharges associated with industrial activity and allowable non-stormwater discharges were already addressed in another operator's valid certification of eligibility under Criteria A-E which included the industrial activities and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in proximity to the facility. To certify eligibility under this criterion there must be no lapse of coverage in the other operator's certification. By certifying eligibility under this criterion, you agree to comply with any measures or controls upon which the other operator's certification was based. You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility requirements of the criteria in this section to remain eligible for coverage under this permit. Such terms and conditions must be documented and incorporated into your Stormwater Pollution Prevention Plan (SWPPP).

Assessing Your Facility Discharges

You must follow the procedures in this addendum to assess the potential effects of stormwater discharges and stormwater discharge-related activities on listed species and their critical habitat. When evaluating these potential effects, you must evaluate your entire facility. For purposes of this Addendum, the term "facility" is inclusive of the term "Action Area." Action area is defined in 50 CFR §402.02 as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. This includes areas beyond the footprint of the facility that may be affected by stormwater discharges and stormwater discharge related activities. "Facility" is defined in Appendix A. Note that dischargers who are eligible and able to certify eligibility under Criterion B, C, D, or F because of a previously issued ESA section 10 permit, a previously completed ESA section 7 consultation, or because their activities were already addressed in another discharger's certification of eligibility may proceed directly to
Step Four.

Step One: *Determine if Listed Threatened or Endangered Species and Critical Habitat are Present On or Near Your Facility*.

You must first determine whether federally-listed species commonly reside in your area. Federally-listed threatened and endangered species are usually found in county-specific or sometimes township-specific listings. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NOAA Fisheries Service), and State or Tribal Heritage Centers often maintain such lists on their internet sites. The types of species that may be present determine which Service office you should contact (in general, National Marine Fisheries Service has jurisdiction over marine, estuaries, and anadromous species). Visit www.epa.gov/npdes/stormwater/cgp to find the appropriate site for your state or check with your local office. If there are listed species in your county or township, you must then determine, as best you are able, whether any of the species are located on or near your property (use the Services or Heritage Centers, as necessary).

You must also check to see if critical habitat has been designated and whether such areas overlap or are near your facility by contacting your local FWS, NOAA Fisheries Service, or

State or Tribal Heritage Center. Critical habitat areas may be designated independently from the listed species for your county, so even if there are no listed species in your county or township, you must still contact one of the agencies mentioned above to determine if there are any critical habitat areas on or near your project area. You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226 http://www.access.gpo.gov.

If there are no listed species in your county or township, no critical habitat areas on or near your project area, or if your local FWS, NOAA Fisheries Service, or State or Tribal Heritage Center indicates that listed species are not a concern in your part of the county or township, you have satisfied your eligibility obligations under Criterion A (check box A on the Notice of Intent Form). If there are listed species and if your local FWS, NOAA Fisheries Service, or State or Tribal Heritage Center indicates that these species could exist on or near your project area, you will need to do one or more of the following:

Conduct visual inspections. This method may be particularly suitable for facilities that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for facilities that discharge directly into municipal separate storm sewer systems.

- Conduct a formal biological survey (typically performed by environmental consulting firms). In some cases, particularly for larger facilities with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located on or near the project area and whether there are likely adverse effects to such species. A biological survey may in some cases be useful in conjunction with Steps Two, Three or Four of these instructions.
- Conduct an environmental assessment under the National Environmental Policy Act (NEPA). Such reviews may indicate if listed species are in proximity to the facility. Coverage under this MSGP may trigger such a review for new sources (that is, dischargers subject to New Source Performance Standards under section 306 of the Clean Water Act). Other facilities might require review under NEPA for other reasons, such as federal funding or other federal involvement in the facility. If listed threatened or endangered species or critical habitat are present in the project area, you must look at impacts to species and/or habitat when following Steps Two through Four. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this MSGP may require measures to protect critical habitat that are separate from those to protect listed species.

Step Two: *Determine if your facility's Stormwater Discharge Associated With Industrial Activity or Allowable Non-Stormwater Discharges Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat*

To receive MSGP coverage, you must assess whether your stormwater discharges associated with industrial activity or allowable non-stormwater discharges are likely to adversely affect listed threatened or endangered species or designated critical habitat that are present on or near your facility. Potential adverse effects from stormwater discharges associated with industrial activity include:

- **Hydrological.** Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary

with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Industrial activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.

