

Stormwater Pollution Prevention Plan

For the SJU - Luis Muñoz Marín International Airport
Carolina, Puerto Rico

JUNE 2024



Stormwater Pollution Prevention Plan

For the Luis Muñoz Marín International Airport (SJU) Carolina, Puerto Rico

June 2024

Stormwater Pollution Prevention Plan For:

Aerostar Airport Holdings, LLC.
TERMINAL D ARRIVALS LEVEL
Carolina, Puerto Rico, 00979
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SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION**1.1 Facility Information.**

Facility Name: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT (SJU)

Street/Location: AIRPORT ROAD

City: CAROLINA

State: P.R.

ZIP Code: 00979

NPDES ID (i.e., permit tracking number): PRR053267PRIMARY SECTOR S, SUBSECTOR S1, SCI CODE 4581

Is your facility presently inactive and unstaffed and is there no industrial materials or activities exposed to stormwater? Yes No

Latitude/Longitude

Latitude:

18.438578 ° N (decimal degrees)

Longitude:

-66.002173 ° W (decimal degrees)

Method for determining latitude/longitude (check one): Maps (If USGS topographic map used, specify scale:) GPS Other (please specify):**Horizontal Reference Datum (check one):** NAD 27 NAD 83 WGS 84Is the facility located in an Indian country? Yes No

Are you considered a “federal operator” of the facility?

 Yes NoEstimated area of industrial activity at your facility exposed to stormwater: approx. 250 acres**Discharge Information**

Does this facility discharge stormwater into a municipal separate storm sewer system (MS4)?

 Yes No

Name(s) of surface water(s) that receive stormwater from your facility:

La Torrecilla Lagoon, Suárez Canal, and San José Lagoon. All eventually empty to the Atlantic Ocean.Does this facility discharge industrial stormwater directly into any segment of an “impaired water” (see definition in 2021 MSGP, Appendix A)? Yes No

If Yes, identify name of the impaired water(s) (and segment(s), if applicable):

La Torrecilla Lagoon.

Identify the pollutant(s) causing the impairment(s): pH, Surfactants, Temperature, Total Nitrogen, Total Phosphorus, Turbidity¹.

Which of the identified pollutants may be present in industrial stormwater discharges from this facility?

Oil and Grease, Surfactants, Turbidity, Metals, BOD, COD, Ammonia, Nitrates, Nitrites, Total Suspended Solids.

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants:

Yes No

Does this facility discharge industrial stormwater into a receiving water designated as Tier 2, Tier 2.5, or Tier 3 water (see definitions in 2021 MSGP, Appendix A)?

Yes No

Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2021 MSGP Table 1-1)? Yes No

If Yes, which guidelines apply?

PAHs Guidelines – 49 kg/year - Section 4.2.1.1.(b) Polycyclic Aromatic Hydrocarbons (PAHs). Samples are analyzed using EPA Method 625.1 consistent with 40CRF Part 136 analytical methods.

1.2 Contact Information/Responsible Parties.

Facility Operator(s):

Name: AEROSTAR AIRPORT HOLDINGS, LLC
Address: TERMINAL D, AIRPORT ROAD
PO Box 38085, San Juan PR 00937-1085
Telephone Number: (787) 289-7240 X2609
Email address: jaime.pabon@aerostarairports.com

Facility Owner(s):

Name: AEROSTAR AIRPORT HOLDINGS
Address: TERMINAL D, AIRPORT ROAD
PO Box 38085, San Juan PR 00937-1085
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Email address: jaime.pabon@aerostarairports.com

SWPPP Contact(s):

SWPPP Contact Name (Primary): Jaime A. Pabón Rodríguez, Primary

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SWPPP Contact Name (Backup): Marisleissis Orona, Backup

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Email address: marisleissis.orona@aerostarairports.com

1.3 Stormwater Pollution Prevention Team.

Table 1. Stormwater Pollution Prevention Team Staff Names and Responsibilities.

Staff Names	Individual Responsibilities
<p>Jaime A. Pabón Rodríguez Sustainability Director</p>	<ul style="list-style-type: none"> • Update SWPPP as needed • Review SWPPP’s effectiveness • Report results and advise Aerostar of problems encountered • Provide Best Management Practices (BMPs) and MSGP training materials • Monitor compliance with the MSGP
<p>Carlos Hernandez Chief - ARFF</p>	<ul style="list-style-type: none"> • Implement facility compliance inspections • Enforce the implementation of the SWPPP requirements • Coordinate trainings programs
<p>Marisleissis Orona Environmental Coordinator</p>	<ul style="list-style-type: none"> • Promote the implementation of the SWPPP requirements and BMPs • Implement employee training programs and inspections • Perform material inventories and inspections • Record keeping • Conduct Quarterly Visual Inspections
<p>Maximiliano Muñoz Airport Facilities Manager</p>	<ul style="list-style-type: none"> • Preventive maintenance • Implement good housekeeping • Record keeping
<p>Mary Olga Santiago Landside and Airport Services Supervisor</p>	<ul style="list-style-type: none"> • Implement the SWPPP requirements and BMPs • Implement employee-training programs and inspections • Perform material inventories and inspections • Record keeping

1.4 Site Description.

The activities performed by Aerostar Airport Holdings, LLC. (Aerostar) are buildings and grounds maintenance (performed outdoors), green areas management, outdoor facility maintenance and repairs, HVAC maintenance, chemical storage (performed both indoors and outdoors), vehicle or parts degreasing (performed indoors), equipment maintenance (performed indoors), equipment storage (performed both indoors and outdoors), fuel storage (performed outdoors), floor wash down (performed indoors), pesticide and herbicide usage (performed outdoors), ground vehicle fueling (performed outdoors), and vehicle maintenance (performed indoors).

A subcontractor periodically performs runway paint and rubber removal. The method utilized uses a truck that provides hydro-blasting followed by a vacuum. Hi-Lite Corp. collects all materials and wastewater generated from these processes during removal and appropriately disposes of them. Aerostar is continually exploring more feasible and environmentally friendly techniques for these activities.

A summary of potential pollutant sources covered by this SWPPP is summarized below. The data presented in this section was collected through historical data, interviews with Aerostar staff, and site visits. Based on the data collected, the following activities were reported to occur at SJU:

- Aircraft fueling
- Equipment storage
- Fuel storage
- Chemical products storage
- Pesticide/herbicide usage
- Outdoor apron wash down
- Cargo handling
- Aircraft maintenance
- Aircraft sanitary services
- Vehicle/equipment washing
- Ground vehicle fueling
- Ground vehicle maintenance
- Floor wash down
- Building and ground maintenance
- Runway/taxiway painting
- Equipment/parts degreasing

1.5 General Location Map.

The general location map for this facility can be found in **Attachment A**.

1.6 Site Map.

The site map with the building inventory for this facility can be found in **Attachment B**.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Potential Pollutants Associated with Industrial Activity.

The SJU is located in Isla Verde (Carolina), Puerto Rico. The figure in **Attachment A** presents a site location map of the SJU. The facility includes approximately 1,600 acres of land used primarily for commercial service. It serves markets in the Caribbean, continental United States, Europe, and Central and South America. The airport also facilitates transportation within Puerto Rico, providing airline service between San Juan and Aguadilla, Mayagüez, Ponce, and the Islands of Culebra and Vieques. The airport handles international and domestic air cargo and general aviation and military activity. SJU has two runways: Runway 8/26 and Runway 10/28, taxiways, terminal buildings, parking garages, etc. Major water bodies near the airport include La Torrecilla Lagoon to the east, San José Lagoon to the southwest, and the Atlantic Ocean to the North. La Torrecilla Lagoon is connected to the San José Lagoon via the Suárez Canal.

Precipitation is relatively low and well-proportioned throughout the year (**Image 1**). The annual precipitation average from 1971 to 2023 was 50 inches, with a monthly maximum of 6.2 inches and a monthly minimum of 2.1 inches. Temperatures average 78.7 °F for the 30 years, with a monthly maximum of 88 °F and a monthly minimum of 71 °F.

Monthly Mean Precipitation for San Juan Area, PR (ThreadEx)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	0.08	0.03	0.03	0.04	0.15	0.10	0.12	0.31	0.10	0.12	0.13	0.10	0.11
2001	0.09	0.12	0.05	0.08	0.19	0.07	0.12	0.21	0.17	0.16	0.21	0.38	0.15
2002	0.11	0.03	0.04	0.16	0.10	0.06	0.17	0.22	0.25	0.16	0.09	0.15	0.13
2003	0.15	0.08	0.05	0.31	0.05	0.11	0.15	0.18	0.15	0.16	0.38	0.17	0.16
2004	0.06	0.09	0.10	0.10	0.30	0.23	0.22	0.11	0.33	0.21	0.19	0.15	0.17
2005	0.17	0.03	T	0.50	0.28	0.17	0.27	0.23	0.13	0.39	0.24	0.12	0.21
2006	0.21	0.06	0.05	0.34	0.16	0.16	0.29	0.14	0.06	0.36	0.19	0.15	0.18
2007	0.08	0.04	0.07	0.33	0.05	0.13	0.15	0.11	0.22	0.16	0.20	0.26	0.15
2008	0.22	0.07	0.02	0.16	0.16	0.18	0.06	0.13	0.33	0.17	0.14	0.15	0.15
2009	0.08	0.12	0.10	0.09	0.17	0.35	0.15	0.28	0.21	0.12	0.40	0.06	0.18
2010	0.36	0.04	0.10	0.12	0.40	0.31	0.27	0.27	0.30	0.25	0.27	0.24	0.24
2011	0.09	0.08	0.04	0.09	0.35	0.45	0.36	0.60	0.22	0.18	0.16	0.26	0.24
2012	0.12	0.07	0.30	0.18	0.17	0.01	0.22	0.24	0.07	0.15	0.10	0.17	0.15
2013	0.06	0.08	0.06	0.14	0.47	0.38	0.46	0.24	0.25	0.10	0.30	0.25	0.23
2014	0.08	0.13	0.02	0.11	0.29	0.03	0.12	0.32	0.21	0.10	0.38	0.18	0.16
2015	0.16	0.12	0.05	0.05	0.07	0.07	0.05	0.19	0.14	0.06	0.29	0.11	0.11
2016	0.05	0.13	0.07	0.33	0.23	0.09	0.16	0.17	0.16	0.21	0.59	0.14	0.19
2017	0.06	0.06	0.19	0.21	0.15	0.13	0.21	0.25	0.53	0.21	0.34	0.11	0.20
2018	0.17	0.19	0.09	0.10	0.16	0.10	0.14	0.20	0.10	0.18	0.19	0.07	0.14
2019	0.07	0.08	0.03	0.10	0.06	0.10	0.22	0.14	0.32	0.09	0.15	0.19	0.13
2020	0.29	0.28	0.16	0.14	0.05	0.13	0.34	0.11	0.17	0.21	0.25	0.15	0.19
2021	0.07	0.11	0.07	0.07	0.13	0.35	0.17	0.09	0.15	0.19	0.09	0.18	0.14
2022	0.09	0.42	0.11	0.10	0.04	0.05	0.26	0.31	0.45	0.21	0.21	0.12	0.20
2023	0.18	0.09	0.07	0.18	0.13	0.08	0.13	0.14	0.10	0.31	0.17	M	0.14
Mean	0.13	0.11	0.08	0.17	0.18	0.16	0.20	0.22	0.21	0.19	0.24	0.17	0.17
Max	0.36 2010	0.42 2022	0.30 2012	0.50 2005	0.47 2013	0.45 2011	0.46 2013	0.60 2011	0.53 2017	0.39 2005	0.59 2016	0.38 2001	0.24
Min	0.05 2016	0.03 2005	T 2005	0.04 2000	0.04 2022	0.01 2012	0.05 2015	0.09 2021	0.06 2006	0.06 2015	0.09 2002	0.06 2009	0.11

