

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart A – Sector A – Timber Products.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.A.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C of the permit.

8.A.2 Limitation on Coverage

8.A.2.1 *Prohibition of Discharges.* (See also Part 1.1.4) 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 AZPDES permit.

8.A.2.2 *Authorized Non-Stormwater Discharges.* (See also Part 1.1.3) Also authorized by this permit, provided the non-stormwater component of the discharge is in compliance with the requirements in Part 2.1.2 (Non-Numeric Effluent Limits): 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.

8.A.3 Additional Technology-Based Effluent Limits.

8.A.3.1 *Good Housekeeping.* (See also Part 2.1.2.2) 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.

8.A.4 Additional SWPPP Requirements.

8.A.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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.

8.A.4.2 *Inventory of Exposed Materials.* (See also Part 5.1.3.2) Where such information exists, if the facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in the facility's SWPPP 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.

8.A.4.3 *Description of Stormwater Management Controls.* (See also Part 5.1.4) Document measures implemented to address the following activities and sources: log, lumber and

wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If the facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

8.A.5 Additional Inspection Requirements. (See also Part 4.1)

If the 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.

8.A.6 Sector-Specific Benchmarks

Table 8.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to both the facility’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

Table 8.A-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector A1. General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Zinc ¹	Hardness Dependent
Subsector A2. Wood Preserving (SIC 2491)	Total Arsenic	0.15 mg/L
	Total Copper ¹	Hardness Dependent
Subsector A3. Log Storage and Handling (SIC 2411)	Total Suspended Solids (TSS)	100 mg/L
Subsector A4. Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Pallets and Skids; Wood Containers, not elsewhere classified; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, “Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals,” for methodology), in accordance with Part 6.2.1.1, to identify the applicable ‘hardness range’ for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Copper (mg/L)	Zinc (mg/L)
0-25 mg/L	0.0038	0.04
25-50 mg/L	0.0056	0.05
50-75 mg/L	0.0090	0.08
75-100 mg/L	0.0123	0.11
100-125 mg/L	0.0156	0.13
125-150 mg/L	0.0189	0.16
150-175 mg/L	0.0221	0.18
175-200 mg/L	0.0253	0.20
200-225 mg/L	0.0285	0.23
225-250 mg/L	0.0316	0.25
250+ mg/L	0.0332	0.26

8.A.7 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.A-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	pH	6.0 – 9.0 s.u.
	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

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart B – Sector B – Paper and Allied Products.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility’s primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.B.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C of the permit.

8.B.2 Sector-Specific Benchmarks. (See also Part 6.)

Table 8.B-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector B1. Paperboard Mills (SIC Code 2631)	Chemical Oxygen Demand (COD)	120 mg/L

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.C.1 Covered Stormwater Discharges.

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

8.C.2 Limitations on Coverage.

8.C.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) 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.

8.C.3 Sector-Specific Benchmarks

Table 8.C-1 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to both the facility's primary industrial activity and any co-located industrial activities.

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector C1. Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Lead ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
	Phosphorus	2.0 mg/L
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	Total Aluminum	0.75 mg/ L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector C3. Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Zinc ¹	Hardness Dependent
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Lead (mg/L)	Zinc (mg/L)
0-25 mg/L	0.014	0.04
25-50 mg/L	0.023	0.05
50-75 mg/L	0.045	0.08
75-100 mg/L	0.069	0.11
100-125 mg/L	0.095	0.13
125-150 mg/L	0.122	0.16
150-175 mg/L	0.151	0.18
175-200 mg/L	0.182	0.20
200-225 mg/L	0.213	0.23
225-250 mg/L	0.246	0.25
250+ mg/L	0.262	0.26

8.C.4 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.C-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these

industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.C-2¹		
Industrial Activity	Parameter	Effluent Limitation
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Total Phosphorus (as P)	105 mg/L, daily maximum
		35 mg/L, 30-day avg.
	Fluoride	75.0 mg/L, daily maximum
		25.0 mg/L, 30-day avg.

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.D.1 Covered Stormwater Discharges.

The requirements in Subpart D 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 C-1 of Appendix C of the permit.

8.D.2 Limitations on Coverage.

The following stormwater discharges associated with industrial activity are not authorized by this permit (See also Part 1.1.4)

8.D.2.1 Discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products, that are subject to nationally established effluent limitation guidelines found in 40 CFR Part 419 (Petroleum Refining); or

8.D.2.2 Discharges from oil recycling facilities; or

8.D.2.3 Discharges associated with fats and oils rendering.

8.D.3 Sector-Specific Benchmarks

Table 8.D-1 identifies benchmarks that apply to the specific subsectors of Sector D. These benchmarks apply to both the facility's primary industrial activity and any co-located industrial activities, which describe the site's activities.

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	100 mg/L

8.D.4 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.D-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these

industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.D-2¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from asphalt emulsion facilities.	Total Suspended Solids (TSS)	23.0 mg/L, daily maximum 15.0 mg/L, 30-day avg.
	pH	6.0 – 9.0 s.u.
	Oil and Grease	15 mg/L, daily maximum
		10 mg/L, 30-day avg.

¹Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.E.1 Covered Stormwater Discharges.

The requirements in Subpart E 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 C-1 of Appendix C of the permit.

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

8.E.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2) 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. The permittee shall sweep regularly or using other equivalent measures to minimize the presence of these materials. Indicate in the facility's SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. The permittee shall 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.

8.E.3 Additional SWPPP Requirements.

8.E.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP 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.

8.E.3.2 *Certification.* (See also Part 5.1.3.4) 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 waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with AZPDES requirements or are recycled.

8.E.4 Sector-Specific Benchmarks.

Table 8.E-1 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to both the facility's primary industrial activity and any co-located industrial activities, which describe the site's activities.

Table 8.E-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector E1. Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Aluminum	0.75 mg/L
Subsector E2. Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	Total Suspended Solids (TSS)	100 mg/L
	Total Iron	1.0 mg/L

8.E.5 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.E-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.E-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from material storage piles at cement manufacturing facilities	Total Suspended Solids (TSS)	50 mg/L, daily maximum
	pH	6.0 – 9.0 s.u.

¹Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart F – Sector F – Primary Metals.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.F.1 Covered Stormwater Discharges.

The requirements in Subpart F apply to stormwater discharges associated with industrial activity from Primary Metals facilities, as identified by the SIC Codes specified under Sector F in Table C-1 of Appendix C of the permit.

8.F.2 Additional Technology-Based Effluent Limits

8.F.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2) As part of the facility's good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, use alternative 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.

8.F.3 Additional SWPPP Requirements.

8.F.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants in stormwater.

8.F.3.2 *Inventory of Exposed Material.* (See also Part 5.1.3.2) 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

8.F.4 **Additional Inspection Requirements.** (See also Part 4.1) As part of conducting the facility's quarterly routine facility inspections (Part 4.1), 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. Monitor 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.

8.F.5 Sector-Specific Benchmarks. (See also Part 6.)

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Aluminum	0.75 mg/L
	Total Zinc ¹	Hardness Dependent
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	Total Aluminum	0.75 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Copper ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Copper ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Copper (mg/L)	Zinc (mg/L)
0-25 mg/L	0.0038	0.04
25-50 mg/L	0.0056	0.05
50-75 mg/L	0.0090	0.08
75-100 mg/L	0.0123	0.11
100-125 mg/L	0.0156	0.13
125-150 mg/L	0.0189	0.16
150-175 mg/L	0.0221	0.18
175-200 mg/L	0.0253	0.20
200-225 mg/L	0.0285	0.23
225-250 mg/L	0.0316	0.25
250+ mg/L	0.0332	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart G – Sector G – Metal Mining.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility’s primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.G.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C. 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.

8.G.1.1 *Covered Discharges from Active and Temporarily Inactive Facilities.* Only the stormwater discharges from the areas described in Table 8.G.1.1 are covered:

TABLE 8.G.1.1—APPLICABILITY OF THE AZPDES MULTI-SECTOR GENERAL PERMIT TO STORMWATER RUNOFF FROM ACTIVE AND TEMPORARLILY INACTIVE ORE (METAL) MINING AND DRESSING SITES

Discharge/source of discharge	AZPDES General Permit Applicability
Piles	
Waste rock/overburden Topsoil piles	Discharge under GP must be composed entirely of stormwater and not combined with mine drainage. See Note below.
Roads constructed of waste rock or spent ore	
Onsite haul roads. Offsite haul/access roads	Discharge under the GP must be composed entirely of stormwater and not combined with mine drainage. See Note below.
Roads not constructed of waste rock or spent ore	
Onsite haul roads Offsite haul/access roads	Discharge acceptable under GP except if “mine drainage” is used for dust control.
Milling/concentrating	
Runoff from tailings dams/dikes when constructed of waste rock/tailings.....	Discharges must be composed entirely of stormwater and not combined with mine drainage; not applicable if process fluids are present. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock/tailings.....	Discharge acceptable under GP except if process fluids are present.
Concentration building.....	Discharge acceptable under GP if discharge is stormwater only and there is no contact with material piles.
Mill site.....	Discharge acceptable under GP if discharge is stormwater only and there is no contact with material piles.
Ancillary areas	
Office/administrative building and housing.....	Discharge acceptable under GP if mixed with stormwater from the industrial area.

Discharge/source of discharge	AZPDES General Permit Applicability
Chemical storage area & Docking facility.....	Discharge acceptable under GP except if there is excessive contact with waste product that would otherwise constitute "mine drainage"
Explosive storage Fuel storage (oil tanks/coal piles) Vehicle/equipment maintenance area/building Parking areas.....	Discharge acceptable under GP (<i>Note: coverage is unnecessary for drainage exclusively from employee and visitor-type parking areas.</i>)
Power plant Truck wash area.....	Discharge acceptable under GP except if there is excessive contact with waste product that would otherwise constitute "mine drainage".
Reclamation-related areas	
Any disturbed area (unreclaimed)..... Reclaimed areas released from reclamation bonds prior to Dec. 17 1990. Partially/inadequately reclaimed areas or areas not released from reclamation bond.	Discharge acceptable under GP only if not in active mining area.

Note: Stormwater runoff from these sources is subject to the AZPDES program for stormwater unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-stormwater discharges from these sources are subject to AZPDES 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 they: (1) drain naturally (or are intentionally diverted) to a point source; and (2) combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit is available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are subject to 40 CFR Part 440, and that meets other eligibility criteria contained in Part 1.1 of this permit. Permit applicants bear the initial responsibility for determining the applicable technology-based standard for such discharges.

8.G.1.2 *Covered Discharges from Inactive Facilities.* All stormwater discharges.

8.G.1.3 *Covered Discharges from Exploration and Construction of Metal Mining and/or Ore Dressing Facilities.* All stormwater discharges.

8.G.1.4 *Covered Discharges from Facilities Undergoing Reclamation.* All stormwater discharges.

8.G.2 Limitations on Coverage.

8.G.2.1 *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).

8.G.2.2 *Prohibition of Non-Stormwater Discharges.* Not authorized by this permit: adit drainage, and contaminated springs or seeps discharging from waste rock dumps that do not directly result from precipitation events (see also the standard Limitations on Coverage in Part 1.1.4).

8.G.3 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).

- 8.G.3.1 *Mining operation* - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.
- 8.G.3.2 *Exploration phase* - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of “mining operations.”
- 8.G.3.3 *Construction phase* - Includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals. The construction phase is not considered part of “mining operations.”
- 8.G.3.4 *Active phase* - Activities including the extraction, removal or recovery of metal ore. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a). The active phase is considered part of “mining operations.”
- 8.G.3.5 *Reclamation phase* - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the “active phase”, intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements. The reclamation phase is considered part of “mining operations.”
- 8.G.3.6 *Active metal mining facility* - A place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a).
- 8.G.3.7 *Inactive metal mining facility* - A site or portion of a site where metal mining and/or milling occurred in the past but is not an active facility as defined above. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an AZPDES industrial stormwater permit.
- 8.G.3.8 *Temporarily inactive metal mining facility* - A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken.
- 8.G.3.9 *Final Stabilization* - A site or portion of a site is “finally stabilized” when it has implemented all applicable Federal and State reclamation requirements.

8.G.4 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

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

8.G.4.1 Management Practices for Clearing, Grading, and Excavation Activities.