- **Habitat.** Site development, grading or other surface disturbances from industrial activities, including storage of materials and the installation or placement of stormwater BMPs, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.
- **Toxicity.** In some cases pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your facility is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you must contact the appropriate office of the FWS, NOAA Fisheries Service or Natural Heritage Center for assistance. If adverse effects are not likely, you have satisfied your eligibility obligations under Criterion E (check box E on the NOI form) and can apply for coverage under the MSGP. If your stormwater discharge may adversely affect listed species or critical habitat, you must follow Step Three.

Step Three: *Determine if Measures Can Be Implemented to Avoid Adverse Effects.*

If you make a preliminary determination that adverse effects to listed species and/or critical habitat are likely to occur, you can still receive coverage under Criterion E if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for MSGP coverage. These measures may be relatively simple, e.g., re-routing a stormwater discharge to bypass an area where species are located, relocating BMPs, or changing the "footprint" of the industrial activity. If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must follow Step Four (iii).

Step Four: *Determine if the Eligibility Requirements of Criterion B, C, D or F Can Be Met.*

Where adverse effects are likely and you are uncertain about how to avoid or eliminate the likelihood of adverse effects, you must contact the FWS and/or NOAA Fisheries Service (see subpart iii below). However, you may still be eligible for MSGP coverage if any likely adverse effects can be addressed through meeting Criterion B, C, D, or F as follows:

i. A consultation under ESA Section 7 has been performed for your industrial activity (see Criterion B).

ii. An incidental taking permit under Section 10 of the ESA has been issued for your activity (see Criterion C). Stormwater discharges from your industrial facility may be authorized by this MSGP if some activity is authorized through the issuance of a permit under section 10 of the ESA and that authorization addressed the effects of your stormwater discharges on federally-listed species and designated critical habitat. You must follow FWS and/or NOAA Fisheries Service procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NOAA Fisheries Service). Application instructions for section 10 permits for FWS and NOAA Fisheries Service can be obtained by accessing the FWS and NOAA Fisheries Service websites (http://www.fws.gov and

http://www.nmfs.noaa.gov) or by contacting the appropriate FWS and NOAA Fisheries Service regional office.

iii. You have coordinated your activities with the appropriate Service office (see Criterion D). In the absence of any other conditions set forth in Step Four, you may still be able to qualify for coverage under this MSGP if you coordinate with the FWS or NOAA Fisheries Service and the Service provides a letter or memorandum concluding that the direct and indirect effects of permitting your stormwater discharges will be unlikely to adversely affect listed species or to adversely modify designated critical habitat. If you adopt measures to avoid or eliminate adverse effects, per the Service's requirements or recommendations, you must abide by those measures for the duration of your coverage under the MSGP. Any such measures must be described in the Stormwater Pollution Prevention Plan and are enforceable MSGP conditions and/or conditions for meeting the eligibility criteria in Subpart 1.2.3.6.

iv. You are covered under the eligibility certification of another operator for the project area (see Criterion F). Your stormwater discharges were already addressed in another discharger's certification of eligibility under Criteria A through E, which also included your facility and determined that federally listed endangered or threatened species or designated critical habitat would not be jeopardized. To certify eligibility under this criterion there must be no lapse of coverage in the other operator's certification. By certifying eligibility under Criterion F, you agree to comply with any measures or controls upon which the other discharge certification under Criterion B, C, or D was based. Certification under Criterion F is discussed in more detail in the Fact Sheet that accompanies this permit.

You must comply with any terms and conditions imposed under the eligibility requirements of Criterion A through F to ensure that your stormwater discharges are protective of listed species and/or critical habitat. Such terms and conditions must be incorporated in the project's Stormwater Pollution Prevention Plan (SWPPP). If the eligibility requirements cannot be met, then you are not eligible for coverage under this MSGP. In these instances, you may consider applying to EPA for an individual permit.

Appendix F
Eligibility and screening procedures relating to historic properties and the National Historic Preservation Act

Appendix F – Eligibility and screening procedures relating to historic properties and the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings" on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term Federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program of a Federal agency including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties. See 36 CFR 800.16(1).