Image 1. Puerto Rico Mean Annual Rainfall. Source: National Oceanic and Atmospheric Administration (NOAA) weather.gov

The airport is generally divided into eight (8) watersheds or micro-basins and five (5) significant outfalls to the receiving water bodies, as shown in **Image 2**. The existing buildings and tenant locations are referenced in **Attachments B and C, respectively**. **The stormwater sewer systems and** associated ditch systems are illustrated in **Attachment J**. Updated sampling points are shown in **Attachment D** to address the problem of the previously selected locations that are permanently flooded by the intertidal movement of the San Juan Bay Estuary waters.

This SWPPP information was compiled from various sources, including the SJU Utility Master Plan, United States Geological Survey (USGS) quadrangle maps, and site visits to the SJU property by Aerostar and Diatom Environmental Services in 2023. **Sampling Points within the watershed were reviewed and modified to avoid reporting background sources of pollution.**

The following description includes the eight (8) SJU watersheds focusing on stormwater drainage patterns and industrial activities. The information contained in this section is later used to identify potential pollution sources and the appropriate BMPs. The area leased by the National Guard is not included in this description and is not covered by this SWPPP. Other areas not within our obligations are the Cargo Area Facilities (CAF1, CAF2, and CAF3) managed by the Puerto Rico Ports Authorities and its private tenants.

Watershed 1

Watershed 1 encompasses approximately 133 acres in the northern portion of the airport. Impervious area land uses consist mainly of the upper half of Runway 8/26. Previous area land uses include open grass areas and drainage ditches. No industrial activities covered by the MSGP are conducted within this watershed. Stormwater runoff in this watershed drains directly (surface flow) to the drainage canal in the middle of the watershed. Depending on the tidal movement, this drainage canal discharges to La Torrecilla Lagoon (Discharge Point No. 1 or Discharge Point No. 4). Discharge Point No. 1 is obstructed by vegetation and is unavailable. **No sampling point was assigned to this watershed.**

Watershed 2

Watershed 2 encompasses approximately 178 acres in the northeastern portion of the airport and includes various industrial activities. Impervious area land uses consist of the lower portion of the eastern part of Runway 8/26; the upper half of the mid-field taxiway; Taxiways: N, and S, and numerous aviation hangars and maintenance facilities. It also includes general aviation services, airport aviation services and their car maintenance facilities, fuel farms, PREPA helicopters and hangars, general aviation aprons, airport catering services, abandoned structures, a solid waste disposal site, and a sanitary disposal site. Pervious area land uses include landscaped areas, open grass areas, and drainage ditches. This watershed drains mainly through the stormwater sewer system, which drains to the drainage canal, ultimately discharging to Discharge Point No. 2. **Sample Point 3 and Sample Point 2 were assigned to this watershed.**

Watershed 3A

Watershed 3A encompasses approximately 225 acres and is located south of Watershed 2. Like Watershed 2, this watershed includes various industrial facilities. Impervious area land uses consist of the lower half of the midfield Taxiway, the eastern half of Runway 10/28, the Airport Rescue and Fire Fighting unit (ARFF), Aerostar vehicle maintenance facilities, cargo areas of different airlines including American Airlines, GMD, FED-EX, Caribbean Airport Facilities (CAF) and an abandoned gas station. Aerostar, LCC, does not operate in these areas. Pervious area land uses include landscaped areas, open grass areas, and drainage ditches. This watershed drains mainly through the stormwater sewer system, which drains to a main drainage canal in the middle of the watershed. It ultimately empties at Discharge Point No. 3. **Sample Point 4, Sample Point 6, Sample Point 7, Sample Point 8, and Sample Point 9 were assigned to this watershed.**

Watershed 3B

Watershed 3B encompasses approximately 71 acres and is east of Watershed 3A. No industrial activities covered by the MSGP are located within this watershed. **No sampling point was assigned to this watershed.**

Watershed 4A

Watershed 4A encompasses approximately 110 acres at the west end of the airport property. No industrial activities covered by the MSGP are conducted within this watershed. **No sampling point was assigned to this watershed.**

Watershed 4B

Watershed 4B encompasses approximately 128 acres located south of Watershed 1. Impervious land uses consist of the lower half of Runway 8/26; portions of Taxiways A, B, D, and S; the northern half of the terminal building; the multi-story parking building and roadways. Industrial activities within this watershed include vehicle maintenance, mechanical repairs, fueling, lubrication, and equipment cleaning. Pervious land uses include landscaped areas, open grass areas, and drainage ditches. Stormwater in this watershed drains mainly through the storm sewer network, which discharges to the drainage ditch in the middle of the eastern side of the watershed. Depending on the tidal movement, this watershed drains to Discharge Points No. 4 or No. 1.

Four emergency electric pump stations are at the SJU Entrance/Exit Tunnel at the southwest corner of Watershed 4B. During extreme storm events, excessive stormwater runoff from the roadway underneath the tunnel is pumped automatically to the adjacent open channel, which drains to Discharge Point No. 4 or No. 1, depending on the tidal movement. **Sample Point 1 was assigned to this watershed.**

Watershed 4C

Watershed 4C encompasses approximately 58 acres and is located south of Watershed 4B. Impervious area land uses consist of the lower half of the terminal building, the multi-story parking building, a car rental area, roadways, and the eastern half of the adjacent aviation apron. Previous land uses include landscaped areas, open grass areas, and drainage ditches. Stormwater in this watershed drains to:

- a) the storm sewer network, which in turn discharges to the main drainage ditch located in the middle of the eastern side of the watershed, and
- b) an open drainage ditch (surface flow) that discharges to the main drainage ditch located in the middle of the east side of the watershed. Like Watershed 4B, discharge from this watershed drains to Discharge Point No. 4 or Discharge Point No. 1, depending on the tidal movement. **Sample Point 5 was assigned to this watershed.**

Watershed 4D

Watershed 4D encompasses approximately 211 acres in the southern portion of the airport. Impervious land uses consist mainly of the western part of Runway 10/28, the lower half of the eastern part of Runway 10/28, the western part of the aviation apron, the western part of Taxiway J; the CAF III that includes the FAA buildings and the National Weather Service buildings, and the eastern part of the CAF II. Previous area land uses include open grass areas and landscaped areas. In the eastern part of this watershed, stormwater drains to a) the storm sewer network, which discharges to the drainage canal at the middle of the eastern side, or b) directly to the open drainage ditch (surface flow). In the western portion, the stormwater runoff empties directly (surface flow) to the drainage ditch in the watershed's northern half. This drainage ditch discharges to Discharge Point No. 4. **No sampling point was assigned to this watershed.**

Watershed 5

Watershed 5 encompasses approximately 31 acres in the southeastern portion of the airport properties. The impervious area uses CAF II, mainly for cargo operations. Additionally, the impervious area has a U.S. Postal Office, a car maintenance facility, and a food court. The previous area uses open grass areas. This area drains to Discharge Point No. 5 or directly to the Suárez Canal to the east of the watershed.

Aerostar is requesting SWPPPs from all tenants. These represent the potential for contamination in various matters, including, but not limited to, fueling, aircraft and vehicle washing and maintenance, chemical storage, waste management, lavatory management, grease, and oil water separators, among others. **No sampling point was assigned to this watershed because these areas are outside our operational control.**



Image 2. SJU MAJOR WATERSHED AREAS AND DISCHARGE POINTS

Complying with the USEPA MSGP 2021 regulations, this SWPPP includes all operations at the SJU, including current tenants at **Attachment C**. Most industrial facilities at SJU maintain aircraft, equipment, and vehicles. Maintenance activities are performed both indoors and outdoors. Based on the nature of maintenance activities at airports, materials such as lubricating oils, hydraulic oils, degreasers, and other cleaning products are commonly used during maintenance activities, summarized in Table 2. At the general aviation facilities, waste oils, lubricants, and transmission fluids are accumulated and stored at local collection points before transport to disposal or recycling facilities. Small leaks or spills of these materials are common during maintenance activities. Tenants respond to these leaks and spills by using absorbent socks, dry absorbent materials, rags, and mops. Maintenance activities represent a low potential for significant pollutant discharge. Some tenants have floor drains located in maintenance areas. At some of these facilities, the runoff entering the floor drain is conveyed to an oil/water separator before entering the sanitary sewer or the stormwater system. At a few facilities, the runoff that discharges through the floor drains discharges directly to the sanitary sewer. Plumbing floor drains connected to the storm drain system are strictly prohibited.