8.G.4.1.1 *Selecting and installing control measures.* For all areas affected by clearing, grading, and excavation activities, the permittee shall select, design, install, and implement control measures that meet applicable Part 2 effluent limits and the following objectives:

- a. Design and implement a combination of erosion and sediment control Best Management Practices (BMPs) to keep sediment in place and to capture sediment to the extent practicable before it leaves the site.

Note: Soil crusting from water application, a practice commonly used for dust control is not an effective or acceptable erosion control/ stabilization BMP for compliance with this permit.

- b. Install sediment control/ perimeter control BMPs before upgradient land is disturbed. Temporary BMPs shall not be removed until final stabilization is achieved except when temporary control structures must be moved in order to allow clearing, grading, and excavation activities to continue. In this instance, the permittee shall implement equivalent measures to ensure the same level of protection in minimizing potential pollutant discharges.
- c. Phase or sequence exploration and construction activities, as practicable, to minimize the area of disturbance at any one time.

8.G.4.1.2 *Good Housekeeping.* (See also Part 2.1.2.2) The permittee shall implement practices to ensure litter, debris, and chemicals are prevented from contact with stormwater discharges.

8.G.4.1.3 *Sediment Control BMPs for Clearing, Grading, and Excavation Activities.* For drainage locations serving more than one acre, the permittee shall implement structural BMPs to divert flows from exposed soils, store flows, or otherwise limit run-off and the discharge of pollutants from exposed areas of the site to the degree attainable. Placement of structural BMPs within the floodplain shall be avoided to the extent practicable. Permittees may need to implement a combination of structural BMP approaches to sufficiently decrease discharge of sediment from their facilities.

1. Perimeter Control. The permittee shall use silt fences, vegetative buffer strips, sediment traps, or equivalent sediment control BMPs at all times for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the area unless a sediment basin that will store either a calculated volume of runoff from a 2 year, 24 hour storm, or 3,600 cubic feet per acre drained, is provided.
2. Soil Stockpiles. The permittee shall use silt fences or other effective sediment control BMPs around soil stockpiles except when stockpiles are being actively worked (i.e., controls must be in place evenings, weekends, and other down times). The permittee shall not place stockpiles in washes or other surface waters, or in stormwater conveyances such as curb and gutter systems, or in streets leading to such conveyances.

3. Sediment Basins and Traps.

- a. Where attainable, the permittee shall provide temporary (or permanent) sediment basins at sites with common drainage locations that serve an area with 10 or more acres disturbed at one time. The permittee shall design and construct basins as follows:
 - i. The basin shall provide storage for a calculated volume of runoff from a 2 year, 24 hour rain event from each disturbed acre drained; or
 - ii. Where no calculation is performed, a sediment basin providing 3,600 cubic feet of storage per acre drained shall be provided.

When computing the number of acres draining into a common location it is not necessary to include flows from offsite areas, if such flows are diverted around both the disturbed areas and the sediment basin. It is, however, necessary to include all sources of on-site flow that will reach the basin, including areas that are undisturbed and areas that have undergone final stabilization.

In determining whether installing a sediment basin is attainable, the permittee shall consider physical limitations at the site such as soils, slope, and available on-site area. If non-attainability is claimed, the permittee shall explain in the SWPPP why a sediment basin is non-attainable. The permittee shall also consider public safety, especially as it relates to children, as a design factor for sediment basin attainability and shall implement alternative sediment control BMPs if site limitations preclude a safe design.

The SWPPP shall provide sizing and calculation requirements for sediment basin(s) and shall indicate whether the basin(s) will be temporary or permanent.

- b. The permittee shall use smaller sediment basins and/or sediment traps for drainage locations that serve 10 or more disturbed acres at one time if a sediment basin meeting the above provisions of (Part 8.G.4.1.4.a.3) this subsection is not attainable.
 - c. The permittee shall remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent. Sediment basin, ponds, and traps must be maintained until final stabilization of the site is obtained.
 - d. For drainage locations serving less than 10 acres, smaller sediment basins and/or traps shall be used.
4. Discharge of Sediments during Dry Weather. The permittee shall implement effective BMPs that ensure there is no discharge of sediments from the exploration, construction and mining phases to any water body including dry washes during dry weather.

Note: This is not intended to apply to blowing dust, or to track-out that is otherwise managed as required in this permit.

5. Velocity Dissipation Devices. The permittee shall place velocity dissipation devices along the length of any outfall channel on-site, and at locations where discharges leave the site as necessary to provide a non-erosive flow velocity.
6. Storm Drain Inlet Protection. The permittee shall at all times provide effective sediment control BMPs at storm drain inlets that discharge, or

could discharge, to waters of the U.S. or to a local MS4 until all sources with potential for discharging to the inlet are stabilized.

7. Site Egress. The permittee shall implement effective BMPs to minimize tracking of sediments, debris and other pollutants from vehicles and equipment leaving the site (e.g., stone pads, concrete or steel wash racks, or equivalent systems).

8.G.4.1.4 *Erosion Control / Stabilization BMPs for Clearing, Grading, and Excavation Activities*. The permittee shall implement interim and permanent erosion control and stabilization BMPs on-site and shall comply with the following:

- a. Preserving Natural Vegetation. Where practicable, existing vegetation should be preserved. If natural vegetation can be preserved, the permittee shall clearly mark vegetation before clearing activities begin. Locations of trees and boundaries of environmentally sensitive areas and buffer zones to be preserved shall be identified on the SWPPP site map;
- b. Seeding/Vegetation. If revegetation plans include seeding, the SWPPP shall include seed mix and application specifications that will be used for vegetative stabilization. If the permittee uses fertilizers or tackifiers on-site to establish vegetation, BMPs shall be established to minimize the presence of these chemicals in the discharge.
- c. Culvert Stabilization. If culverts are present on the site, the SWPPP shall include measures to sufficiently minimize the threat of erosion at culvert locations to prevent the formation of rills and gullies; and
- d. Run-on Management. If off site areas direct flow onto the site, the SWPPP shall include plans to either divert run-on flows, or otherwise provide engineering controls and BMPs to account for off site contributions of stormwater and non-stormwater flow.

8.G.4.1.5 *Non-Structural BMPs for Clearing, Grading, and Excavation Activities*.

- a. Good Housekeeping BMPs. The permittee shall implement good housekeeping procedures to prevent litter, debris, and chemicals exposed to stormwater from becoming a pollutant source for stormwater discharges. These procedures shall include storage practices to minimize exposure of the materials to stormwater, and spill prevention and response practices.
- b. On-site and Offsite Material Storage. The permittee shall identify and describe all material storage areas (including overburden and stockpiles of dirt, borrow areas, etc.) used for the permitted project in the SWPPP unless those areas are covered by another AZPDES permit.
- c. Concrete Washout. Where possible, concrete suppliers should conduct washout activities at their own plants or dispatch facilities.

8.G.4.2 *Maintenance of BMPs for Clearing, Grading, and Excavation Activities.*

- a. The permittee shall maintain all erosion and sediment control measures (BMPs) and other protective measures identified in the SWPPP in effective operating condition.
- b. If existing BMPs need to be repaired or modified or if additional BMPs are necessary, implementation shall be completed within 7 calendar days or before the next rain event (whichever is sooner), unless otherwise prescribed in 1 through 4 below. If implementation before the next rain event is impracticable, the reason(s) for delay shall be documented in the SWPPP and alternative BMPs shall be implemented as soon as possible. Additionally, the following maintenance activities shall be implemented as follows:
 1. Remove accumulated sediment when it reaches a maximum of one-third the height of the silt fence or one-half the height of a fiber roll.
 2. Sediment shall be removed from temporary and permanent sedimentation basins, ponds and traps when the depth of sediment collected in the basin reaches 50% of the storage capacity.
 3. Site egress location(s) shall be inspected for evidence of off-site tracking of sediment, debris, and other pollutants onto paved surfaces. Removal of sediment, debris, and other pollutants from all off-site paved areas shall be completed as soon as practicable, or as otherwise required by Federal, State, and local requirements.
 4. Accumulations of sediment, debris, and other pollutants observed in offsite surface waters, drainage ways, catch basins, and other drainage features shall be removed in a manner and at a frequency sufficient to minimize impacts and to ensure no adverse effects on water quality.

8.G.4.3 *Inspection of Clearing, Grading, and Excavation Activities.*

8.G.4.3.1 *Inspection Frequency.*

- a. Inspection Schedule. The permittee shall ensure inspections are performed at the site as indicated below to ensure BMPs are functional and that the SWPPP is being properly implemented.
 - i. The site shall be inspected at least once every 14 calendar days throughout the project, and
 - ii. During the wet seasons, the site shall be inspected at least once every 7 calendar days, and also and within 24 hours of the end of each measurable storm event (in accordance with Part 6.1.2.2).
- b. Reduced Inspection Schedule. If the site has been temporarily stabilized (pursuant to Part 8.G.4.3.2); or runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), or exploration and construction activities are occurring during seasonal dry periods, the inspection frequency may be reduced to at least once every 28 calendar days, and when a rain event is anticipated, and within 24 hours of the end of each measurable storm event.

Inspection Schedule for Sites within ¼ mile of Impaired or outstanding Arizona Waters. If any discharge point from the site is within 1/4 mile of an impaired or outstanding Arizona water, the permittee shall inspect the site at least once every 7 calendar days. In addition, the permittee shall visually observe stormwater discharges at all discharge locations within one business day after each measurable storm event.

Note: If the inspection day falls on a Saturday or holiday, the inspection shall be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection shall be conducted on the following Monday.

8.G.4.3.2 *Location of Inspections.* Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

8.G.4.3.3 *Inspection Reports.* For each inspection required above, the permittee shall complete an inspection report. In addition to the information required in Part 4.1, the inspection report shall include:

- Location(s) of discharges of sediment or other pollutants from the site;
- For inspections occurring during or after a rain event, a description of stormwater that is discharging from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen, as applicable), when present;
- Identification of all sources of non-stormwater discharges occurring at the site and associated BMPs in place;
- Identification of material storage areas and, evidence of or potential for, pollutant discharge from such areas.

8.G.4.4 *Requirements for Cessation of Clearing, Grading, and Excavation Activities.*

8.G.4.4.1 *Inspections and Maintenance.* Inspections and maintenance of control measures, including BMPs, associated with clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of a mining operation shall continue until final stabilization has been achieved on all portions of the disturbed area, or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining.

8.G.4.4.2 *Temporary Stabilization of Disturbed Areas.* Temporary stabilization of disturbed areas shall be initiated within 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased, except as follows:

- a. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
- b. When the site is using vegetative stabilization but is located in an arid area and it is during seasonally arid conditions, vegetative stabilization measures shall be initiated as soon as practicable;

- c. When the site is using vegetative stabilization but is located in other areas of the state experiencing drought conditions (see definitions), vegetative stabilization measures shall be initiated as soon as practicable;
- d. Stabilization shall be initiated within 7 days, for areas within 50 feet of an impaired or outstanding Arizona water.

Until temporary vegetative stabilization is achieved in areas where mining, exploration, and/or construction activity has temporarily ceased, interim measures such as erosion control blankets with an appropriate seed base and tackifiers shall be employed.

In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures shall be implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

8.G.4.4.3 *Final Stabilization of Disturbed Areas.* Permanent stabilization of disturbed areas shall be initiated within 14 days after the clearing, grading and/or excavation activities in that portion of the site have permanently ceased, except as follows:

- a. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
- b. When the site is using vegetative stabilization but is located in an arid area and it is during seasonally arid conditions, vegetative stabilization measures shall be initiated as soon as practicable;
- c. When the site is using vegetative stabilization but is located in other areas of the state experiencing drought conditions (see definitions), vegetative stabilization measures shall be initiated as soon as practicable;
- d. Stabilization shall be initiated within 7 days, for areas within 50 feet of an impaired or outstanding Arizona water.

Until final stabilization is achieved in areas where mining, exploration, and/or construction activity has permanently ceased, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, shall be used.

8.G.5 Additional Technology-Based Effluent Limits.

8.G.5.1 *Employee Training.* (See also Part 2.1.2.9) Conduct employee training at least annually at active and temporarily inactive sites.

8.G.5.2 *Stormwater Controls.* Where necessary to minimize pollutant discharges, the permittee shall implement the following control measures at the site. These control measures are apart from, or in addition to, the control measures implemented by the permittee to meet the Part 2 effluent limits. The potential pollutants identified in Part 8.G.6.3 shall determine the priority and appropriateness of the control measures selected.