EPA's issuance of the Multi-Sector General Permit is a Federal undertaking within the meaning of the NHPA regulations. To address any issues relating to historic properties in connection with issuance of the permit, EPA has included criteria for certifications by applicants that potential impacts of their covered activities on historic properties have been appropriately considered and addressed. Although individual applications for coverage under the general permit do not constitute separate Federal undertakings, the screening criteria and certifications provide an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit. Applicants seeking coverage under the MSGP are thus required to make certain certifications regarding the potential effects of their stormwater discharge, allowable non-stormwater discharge, and discharge-related activities on properties listed or eligible for listing on the National Register of Historic Places.

You must meet one or more of the following four criteria (A-D) to be eligible for coverage under this permit:

Criterion A. Your stormwater discharges and allowable non-stormwater discharges do not have the potential to have an effect on historic properties and you are not constructing or installing stormwater BMPs – or, for existing facilities seeking renewal of previous permit coverage, new BMPs – on your site that cause less than 1 acre of subsurface disturbance; or

Criterion B. Your discharge-related activities (i.e., construction and/or installation of stormwater best management practices that involve subsurface disturbance) will not affect historic properties; or

Criterion C. Your stormwater discharges, allowable non-stormwater discharges, and discharge-related activities have the potential to have an effect on historic properties, and you have obtained and are in compliance with a written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other tribal representative that outlines all measures you will carry out to mitigate or prevent any adverse effects on historic properties; or

Criterion D. You have contacted the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other tribal representative in writing informing them that

you have the potential to have an effect on historic properties and you did not receive a response within 30 days.

Activities with No Potential to Have an Effect on Historic Properties

A determination that a Federal undertaking has no potential to have an effect on historic properties fulfills an agency's obligations under the NHPA. EPA has reason to believe that the vast majority of activities authorized under the MSGP have no potential to have effects on historic properties. The purpose of this permit is to control pollutants that may be transported in stormwater runoff from industrial facilities. EPA does not anticipate effects on historic properties from the pollutants in the stormwater and allowable non-stormwater discharges from these industrial facilities. Thus, to the extent EPA's issuance of this general permit authorizes discharges of such constituents, confined to existing stormwater channels or natural drainage areas, the permitting action does not have the potential to cause effects on historic properties.

In addition, the overwhelming majority of sources covered under this permit will be facilities that are seeking renewal of previous permit coverage. These existing dischargers should have already addressed NHPA issues in the 2000 MSGP as they were required to certify that they were either not affecting historic properties or they had obtained written agreement from the applicable State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) regarding methods of mitigating potential impacts. Both existing and new dischargers must follow the historic property screening process to determine their eligibility. EPA is not aware of any impacts on historic properties under the 2000 MSGP, or, for that matter, any need for a written agreement. Therefore, to the extent this permit authorizes renewal of prior coverage without relevant changes in operations, it has no potential to have an effect on historic properties.

Activities with Potential to Have an Effect on Historic Properties

EPA believes this permit may have some potential to have an effect on historic properties where the MSGP authorizes the construction and/or installation of stormwater best management practices (BMPs) that involve subsurface disturbance and impact less than 1 acre of land. (Ground disturbances of 1 acre or more require coverage under a different permit, the Construction General Permit.) Where you have to disturb the land through the construction and/or installation of BMPs, there is a possibility that underground artifacts, records, or remains associated with historic properties could be impacted. Therefore, if you are establishing new or altering existing BMPs to manage your stormwater that will involve subsurface ground disturbance of less than 1 acre, you will need to ensure that historic properties will not be impacted by your activities or that you are in compliance with a written agreement with the SHPO, THPO, or other tribal representative that outlines all measures you will carry out to mitigate or prevent any adverse effects on historic properties.

Examples of BMPs Which Involve Subsurface Disturbance

EPA reviewed all BMPs currently employed to determine which practices involve some level of earth disturbance. The following is a non-inclusive list of BMPs that are presumptively expected to cause subsurface ground disturbance:

Dikes	Berms	Catch Basins
Ponds	Ditch	Trench
Culvert	Land manipulation: contouring, sloping, and grading	Channels
Perimeter Drain	Swales	Other

EPA cautions dischargers that this list is non-inclusive. Any installation and/or construction of BMPs that involve earth disturbing activities that are not on this list will need to be further examined for the potential to affect historic properties.