Table 2. Maintenance activities for SJU Tenants and associated pollutants.

Industrial Activity	Associated Pollutants
Aircraft fueling	Polycyclic Aromatic Hydrocarbons (PAHs)
Equipment storage	Grease
Fuel storage	Polycyclic Aromatic Hydrocarbons (PAHs)
Chemical storage	Solvents
Pesticide/herbicide Storage	Organic pesticides
Outdoor apron wash down	Surfactants, phosphates, grease
Cargo handling	Unspecified products
Aircraft maintenance	Grease, solvents
Aircraft sanitary services	Lavatory waste
Vehicle/equipment washing	Surfactants, grease, oil, used batteries
Ground vehicle fueling	Polycyclic Aromatic Hydrocarbons (PAHs)
Ground vehicle maintenance	Grease, oil
Floor washdown	Surfactants, phosphate, oil
Building and ground maintenance	Dirt
Runway/taxiway painting	Iron, rubber
Equipment/parts degreasing	Grease, oil

If you are a Sector S (Air Transportation) facility, do you anticipate using more than 100,000 gallons of pure glycol in glycol-based de-icing fluids or 100 tons or more of urea on an average annual basis? Yes No

If you are a Sector G (Metal Mining) facility, do you have discharges from waste rock and overburden piles? Yes No

2.2 Spills and Leaks.

Areas of Site Where Potential Spills/Leaks Could Occur

Due to the numerous aircraft and vehicle fueling activities at SJU daily and the large volume of fuel provided within the SJU (more than 130,000,000 million gallons in 2022), spill occurrences are possible. These would represent a potential source of stormwater pollution. The NPDES-MSGP Permit requires a historical profile of SJU spills covering the previous three-year period. Each co-permittee at SJU is responsible for reporting spills to the SJU Operations Manager to be appropriately recorded on the 3-year running spill list and adequately conveyed to the regulatory agencies if required. **Attachment E** provides information on known significant spills and leaks at SJU over the last three years.

Table 3. Potential Spill Locations

Location	Discharge Points
Ground Vehicle and Equipment Maintenance Area	Sample Point 1, Sample Point 2, Sample Point 3, Sample Point 4, Sample Point 5, Sample Point 6, Sample Point 8 and Sample Point 9.
Ground Vehicle Fueling Areas	Sample Point 2, Sample Point 4, Sample Point 5, Sample Point 6, and Sample Point 7.
Ground Vehicle Washing Areas	Sample Point 3, Sample Point 4, and Sample Point 5.
Aircraft Fueling – all ramps	Sample Point 1, Sample Point 2, Sample Point 3, Sample Point 4, Sample Point 5, Sample Point 6, and Sample Point 7.

2.3 Unauthorized Non-stormwater Discharges Evaluation.

No unauthorized non-stormwater discharges have been observed at SJU. The presence of non-stormwater discharges will be evaluated during the quarterly routine inspections.

As part of the general non-storm discharge assessment at SJU to prepare the SWPPP, the following discharges are allowed under the current MSGP 2021 permit. These discharges have minimal pollution potential, as some are temporarily related to activities permitted by USEPA regulations. The discharges may include:

1. Firefighting activities
2. Fire hydrant flushing
3. Potable water, including water line flushing
4. Uncontaminated air conditioning condensate
5. Irrigation drainage
6. Landscape watering (all pesticides, herbicides, and fertilizer are applied according to

- the manufacturer's instructions)
7. Pavement wash water (no detergents and no leaks or spills unless spill material has been removed)
 8. Routine external buildings wash down (no detergent)
 9. Uncontaminated groundwater or spring water
 10. Foundation or footing drains
 11. Incidental windblown mist from cooling towers

If non-stormwater discharges (other than those listed above) drain to the stormwater collection system or the receiving waters, they will be eliminated or covered by a separate NPDES permit. This includes wastewater and wash water of vehicles/aircraft/runways/tanks (MSGP Part 8.S.2.2). All outfalls of the SJU are authorized by the regulations to discharge the non-stormwater mentioned above discharges. See **Attachment D** for location and Table 5 for detailed information.

The SJU receives a discharge from the PR-26 with potential pollutants associated with transit, faulty sewer lines from nearby communities, and discharges from businesses and industries. Aerostar is currently assessing strategies to work with the PRDTOP and the Municipality of Carolina to address these pollution sources.

2.4 Salt Storage.

Aerostar SJU does not store or employ salt, and de-icing is never needed at this facility.

2.5 Sampling Data Summary.

Discharge quality data for the SJU watersheds and quarterly visual inspections for all discharges are available from 2016 to the present. Aerostar maintains a digital record of all sampling data collected over the years and is available per request. The record, which is also uploaded quarterly to the EPA NetDMR site, includes laboratory results for all the existing stormwater sample points covered by the applicable permit.

As part of the ongoing review of airport operations and environmental regulation compliance, exceedances in some water quality parameters were observed in specific discharge points around the facility's perimeter. These exceedances were associated with conditions outside SJU, not airport operations, explicitly resulting from the drainage of outside areas into SJU.

These findings prompted SJU management to modify water quality sampling points and avoid cross-contamination with background sources. Such sampling points cover critical areas, including curbside operations, aircraft gates, runways, and taxiways. A map for all sample points included in the last permit has been modified in 2024 to improve data collection and analysis. A new sampling points map is included in **Attachment D**.

SECTION 3: STORMWATER CONTROL MEASURES (SCM)

3.1 Non-numeric Technology-based Effluent Limits (BPT/BAT/BCT)

Aerostar SJU will comply with the following non-numeric effluent limits and any sector-specific non-numeric effluent limits in Part 8 of the MSGP 2021, except where otherwise specified.

3.1.1 Minimize Exposure.

The following discussion describes the existing BMPs implemented at SJU by Aerostar and proposed additional control mechanisms. An implementation program detailing scheduling, pollution prevention team personnel, training requirements, and facility inspection protocol is provided for implementing the BMPs for Aerostar-operated facilities.

Existing Control Mechanisms through Best Management Practices (BMPs)

Many areas of SJU are supplied by an underground piping system that provides fuel to fuel pits. These areas, shown as Areas A, B, R, T, U, V, W, X, Y, and Z in **Attachment B**, are equipped with an emergency shut-off system that stops all fuel pumping to all SJU areas. The system is activated by a marked station located approximately 25 feet from each fuel pit. Ground crew or Aerostar Operations Personnel that become aware of a leak must break a small glass and hit the switch. This action results in the following steps:

- Automatically shuts down the SJU's fuel system, which keeps the fuel spill volume to a minimum.
- Trained Aerostar's Operations Crew responds with light firefighting devices, spill containment, and countermeasures materials.
- The ARFF unit is also activated. They bring additional spill containment materials and supplies and superior firefighting capabilities.

Aerostar performs various industrial activities such as vehicle maintenance, equipment storage, and facility maintenance. To minimize the side effects of those activities on stormwater quality, Aerostar has already implemented BMPs, including performing activities inside buildings or under cover, conducting employee training, and using absorbent materials. Also, to prevent fuel spills from entering the receiving drainage ditches, SJU has four oil/water separators located throughout the SJU. These oil/water drainage ditches could prevent the General Aviation Apron and terminal spills from reaching the stormwater drainage system.

- Oil-water separators – an oil-water separator captures runoff from the Airfield before discharging it to outfalls.
- Under-drain collection—a system of perforated pipes entrenched in gravel and geotextiles collects water that reaches the underside of runways, taxiways, and aprons and conveys it to the stormwater drainage system. Although it was designed to remove water, its massive surface area removes contaminants as the water passively moves through the system.
- Drain guards – catch basin inserts that protect the water system from sediments and

pollutants have been installed at selected locations where targeted activities are conducted.

The existing BMPs will have to be supplemented by additional BMPs. The following sections supplement and enhance current BMP implementation.

Required Best Management Practices

The following are 13 activity-based BMPs implemented at SJU. These BMPs cover all activities conducted by Aerostar and the SJU tenants.

Attachment F contains details of the following BMPs:

- BMP 1 Elimination of Non-Stormwater Discharges to Storm Drains
- BMP 2 Aircraft, Vehicle, and Equipment Maintenance
- BMP 3 Aircraft, Vehicle, and Equipment Fueling
- BMP 4 Vehicle and Equipment Washing and Steam Cleaning/Degreasing
- BMP 5 Outdoor Material Handling
- BMP 6 Outdoor Fuel and Chemical Storage
- BMP 7 Waste Handling and Disposal
- BMP 8 Building and Grounds Maintenance
- BMP 9 Stormwater Pollution Prevention Education
- BMP 10 Lavatory Service Operations
- BMP 11 Spill Response
- BMP 12 Oil/Water Separators
- BMP 13 Sediment and Erosion Control

3.1.2 Good Housekeeping.

The following discussion describes the existing BMPs implemented at SJU by Aerostar and proposed additional control mechanisms. An implementation program detailing scheduling, pollution prevention team personnel, training requirements, and facility inspection protocol is provided for implementing the BMPs for Aerostar-operated facilities. Many areas of SJU are supplied by an underground piping system that supplies fuel to fuel pits. These areas have an emergency shut-off system that stops all fuel pumping to all SJU areas. The system is activated by clearly marked stations approximately 25 feet from each fuel pit. Ground crew or Aerostar Operations Personnel that become aware of a leak must break a small glass and hit a switch. This action results in the following actions:

1. Automatically shut down the SJU's fuel system. This mechanism keeps the fuel spill volume to a minimum.
2. Trained Aerostar's Operations Crew responds with light firefighting devices, spill containment, and countermeasures materials.

3. The ARFF unit is also activated. They bring additional spill containment materials and supplies and superior firefighting capabilities.

Aerostar performs various industrial activities such as vehicle maintenance, equipment storage, and facility maintenance. To minimize the effects of those activities on stormwater quality, Aerostar has already implemented some acceptable BMPs. Those BMPs include performing activities inside buildings or under cover, conducting employee training, and using absorbent materials. Also, to prevent fuel spills from entering the receiving drainage ditches, SJU has four oil/water separators located throughout the SJU. These oil/water separators could prevent the General Aviation Apron and terminal spills from reaching the stormwater drainage system.