8.G.5.2.1 *Stormwater Diversions:* Divert stormwater away from potential pollutant sources when possible. Employ one or more of the following control measure

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.

8.G.5.2.2 *Capping*: When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.

8.G.5.2.3 *Treatment*: If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged where practicable. Treated runoff may be discharged as a stormwater source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

8.G.5.3 *Certification of Discharge Testing*. (See also Part 5.1.3.4) 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. The certification may be kept with the facility's SWPPP consistent with Part 8.G.6.6.

8.G.6 Additional SWPPP Requirements.

8.G.6.1 *Nature of Industrial Activities*. (See also Part 5.1.2) Briefly document in the facility's SWPPP 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.

8.G.6.2 *Site Map*. (See also Part 5.1.2) Document in the facility's SWPPP 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 AZPDES 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.

8.G.6.3 *Potential Pollutant Sources.* (See also Part 5.1.3) For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, document in the SWPPP the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. To identify potential pollutants, evaluate 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 drainage. If any new data is acquired due to changes in ore type being mined, update the SWPPP with this information.

8.G.6.4 *Documentation of Control Measures.* All control measures implemented at the site shall be documented in the SWPPP, in accordance with Part 8.G.5.2 and Part 5.1.4. If control measures are implemented or planned but are not listed in Part 8.G.5.2 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

The SWPPP shall describe measures to prevent the discharge of solid materials, including building materials, to waters of the US, except as authorized by a permit issued under section 404 of the Clean Water Act.

The SWPPP shall describe specific locations of any concrete and vehicle washout activities that will occur at the site. The permittee shall employ measures to contain and manage on-site vehicle and equipment washwater and concrete wash-out to prevent discharge and consistent with applicable Aquifer Protection Program (APP) permits.

8.G.6.5 *Employee Training.* All employee training(s) conducted in accordance with Parts 2.1.2.9 and 8.G.5.1 must be documented in the SWPPP.

8.G.6.6 *Certification of Permit Coverage for Commingled Non-Stormwater Discharges:* If the permittee is able to certify, consistent with Part 8.G.5.3 above, that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate AZPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, such certification shall be retained with the SWPPP. This certification must identify the non-stormwater discharges, the applicable AZPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

8.G.7 Additional Inspection Requirements. (See also Parts 4.1 and 8.G.4.3)

Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 8.G.4.2.1, the permittee shall inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters designated as OAWs or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 8.G.8.4 for inspection requirements for inactive and unstaffed sites.

8.G.8 Monitoring and Reporting Requirements. (See also Part 6.)

Note: There are no Part 8.G.8 monitoring and reporting requirements for inactive and unstaffed sites.

8.G.8.1 *Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities.* Active copper ore mining and dressing facilities must sample and analyze stormwater discharges for the pollutants listed in Table 8.G-8.1.

Table 8.G-8.1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector G1. Active 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

8.G.8.2 *Benchmark Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities.* For discharges from waste rock and overburden piles, the permittee shall perform benchmark monitoring once in the first year for the parameters listed in Table 8.G-8.2, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. Analytic monitoring is also required for the parameters listed in Table 8.G-8.3 in accordance with the requirements in Part 8.G.6.3. In addition, the Director may also require the permittee to perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from waste rock and overburden piles.

Table 8.G-8.2		
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector G2. 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) <i>(Note: when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and have hardness calculated than to require hardness analysis separately)</i>	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) ¹	no benchmark value
	Total Antimony	0.64 mg/L
	Total Arsenic	0.15 mg/L
	Total Beryllium	0.13 mg/L
	Total Cadmium ¹	Hardness Dependent
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent
	Total Mercury	0.0014 mg/L
	Total Nickel ¹	Hardness Dependent

Total Selenium	0.005 mg/L
Total Silver ¹	Hardness Dependent
Total Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Nickel (mg/L)	Silver (mg/L)	Zinc (mg/L)
0-25 mg/L	0.0005	0.0038	0.014	0.15	0.0007	0.04
25-50 mg/L	0.0008	0.0056	0.023	0.20	0.0007	0.05
50-75 mg/L	0.0013	0.0090	0.045	0.32	0.0017	0.08
75-100 mg/L	0.0018	0.0123	0.069	0.42	0.0030	0.11
100-125 mg/L	0.0023	0.0156	0.095	0.52	0.0046	0.13
125-150 mg/L	0.0029	0.0189	0.122	0.61	0.0065	0.16
150-175 mg/L	0.0034	0.0221	0.151	0.71	0.0087	0.18
175-200 mg/L	0.0039	0.0253	0.182	0.80	0.0112	0.20
200-225 mg/L	0.0045	0.0285	0.213	0.89	0.0138	0.23
225-250 mg/L	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+ mg/L	0.0053	0.0332	0.262	1.02	0.0183	0.26

8.G.8.3 *Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities.* In addition to the monitoring required in Part 8.G.6.2 for discharges from waste rock and overburden piles, the permittee shall also conduct monitoring for additional parameters based on the type of ore mined at the site. Where a parameter in Table 8.G-8.3 is the same as a pollutant with required monitoring in Table 8.G-8.2 (i.e., for all of the metals), the permittee shall use the corresponding benchmark in Table 8.G-8.2 and may use any monitoring results conducted for Part 8.G.6.2 to satisfy the monitoring requirement for that parameter for Part 8.G.6.3. For radium and uranium, which do not have corresponding benchmarks in Table 8.G-8.2, there are no applicable benchmarks. The frequency and schedule for monitoring for these additional parameters is the same as that specified in Part 6.2.1.2.

Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Aluminum Ore	X	X	Iron
Mercury Ore	X	X	Nickel (H)
Iron Ore	X	X	Iron (Dissolved)

Table 8.G-8.3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles			
Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H)
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H)
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H)
Uranium, Radium, and Vanadium Ore	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: An “X” indicated for TSS and/or pH means that monitoring is required for those parameters. (H) indicates that hardness must also be measured when this pollutant is measured.

8.G.8.4 *Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Quarterly Visual Assessments and Routine Facility Inspections.* Permit holders of Sector G facilities may, exercise a waiver from the quarterly visual assessment and routine facility inspection requirements for inactive and unstaffed sites (including temporarily inactive sites). The waiver conditionally exempts the permittee from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in accordance with Parts 4.2.3 and 6.2.1.3. This exemption is conditioned on the following:

- If circumstances change and the facility becomes active and/or staffed, this exception no longer applies and the permittee shall immediately begin complying with the quarterly visual assessment requirements; as if the facility were in the first year of permit coverage, including the quarterly visual assessment requirements; and
- ADEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

Subject to the two conditions above, if the facility is inactive and unstaffed, the permittee is waived from the requirement to conduct quarterly visual assessments and routine facility inspections. However, the permittee is not waived from conducting the Part 4.3 annual comprehensive site inspection. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or natural disasters may have damaged control measures or increased discharges.

8.G.9 Termination of Permit Coverage

8.G.9.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990.* A site (or a portion of a site) that was released from applicable state or federal reclamation requirements after December 17, 1990, is not required to maintain coverage under this permit.

If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is not required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.G.9.2.

8.G.9.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if:

- (1) Stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards,
- (2) Soil disturbing activities related to mining at the sites or portion of the site have been completed;
- (3) The site or portion of the site has been stabilized to minimize soil erosion; and
- (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart I – Sector I – Oil and Gas Extraction. – RESERVED

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart J – Sector J – Non-Metallic Mineral Mining and Dressing.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.J.1 Covered Stormwater Discharges.

The requirements in Subpart J apply to stormwater discharges associated with industrial activity from Active and Inactive Non-Metallic Mineral Mining and Dressing facilities as identified by the SIC Codes specified under Sector J in Table C-1 of Appendix C of the permit.

- 8.J.1.1 *Covered Discharges from Active and Temporarily Inactive Facilities.* All stormwater discharges, except for most stormwater discharges subject to the existing effluent limitation guideline at 40 CFR Part 436. Mine dewatering discharges composed entirely of stormwater or uncontaminated ground water seepage from: construction sand and gravel, industrial sand, and crushed stone mining facilities are covered by this permit.
- 8.J.1.2 *Covered Discharges from Inactive Facilities.* All stormwater discharges.
- 8.J.1.3 *Covered Discharges from Exploration and Construction of Non-Metallic Mineral Mining Facilities.* All stormwater discharges.
- 8.J.1.4 *Covered Discharges from Sites Undergoing Reclamation.* All stormwater discharges.

8.J.2 Limitations on Coverage.

Most stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 436 are not authorized by this permit. An exception to this is mine dewatering discharges composed entirely of stormwater or uncontaminated ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities, which are covered under this permit.

8.J.3 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).

- 8.J.3.1 *Mining operations* - Consists of the active and temporarily inactive phases, and the reclamation phase, but excludes the exploration and construction phases.
- 8.J.3.2 *Exploration phase* - Entails exploration and land disturbance activities to determine the financial viability of a site. The exploration phase is not considered part of "mining operations".
- 8.J.3.3 *Construction phase* - Includes the building of site access roads and removal of overburden and waste rock to expose mineable minerals. The construction phase is not considered part of "mining operations".

- 8.J.3.4 *Active phase* - Activities including the extraction, removal or recovery of minerals. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a). The active phase is considered part of “mining operations.”
- 8.J.3.5 *Reclamation phase* - Activities undertaken, in compliance with applicable mined land reclamation requirements, following the cessation of the “active phase”, intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements. The reclamation phase is considered part of “mining operations”.
- 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).
- 8.J.3.6 *Active Mineral Mining Facility* - A place where work or other activity related to the extraction, removal, or recovery of minerals is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a).
- 8.J.3.7 *Inactive Mineral Mining Facility* - A site or portion of a site where mineral mining and/or milling occurred in the past but is not an active facility as defined above.. An inactive mineral mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an AZPDES industrial stormwater permit.
- 8.J.3.8 *Temporarily Inactive Mineral Mining Facility* - A site or portion of a site where mineral mining and/or milling occurred in the past but currently are not being actively undertaken.
- 8.J.3.9 *Final Stabilization* - a site or portion of a site is “finally stabilized” when it has implemented all applicable Federal and State reclamation requirements.
- 8.J.3.10 *Uncontaminated* - Free from the presence of pollutants attributable to industrial activity.

8.J.4 Technology-Based Effluent Limits for Clearing, Grading, and Excavation Activities.

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

8.J.4.1 Management Practices for Clearing, Grading, and Excavation Activities.

- 8.J.4.1.1 *Selecting and installing control measures.* For all areas affected by clearing, grading, and excavation activities, the permittee shall select, design, install, and implement control measures that meet applicable Part 2 effluent limits and meet the following objectives:
- a. Design and implement a combination of erosion and sediment control Best Management Practices (BMPs) to keep sediment in place and to capture sediment to the extent practicable before it leaves the site.

Note: Soil crusting from water application, a practice commonly used for dust control is not an effective or acceptable erosion control/ stabilization BMP for compliance with this permit.

- b. Install sediment control/ perimeter control BMPs before upgradient land is disturbed. Temporary BMPs shall not be removed until final stabilization is achieved except when temporary control structures must be moved in order to allow exploration and construction activities to continue. In this instance, the permittee shall implement equivalent measures to ensure the same level of protection in minimizing potential pollutant discharges.
 - c. Phase or sequence exploration and construction activities, as practicable, to minimize the area of disturbance at any one time.
- 8.J.4.1.2 *Good Housekeeping.* (See also Part 2.1.2.2) The permittee shall implement practices to ensure litter, debris, and chemicals are prevented from contact with stormwater discharges.
- 8.J.4.1.3 *Sediment Control BMPs for Clearing, Grading, and Excavation Activities.* For drainage locations serving more than one acre, the permittee shall implement structural BMPs to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Placement of structural BMPs within the floodplain shall be avoided to the extent practicable. Permittees may need to implement a combination of structural BMP approaches to sufficiently decrease discharge of sediment from their facilities.
1. Perimeter Control. The permittee shall use silt fences, vegetative buffer strips, sediment traps, or equivalent sediment control BMPs at all times for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the exploration, construction and mining areas unless a sediment basin that will store either a calculated volume of runoff from a 2 year, 24 hour storm, or 3,600 cubic feet per acre drained, is provided.
 2. Soil Stockpiles. The permittee shall use silt fences or other effective sediment control BMPs around soil stockpiles except when stockpiles are being actively worked (i.e., controls must be in place evenings, weekends, and other down times). The permittee shall not place stockpiles in washes or other surface waters, or in stormwater conveyances such as curb and gutter systems, or in streets leading to such conveyances.
 3. Sediment Basins and Traps.
 - a. Where attainable, the permittee shall provide temporary (or permanent) sediment basins at sites with common drainage locations that serve an area with 10 or more acres disturbed at one time. The permittee shall design and construct basins as follows:
 - i. The basin shall provide storage for a calculated volume of runoff from a 2 year, 24 hour rain event from each disturbed acre drained; or
 - ii. Where no calculation is performed, a sediment basin providing 3,600 cubic feet of storage per acre drained shall be provided.