Historic Property Screening Process

You should follow the following screening process in order to certify your compliance with historic property eligibility requirements under this permit (see Section 1.2.4.7). The following three steps describe how applicants can meet the permit eligibility criteria for protection of historic properties under this permit:

Step One: *Are you an existing facility that is reapplying for certification under the 2006 MSGP?*

If you are an existing facility you should have already addressed NHPA issues. To gain coverage under the 2000 MSGP you were required to certify that you were either not affecting historic properties or had obtained written agreement from the relevant SHPO or THPO regarding methods of mitigating potential impacts. As long as you are not constructing or installing any new stormwater BMPs then you have met eligibility Criterion A of the MSGP. After you submit your NOI, there is a 30-day waiting period during which the SHPO, THPO, or other tribal representative may review your NOI. The SHPO, THPO, or other tribal representative may request that EPA hold authorization based on concerns about potential adverse impacts to historic properties.

If you are an existing facility and will construct or install stormwater BMPs that require subsurface disturbance of less than 1 acre then you should proceed to Step 2.

If you are a new facility then you should proceed to Step 2.

Step Two: *Are You Constructing or Installing Any Stormwater BMPs That Require Subsurface Disturbance of Less Than 1 acre?*

If, as part of your coverage under this permit, you are not building or installing BMPs on your site that cause less than 1 acre of subsurface disturbance, then your discharge-related activities do not have the potential to have an effect on historic properties. You have no further obligations relating to historic properties. You have met eligibility Criterion A of the MSGP. After you submit your NOI, there is a 30-day waiting period during which the SHPO, THPO, or other tribal representative may review your NOI. The SHPO, THPO, or other tribal representative may request that EPA hold authorization based on concerns about potential adverse impacts to historic properties.

If the answer to the Step 2 question is yes, then you should proceed to Step 3.

Step 3: *Have Prior Earth Disturbances Determined That Historic Properties Do Not Exist, or Have Prior Disturbances Precluded the Existence of Historic Properties?*

If previous construction either revealed the absence of historic properties or prior disturbances preclude the existence of historic properties, then you have no further obligations relating to historic properties. You have met eligibility Criterion B of the MSGP. After you submit your NOI, there is a 30-day waiting period during which the SHPO, THPO, or other tribal representative may review your NOI. The SHPO, THPO, or other tribal representative may request that EPA hold authorization based on concerns about potential adverse impacts to historic properties.

If the answer to the Step 3 question is no, then you should proceed to Step 4.

Step 4: *Contact the Appropriate Historic Property Authorities*

Where you are building and/or installing BMPs affecting less than 1 acre of land to control stormwater or allowable non-stormwater discharges associated with this permit, and the answer to Step 3 is no, then you should contact the relevant SHPO, THPO, or other tribal representative to determine the likelihood that subsurface artifacts, records, or remains are potentially present on your site. This may involve examining local records to determine if historic artifacts have been found in nearby areas, as well as limited subsurface examination carried out by qualified professionals.

If through this process it is determined that such historic properties potentially exist and may be impacted by your construction or installation of BMPs, you should contact the relevant SHPO, THPO, or tribal representative in writing and request to discuss mitigation or prevention of any adverse effects. The letter should describe your facility, the nature and location of subsurface disturbance activities that are contemplated, any known or suspected historic properties in the area, and any anticipated effects on such properties. The letter should state that if the SHPO, THPO, or tribal representative does not respond within 30 days of receiving your letter, you may submit your NOI. EPA encourages applicants to contact the appropriate authorities as soon as possible in the event of a potential adverse effect to an historic property.

If you receive a response within 30 days and enter into, and comply with, a written agreement with the SHPO, THPO, or other tribal representative regarding how to address any adverse impacts on historic properties, you have met eligibility Criterion C. After you submit your NOI, there is a 30-day waiting period during which the SHPO, THPO, or other tribal representative may review your NOI. The SHPO, THPO, or other tribal representative may request that EPA hold authorization based on concerns about potential adverse impacts to historic properties.

If you receive a response within 30 days but an agreement cannot be reached between you and the SHPO, THPO, or other tribal representative, you should contact the appropriate EPA Regional Office (addresses listed in Part 3.8) or EPA Headquarters (Water Permits Division, Mail Code 4203M, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0001).