SJU is also provided with two other mechanisms for the control of pollutants that may reach the site's stormwater:

- Oil-water separators – an oil-water captures runoff from the Airfield separator before discharging it to outfalls.
- Under-drain collection—a system of perforated pipes entrenched in gravel and geotextiles collects water that reaches the underside of runways, taxiways, and aprons and conveys it to the stormwater drainage system. Although it was designed to remove water, its massive surface area removes contaminants as the water passively moves through the system.
- Drain guards – catch basin inserts that protect the water system from sediments and pollutants have been installed at selected locations where targeted activities are conducted.

The existing BMPs will have to be supplemented by additional BMPs. The following sections supplement and enhance current BMP implementation.

Good Housekeeping Requires the maintenance of a clean, orderly facility.

Applicable BMPs:

- BMP 2 Aircraft, Vehicle, and Equipment Maintenance
- BMP 4 Vehicle and Equipment Washing and Steam Cleaning/ Degreasing
- BMP 5 Outdoor Material Handling
- BMP 6 Outdoor Fuel and Chemical Storage
- BMP 7 Waste Handling and Disposal
- BMP 8 Building and Grounds Maintenance
- BMP 10 Lavatory Service Operations
- BMP 11 Spill Response

3.1.3 Maintenance.

Applicable BMPs:

- BMP 1 Elimination of Non-Stormwater Discharges to Storm Drains
- BMP 2 Aircraft, Vehicle, and Equipment Maintenance
- BMP 3 Aircraft, Vehicle, and Equipment Fueling
- BMP 4 Vehicle and Equipment Washing and Steam Cleaning/ Degreasing
- BMP 6 Outdoor Fuel and Chemical Storage
- BMP 7 Waste Handling and Disposal
- BMP 8 Building and Grounds Maintenance
- BMP 10 Lavatory Service Operations
- BMP 11 Spill Response
- BMP 12 Oil/Water Separators

3.1.4 Spill Prevention and Response Procedures.

Areas with potential spills and accompanying drainage points should be identified. Procedures for cleaning up spills should be included in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup should be available to personnel.

Applicable BMPs:

- BMP 1 Elimination of Non-Stormwater Discharges to Storm Drains
- BMP 2 Aircraft, Vehicle, and Equipment Maintenance
- BMP 3 Aircraft, Vehicle, and Equipment Fueling
- BMP 4 Vehicle and Equipment Washing and Steam Cleaning/ Degreasing
- BMP 5 Outdoor Material Handling
- BMP 6 Outdoor Fuel and Chemical Storage
- BMP 7 Waste Handling and Disposal
- BMP 8 Building and Grounds Maintenance
- BMP 9 Stormwater Pollution Prevention Education
- BMP 10 Lavatory Service Operations
- BMP 11 Spill Response
- BMP 12 Oil/Water Separators
- BMP 13 Sediment Erosion Control

3.1.5 Erosion and Sediment Controls.

The following activities trigger Erosion and Sediment Control measures: excavation, grading, clearing, and grubbing; stockpiling of soils or debris; runway, taxiway, or apron reconstruction or expansion; underground utility construction or repairs; installation and removal of underground storage tanks; facility/building construction (See **Attachment F** - BMP 13 for details). Most of these activities require a construction permit, which requires implementing an erosion and sedimentation control plan, which triggers inspection and reporting requirements. Aerostar SJU will strictly enforce construction permit requirements within its boundaries.

3.1.6 Management of Stormwater.

Stormwater from the SJU is managed through a comprehensive implementation of procedures and BMPs on-site. The SJU stormwater conveyance system collects water from buildings, parking, runways, and cargo areas. Areas of actual or potential pollutant contact are evaluated, and applicable BMPs are implemented to eliminate or minimize the pollutants. An implementation program detailing scheduling, pollution prevention team personnel, training requirements, and facility inspection protocol is provided for implementing the BMPs for Aerostar-operated facilities.

3.1.7 Salt Storage Piles or Piles Containing Salt.

Aerostar SJU does not store or employ salt, and de-icing is never needed at this facility.

3.1.8 Dust Generation and Vehicle Tracking of Industrial Materials.

The Puerto Rico Office of Permit Management (OGPe) requires all construction permits to comply with dust and vehicle tracking practices. Every construction authorized within the SJU includes an Erosion and Sedimentation Control Plan (Plan CES) and an EPA General Construction Permit with the appropriate SWPPP. To control dust, all trucks must have a tarp covering the transported material, and tire washing stations are built at the exit of each construction site. Copies of the PLAN CES and SWPPPs are maintained at each construction site as required.

3.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines (ELGs).

Part 4.2.3.1 of the MSGP, Table 4-3, Part 8.S.9 and Table 8.S-3 include the Numeric Effluent Limitations for Sector S for runoff containing urea from airfield pavement deicing. Aerostar SJU does not store nor employ urea, and de-icing is unnecessary at this facility. Therefore, no effluent limitations have been established for the SJU.

3.3 Water Quality-based Effluent Limitations and Water Quality Standards.

A series of control measures have been developed to allow SJU to meet water quality standards. These measures include:

- Fueling operations are conducted on an impervious surface.
- Spill kits are kept on-site near potential spill areas.
- Personnel are trained in proper fueling procedures and spill clean-up methods.

- Any spill will be cleaned up immediately using dry clean-up methods.
- Grading, berming, or curbing prevents runoff of contaminated flows and diverts run-on away from these areas.
- Outdoor maintenance activities involving lubricants, hydraulic fluid, or fuels are performed over drip pans or spill pads.
- Drums are placed on elevated surfaces (e.g., PVC footings, pallets, storage racks, or other suitable materials), keeping them out of containment water and reducing the potential for corrosion. This prevents moisture from contacting drum bottoms. Drums are also covered to prevent standing water from accumulating on their tops.

3.4 Sector-Specific Non-Numeric Effluent Limits.

- Periodic visual inspections will be conducted on all equipment and containers to ensure no signs of leakage or corrosion. Piping, pumps, storage tanks, pressure vessels, and process and materials handling equipment will be inspected for leaks, signs of corrosion, support or foundation failure, or other deterioration or non-containment.
- Stormwater management infrastructure, catch basins, base pavements, grounds, and permanent structural controls associated with industrial activities are inspected quarterly during routine facility inspections.
- Catch basins will be cleaned when the depth of debris impairs the flow of stormwater based on the design and construction of the catch basin. The cleaning will be accomplished to minimize pollutant discharges and ensure system functionality.
- Visual evaluations of equipment are performed at least weekly.
- Aircraft fueling at SJU is conducted by mobile refueling trucks. Jet fuel is delivered via commercial tanker trucks and off-loaded to aboveground storage tanks located within containment dikes. Fuel off-loading into the aboveground storage tanks and subsequent transfer to mobile refueling trucks is accomplished within secondary containment. Secondary containment systems are controlled and operated by trained personnel who inspect the containment structures prior to releasing accumulated liquids.
- Standard operating procedures have been established for fuel transfers.
- Spill response equipment is available to clean up any minor spills.
- Personnel responsible for fueling operations are trained in proper fueling operations, spill prevention, and spill response.
- Spill kits are available at all fueling locations.
- Drip pans and trays are utilized, when appropriate, to contain any leaks during fueling operations.

SECTION 4: SCHEDULES AND PROCEDURES

4.1 Good Housekeeping.

Requires the maintenance of a clean, orderly facility. Applicable BMPs: BMP 2, BMP 4, BMP 5, BMP 6, BMP 7, BMP 8, BMP 10, BMP 11.

4.2 Maintenance.

Aerostar SJU is responsible for storage and light-duty maintenance of Aerostar vehicles and equipment used at the SJU; vehicles are maintained indoors. Vehicles will be washed outside the facility using commercial carwashes or a private service provider. Heavy mechanical labor will also be conducted outside the facility. The floor drains in the building discharge into the sanitary system. Chemicals currently used at this facility are stored indoors, including brakes, power steering, oil, degreasers, batteries, soap, and transmission fluids. The floors in the buildings are subjected to residual oil, grease, petroleum products, and solvents.

Aerostar maintenance staff regularly verify site conditions and record logs for leaks, spills, product inventory, and scheduled cleaning events.

4.3 Spill Prevention and Response Procedures.

Areas with potential spills and accompanying drainage points will be identified. The SJU has an operational Spill Prevention, Control, and Countermeasure (SPCC) Plan for cleaning up spills, which is available to the appropriate personnel and reviewed and updated every year.

Applicable BMPs: BMP 1, BMP 2, BMP 3, BMP 4, BMP 5, BMP 6, BMP 7, BMP 8, BMP 9, BMP 10, BMP 11, BMP 12.

4.4 Erosion and Sediment Control.

No polymers or chemicals are employed at SJU for erosion and sedimentation control.

4.5 Employee Training.

Aerostar conducts annual SWPPP training for all co-permitters. These members, in turn, must train their internal staff. Training will cover items such as discussion of annual inspection results, implementation of BMPs, BMP updates, and record-keeping procedures. Aerostar will train all tenants and airport-operated facility personnel yearly and requires SWPPP training for all tenant occupants who perform industrial activities or have the potential to impact the stormwater drainage system adversely. The training program implementation, including tenant participation, will be thoroughly documented. Each training session is filed in the Aerostar MSGP electronic file.

Employee training programs should inform personnel of the components and the goals of the SWPPP. Training should address spill response, good housekeeping, and material management practices. The employee training will be conducted twice a year.

Topics:**Prohibited discharges**

- Employees will be trained to identify non-allowable discharges to the stormwater system.
- Employees will be given instructions on how to prevent non-allowable stormwater discharges from entering the storm sewer system.

Spill response

- Employees will be shown the potential spill areas and stormwater drainage uses.
- Material handling procedures and storage requirements will be discussed.
- Employees will be given instructions on reporting spills and the appropriate individuals to contact.
- Employees responsible for spill response activities will be taught how to implement the facility's spill response procedures quickly and safely.
- Locations for housekeeping and spill response equipment will be designated.