When computing the number of acres draining into a common location it is not necessary to include flows from offsite areas, if such flows are diverted around both the disturbed areas and the sediment basin. It is, however,

necessary to include all sources of on-site flow that will reach the basin, including areas that are undisturbed and areas that have undergone final stabilization.

In determining whether installing a sediment basin is attainable, the permittee shall consider physical limitations at the site such as soils, slope, and available on-site area. If non-attainability is claimed, the permittee shall explain in the SWPPP why a sediment basin is non-attainable. The permittee shall also consider public safety, especially as it relates to children, as a design factor for sediment basin attainability and shall implement alternative sediment control BMPs if site limitations preclude a safe design.

The SWPPP shall provide sizing and calculation requirements for sediment basin(s) and shall indicate whether the basin(s) will be temporary or permanent.

- b. The permittee shall use smaller sediment basins and/or sediment traps for drainage locations that serve 10 or more disturbed acres at one time if a sediment basin meeting the above provisions of this subsection is not attainable.
 - c. The permittee shall remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50 percent. Sediment basin, ponds, and traps must be maintained until final stabilization of the site is obtained.
 - d. For drainage locations serving less than 10 acres, smaller sediment basins and/or traps shall be used.
4. Discharge of Sediments during Dry Weather. The permittee shall implement effective BMPs that ensure there is no discharge of sediments from construction, exploration and mining activities to any water body including dry washes during dry weather.
- Note: This is not intended to apply to blowing dust, or to track-out that is otherwise managed as required in this permit.*
5. Velocity Dissipation Devices. The permittee shall place velocity dissipation devices along the length of any outfall channel on-site, and at locations where discharges leave the construction, exploration and mining areas as necessary to provide a non-erosive flow velocity.
6. Storm Drain Inlet Protection. The permittee shall at all times during construction, exploration and mining activities provide effective sediment control BMPs at storm drain inlets that discharge, or could discharge, to waters of the U.S. or to a local MS4 until all sources with potential for discharging to the inlet are stabilized.
7. Site Egress. The permittee shall implement effective BMPs to minimize tracking of sediments, debris and other pollutants from vehicles and equipment leaving the site (e.g., stone pads, concrete or steel wash racks, or equivalent systems).

- 8.J.4.1.4 *Erosion Control / Stabilization BMPs for Clearing, Grading, and Excavation Activities.* The permittee shall implement interim and permanent erosion control and stabilization BMPs on-site and shall comply with the following:

1. Preserving Natural Vegetation. Where practicable, existing vegetation should be preserved. If natural vegetation can be preserved, the permittee shall clearly mark vegetation before clearing activities begin. Locations of trees and boundaries of environmentally sensitive areas and buffer zones to be preserved shall be identified on the SWPPP site map;
2. Seeding/Vegetation. If revegetation plans include seeding, the SWPPP shall include seed mix and application specifications that will be used for vegetative stabilization. If the permittee uses fertilizers or tackifiers on-site to establish vegetation, BMPs shall be established to minimize the presence of these chemicals in the discharge.
3. Culvert Stabilization. If culverts are present on the site, the SWPPP shall include measures to sufficiently minimize the threat of erosion at culvert locations to prevent the formation of rills and gullies during construction, exploration and mining activities; and
4. Run-on Management. If off site areas direct flow onto the site, the SWPPP shall include plans to either divert run-on flows, or otherwise provide engineering controls and BMPs to account for off site contributions of stormwater and non-stormwater flow.

8.J.4.1.5 *Non-Structural BMPs for Clearing, Grading, and Excavation Activities.*

1. Good Housekeeping BMPs. The permittee shall implement good housekeeping procedures to prevent litter, debris, and chemicals exposed to stormwater from becoming a pollutant source for stormwater discharges. These procedures shall include storage practices to minimize exposure of the materials to stormwater, and spill prevention and response practices.
2. On-site and Offsite Material Storage. The permittee shall identify and describe all material storage areas (including overburden and stockpiles of dirt, borrow areas, etc.) used for the permitted project in the SWPPP unless those areas are covered by another AZPDES permit.
3. Concrete Washout. Where possible, concrete suppliers should conduct washout activities at their own plants or dispatch facilities.

8.J.4.2 *Maintenance of BMPs for Clearing, Grading, and Excavation Activities.*

- a. The permittee shall maintain all erosion and sediment control measures (BMPs) and other protective measures identified in the SWPPP in effective operating condition.
- b. If existing BMPs need to be repaired or modified or if additional BMPs are necessary, implementation shall be completed within 7 calendar days or before the next rain event (whichever is sooner), unless otherwise prescribed in 1 through 4 below. If implementation before the next rain event is impracticable, the reason(s) for delay shall be documented in the SWPPP and alternative BMPs shall be implemented as soon as possible. Additionally, the following maintenance activities shall be implemented as follows:
 1. Remove accumulated sediment when it reaches a maximum of one-third the height of the silt fence or one-half the height of a fiber roll.
 2. Sediment shall be removed from temporary and permanent sedimentation basins, ponds and traps when the depth of sediment collected in the basin reaches 50% of the storage capacity.

3. Site egress location(s) shall be inspected for evidence of off-site tracking of sediment, debris, and other pollutants onto paved surfaces. Removal of sediment, debris, and other pollutants from all off-site paved areas shall be completed as soon as practicable, or as otherwise required by Federal, State, and local requirements.
4. Accumulations of sediment, debris, and other pollutants observed in offsite surface waters, drainage ways, catch basins, and other drainage features shall be removed in a manner and at a frequency sufficient to minimize impacts and to ensure no adverse effects on water quality.

8.J.4.3 *Inspection of Clearing, Grading, and Excavation Activities.* (See also Part 4)

8.J.4.3.1 *Inspection Frequency.*

- a. Inspection Schedule. The permittee shall ensure inspections are performed at the site as indicated below to ensure BMPs are functional and that the SWPPP is being properly implemented.
 - i. The site shall be inspected at least once every 14 calendar days throughout the project, and
 - ii. During the summer wet season, the site shall be inspected at least once every 7 calendar days, and also and within 24 hours of the end of each measurable storm event (in accordance with Part 6.1.2.2).
- b. Reduced Inspection Schedule. If the site has been temporarily stabilized (pursuant to Part 8.G.4.3.2); or runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), or exploration and construction activities are occurring during seasonal dry periods, the inspection frequency may be reduced to at least once every 28 calendar days, and when a rain event is anticipated, and within 24 hours of the end of each measurable storm event.

Inspection Schedule for Sites within 1/4 mile of Impaired or Outstanding Arizona Waters. If any discharge point from the construction site is within 1/4 mile of an impaired or outstanding Arizona water, the permittee shall inspect the site at least once every 7 calendar days. In addition, the permittee shall visually observe stormwater discharges at all discharge locations within one business day after each measurable storm event.

Note: If the inspection day falls on a Saturday or holiday, the inspection shall be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection shall be conducted on the following Monday.

- 8.J.4.3.2 *Location of Inspections.* Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures implemented must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit

the site must be inspected for evidence of significant off-site sediment tracking.

8.J.4.3.3 *Inspection Reports.* (See also Part 4.1) For each inspection required above, the permittee shall complete an inspection report. In addition to the information required in Part 4.1, the inspection report shall include:

- Location(s) of discharges of sediment or other pollutants from the site;
- For inspections occurring during or after a rain event, a description of stormwater that is discharging from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen, as applicable), when present;
- Identification of all sources of non-stormwater discharges occurring at the site and associated BMPs in place;
- Identification of material storage areas and, evidence of or potential for, pollutant discharge from such areas.

8.J.4.4 *Requirements for Cessation of Clearing, Grading, and Excavation Activities.*

8.J.4.4.1 *Inspections and Maintenance.* Inspections and maintenance of control measures, including any BMPs, associated with clearing, grading, and/or excavation activities being conducted as part of the exploration and construction phase of a mining operation must continue until final stabilization has been achieved on all portions of the disturbed area or until the commencement of the active mining phase for those areas that have been temporarily stabilized as a precursor to mining

8.J.4.4.2 *Temporary Stabilization of Disturbed Areas.* Temporary stabilization of disturbed areas shall be initiated within 14 days after the clearing, grading and/or excavation activities in that portion of the site have temporarily ceased, except as follows:

- a. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
- b. When the site is using vegetative stabilization but is located in an arid area and it is during seasonally arid conditions, vegetative stabilization measures shall be initiated as soon as practicable;
- c. When the site is using vegetative stabilization but is located in other areas of the state experiencing drought conditions (see definitions), vegetative stabilization measures shall be initiated as soon as practicable;
- d. Stabilization shall be initiated within 7 days, for areas within 50 feet of an impaired or outstanding Arizona water.

Until temporary vegetative stabilization is achieved in areas where mining, exploration, and/or construction activity has temporarily ceased, interim measures such as erosion control blankets with an appropriate seed base and tackifiers shall be employed.

In areas of the site, where exploration and/or construction has permanently ceased prior to active mining, temporary stabilization measures must be

implemented to minimize mobilization of sediment or other pollutants until such time as the active mining phase commences.

- 8.J.4.4.3 *Final Stabilization of Disturbed Areas.* Permanent stabilization of disturbed areas shall be initiated within 14 days after the clearing, grading and/or excavation activities in that portion of the site have permanently ceased, except as follows:
- a. Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;
 - b. When the site is using vegetative stabilization but is located in an arid area and it is during seasonally arid conditions, vegetative stabilization measures shall be initiated as soon as practicable;
 - c. When the site is using vegetative stabilization but is located in other areas of the state experiencing drought conditions (see definitions), vegetative stabilization measures shall be initiated as soon as practicable;
 - d. Stabilization shall be initiated within 7 days, for areas within 50 feet of an impaired or outstanding Arizona water.

Until final stabilization is achieved in areas where mining, exploration, and/or construction activity has permanently ceased, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers shall be used.

8.J.5 Additional Technology-Based Effluent Limits.

- 8.J.5.1 *Employee Training.* (See also Part 2.1.2.9) Conduct employee training at least annually at active and temporarily inactive sites.
- 8.J.5.2 *Stormwater Controls.* Where necessary to minimize pollutant discharges, the permittee shall implement the following control measures at the site. These control measures are apart from, or in addition to, the control measures implemented by the permittee to meet the Part 2 effluent limits. The potential pollutants identified in Part 8.J.5.3 shall determine the priority and appropriateness of the control measures selected.
- 8.J.5.2.1 *Stormwater Diversions:* Divert stormwater away from potential pollutant sources when possible. Employ one or more of the following control measure 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.
- 8.J.5.2.2 *Capping:* When capping is necessary to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.
- 8.J.5.2.3 *Treatment:* If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged. 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).

- 8.J.5.3 *Certification of Discharge Testing*: (See also Part 5.1.4.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-stormwater discharges such as discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 436). The certification may be kept with the facility's SWPPP consistent with Part 8.J.6.6.

8.J.6 Additional SWPPP Requirements.

The requirements in Part 8.J.6 are applicable for sites undergoing exploration and construction, active mineral mining facilities, temporarily inactive mineral mining facilities, and sites undergoing reclamation. The requirements in Part 8.J.6 are not applicable to inactive mineral mining facilities.

- 8.J.6.1 *Nature of Industrial Activities*. (See also Part 5.1.2) Document in the facility's SWPPP 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.

- 8.J.6.2 *Site Map*. (See also Part 5.1.2) Document in the SWPPP 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 AZPDES 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 dewatering or other process water;
- Off-site points of discharge for mine dewatering and process water;
- Surface waters;
- Boundary of tributary areas that are subject to effluent limitations guidelines; and
- Location(s) of reclaimed areas.