If you have contacted the SHPO, THPO, or other tribal representative in writing regarding your potential have an effect on historic properties and did not receive a response within 30 days, you have met eligibility Criterion D. After you submit your NOI, there is a 30-day waiting period during which the SHPO, THPO, or other tribal representative may review

your NOI. The SHPO, THPO, or other tribal representative may request that EPA hold authorization based on concerns about potential adverse impacts to historic properties.

Addresses for State Historic Preservation Officers and Tribal Historic Preservation Officers may be found on the Advisory Council on Historic Preservation's website (http://www.achp.gov/programs.html). In instances where a Tribe does not have a Tribal Historic Preservation Officer, you should contact the appropriate Tribal government office when responding to this permit eligibility condition.

You are reminded that you must comply with applicable State, Tribal, and local laws concerning protection of historic properties and include documentation supporting your determination of permit eligibility with regard to Part 1.2.4.7 (Historic Places) within your Stormwater Pollution Prevention Plan (SWPPP) (See Part 2.1.6.2 for documentation regarding historic properties that must be included in your Stormwater Pollution Prevention Plan).

Appendix G
Information required for the Notice of Intent (NOI)

Appendix G – Information required for the Notice of Intent (NOI)

As part of applying for coverage under MSGP 2006, the permittee will be required to submit a Notice of Intent (NOI). The following is the preliminary updated NOI form that must be submitted.

NPDES Form _ _ _ _ - _

EPA

United States Environmental Protection Agency
Washington, DC 20460
Notice of Intent (NOI) for Stormwater Discharges Associated with INDUSTRIAL ACTIVITY under the Multi-Sector NPDES General Permit

Form Approved
OMB No. _ _ _ _ - _ _ _ _

Submission of this completed Notice of Intent (NOI) constitutes notice that the entity in Section B intends to be authorized to discharge pollutants to waters of the United States, from the facility or site identified in Section C, under EPA's Stormwater Multi-Sector General Permit (MSGP). Submission of the NOI also constitutes notice that the party identified in Section B of this form has read, understands, and meets the eligibility conditions of Part 1 of the MSGP; agrees to comply with all applicable terms and conditions of the MSGP; understands that continued authorization under the MSGP is contingent on maintaining eligibility for coverage, and that implementation of the permittee's pollution prevention plan is required two days after a complete NOI is mailed. In order to be granted coverage, all information required on this form must be completed. Please read and make sure you comply with all permit requirements, including the requirement to prepare and implement a stormwater pollution prevention plan.

A. **Permit Number**: _ _ _ _ _ _ _ _ _ (see Appendix C of the MSGP for the list of eligible permit numbers)

B. **Facility Operator Information**

1. Name: _____

2. IRS Employer Information Number: _ _ - _ _ _ _ _ _ _

3. Mailing Address: a. Street: _____

b. City: _____ c. State: _ _ d. Zip code: _ _ _ _ _ - _ _ _ _

e. Phone: _ _ _ - _ _ _ - _ _ _ _ f. Fax (Optional): _ _ _ - _ _ _ - _ _ _ _

g. E-mail: _____

C. **Facility Information**

1. Facility Name: _____

2. This discharge is ☐ New ☐ Existing

If you have an existing stormwater discharge associated with industrial activity and you had coverage under the MSGP 2000, provide the Tracking Number: _ _ _ _ _ _ _ _ _

3. Location Address: a. Street: _____

b. City: _____ c. County or similar government subdivision: _____

d. State: _ _ e. Zip code: _ _ _ _ _ - _ _ _ _

f. Latitude: 1. _ _°_ _ ' _ _"N (degrees, minutes, seconds)
2. _ _°_ _ . _ _' N (degrees, minutes, decimal)
3. _ _ . _ _ _ _° N (decimal)

g. Longitude: 1. _ _ _°_ _ ' _ _" W (degrees, minutes, seconds)
2. _ _ _°_ _ . _ _' W (degrees, minutes, decimal)
3. _ _ _ . _ _ _ _° W (decimal)

4. Is this facility federal? ☐ Yes ☐ No

5. Is this facility located on Indian Country lands? ☐ Yes ☐ No

If yes, name of reservation, or if not part of a reservation, put "Not Applicable:" _____