Good Housekeeping

- Employees will be trained to properly implement good housekeeping for Sector S facilities.

Implementation of BMPs and record-keeping procedures

- Employees will be instructed to maintain materials in an organized manner.
- Employees will be trained to properly mark and store toxic and hazardous substances in designated areas.
- Proper and safe handling procedures will be discussed with employees responsible for handling toxic and hazardous substances.
- Employees will be trained to document housekeeping and preventive maintenance inspections.

The training program should create an overall sensitivity to pollution prevention concerns. Open discussions should be encouraged to further the importance and enhance the program. In addition, the effectiveness of the training program should be evaluated routinely to verify that the information has been communicated effectively to the employees.

The training program will consist of both formal and informal training. The following training tools can be included in the facility's training program:

- Employee handbooks
- Films and slide presentations
- Drills
- Routine employee meetings

- Bulletin boards
- Suggestion boxes
- Newsletters
- Environmental excellence awards and other employee incentive programs

Tenants are responsible for implementing their training program. Additional training topics can be required for tenants who store or use Section 313, SARA Title III, and water priority chemicals. Other requirements can include but are not limited to, safety requirements, spill prevention and response procedures, specific storage and disposal requirements, preventive maintenance, and compliance with any other applicable federal and state laws.

4.6 Inspections and Assessments.

The inspections and any subsequent maintenance activities are documented, recording the date and time of review, the individual making the inspections, and a narrative description of the facility's stormwater control systems, plant equipment, and systems. Records of these inspections will be incorporated into this SWPPP and the annual report. Inspection forms will be maintained in the permit's electronic file. Changes to existing documents require filling out and dating a new form for tenants and monitoring forms.

4.6.1 Routine Facility Inspections.

Qualified personnel will conduct inspections at least quarterly. A routine inspection will be conducted at least once each calendar year when a stormwater discharge occurs.

Since the NPDES Permit was reissued in 2021, the SJU has monitored all basin outfalls. All outfalls are sampled regularly, and the samples are analyzed for various constituents of concern. Also, all basins are assessed visually for water quality parameters such as color, odor, clarity, solids, foam, outfall staining, and visible sheen. Visual monitoring will be performed quarterly, and the observations will be completed during a measurable storm event.

FACILITY INSPECTION PROTOCOL

Aerostar personnel will conduct routine quarterly inspections of the SJU facilities to verify that all SWPPP elements are correctly implemented. Aerostar personnel must notify tenants immediately if they notice any pollutant or potentially dangerous situation related to their operation. As the tenants implement their SWPPP, a joint team of Aerostar and the tenant representatives will meet periodically to discuss inspection findings and maintain records of these inspections and reunions.

During the site inspection, the inspection team will:

- Visually inspect potential sources and locations of pollution for evidence of pollutants entering the drainage system
- Evaluate the effectiveness of control measures to reduce pollutant loadings and determine whether additional steps are needed.
- Inspect any equipment needed to implement the SWPPP, such as spill response

equipment.

This SWPPP’s description of potential pollutant sources and stormwater control measures may need to be revised based on the results of site inspections. BMP implementation and evaluation of their effectiveness will be verified and documented at each Aerostar-operated facility at the SJU.

All inspections will be carefully documented, and required changes will be incorporated into the SWPPP. Inspection records will be maintained for at least three years. This SWPPP will be reviewed annually and evaluated for its effectiveness in eliminating or reducing pollutant discharge to the stormwater drainage system. Based on the annual inspections, any necessary revisions to the SWPPP will be documented and incorporated. The SWPPP will also be amended whenever new construction, operation, or maintenance may affect the discharge of pollutants. The SWPPP will also be modified to include the tenant facilities that choose to implement this SWPPP. If any BMP is shown to be ineffective in achieving the general objective of controlling pollutants, the SWPPP will also be modified.

1. Person(s) or positions of person(s) responsible for inspection.

Staff Names	Individual Responsibilities
<p>Marisleissis Orona Environmental Coordinator</p>	<ul style="list-style-type: none"> • Implement employee training programs and inspections • Perform material inventories and inspections • Record keeping • Conduct Quarterly Visual Inspections
<p>Mary Olga Santiago Landside and Airport Services Supervisor</p>	<ul style="list-style-type: none"> • Implement the SWPPP requirements and BMPs • Implement employee-training programs and inspections • Perform material inventories and inspections • Record keeping

2. Schedules for conducting inspections.

Qualified Aerostar staff will conduct quarterly visual inspections of stormwater discharges during monitoring. Findings will be reported and documented using Form 1 (See **Attachment G**). Inspections will be performed at the predetermined sampling points (See **Attachment D**); if any pollutant is observed during the quarterly visual inspection, a thorough inspection will be performed to see what could be causing the problem so it can be corrected. Potential pollution areas will also be visually inspected during the routine inspections to ensure the effectiveness of the BMPs implemented.

Grab samples will be visually evaluated for the existence of any oil sheens, floatable materials, color, odor, and turbidity. The eligible storm event must cause a stormwater discharge and have a time interval from the preceding measurable storm of at least 72 hours.

Grab samples should be taken during the first 30 minutes of the storm event and, at most, 1 hour. If no storm event resulted in runoff from the facility during a monitoring quarter, no visual monitoring will be conducted. However, a signed and certified visual monitoring waiver (Form 3, **Attachment G**) will be documented with the monitoring records.

3. List areas where industrial materials or activities are exposed to stormwater.

A summary of potential pollutant sources covered by this SWPPP is summarized below. The data presented in this section was collected through historical data, interviews with Aerostar staff, and site visits. Based on the data collected, the following activities were reported to occur at SJU:

- Aircraft fueling
- Equipment storage
- Fuel storage
- Pesticide/herbicide usage
- Outdoor apron wash down
- Cargo handling
- Aircraft maintenance
- Aircraft sanitary services
- Vehicle/equipment washing
- Ground vehicle fueling
- Ground vehicle maintenance
- Floor wash down
- Building and ground maintenance
- Runway/taxiway painting

Aerostar's activities include building and grounds maintenance (performed outdoors), chemical storage (performed both indoors and outdoors), vehicle or parts degreasing (performed indoors), equipment maintenance (performed indoors), equipment storage (performed both indoors and outdoors), fuel storage (performed outdoors), floor washdown (performed indoors), and pesticide and herbicide usage (performed outdoors).

4. List areas identified in the SWPPP and those that are potential pollutant sources (see Part 6.2.3).

- Aircraft fueling
- Equipment storage
- Fuel storage
- Pesticide/herbicide usage
- Outdoor apron wash down
- Cargo handling
- Aircraft maintenance
- Aircraft sanitary services
- Vehicle/equipment washing

- Ground vehicle fueling
- Ground vehicle maintenance
- Floor wash down
- Building and ground maintenance
- Runway/taxiway painting

5. Areas where spills and leaks have occurred in the past three years.

See ***Attachment E***.

6. Inspection information for Discharge Points.

Table 5. Discharge and Sampling Points description and information

Discharge Point ID	Coordinates	SJU Location	Safety Considerations
Sample Point 1	18 26'16.3"N -66 00'40.5"W	Storm Drain Green Area	Access Gate
Sample Point 2	18 26'24.2"N -66 00'12.5"W	Storm Drain On Taxiway	Taxiway Area
Sample Point 3	18 26'36.8"N -65 59'55.7"W	Storm Drain Green Area	Aircraft Operation Area
Sample Point 4	18 26'16.0"N -66 00'12.9"W	Storm Drain Near Building	Traffic
Sample Point 5	18 26'11.94"N -66 00'17.03"W	Storm Drain On Curbside	Traffic
Sample Point 6	18 26'06.9"N -66 00'03.9"W	Discharge Pipe	Flooded Channel
Sample Point 7	18 26'06.3"N 66 00'03.4"W	Discharge Pipe	Flooded Channel
Sample Point 8	18 26'22.05"N -65 59'53.35"W	Vehicle Maintenance Facility	Traffic
Sample Point 9	18 26'14.06"N -65 59'53.33"W	ARFF	Traffic

7. List the control measures used to comply with the effluent limits contained in the 2021 MSGP.

Part 4.2.3.1 of the MSGP, Table 4-3, Part 8.S.9 and Table 8.S-3 include the Numeric Effluent Limitations for Sector S for runoff containing urea from airfield pavement deicing. Aerostar SJU does not store nor employ urea, and de-icing is unnecessary at this facility. Therefore, no effluent limitations have been established for the SJU.

8. Other site-specific inspection objectives.

Aerostar is actively working on addressing potential outside sources of pollutants from the Municipality of Carolina MS4, which has been discharging stormwater into the SJU storm drain system. Aerostar will request copies of the municipal storm sewer system map to identify potential sources of contamination from their MS4 system.

4.6.2 Quarterly Visual Assessment of Stormwater Discharges.

Quarterly visual inspections must be conducted at all significant outfalls, and the results of the collected samples must be kept with the SWPPP on site. Since the NPDES Permit was reissued in 2021, the SJU has monitored all basin outfalls. Also, all outfalls are sampled regularly, and the samples are analyzed for various constituents of concern. The basins are assessed visually for water quality parameters such as color, odor, clarity, solids, foam, outfall staining, and visible sheen. Visual monitoring is regular, and the observations are completed during a measurable storm event.

Monitoring Periods

The permit requires that monitoring begins in the first full quarter following September 2, 2021, or the date of discharge authorization. Quarterly month inspections must be performed once in the following 3-month intervals.

- January 1 – March 31
- April 1 – June 30
- July 1 – September 30
- October 1 – December 31

Quarterly Visual Inspections

Qualified Aerostar staff will conduct a quarterly visual inspection of stormwater discharges during monitoring. Findings will be reported and documented.

Inspections will be performed at the predetermined sampling points (See **Attachment D**); if visual assessment shows evidence of stormwater pollution, corrective action will be initiated, the SWPPP will be reviewed and revised, if applicable, and the results will be documented. Potential pollution areas will also be visually inspected during the routine inspections to ensure the effectiveness of the BMPs implemented. Grab samples will be visually tested for oil sheens, floatable materials, color, odor, and turbidity. The eligible storm event must cause a stormwater discharge and have a time interval from the preceding measurable storm of at least 72 hours. Grab samples should be taken during the first 30 minutes of the storm event and at least 1 hour.