- 8.J.6.3 *Potential Pollutant Sources*. (See also Part 5.1.3) For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, document in the SWPPP the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. To identify potential pollutants, evaluate 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. If

any existing overburden or waste rock has been characterized for potential generation of acid rock drainage, this data shall be included in the SWPPP.

8.J.6.4 *Documentation of Control Measures.* To the extent that any of the control measures in Part 8.J.5.2 are used, the permittee shall document them in the facility’s SWPPP pursuant to Part 5.1.4. If control measures are implemented or planned but are not listed in Part 8.J.5.2 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

The SWPPP shall describe measures to prevent the discharge of solid materials, including building materials, to waters of the US, except as authorized by a permit issued under section 404 of the Clean Water Act.

The SWPPP shall describe specific locations of any concrete and vehicle washout activities that will occur at the site. The permittee shall employ measures to contain and manage on-site vehicle and equipment washwater and concrete wash-out to prevent discharge and consistent with applicable APP permits.

8.J.6.5 *Employee Training.* All employee training(s) conducted in accordance with Parts 2.1.2.9 and 8.J.5.1 must be documented with the SWPPP.

8.J.6.6 *Certification of Permit Coverage for Commingled Non-Stormwater Discharges.* If the permittee is able to certify, consistent with Part 8.J.5.3 above, that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate AZPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, such certification shall be retained with the SWPPP. This certification must identify the non-stormwater discharges, the applicable AZDPES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

8.J.7 Additional Inspection Requirements. (See also Parts 4.1 and 8.J.4.3)

Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 8.J.4.3.1, the permittee shall inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 8.J.8.1 for inspection requirements for inactive and unstaffed sites.

8.J.8 Sector-Specific Benchmarks

Table 8.J-1 identifies benchmarks that apply to the specific subsectors of Sector J. These benchmarks apply to both the facility’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

Table 8.J-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector J1. Sand and Gravel Mining (SIC	Nitrate plus Nitrite Nitrogen	0.68 mg/L

Table 8.J-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
1442, 1446)	Total Suspended Solids (TSS)	100 mg/L
Subsector J2. Dimension and Crushed Stone and Nonmetallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)	100 mg/L

8.J.8.1 *Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Routine Inspections, Quarterly Visual Assessments, and Benchmark Monitoring.* Permit holders of Sector J facilities may exercise a waiver from either the routine inspection, quarterly visual assessment or the benchmark monitoring requirements for inactive and unstaffed sites (including temporarily inactive sites). The waiver conditionally exempts the permittee from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in accordance with Parts 4.2.3 and 6.2.1.3. This exemption is conditioned on the following:

- If circumstances change and the facility becomes active and/or staffed, this exception no longer applies and the permittee shall immediately begin complying with the applicable benchmark monitoring requirements as if the facility were in the first year of permit coverage, including the quarterly visual assessment requirements; and
- ADEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contribute to an instream excursion above an applicable water quality standard, including designated uses.

Subject to the two conditions above, if the facility is inactive and unstaffed, the permittee is waived from the requirement to conduct quarterly visual assessments and routine facility inspections. However, the permittee is not waived from conducting the Part 4.3 annual comprehensive site inspection. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or natural disasters may have damaged control measures or increased discharges.

8.J.9 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.J-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.J-2		
Industrial Activity	Parameter	Effluent Limitation ¹

Industrial Activity	Parameter	Effluent Limitation ¹
Mine dewatering discharges at crushed stone mining facilities (SIC 1422 - 1429)	pH	6.0 – 9.0 s.u.
Mine dewatering discharges at construction sand and gravel mining facilities (SIC 1442)	pH	6.0 – 9.0 s.u.
Mine dewatering discharges at industrial sand mining facilities (SIC 1446)	Total Suspended Solids (TSS)	25 mg/L, monthly avg.
		45 mg/L, daily maximum
	pH	6.0 – 9.0 s.u.

¹Monitor annually.

8.J.10 Termination of Permit Coverage

8.J.10.1 *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 not required to maintain coverage under this permit.

If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is not required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.J.10.2.

8.J.10.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if:

- (1) Stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards;
- (2) Soil disturbing activities related to mining at the sites or portion of the site have been completed;
- (3) The site or portion of the site has been stabilized to minimize soil erosion; and
- (4) as appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.K.1 Covered Stormwater Discharges.

The requirements in Subpart K apply to stormwater discharges associated with industrial activity from Hazardous Waste Treatment, Storage, or Disposal facilities (TSDFs) as identified by the Activity Code specified under Sector K in Table C-1 of Appendix C of the permit.

8.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.

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to stormwater, are considered inactive and do not require coverage under this general permit.

8.K.3 Limitations on Coverage.

8.K.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following are not authorized for discharge under 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.

8.K.4 Definitions.

8.K.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 8.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.

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

8.K.4.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.

- 8.K.4.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.
- 8.K.4.5 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.
- 8.K.4.6 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 8.K.4.4. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.K.5 Sector-Specific Benchmarks

Table 8.K-1 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to both the facility's primary industrial activity and any co-located industrial activities, which describe the site's activities.

Table 8.K-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector K1. ALL - Industrial Activity Code "HZ" (<i>Note:</i> permit coverage limited in some States). Benchmarks only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A (see below).	Ammonia	2.14 mg/L
	Total Magnesium	0.064 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Arsenic	0.15 mg/L
	Total Cadmium ¹	Hardness Dependent
	Total Cyanide	0.022 mg/L
	Total Lead ¹	Hardness Dependent
	Total Mercury	0.0014 mg/L
	Total Selenium	0.005 mg/L
	Total Silver ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)
0-25 mg/L	0.0005	0.014	0.0007
25-50 mg/L	0.0008	0.023	0.0007
50-75 mg/L	0.0013	0.045	0.0017
75-100 mg/L	0.0018	0.069	0.0030
100-125 mg/L	0.0023	0.095	0.0046
125-150 mg/L	0.0029	0.122	0.0065
150-175 mg/L	0.0034	0.151	0.0087
175-200 mg/L	0.0039	0.182	0.0112
200-225 mg/L	0.0045	0.213	0.0138
225-250 mg/L	0.0050	0.246	0.0168
250+ mg/L	0.0053	0.262	0.0183

8.K.6 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.K-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Discharges from hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart A (see footnote).	Biochemical Oxygen Demand (BOD ₅)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
Total Arsenic	1.1 mg/L, daily maximum	
	0.54 mg/L, monthly avg. maximum	
Total Chromium	1.1 mg/L, daily maximum	
	0.46 mg/L, monthly avg. maximum	
Total Zinc	0.535 mg/L, daily maximum	
	0.296 mg/L, monthly avg. maximum	
	pH	6.0 – 9.0 s.u.

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.L.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C of the permit.

8.L.2 Industrial Activities Covered by Sector L.

This permit authorizes 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. This permit does not cover discharges from landfills that receive only municipal wastes.

8.L.3 Limitations on Coverage.

8.L.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following discharges 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.

8.L.4 Definitions.

8.L.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

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

8.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.

8.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.

8.L.4.5 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.L.5 Additional Technology-Based Effluent Limits.

8.L.5.1 *Preventive Maintenance Program.* (See also Part 2.1.2.3) As part of the facility's preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

8.L.5.2 *Erosion and Sedimentation Control.* (See also Part 2.1.2.5) 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.

8.L.5.3 *Unauthorized Discharge Test Certification.* (See also Part 5.1.3.4) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

8.L.6 Additional SWPPP Requirements.

8.L.6.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP 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.

8.L.6.2 *Summary of Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP 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.

8.L.7 Additional Inspection Requirements. (See also Part 4)

8.L.7.1 *Inspection Schedule of Active Sites.*

- a. Routine Inspection Schedule. The permittee shall ensure inspections are performed at operating landfills, open dumps, and land application sites as indicated below to ensure BMPs are functional and that the SWPPP is being properly implemented.
 - i. The site will be inspected a minimum of once every 7 calendar days, OR

- ii. The site will be inspected a minimum of once every 14 calendar days, and also and within 24 hours of the end of each measurable storm event (in accordance with Part 6.1.2.2).

The permittee shall 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.

Note: The Department encourages adding inspections before and/or during predicted rain events and “spot” inspections to ensure BMPs will be effective in managing stormwater runoff and associated pollutants.

- b. Reduced Inspection Schedule. The permittee may reduce inspection if: the entire site has been temporarily stabilized; land application has been completed in certain areas; or runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists). In this case, the permittee shall conduct inspections at least once every month, before an anticipated rain event and within 24 hours of the end of each measurable storm event.
- c. Inspection Schedule for Sites within 1/4 mile of Impaired or Outstanding Arizona Waters. If any discharge point from the facility is within 1/4 mile of an impaired or outstanding Arizona water, the permittee shall inspect the site at least once every 7 calendar days. In addition, the permittee shall visually observe stormwater discharges at all discharge locations within one business day of the end of each measurable storm event.

Note: If an inspection day (except those required relative to a rainfall event) falls on a Saturday or holiday, the inspection may be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection may be conducted on the following Monday.

- 8.L.7.2 *Inspections of Inactive Sites*. Inspect inactive landfills, open dumps, and land application sites at least quarterly. 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.

8.L.8 Additional Post-Authorization Documentation Requirements.

- 8.L.8.1 *Recordkeeping and Internal Reporting*. Keep records with the SWPPP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

8.L.9 Sector-Specific Benchmarks

Table 8.L-1 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to both the facility’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

Table 8.L-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration ¹
Subsector L1. All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code "LF")	Total Suspended Solids (TSS)	100 mg/L
Subsector L2. All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code "LF")	Total Iron	1.0 mg/L

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

8.L.10. Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.L-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD ₅)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum
		0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
Total Zinc	0.20 mg/L, daily maximum	
	0.11 mg/L, monthly avg. maximum	
pH	6.0 – 9.0 s.u.	

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart M – Sector M – Automobile Salvage Yards.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.M.1 Covered Stormwater Discharges. The requirements in Subpart M apply to stormwater discharges associated with industrial activity from Automobile Salvage Yards as identified by the SIC Code specified under Sector M in Table C-1 of Appendix C of this permit.

8.M.2 Additional Technology-Based Effluent Limits.

8.M.2.1 *Spill and Leak Prevention Procedures.* (See also Part 2.1.2.4) 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 (such as storage indoors until drained) to prevent spills and leaks.

8.M.2.2 *Employee Training.* (See also Part 2.1.2.9) If the facility handles these materials, the employee training program shall address the proper handling (collection, storage, and disposal) of oil, used mineral spirits, antifreeze, mercury switches, and solvents.

8.M.2.3 *Management of Runoff.* (See also Part 2.1.2.6) The permittee shall implement effective controls to manage run-off. Consider the following or other equivalent practices: installation of 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.

8.M.3 Additional SWPPP Requirements.

8.M.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.

8.M.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) 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.

8.M.4 Additional Inspection Requirements. (See also Part 4.1) Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect quarterly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect quarterly 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.

8.M.5 Sector-Specific Benchmarks. (See also Part 6 of the permit.)

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector M1. Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L
	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Lead (mg/L)
0-25 mg/L	0.014
25-50 mg/L	0.023
50-75 mg/L	0.045
75-100 mg/L	0.069
100-125 mg/L	0.095
125-150 mg/L	0.122
150-175 mg/L	0.151
175-200 mg/L	0.182
200-225 mg/L	0.213
225-250 mg/L	0.246
250+ mg/L	0.262

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.N.1 Covered Stormwater Discharges.

The requirements in Subpart N apply to stormwater discharges associated with industrial activity from Scrap Recycling and Waste Recycling facilities as identified by the SIC Code specified under Sector N in Table C-1 of Appendix C of the permit.

8.N.2 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).

8.N.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) Non-stormwater discharges from turnings containment areas are not covered by this permit (see also Part 8.N.3.2.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate AZPDES permit.

8.N.3 Additional Technology-Based Effluent Limits.

8.N.3.1 *Scrap and Waste Recycling Facilities (Non-Source Separated, Non-liquid Recyclable Materials).* The requirements in this section pertain to facilities that receive, process, and conduct wholesale distribution of non-liquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both non-recyclable and recyclable materials. This section does not apply to facilities that accept recyclables only from primarily non-industrial and residential sources.

8.N.3.1.1 *Inbound Recyclable and Waste Material Control Program.* Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the 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 Part 8.N.3.2.6); (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 the Resource Conservation and Recovery Act (RCRA).