6. Discharge of Stormwater

a. List the name(s) of the receiving water(s) that that you discharge stormwater into: _____

b. Does your facility discharge stormwater into a Municipal separate storm sewer system (MS4)? ☐ Yes ☐ No

If yes, name of MS4 operator: _____

7. List the code that best represents your Standard Industrial Classification (SIC) Code(s) for your industrial activity: _ _ _ _

D. **StormWater Pollution Prevention Plan Contact Information and Location**

1. Name: _____

2. Location Address: a. Street: _____

b. City: _____ c. State: _ _ d. Zip code: _ _ _ _ _ - _ _ _ _

e. Phone number _ _ _ - _ _ _ - _ _ _ _ ext. _ _ _

f. URL address of Stormwater Prevention Plan (if applicable): _____

E**. Endangered Species Act Eligibility**

Based on the instructions provided in Appendix E of the MSGP, under which criterion have you satisfied your Endangered Species Act obligations? ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

If you select criterion F, provide permit tracking number of the operator under which you are certifying eligibility:
_ _ R _ _ _ _ _ _

F. **National Historic Preservation Act Eligibility**

Based on the instruction provided in Appendix F of the MSGP, under which permit criterion have you satisfied your National Historic Preservation Act obligations? ☐ A ☐ B ☐ C ☐ D

G. **Certifier Name and Title**

Do you certify under penalty of law that this document and all attachments were prepared under your direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted? Based on your inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, do you certify that the information submitted is, to the best of your knowledge and belief, true, accurate, and complete? Do you certify that you are aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations?

Print Name: _____

Title: _____

Signature: _____ Date: _ _ - _ _ - _ _

Appendix H
Information required for the Notice of Termination (NOT)

Appendix H – Information required for the Notice of Intent (NOT)

As part terminating coverage under MSGP 2006, the permittee will be required to submit a Notice of Termination (NOI). The following is the proposed update to the NOT form that must be submitted.

This Form Replaces Previous Form 2040-0086 Form Approved. OMB No _ _ _ _ - _ _ _ _

Please See Instructions Before Completing This Form

NPDES FORM _ _ _ _ - _

EPA Notice of Termination (NOT) of Coverage under a NPDES General Permit for Stormwater Discharges Associated with Industrial Activity

Submission of this notice of termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge Stormwater associated with industrial activity under the NPDES program for the facility identified in Section III of this form. All necessary information must be included on this form. Refer to the instructions at the end of this form.

A. **Permit Information**

1. NPDES Permit Tracking Number: _ _ _ _ _ _ _ _ _ _

2. Reason for Termination (check one only): a. ☐ You transferred operational control to another operator. b. ☐ You terminated facility operations.

c. ☐ You obtained coverage under an alternative NPDES permit. d. ☐ You qualified for a No Exposure Exemption. If you answered yes to "d," you must fill out the No Exposure Form instead of the NOT Form.

B. **Facility Operator Information**

1. Name: _____

2. IRS Employer Identification Number: _____

3. Mailing Address: a. Street: _____

b. City: _____ c. State: _ _ d. Zip Code: _ _ _ _ _ - _ _ _ _ e. Phone: _ _ _ - _ _ _ - _ _ _ _

f. Fax (optional): _ _ _ - _ _ _ - _ _ _ _ g. E-mail: _____

C. **Facility Information**

1. Facility name: _____

2. Location Address: a. Street: _____

b. City: _____ c. County or similar government subdivision: _____

d. State: _ _ e. Zip Code: _ _ _ _ _ - _ _ _ _

f. Latitude: 1. _ _°_ _ ' _ _"N (degrees, minutes, seconds)
2. _ _°_ _ . _ _' N (degrees, minutes, decimal)
3. _ _ . _ _ _ _° N (decimal)

g. Longitude: 1. _ _ _°_ _ ' _ _" W (degrees, minutes, seconds)
2. _ _ _°_ _ . _ _' W (degrees, minutes, decimal)
3. _ _ _ . _ _ _ _° W (decimal)

D. **Certifier Name and Title**:

I certify under penalty of law that all stormwater discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge stormwater associated with industrial activity under this general permit, and that discharging pollutants in stormwater associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

Print Name: _____

Title: _____

Signature: _____ Date: _ _ - _ _ - _ _