If no storm event resulted in runoff from the facility during a monitoring quarter, no visual monitoring will be conducted. However, a signed and certified visual monitoring waiver will be documented with the monitoring records.

Impaired Waters Monitoring

Impaired Waters Monitoring (**MSGP Part 6.2.4**) – The Suárez Canal, La Torrecilla Lagoon, and San José Lagoon are part of the San Juan Bay Estuary System and in the latest reporting period of 2021 show impaired causes for **Cadmium, Copper, Cyanide, Dissolved Oxygen, Enterococcus Bacteria, Fecal Coliform, Lead, Mercury, Oil and Grease, Thermal Modifications, Total Coliform, Turbidity, and pH**. The probable impairment causes include Collection System Failure/Discharges-Sewage, Confined Animal Feeding Operations/Agriculture, Onsite Wastewater Systems/Sewage, Storm sewers/Stormwater.

Currently, there are no approved TMDLs for these water bodies. Each outfall at SJU must be monitored once in Year 1 for parameters that do not have an approved TMDL. If the pollutant

of concern is not detected, tracking for that parameter can be discontinued until Year 4, when a subset of parameters is sampled; those also in the Benchmark Parameters list.

Aerostar has identified potential sources of pollutants caused by background input. Our company is currently identifying those sources and working with state agencies and city governments to explore strategies to reduce them and their potential impact on the SJU MSGP permit.

Additional Monitoring

Aerostar SJU will comply with additional EPA monitoring requirements.

For quarterly visual assessments to be performed at your site, your SWPPP must include a description of the following:

1. Person(s) or positions of person(s) responsible for assessments.

Table 6. Responsible personnel for assessments

Name	Role	Company
Marisleissis Orona	Environmental Coordinator	Aerostar Airport Holdings, LLC

2. Schedules for conducting assessments.

Table 7. Assessment details

Activity	Frequency	Description
Routine visual inspections	Daily	As part of the daily operations, staffers visually inspect ramps, runways, and access roads for signs of spills and leaks potentially reaching nearby water channels.
Ramp and runway inspections	Quarterly	Aerostar personnel must notify tenants immediately if they notice any pollutant or potentially dangerous situation related to their operation.

3. Specific assessment activities.

Aerostar will collect a stormwater sample from each outfall for each quarter of the permit term and conduct a visual assessment of each sample. These samples will be collected in such a manner that they are representative of the stormwater discharge. The required sampling is anticipated during a site's regular business hours. The visual assessment will be made of a clean, clear glass or plastic container sample and examined in a well-lit area. Samples are collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample will be collected as soon as practicable after the first 30 minutes, and staff must document why it was not possible to take samples within the first 30 minutes. Staff will visually inspect the sample for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other apparent indicators of stormwater pollution.

4.6.3 Exception to Routine Facility Inspections and Quarterly Visual Assessments for Inactive and Unstaffed Sites.

- This site is inactive and unstaffed and has no industrial materials or activities exposed to stormwater, per the substantive requirements in 40 CFR 122.26(g)(4)(iii) as signed and certified in Section 7 below.

If you are invoking the exception for inactive and unstaffed sites for your routine facility inspections and quarterly visual assessments, including information to support this claim.

NOTE: This is an active staff site.

4.7 Monitoring.

According to the 2021 MSGP, the SJU is classified as a Sector S facility. Although there are no deicing activities at SJU, the new permit requires analytical monitoring. However, quarterly visual inspections must be conducted at all major outfalls, and the results of the collected samples must be kept with the SWPPP on site.

Check the following monitoring activities applicable to your facility:

- Indicator monitoring
- Benchmark monitoring
- Effluent limitations guidelines monitoring
- State- or tribal-specific monitoring
- Impaired water monitoring
- Other monitoring required by EPA

SJU's NPDES permit requires analytical testing at all outfalls. Routine sampling and monitoring are needed for each outfall. The complete list of monitoring requirements is included in the NPDES permit (Appendix K). The permit summarizes the qualitative and quantitative sampling required for each outfall, including discharge limits and test frequency. Analytical results are reported for all outfalls. The forms provided by the local analytical laboratory are signed by the person responsible for collecting the samples. For each sample collected, the following information is recorded: date, exact place, and time of sampling or measurement; individual performing the sampling or measurement; data analyses were performed; the individual who conducted the analysis; analytical techniques or methods used; and results of such analyses.

1. **Indicator monitoring** – Report only. No follow-up action is triggered. The following parameters:
 - a. pH, TSS, COD. Quarterly.
 - b. 16 PAHs (Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo[a]anthracene, Chrysene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Benzo[g,h,i]perylene, Indeno[1,2,3-c,d]pyrene, and Dibenz[a,h]anthracene). Twice/year during the 1st year and the 4th year.
2. **Effluent limitation guidelines monitoring.**
Aerostar SJU does not conduct deicing, either glycol- or urea-based. In lieu of additional benchmark monitoring, annual certification will be provided.
3. **Impaired Waters Monitoring.** Aerostar SJU discharges to impaired waters without an EPA-approved TMDL. Therefore, the following monitoring is required:

a. **Annual sample on 1st year** for the pollutants causing the impairment:

Aluminum (TR)	Enterococcus	pH
Ammonia	Fecal Coli.	Phosphorus (T)
Beryllium (TR)	200/100ml+	Silver (TR)
BOD	Lead (TR)	Temperature
Cadmium (TR)	Nickel (TR)	TSS
Copper (TR)	NO3 & NO4	Turbidity
COD	Oil & Grease	Zinc (TR)

Should parameter(s) exceed the threshold for Year 1, continue monitoring for the parameter(s) annually until no longer detected.

b. **Annual sample on 4th year.** Monitor a subset of the parameters monitored in 1st year: Only parameters causing the impairment associated with Sector S (Airports) or are listed as Benchmark parameters. This monitoring is regardless of whether it is satisfying Benchmark Monitoring.

Aluminum (TR)	COD	Oil & Grease
Ammonia	Enterococcus	pH
Beryllium (TR)	Fecal Coliform	Phosphorus (T)
BOD	Lead (TR)	Silver (TR)
Cadmium (TR)	Nickel (TR)	Turbidity
Copper (TR)	NO3 & NO4	Zinc (TR)

Exceptions.

Exception for Inactive and Unstaffed Facilities (if applicable)

- This site is inactive and unstaffed and has no industrial materials or activities exposed to stormwater, by the substantive requirements in 40 CFR 122.26(g)(4)(iii) as signed and certified in Section 7 below.

Exception for Substantially Identical Discharge Points (SIDP) (if applicable)

Aerostar SJU has yet to request the exception for SIDP.

SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

5.1 Documentation Regarding Endangered Species Act (ESA) Listed Species and Critical Habitat Protection.

The Endangered Species Act of 1973, as amended after that by the U.S. Congress, designated the U.S. Fish and Wildlife Service (USFWS) with the responsibility and authority to conserve threatened and endangered (T&E) species and the ecosystems on which those species depend. The National Marine Fisheries Service (NMFS) also has jurisdiction over marine T&E species. To satisfy the newly issued MSGP eligibility criteria regarding endangered species, an initial review of the SJU indicates that the airport provides no habitat to endangered species. Consultation with the USFWS office in Puerto Rico was initiated on May 29, 2001. The USFWS reviewed the letter and decided that there are no records of T&E species in the project area and determined that no further consultation is required (USFWS letter dated June 18, 2001). A copy of the correspondence is attached in **Appendix H**. Conditions at the SJU have stayed the same as the previous permit and USFWS Certification. No new consultation will be initiated for this new permit.

5.2 Documentation Regarding National Historic Preservation Act (NHPA)-Protected Properties.

The newly issued MSGP requires that the discharges authorized by the permit should comply with the National Historic Preservation Act. Coordination with the Puerto Rico State Historic Preservation Office (SHPO) does not indicate any cultural resources or properties listed or eligible for listing in the National Register of Historic Places within the SJU. Previous consultation with SHPO indicates that no historical sites are listed or eligible for listing in the area or proximity of the SJU. A copy of the letter is attached in **Appendix I**.

SECTION 6: CORRECTIVE ACTIONS AND ADDITIONAL IMPLEMENTATION MEASURES


Since 2021, SJU has implemented corrective actions to maintain compliance with the USEPA MSGP 2021. The corrective actions included:

- Fuel Pits located at gates are painted red so that these are visible (no vehicles should transit over these);
- Emergency Fuel Shutoff (EFSO) system was upgraded in 2022-2023.
- Yearly training for all fuel operators.
- On-the-spot training when necessary.
- Revocation of SJU airport ID or ramp access to negligent drivers.