- 8.N.3.1.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor)*. Minimize contact of stormwater runoff with stockpiled materials, processed materials, and non-recyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).
- 8.N.3.1.3 *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage)*. Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. The permittee shall regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.
- 8.N.3.1.4 *Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage)*. Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.
- 8.N.3.1.5 *Scrap and Recyclable Waste Processing Areas*. Minimize surface runoff from coming in contact with scrap processing equipment. The permittee shall determine whether operations that generate visible amounts of particulate residue (e.g., shredding) and residual fluids come in contact with runoff. Such contact shall be minimized or prevented through good housekeeping, preventive maintenance, etc. The permittee shall: (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; and (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches.

The permittee shall also implement one or more of the following (or other equivalent measures): (a) 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, (b) install 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; (c) oil and water separators or sumps; (d) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (e) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); and (f) catch basin filters or sand filters.

- 8.N.3.1.6 *Scrap Lead-Acid Battery Program.* Properly handle, store, and dispose of scrap lead-acid batteries. The permittee shall implement one or more of the following control measure options (or other equivalent measures): (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 exposure of scrap lead-acid batteries to precipitation or runoff. Also, employee training for the management of scrap batteries shall be provided.
- 8.N.3.1.7 *Spill Prevention and Response Procedures.* (See also Part 2.1.2.4) 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.
- 8.N.3.1.8 *Supplier Notification Program.* As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.
- 8.N.3.2 *Waste Recycling Facilities (Liquid Recyclable Materials).*
- 8.N.3.2.1 *Waste Material Storage (Indoor).* Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The facility SWPPP may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. The permittee shall implement: (a) procedures for safe material handling (including labeling and marking); and (b) clean up of spills and leaks with dry absorbent materials, or a wet vacuum system.

The permittee shall implement one or both of the following control measure options (or other equivalent measures): (a) appropriate containment structures (trenching, curbing, gutters, etc.); and (b) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage shall be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage

under a separate AZPDES wastewater permit or industrial user permit under the pretreatment program.

- 8.N.3.2.2 *Waste Material Storage (Outdoor)*. Minimize contact between stored residual liquids and precipitation or runoff. The SWPPP 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 shall be in accordance with applicable sections of 40 CFR Part 112. The permittee shall implement one or more of the following control measure options (or other equivalent measures) to minimize contaminants in stormwater: (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.
- 8.N.3.2.3 *Trucks and Rail Car Waste Transfer Areas*. Implement effective measures to minimize pollutants in discharges from truck and rail car loading and unloading areas. Such measures may include: (a) clean up of minor spills and leaks resulting from the transfer of liquid wastes; (b) containment and diversionary structures to minimize contact with precipitation or runoff, and (c) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.
- 8.N.3.3 *Recycling Facilities (Source-Separated Materials)*. The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.
- 8.N.3.3.1 *Inbound Recyclable Material Control*. Minimize the chance of accepting non-recyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Implement one or more of the following control measures (or other equivalent measures): (a) provide information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials; (b) train drivers responsible for pickup of recycled material; (c) clearly mark public drop-off containers regarding which materials can be accepted; and (d) reject non-recyclable wastes or household hazardous wastes at the source. The permittee shall also establish procedures for handling and disposal of non-recyclable material.
- 8.N.3.3.2 *Outdoor Storage*. Implement effective control measures to 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. Implement one or more of the following control measures (or other equivalent measures): (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; and (e) provide covers over containment bins, dumpsters, and roll-off boxes.

- 8.N.3.3.3 *Indoor Storage and Material Processing.* Implement effective control measures to minimize the release of pollutants from indoor storage and processing areas. The permittee shall: (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the surface soils or to the storm sewer system, and (c) provide employee training on pollution prevention practices.
- 8.N.3.3.4 *Vehicle and Equipment Maintenance.* Implement effective control measures for areas where vehicle and equipment maintenance occur outdoors. The permittee shall implement one or more of the following control measure options (or other equivalent measures): (a) prohibit vehicle and equipment washwater from discharging to surface soils or the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) avoid topping off fuel tanks, (d) divert runoff from fueling areas, and (e) store lubricants and hydraulic fluids indoors. The permittee shall also establish spill prevention and clean-up procedures for fueling areas, and provide employee training on proper handling and storage of hydraulic fluids and lubricants.

8.N.4 Additional SWPPP Requirements.

- 8.N.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility’s SWPPP 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.
- 8.N.4.2 *Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities.* For any facility subject to Part 8.N.3.1.3, the SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

8.N.5 Additional Inspection Requirements.

- 8.N.5.1 *Inspections for Waste Recycling Facilities.* The inspections must be performed quarterly, pursuant to Part 4.1, 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.

8.N.6 Sector-Specific Benchmarks. (See also Part 6.)

Table 8.N-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector N1. Scrap Recycling and Waste Recycling Facilities except	Chemical Oxygen Demand (COD)	120 mg/L

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Source-Separated Recycling (SIC 5093)	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Aluminum	0.75 mg/L
	Total Recoverable Copper ¹	Hardness Dependent
	Total Recoverable Iron	1.0 mg/L
	Total Recoverable Lead ¹	Hardness Dependent
	Total Recoverable Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)
0-25 mg/L	0.0038	0.014	0.04
25-50 mg/L	0.0056	0.023	0.05
50-75 mg/L	0.0090	0.045	0.08
75-100 mg/L	0.0123	0.069	0.11
100-125 mg/L	0.0156	0.095	0.13
125-150 mg/L	0.0189	0.122	0.16
150-175 mg/L	0.0221	0.151	0.18
175-200 mg/L	0.0253	0.182	0.20
200-225 mg/L	0.0285	0.213	0.23
225-250 mg/L	0.0316	0.246	0.25
250+ mg/L	0.0332	0.262	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.O.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C.

8.O.2 Industrial Activities Covered by Sector O.

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

- 8.O.2.1 steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, including coal handling areas;
- 8.O.2.2 coal pile runoff, including effluent limitations established by 40 CFR Part 423; and
- 8.O.2.3 dual fuel facilities that could employ a steam boiler.

8.O.3 Limitations on Coverage.

- 8.O.3.1 *Prohibition of Non-Stormwater Discharges.* Non-stormwater discharges subject to effluent limitations guidelines are not covered by this permit.
- 8.O.3.2 *Prohibition of Stormwater Discharges.* Stormwater discharges from the following are not covered by this permit:
 - 8.O.3.2.1 ancillary facilities (e.g., fleet centers and substations) that are not contiguous to a steam electric power generating facility;
 - 8.O.3.2.2 gas turbine facilities (providing the facility is not a dual-fuel facility that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the facility is not a dual-fuel facility that includes a steam boiler); and
 - 8.O.3.2.3 cogeneration (combined heat and power) facilities utilizing a gas turbine.

8.O.4 Additional Technology-Based Effluent Limits. (See also Part 2.1.2.2)

The following good housekeeping measures are required in addition to Part 2.1.2.2:

- 8.O.4.1 *Fugitive Dust Emissions.* Minimize fugitive dust emissions from coal handling areas. The permittee shall implement effective controls to minimize the tracking of coal dust offsite, such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

- 8.O.4.2 *Delivery Vehicles*. The permittee shall implement effective controls to minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site such as 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.
- 8.O.4.3 *Fuel Oil Unloading Areas*. The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from fuel oil unloading areas, such as using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).
- 8.O.4.4 *Chemical Loading and Unloading*. The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from chemical loading and unloading areas, such as: using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, loading and unloading in covered areas and storing chemicals indoors.
- 8.O.4.5 *Miscellaneous Loading and Unloading Areas*. The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from loading and unloading areas, such as: covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.
- 8.O.4.6 *Liquid Storage Tanks*. The permittee shall implement effective controls to minimize contamination of surface runoff from above-ground liquid storage tanks, such as using protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.
- 8.O.4.7 *Large Bulk Fuel Storage Tanks*. The permittee shall implement effective controls to minimize contamination of surface runoff from large bulk fuel storage tanks including the use of containment berms or other equivalent measures. The permittee shall also comply with applicable State and Federal laws, including SPCC Plan requirements.
- 8.O.4.8 *Spill Reduction Measures*. The permittee shall implement effective controls to minimize the potential for an oil or chemical spill. These shall be detailed in the SWPPP or the permittee may reference the appropriate part of the facility's SPCC plan if applicable. As part of the routine facility inspection the permittee shall inspect the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.
- 8.O.4.9 *Oil-Bearing Equipment in Switchyards*. The permittee shall implement effective controls to minimize contamination of surface runoff from oil-bearing equipment in switchyard areas, such as the use of level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

- 8.O.4.10 *Residue-Hauling Vehicles*. The permittee shall inspect all residue-hauling vehicles for proper load covering, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.
- 8.O.4.11 *Ash Loading Areas*. The permittee shall implement effective controls to reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.
- 8.O.4.12 *Areas Adjacent to Disposal Ponds or Landfills*. The permittee shall implement effective controls to minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills, reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.
- 8.O.4.13 *Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites*. The permittee shall implement effective controls to minimize the potential for contamination of runoff from these areas.

8.O.5 Additional SWPPP Requirements.

- 8.O.5.1 *Drainage Area Site Map*. (See also Part 5.1.2) Document in the facility's SWPPP 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).
- 8.O.5.2 *Documentation of Good Housekeeping Measures*. The permittee shall document in the facility's SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 8.O.4.

8.O.6 Additional Inspection Requirements.

- 8.O.6.1 *Comprehensive Site Compliance Inspection*. (See also Part 4.3) As part of the facility's inspection, inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

8.O.7 Sector-Specific Benchmarks

Table 8.O-1 identifies benchmarks that apply to the specific subsectors of Sector O. These benchmarks apply to both the facility's primary industrial activity and any co-located industrial activities, which describe the site's activities.

Table 8.O-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector O1. Steam Electric Generating Facilities (Industrial Activity Code "SE")	Total Iron	1.0 mg/L

8.O.8 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1.)

Table 8.O-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.O-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/l ²
	pH	6.0 – 9.0 s.u.

¹ Monitor annually.

² If the 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.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.P.1 Covered Stormwater Discharges.

The requirements in Subpart P apply to stormwater discharges associated with industrial activity from Land Transportation and Warehousing facilities as identified by the SIC Codes specified under Sector P in Table C-1 of Appendix C of the permit.

8.P.2 Limitation on Coverage

8.P.2.1 *Prohibited Discharges* (see also Parts 1.1.4 and 8.P.3.6) This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be legally disposed in a permitted facility, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

8.P.3 Additional Technology-Based Effluent Limits.

8.P.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2) In addition to the Good Housekeeping requirements in Part 2.1.2.2, the permittee shall perform the following:

8.P.3.1.1 *Vehicle and Equipment Storage Areas.* Minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Implement one or more of the following (or other equivalent measures): use of drip pans under vehicles/equipment; indoor storage of vehicles and equipment; install berms or dikes; use of absorbents; install roofs or cover storage areas; and clean pavement surfaces to remove oil and grease.

8.P.3.1.2 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

8.P.3.1.3 *Material Storage Areas.* Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., "Used Oil," "Spent Solvents," etc.). Implement one or more of 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.

8.P.3.1.4 *Vehicle and Equipment Cleaning Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. Implement one or more of the following (or other equivalent measures):

performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or other equivalent measures.

8.P.3.1.5 *Vehicle and Equipment Maintenance Areas.* Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. Implement one or more of 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.

8.P.3.1.6 *Locomotive Sanding (Loading Sand for Traction) Areas.* Implement one or more of 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.

8.P.3.2 *Employee Training.* (See also Part 2.1.2.9) 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.

8.P.4 Additional SWPPP Requirements.

8.P.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the SWPPP 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.

8.P.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the stormwater conveyance system(s); and fueling areas. Describe these activities in the SWPPP.

8.P.4.3 *Description of Good Housekeeping Measures.* The permittee shall document in the facility's SWPPP the good housekeeping measures implemented, consistent with Part 8.P.3.

8.P.4.4 *Vehicle and Equipment Washwater Requirements.* . The permittee shall only dispose of vehicle and equipment washwater at a facility permitted to accept this waste (APP and AZPDES permits may be applicable). If an industrial user permit is issued under a local pretreatment program, include a copy to the SWPPP. In any case, implement all non-stormwater discharge permit conditions or pretreatment conditions described in the SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and include all pertinent documentation/ information (e.g., frequency, volume, destination, etc.) in the SWPPP.

8.P.5 Additional Inspection Requirements. (See also Part 4.1) 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.