SECTION 7: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision by a system designed to ensure that qualified personnel appropriately gathered and evaluated the information. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for collecting the data, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I know there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Name: Jaime Pabón Title: Sustainability Director

Signature:  Date: 07/25/2024

SECTION 8: SWPPP MODIFICATIONS

Table of Revision:

Table of Revision		
Date	Page	Revision
7/1/2024	31	Information added to Table 5: Discharge and sampling Points description and information Sample Point 8 & Sample Point 9
7/12/2024	46	Attachment D – 2021 MSGP Sampling Points Image Edited

SECTION 9: SWPPP AVAILABILITY

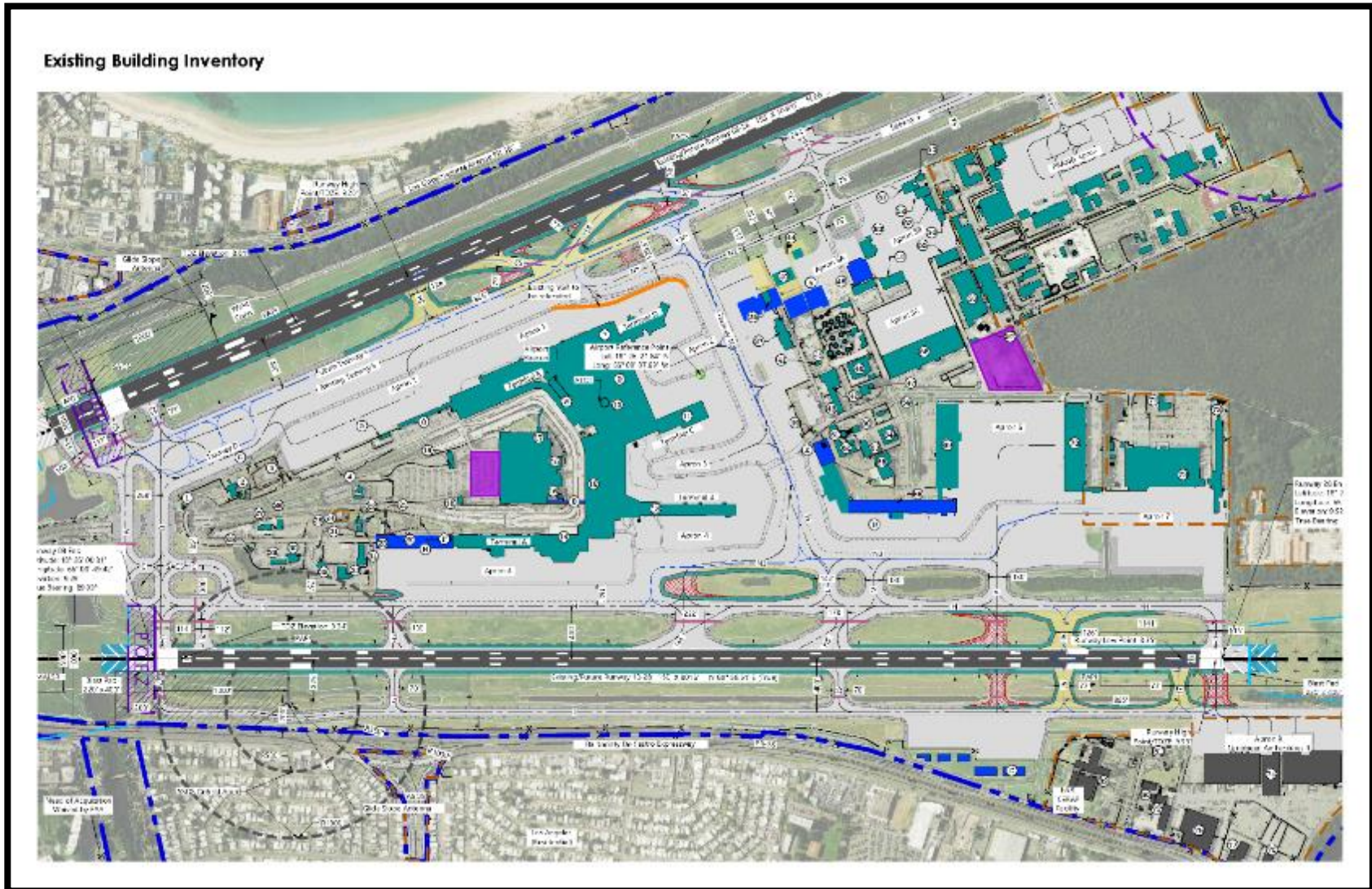
This SWPPP can be requested at Aerostar Airport Holdings, LLC corporate offices (Aerostar Airport Holdings, LLC, TERMINAL D ARRIVALS LEVEL Carolina, Puerto Rico, 00979) or in digital format via email at sustainability@aerostarairports.com.

SECTION 10: ATTACHMENTS

10.1 Attachment A – General Location Map



10.2 Attachment B – Existing Building Inventory



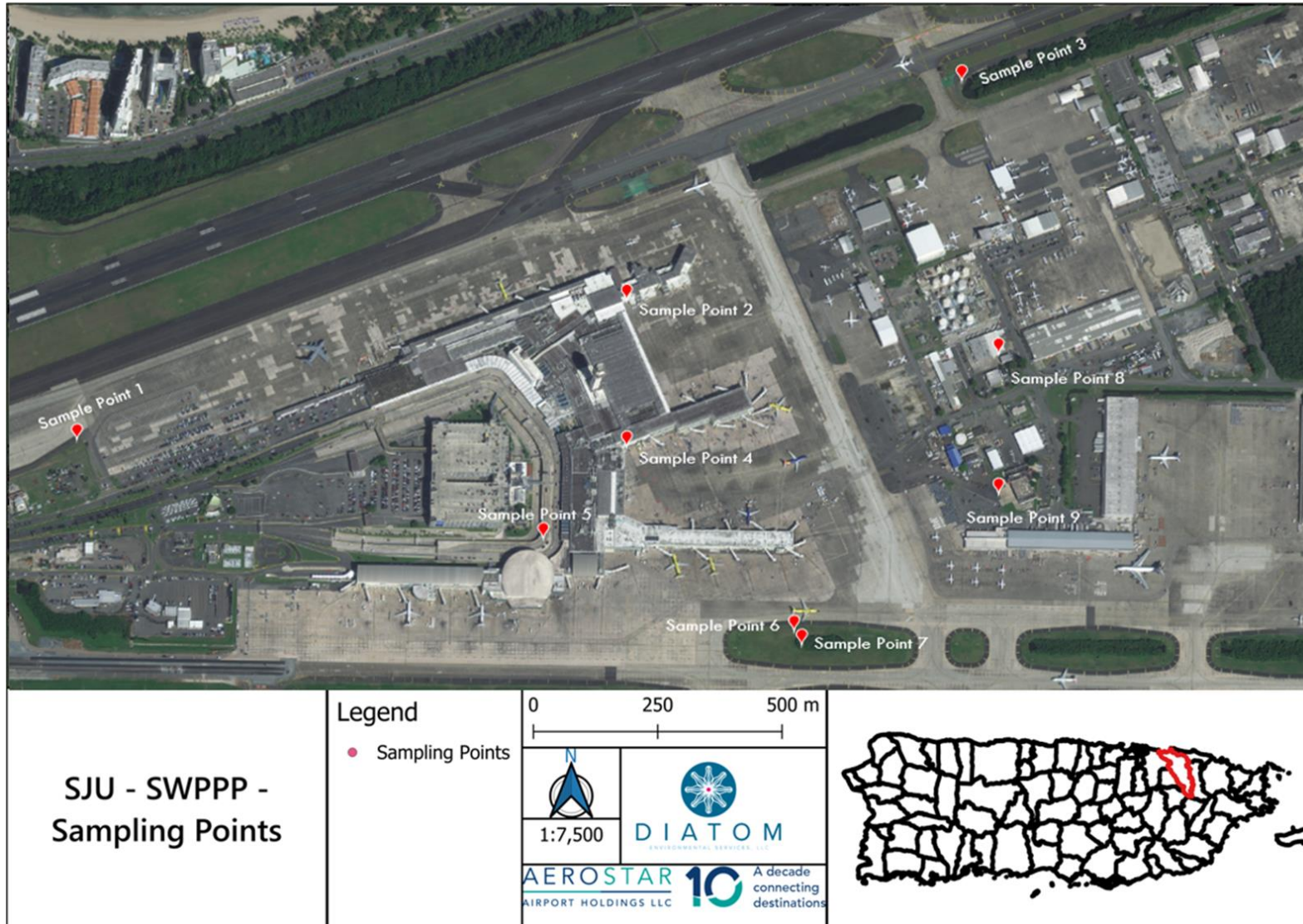
10.3 Attachment C – Existing Building Inventory List

No.	Existing Building	Roof Elev.	Future Use
1	Airfield Vault/Generator Room	46.8	Same
2	Aero Parque	52.4	Same
3	Vehicular Gate 1	32.9	Same
4	Taxi Stand	35.5	Same
5	Cistern Pump House	32.2	Same
6	Storage	32.7	Same
7	Terminal D	36.7	Same
8	Airport Hotel	44.2	Same
9	FIS & Concourse C/D Connector	50.2	Same
10	FAA ATCT	243.8	Same
11	Terminal C	50.2	Same
12	Central Terminal	50.2	Same
13	Terminal B	25.1	Same
14	Terminal A	84.3	Same
15	Food & Beverage Building	25.0	Same
16	Rental Car	35.8	Same
17	Parking Garage	113.0	Same
18	Parking Garage Entrance	40.1	Same
19	Parking Garage Exit	40.0	Same
20	Cistern Pump House	32.6	Same
21	Cistern Pump House	31.1	Same
22	Power Generators	35.0	Same
23	Airfield Electrical Vault	35.9	Same
24	Power Substation	36.2	Same
25	Car Rental Entrance	25.5	Same

26	Car Rental Maintenance	31.5	Same
27	Car Rental Office	31.7	Same
28	Car Rental Exit	32.0	Same
29	Car Rental Office	24.6	Same
30	Car Rental Maintenance	27.2	Same
31	Car Rental Entrance	27.5	Same
32	Car Rental Office	40.3	Same
33	Car Rental Maintenance	39.3	Same
34	Car Rental Maintenance	38.6	Same
36	Peñagaricano Hangar	38.4	Same
37	Airport Aviation Services	55.2	Same
39	Vehicular Gate 2	38.0	Same
40	Vacant Building	46.1	Same
41	Sanitary Waste Disposal/Lavatory	28.3	Same
42	Orocovis Petroleum	43.0	Same
43	Airport Aviation Services (Sub-Leased To Rivero Transport)	43.0	Same
44	Drug Enforcement Administration	37.3	Same
45	Fuel Farm	32.5	Same
46	American Airlines (Workshop)	36.6	Same
47	U.S. Customs and Border Protection	31.3	Same
48	Jet Aviation	55.4	To Be Demolished
49	Jet Aviation	48.6	Same
50	Hangar Optima	27.9	Same
51	Hangar	35.8	Same
52	Pazos Hangar (Subleased To Tradewind)	37.3	Same
53	PRPD	31.6	Same
54	PRPD	29.2	Same