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Q.1 Covered Stormwater Discharges.

The requirements in Subpart Q apply to stormwater discharges associated with industrial activity from Water Transportation facilities as identified by the SIC Codes specified under Sector Q in Table C-1 of Appendix C of the permit.

8.Q.2 Limitations on Coverage.

8.Q.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

8.Q.3 Additional Technology-Based Effluent Limits.

8.Q.3.1 *Good Housekeeping Measures.* The permittee shall implement the following good housekeeping measures in addition to the requirements of part 2.1.2.2:

8.Q.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate AZPDES permit. Collect or contain the discharges from the pressure washing area so that they are not co-mingled with stormwater discharges authorized by this permit.

8.Q.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.

8.Q.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and install containment or enclosure for those stored outdoors when feasible. If abrasive blasting is performed, implement control measures for 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.

8.Q.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement one or more of the following control measure options (or

other equivalent measures): perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor, use dry cleanup methods, and properly dispose or treat and/or recycle stormwater runoff collected from the maintenance area.

- 8.Q.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize runoff of stormwater to material handling areas.
- 8.Q.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding, and perform final cleanup following removal of the vessel and raising the dock. Implement effective procedures for cleaning up oil, grease, and fuel spills occurring on the drydock, such as: 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.
- 8.Q.3.2 *Employee Training.* (See also Part 2.1.2.9) Include the following (as applicable) in an employee training program: 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.
- 8.Q.3.3 *Preventive Maintenance.* (See also Part 2.1.2.3) As part of the facility's 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). The permittee shall also routinely inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.
- 8.Q.4 Additional SWPPP Requirements.**
- 8.Q.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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).
- 8.Q.4.2 *Summary of Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

8.Q.5 Additional Inspection Requirements. (See also Part 4.1)

Include the following in all quarterly routine facility 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.

8.Q.6 Sector-Specific Benchmarks. (See also Part 6.)

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Lead (mg/L)	Zinc (mg/L)
0-25 mg/L	0.014	0.04
25-50 mg/L	0.023	0.05
50-75 mg/L	0.045	0.08
75-100 mg/L	0.069	0.11
100-125 mg/L	0.095	0.13
125-150 mg/L	0.122	0.16
150-175 mg/L	0.151	0.18
175-200 mg/L	0.182	0.20
200-225 mg/L	0.213	0.23
225-250 mg/L	0.246	0.25
250+ mg/L	0.262	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.R.1 Covered Stormwater Discharges.

The requirements in Subpart R apply to stormwater discharges associated with industrial activity from Ship and Boat Building and Repair Yards as identified by the SIC Codes specified under Sector R in Table C-1 of Appendix C of the permit.

8.R.2 Limitations on Coverage.

8.R.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) Discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels are not covered by this permit.

8.R.3 Additional Technology-Based Effluent Limits.

8.R.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.R.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate AZPDES permit.

8.R.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. The permittee shall contain 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). If deposits of abrasive blasting debris and paint chips reach stormwater conveyances, the permittee shall remove and properly dispose of all visible contaminants.

8.R.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, properly store and dispose of spent abrasive materials generated at the facility. Implement an inventory control plan to limit the presence of potentially hazardous materials onsite.

8.R.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement one or more of the following control measure options (or other equivalent measures): perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor,

use dry cleanup methods, and properly dispose, or treat and/or recycle stormwater runoff collected from the maintenance area.

- 8.R.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize stormwater run-on to material handling areas.
- 8.R.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and perform 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, such as the following (or other equivalent measures): sweep rather than hose off debris and spent blasting material from accessible areas of the drydock prior to flooding; and make absorbent materials and oil containment booms readily available to clean up and contain any spills.
- 8.R.3.2 *Employee Training.* (See also Part 2.1.2.9) Include the following (as applicable) in an employee training program: 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.
- 8.R.3.4 *Preventive Maintenance.* (See also Part 2.1.2.3) As part of the facility's 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 inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.R.4 Additional SWPPP Requirements.

- 8.R.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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).
- 8.R.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).
- 8.R.4.3 *Documentation of Good Housekeeping Measures.* Document in the SWPPP any good housekeeping measures implemented to meet the effluent limits in Part 8.R.3.

8.R.4.3.1 *Blasting and Painting Areas*. Document in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibit uncontained blasting and painting over open water and prohibit blasting and painting during windy conditions, which can render containment ineffective).

8.R.4.3.2 *Storage Areas*. Specify in the SWPPP which materials are stored indoors, and implement containment or enclosure for those stored outdoors when feasible.

8.R.5 Additional Inspection Requirements. (See also Part 4.1)

Include the following in all quarterly routine facility 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.

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart S – Sector S – Air Transportation.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.S.1 Covered Stormwater Discharges.

The requirements in Subpart S apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes specified under Sector S in Table C-1 of Appendix C of the permit.

8.S.2 Limitation on Coverage

8.S.2.1 *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.

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.

8.S.2.2 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4 and Part 8.S.3) 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 AZPDES permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge.

8.S.3 Additional Technology-Based Effluent Limits.

8.S.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.S.3.1.1 *Aircraft, Ground Vehicle and Equipment Maintenance Areas.* Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Implement one or more of the following control measure options (or other equivalent measures): perform maintenance activities indoors; maintain an organized inventory of material used in the maintenance areas; drain all parts of fluids prior to disposal; prohibit the practice of hosing down the apron or hanger floor; use dry cleanup methods; and collect the stormwater runoff from the maintenance area and properly dispose or treat and recycling.

8.S.3.1.2 *Aircraft, Ground Vehicle and Equipment Cleaning Areas.* (See also Part 8.S.3.6) Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater runoff from cleaning areas.

- 8.S.3.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Implement one or more of the following control measure options, including any BMPs (or other equivalent measures): store aircraft and ground vehicles indoors when feasible; use drip pans for the collection of fluid leaks; and install perimeter drains, dikes or berms around storage areas.
- 8.S.3.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Minimize contamination of precipitation/runoff from these areas. Implement one or more of the following control measure options (or other equivalent measures): store materials indoors when feasible; store waste materials in a centralized location; and install berms/dikes around storage areas.
- 8.S.3.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Implement one or more of the following control measure options (or other equivalent measures): spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); use only dry cleanup methods; and collect stormwater runoff for disposal or on-site retention.
- 8.S.3.1.6 Source Reduction. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.
- 8.S.3.1.6.1 Runway Deicing Operation: Minimize contamination of stormwater runoff from runways as a result of deicing operations. Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. The permittee shall also evaluate whether the following control measures (or other equivalent measures) are feasible: metered application of chemicals; pre-wetting dry chemical constituents prior to application; install a runway ice detection system; implement anti-icing operations as a preventive measure against ice buildup.
- 8.S.3.1.6.2 Aircraft Deicing Operations. Minimize contamination of stormwater runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority).

Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these control measure options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

- 8.S.3.1.7 **Management of Runoff.** (See also 2.1.2.6) Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Implement one or more of the following control measure options (or other equivalent measures): use a dedicated deicing facility with a runoff collection/ recovery system; use vacuum/collection trucks; store contaminated stormwater/deicing fluids in tanks and release 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 direct runoff into vegetative swales or other infiltration measures. Recover deicing materials when they are applied during non-precipitation events (e.g., cover storm sewer inlets, use booms, install absorptive interceptors in the drains, etc.) to prevent these from later becoming a source of stormwater contamination. Recycle used deicing fluid whenever possible.
- 8.S.3.2 *Deicing Season.* The permittee shall determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. The permittee shall implement control measures, including any BMPs, facility inspections and monitoring with particular emphasis throughout the defined deicing season. When the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea are met, the permittee shall obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH. This sampling timeframe shall occur during the deicing season identified above. See also Part 8.S.6.

8.S.4 Additional SWPPP Requirements.

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from its own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the 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.

- 8.S.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP 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.

8.S.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) In the facility's inventory of exposed materials, the SWPPP shall describe the potential for the following activities and facility areas to contribute pollutants to stormwater discharges:

- Aircraft, runway, ground vehicle and equipment maintenance and cleaning; and
- Aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps).

When deicing chemicals are used, the permittee shall 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 the permittee's knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

8.S.4.3 *Vehicle and Equipment Washwater Requirements.* The permittee shall only dispose of vehicle and equipment washwater at a facility permitted to accept this waste (APP and AZPDES permits may be applicable). If an industrial user permit is issued under a local pretreatment program, include a copy in the SWPPP. In any case, if the facility is subject to another permit, describe the control measures for implementing all non-stormwater discharge permit conditions or pretreatment requirements in the SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and include all pertinent documentation/ information (e.g., frequency, volume, destination, etc.) in the SWPPP.

8.S.4.4 *Documentation of Control Measures Used for Management of Runoff:* Document in the SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

8.S.5 Additional Inspection Requirements.

8.S.5.1 *Inspections.* (See also Part 4.1) At a minimum conduct routine facility inspections at least monthly during the deicing season. If the facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Director may specifically require an increase in inspection frequencies.

8.S.5.2 *Comprehensive Site Inspections.* (See also Part 4.3) Using only qualified personnel, conduct the annual site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

8.S.6 Sector-Specific Benchmarks. (See also Part 6.)

Monitor per the requirements in Table 8.S-1.

Table 8.S-1.		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, monitor the first four parameters in those outfalls that collect runoff from areas where deicing activities occur (SIC 4512-4581).	Biochemical Oxygen Demand (BOD ₅) ¹	30 mg/L
	Chemical Oxygen Demand (COD) ¹	120 mg/L
	Ammonia ¹	2.14 mg/L
	pH ¹	6.0 – 9.0 s.u.

¹ These are deicing-related parameters. Collect the four benchmark samples, and any required follow-up benchmark samples, during the timeframe defined in Part 8.S.3.2 when deicing activities are occurring.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart T – Sector T – Treatment Works.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.T.1 Covered Stormwater Discharges.

The requirements in Subpart T apply to stormwater discharges associated with industrial activity from Treatment Works as identified by the Activity Code specified under Sector T in Table C-1 of Appendix C of the permit.

8.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:

- 8.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 a 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.
- 8.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.

8.T.3 Limitations on Coverage.

- 8.T.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

8.T.4 Additional Technology-Based Effluent Limits.

- 8.T.4.1 *Control Measures.* (See also the non-numeric effluent limits in Part 2.1.2) In addition to the other control measures, implement the following, or other equivalent measures when feasible: 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).
- 8.T.4.2 *Employee Training.* (See also Part 2.1.2.9) Include the following (as applicable) in an employee training program: 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.

8.T.5 Additional SWPPP Requirements.

- 8.T.5.1 *Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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.
- 8.T.5.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP 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.
- 8.T.5.3 *Wastewater and Washwater Requirements.* The permittee shall only dispose of industrial, vehicle and equipment washwater at a facility permitted to accept this waste (APP and AZPDES permits may be applicable). . If the washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and include all pertinent documentation / information (e.g., frequency, volume destination, etc.) in the SWPPP.

8.T.6 Additional Inspection Requirements. (See also Part 4.1)

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.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.U.1 Covered Stormwater Discharges.

The requirements in Subpart U apply to stormwater discharges associated with industrial activity from Food and Kindred Products facilities as identified by the SIC Codes specified in Table C-1 of Appendix C of the permit.

8.U.2 Limitations on Coverage.

8.U.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following discharges are not authorized by this permit: discharges containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

8.U.3 Additional Technology-Based Limitations.

8.U.3.1 *Employee Training.* (See also Part 2.1.2.9) Include pest control in the facility's employee training program.

8.U.4 Additional SWPPP Requirements.

8.U.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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.

8.U.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP, 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.

8.U.5 Additional Inspection Requirements. (See also Part 4.1)

Inspect on a quarterly 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.

8.U.6 Sector-Specific Benchmarks. (See also Part 6.)

Table 8.U-1.		
Subsector (Facility discharges may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration
Subsector U1. Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L
Subsector U2. 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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.V.1 Covered Stormwater Discharges.

The requirements in Subpart V apply to stormwater discharges associated with industrial activity from Textile Mills, Apparel, and Other Fabric Product manufacturing as identified by the SIC Codes specified under Sector V in Table C-1 of Appendix C of the permit.

8.V.2 Limitations on Coverage.

8.V.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) 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.

A facility with these types of discharges shall be covered under a separate AZPDES permit.

8.V.3 Additional Technology-Based Limitations.

8.V.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.V.3.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances. If storing empty chemical drums or containers, ensure that the drums and containers are clean and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.

8.V.3.1.2 *Material Handling Areas.* Minimize contamination of stormwater runoff from material handling operations and areas. Implement one or more of the following (or other equivalent measures): use spill and overflow protection; cover fueling areas; and cover or enclose areas where the transfer of material may occur. When applicable, replace or repair leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.

8.V.3.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): cover the fueling area, use spill and overflow protection, minimize run-on of stormwater to the fueling areas, use dry cleanup methods, and

dispose, treat and/or recycling stormwater runoff collected from the fueling area.

8.V.3.1.4 *Above-Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Implement one or more of the following (or other equivalent measures): regular cleanup of these areas; including tanks, piping and valves; minimize runoff of stormwater from adjacent areas; restrict access to the area; insert filters in adjacent catch basins; provide absorbent booms in unbermed fueling areas; use dry cleanup methods; and permanently seal drains within critical areas that may discharge to a storm drain.

8.V.3.2 *Employee Training.* (See also Part 2.1.2.9) Include the following (as applicable) in an employee training program: 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.

8.V.4 Additional SWPPP Requirements.

8.V.4.1 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the facility's SWPPP 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).

8.V.4.2 *Description of Good Housekeeping Measures for Material Storage Areas.* Document in the SWPPP the facility's containment area or enclosure for materials stored outdoors in connection with Part 8.V.3.1.1 above.

8.V.5 Additional Inspection Requirements. (See also Part 4.1)

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart W – Sector W – Furniture and Fixtures.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.W.1 Covered Stormwater Discharges.

The requirements in Subpart W apply to stormwater discharges associated with industrial activity from Furniture and Fixtures facilities as identified by the SIC Codes specified under Sector W in Table C-1 of Appendix C of the permit.

8.W.2 Additional SWPPP Requirements.

8.W.2.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP 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; access roads; and rail spurs.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.X.1 Covered Stormwater Discharges.

The requirements in Subpart X apply to stormwater discharges associated with industrial activity from Printing and Publishing facilities as identified by the SIC Codes specified under Sector X in Table C-1 of Appendix C of the permit.

8.X.2 Additional Technology-Based Effluent Limits.

8.X.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

- 8.X.2.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances.
- 8.X.2.1.2 *Material Handling Area.* Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Implement one or more of the following (or other equivalent measures): using spill and overflow protection, cover fueling areas, and cover or enclose areas where the transfer of materials may occur. When applicable, replace or repair leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.
- 8.X.2.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): cover the fueling area, use spill and overflow protection, minimize runoff of stormwater to the fueling areas, use dry cleanup methods, and properly dispose, treat and/or recycling stormwater runoff collected from the fueling area.
- 8.X.2.1.4 *Above Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Implement one or more of the following (or other equivalent measures): regularly clean these areas, explicitly address tanks, piping and valves in the facility's SPCC program, minimize stormwater runoff from adjacent areas, restrict access to the area, insert filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use dry cleanup methods, and permanently seal drains within critical areas that may discharge to a storm drain.

8.X.2.2 *Employee Training.* (See also Part 2.1.2.9) Include the following (as applicable) in an employee training program: spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

8.X.3 Additional SWPPP Requirements.

8.X.3.1 *Description of Good Housekeeping Measures for Material Storage Areas.* In connection with Part 8.X.2.1.1, describe in the SWPPP the containment area or enclosure for materials stored outdoors.

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

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

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Y.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C of the permit.

8.Y.2 Additional Technology-Based Effluent Limits.

8.Y.2.1 *Controls for Rubber Manufacturers.* (See also Part 2.1.2) Minimize the discharge of zinc in the facility's stormwater discharges. Parts 8.Y.2.1.1 to 8.Y.2.1.5 give possible sources of zinc to be reviewed and list some specific control measures for implementation (or their equivalents). Other general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring airspace between the container and the cover to minimize "puffing" losses when the container is opened, and using automatic dispensing and weighing equipment.

8.Y.2.1.1 *Zinc Bags.* Ensure proper handling and storage of zinc bags at the facility. Include the following (as applicable) in an employee training program: the handling and storage of zinc bags, indoor storage of zinc bags, and cleanup of zinc spills without washing the zinc into the storm drain. Consider the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

8.Y.2.1.2 *Dumpsters.* Minimize discharges of zinc from dumpsters. Implement the following control measures: cover and line dumpsters containing zinc bags or residue or move the dumpster indoors.

8.Y.2.1.3 *Dust Collectors and Baghouses.* Minimize contributions of zinc to stormwater from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

8.Y.2.1.4 *Grinding Operations.* Minimize contamination of stormwater as a result of dust generation from rubber grinding operations, such as installing a dust collection system.

8.Y.2.1.5 *Zinc Stearate Coating Operations.* Minimize the potential for stormwater contamination from drips and spills of zinc stearate slurry that may be released to the storm drain, such as using alternative compounds to zinc stearate.

8.Y.2.2 *Controls for Plastic Products Manufacturers.* Minimize the discharge of plastic resin pellets in the facility's stormwater discharges. Implement the following control

measures (or other equivalent measures) minimize spills, clean up spills promptly and thoroughly, train employees on proper handling, and recapture pellets when possible.

8.Y.3 Additional SWPPP Requirements.

8.Y.3.1 *Potential Pollutant Sources for Rubber Manufacturers.* (See also Part 5.1.3) Document in the SWPPP the use of zinc at the facility and the possible pathways through which zinc may be discharged in stormwater runoff.

8.Y.4 Sector-Specific Benchmarks. (See also Part 6.)

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Y1. Rubber Products Manufacturing (SIC 3011, 3021, 3052, 3053, 3061, 3069)	Total Zinc ¹	Hardness Dependent

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Zinc (mg/L)
0-25 mg/L	0.04
25-50 mg/L	0.05
50-75 mg/L	0.08
75-100 mg/L	0.11
100-125 mg/L	0.13
125-150 mg/L	0.16
150-175 mg/L	0.18
175-200 mg/L	0.20
200-225 mg/L	0.23
225-250 mg/L	0.25
250+ mg/L	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Z.1 Covered Stormwater Discharges.

The requirements in Subpart Z apply to stormwater discharges associated with industrial activity from Leather Tanning and Finishing facilities as identified by the SIC Code specified under Sector Z in Table C-1 of Appendix C of the permit.

8.Z.2 Additional Technology-Based Effluent Limits.

8.Z.2.3 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

- 8.Z.2.3.1 *Storage Areas for Raw, Semi-processed, or Finished Tannery By-products.* Minimize contamination of stormwater runoff from pallets and bales of raw, semi-processed, or finished tannery by-products (e.g., splits, trimmings, shavings). Consider indoor storage or protect outdoor storage areas with polyethylene wrapping, tarpaulins, roofed storage, etc. When feasible place materials on an impermeable surface and enclose or install berms (or other equivalent measures) around the area to prevent stormwater run-on and runoff.
- 8.Z.2.3.2 *Material Storage Areas.* Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) and minimize contact of such materials with stormwater.
- 8.Z.2.3.3 *Buffing and Shaving Areas.* Minimize contamination of stormwater runoff with leather dust from buffing and shaving areas by implementing dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.
- 8.Z.2.3.4 *Receiving, Unloading, and Storage Areas.* Minimize contamination of stormwater runoff from receiving, unloading, and storage areas. If these areas are exposed, implement the following (or other equivalent measures): cover all hides and chemical supplies, divert drainage to the process sewer, or place berms or curbs around the area to prevent stormwater runoff.
- 8.Z.2.3.5 *Outdoor Storage of Contaminated Equipment.* Minimize contact of stormwater with contaminated equipment. Implement the following (or other equivalent measures): clean thoroughly prior to storage, or cover equipment, or divert drainage to the process sewer.
- 8.Z.2.3.6 *Waste Management.* Minimize contamination of stormwater runoff from waste storage areas. Implement the following (or other equivalent measures): cover dumpsters or move waste management activities indoors, cover waste piles with temporary covering material such as tarpaulins or polyethylene, and

minimize stormwater runoff by enclosing the area or placing berms around the area.

8.Z.3 Additional SWPPP Requirements.

8.Z.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the facility's SWPPP 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.

8.Z.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

DRAFT

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AA.1 Covered Stormwater Discharges.

The requirements in Subpart AA apply to stormwater discharges associated with industrial activity from Fabricated Metal Products facilities as identified by the SIC Codes specified under Sector AA in Table C-1 of Appendix C of the permit.

8.AA.2 Additional Technology-Based Effluent Limits.

8.AA.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.AA.2.1.1 *Raw Steel Handling Storage.* Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

8.AA.2.1.2 *Paints and Painting Equipment.* Minimize exposure of paint and painting equipment to stormwater.

8.AA.2.2 *Spill Prevention and Response Procedures.* (See also Part 2.1.2.4) The permittee shall ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas shall be addressed:

8.AA.2.2.1 *Metal Fabricating Areas.* Maintain clean, dry, orderly conditions in these areas. Use dry clean-up techniques where feasible.

8.AA.2.2.2 *Storage Areas for Raw Metal.* Keep these areas free of conditions that could cause, or impede appropriate and timely response to, spills or leakage of materials. Maintain storage areas so that there is easy access in the event of a spill, and label stored materials to aid in identifying spill contents.

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

8.AA.2.2.4 *Cleaners and Rinse Water.* Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible.

8.AA.2.2.5 *Lubricating Oil and Hydraulic Fluid Operations.* Minimize the potential for stormwater contamination from lubricating oil and hydraulic fluid operations. Use monitoring equipment or other devices to detect and control leaks and overflows. Install perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures if any operations occur outside.

8.AA.2.2.6 *Chemical Storage Areas.* Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

8.AA.2.3 *Spills and Leaks.* (See also Part 5.1.3.3) In the facility’s spill prevention and response procedures, required by Part 2.1.2.4, determine whether chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes are present. If present, ensure the spill prevention and response procedures specifically address these chemicals..

8.AA.3 Additional SWPPP Requirements.

8.AA.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility’s SWPPP 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.

8.AA.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP 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.

8.AA.4 Additional Inspection Requirements

8.AA.4.1 *Inspections.* (See also Part 4) 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.

8.AA.4.2 *Comprehensive Site Inspections.* (See also Part 4.3) As part of the facility’s inspection, 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.

8.AA.5 Sector-Specific Benchmarks. (See also Part 6.)

Table 8.AA-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector AA1. Fabricated Metal Products, except Coating (SIC 3411-	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L

Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
3499; 3911-3915)	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	0.68 mg/L

¹ The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix D, "Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Water Hardness Range	Zinc (mg/L)
0-25 mg/L	0.04
25-50 mg/L	0.05
50-75 mg/L	0.08
75-100 mg/L	0.11
100-125 mg/L	0.13
125-150 mg/L	0.16
150-175 mg/L	0.18
175-200 mg/L	0.20
200-225 mg/L	0.23
225-250 mg/L	0.25
250+ mg/L	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AB – Sector AB – Transportation Equipment, Industrial or Commercial Machinery Facilities.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AB.1 Covered Stormwater Discharges.

The requirements in Subpart AB apply to stormwater discharges associated with industrial activity from Transportation Equipment, Industrial or Commercial Machinery facilities as identified by the SIC Codes specified under Sector AB in Table C-1 of Appendix C of the permit.

8.AB.2 Additional SWPPP Requirements.

8.AB.2.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the facility's SWPPP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AC– Sector AC –Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AC.1 Covered Stormwater Discharges.

The requirements in Subpart 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 C-1 of Appendix C of the permit.

8.AC.2 Additional Requirements.

No additional sector-specific requirements apply.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AD – Sector AD – Stormwater Discharges Designated by the Director as Requiring Permits.

The permittee shall comply with Part 8 sector-specific requirements associated with the facility's primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of the facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.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.

8.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 the facility may or may not normally be discharging stormwater associated with industrial activity, the permittee shall obtain the Director's written permission to use this permit prior to submitting an NOI. An operator, who is authorized to use this permit, shall also be required to ensure that the facility's discharges meet the basic eligibility provisions of this permit at Part 1.2.

8.AD.2 Sector-Specific Benchmarks and Effluent Limits. (See also Part 6.)

The Director shall establish any additional monitoring and reporting requirements for the facility prior to authorizing an operator to be covered by this permit. Any additional monitoring requirements shall be based on the nature of activities at the facility and its stormwater discharges.