55	Tradewind	43.7	Same
56	Vacant – Flight Kitchen (Abandoned)	56.9	Same
57	World Fuels (Petro Air)	28.8	Same
58	World Cargo	46.5	Same
59	PRPD K9	27.9	Same
60	Aerostar Maintenance Workshop	28.4	Same
61	Cistern	30.9	Same
62	GMD Services Workshop	43.0	Same
63	Aerostar Workshop	44.9	Same
64	Aerostar Equipment Shelter	36.0	Same
65	ARFF	51.0	Same
66	FedEx Cargo	37.3	To Be Demolished
69	Amerijet and AA Cargo	30.8	Same
70	GMD Cargo	52.7	Same
71	Gas Station (Not In Use)	32.2	Same
72	CAF 1 – United Parcel Service	25.5	Same
73	CAF 1 – Cargo Building	78.6	Same
74	CAF 2 – Cargo Building	56.9	Same
75	Burger King	27.4	Same
76	Multipurpose Office Space	33.8	Same
77	Hertz Car Rental	36.4	Same
78	Warehouse	56.3	Same
79	Commercial Building	39.6	Same
80	Commercial Building	34.6	Same
81	NOAA	29.6	Same
82	FAA	58.2	Same
83	Loading Platform	31.0	Same

10.4 Attachment D – 2021 MSGP – Sampling Points



10.5 Attachment E – Description of Past Spills

Past Spills and Leaks at SJU 2021-2023								
CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20210301	3/12/21	Southwest	30203	Fuel Spill on transfer from wing tank to another wing tank	B 5	Area was cleaned by Vortex	S	2021
20210304	3/18/21	GMD	254910	Transmission fluid leak	B/C make-up	Area was clean by GMD personnel	S	2021
20210410	4/14/21	Jet Aviation	34683	Jet fuel spill	APN 9	Area was cleaned by the company. The spill was approximately 10 gallons.	S	2021
20210413	4/18/21	Aerostar Airport Holding	N/A	PBB hydraulic spill	A 7	Area was cleaned and repair by Aerostar maintenance	S	2021
20210418	4/27/21	Western Global	36477	Jet fuel leak from engine #1	APN 12	Area was cleaned by GMD	S	2021
20210419	4/28/21	Prime Flight	01727	Hydraulic spill from belt loader	APN 2	The belt loader was removed, and the area was cleaned by company	S	2021

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20210503	5/17/21	Jet Aviation	33411	Diesel leak truck R2	Gate 25	Area was cleaned by company and truck taken to maintenance	S	2021
20210509	5/26/21	Airport Aviation Service	N/A	Fuel spill during refueling aircraft	Airport Aviation	The spill was cleaned by Airport Aviation, was a proximally 50-55 gal. jet fuel.	S	2021
20210702	7/13/21	Cargo Force	05114	Hydraulic spill from tractor 01	APN 9	Area was cleaned by company and the tractor was removed from AOA	S	2021
20210705	7/14/21	American Airlines / GMD	N/A	Oil spill from ground support equipment	C5/C3	GMD clean the area	S	2021
20210805	8/21/21	Sun Country	15512	Wing overflow fuel spill	C5	The spill was cleaned by Puma company and boom was install on the water channel	S	2021
20210901	9/6/21	Prime Flight	N/A	Oil spill on gate	C2	Area was cleaned by Airside personnel	S	2021

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20211206	12/6/21	Jet Aviation	N/A	Hydraulic spill from belt loader	APN 5A	Area was cleaned by company	S	2021
20220102	1/25/22	FedEx	22611	Hydraulic spill from Loader	FedEx Ramp	Company cleans the area	S	2022
20220305	3/19/22	United	N/A	Wing overflow fuel spill	B 8	The spill was cleaned by Puma company	S	2022
20220306	3/25/22	Amerijet	N/A	Wing overflow fuel spill	APN 6	The spill was cleaned by Puma company	S	2022
20220308	3/31/22	PR Pipeline	N/A	Fuel coming into SJU via Stormwater system	TWY J	On process	S	2022
20220402	4/6/22	Jet Aviation	25812	Jet Fuel Spill from R11	MVG 25	Area was clear by Jet Aviation	S	2022

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20220404	4/8/22	Delta	N/A	Hydraulic spill	TWY N	Area was cleaned	S	2022
20220407	4/13/22	Jet Aviation	32530	Fuel overflow	APN 5A	Area was cleaned by Jet Aviation	S	2022
20220410	4/19/22	Pipeline	N/A	Fuel coming into SJU via Stormwater system	TWY J	On process	S	2022
20220411	4/20/22	Pipeline	N/A	Fuel coming into SJU via Stormwater system	TWY J	On process	S	2022
20220416	4/23/22	Jet Aviation	27796	Hydraulic spill from lavatory truck	MVG 24	Area was cleaned by Jet aviation	S	2022
20220515	5/28/22	Puma / Kalita	04063	Wing overflow spill	APN 6	Area was cleaned by Puma	S	2022

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20220606	6/9/22	Puma	31841	Wing overflow spill	B 5	Area was cleaned by Puma	S	2022
20220607	6/9/22	Puma	N/A	Wing overflow spill	B 3	Area was cleaned by Puma	S	2022
20210702	7/1/22	Jet Aviation	N/A	Fuel spill	APN 5B	Area was cleaned by Jet Aviation	S	2022
20220802	8/9/22	GMD	N/A	Fuel spill	GMD	Area was cleaned by GMD	S	2022
20221014	10/30/22	JetBlue	N/A	Air conditioning spill engine oil	A 5	Area was cleaned by company	S	2022
20221106	11/14/22	Airport Aviation Service	31104	Avgas spill	AAS	Spill was cleaned by company	S	2022

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20221107	11/18/22	Jet Aviation	N/A	Wing overflow spill	Jet Aviation	Spill was cleaned by company	S	2022
20230103	1/6/23	American	N/A	Oil leak from left engine	C 6	Mechanics report it was an overflow, the area was cleaned	S	2023
20230114	1/16/23	Airport Aviation Service	N/A	Wing overflow spill	AAS	Area was cleaned by personnel	S	2023
20230117	1/24/23	Aerostar Airport Holding	N/A	Hydraulic spill from mechanical arm	MV 2	Area was cleaned by Aerostar	S	2023
20230205	2/15/23	GMD	N/A	Hydraulic spill from belt loader	B 2	Area was cleaned by GMD personnel	S	2023
20230210	2/21/23	Sol PR	N/A	Wing overflow fuel spill	C 7	Area was cleaned	S	2023

Past Spills and Leaks at SJU 2021-2023

CASE #	DATE	COMPANY	ID #	EVENT NAME	LOCATION	RESOLUTION	Code	Year
20230301	3/1/23	Air 71	N/A	Oil spill during engine run-up	H 7	Area was cleaned by Airport Aviation	S	2023
20230305	3/11/23	Swift Air	N/A	Fuel spill due to overflow	APN 6	Area was cleaned by company	S	2023
20230410	4/27/23	Puma	N/A	Fuel spill	APN 9	Area was cleaned	S	2023

10.6 Attachment F – BMPs for the SJU

A stormwater BMP is any program, technology, process, criteria, or operating method that controls, removes, or reduces pollution. Appropriate BMPs are selected for industrial facilities based on on-site assessments. Areas of actual or potential pollutant contact are evaluated, and applicable BMPs are implemented to eliminate or minimize the pollutants. The following discussion describes the existing BMPs implemented at SJU by Aerostar and proposed additional control mechanisms. An implementation program detailing scheduling, pollution prevention team personnel, training requirements, and facility inspection protocol is provided for implementing the BMPs for Aerostar-operated facilities.

Aerostar performs various industrial activities such as vehicle maintenance, equipment storage, and facility maintenance. To minimize the effects of those activities on stormwater quality, Aerostar has already implemented some acceptable BMPs. Those BMPs include performing activities inside buildings or under cover, conducting employee training, and using absorbent materials. Also, to prevent fuel spills from entering the receiving drainage ditches, SJU has four oil/water separators located throughout the airport. These oil/water separators could prevent the General Aviation Apron and terminal spills from reaching the stormwater drainage system.

BMP 1: ELIMINATION OF NON-STORMWATER DISCHARGES TO STORM DRAINS TARGETED ACTIVITIES:

Aircraft washing, aircraft lavatory service, vehicle washing, equipment cleaning/degreasing, apron wash water, building and ground maintenance, and floor wash water.

DESCRIPTION:

Existing discharges: Eliminate non-stormwater discharges to the stormwater collection system. Non-stormwater discharges can be classified as follows:

- 1) Activity-based (subtle), and;
- 2) Overt (hard pipe connection). Activity-based non-stormwater discharges may include wash water and spillage. Overt non-stormwater discharges may consist of process wastewater, treated cooling water, and sanitary wastewater. Prevention of illicit connections: Prevent improper physical connections to the storm drain system from sanitary sewers, floor drains, industrial process discharge lines, lavatory service, and wash areas through education, developing project approval conditions, and performing both construction phase and post-construction inspections.

Discharges exempt from federal regulation include air-conditioning condensate drainage, landscape irrigation runoff, uncontaminated foundation drainage, and fire suppression flows.

APPROACH:

NOTE: The guidelines below suggest reducing pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

IDENTIFICATION OF ACTIVITY-BASED DISCHARGES:

The following techniques may be used to identify activity-based non-stormwater discharges to the stormwater collection system:

- Perform frequent activity inspections to identify non-stormwater discharges. Stagger inspection times to cover all work periods.
- Perform visual inspections of Discharge Points to the storm drain system. Observe uncharacteristic volumes, colors, turbidity, odors, deposition, staining, floatable materials, and foaming characteristics of any flow.

The following items are recommended for implementation at SJU:

- Establish an aircraft and vehicle washing station connected to the sanitary sewer system.
- Estimate flow rate and loadings from this station.
- Obtain a discharge permit from the City of Carolina (if applicable).
- Install an appropriate wastewater management system to meet permit limits and connect the station to the sanitary system.

- Develop a plan to eliminate non-stormwater discharges from illicitly connected floor drains.

IDENTIFICATION OF (HARD PIPE) DISCHARGES:

The following techniques may be used to identify hard pipe non-stormwater discharges to the stormwater collection system:

- **VISUAL INSPECTION:** Inspect each Discharge Point during dry weather.
- **PIPING SCHEMATIC REVIEW:** Review as-built facilities drawings to determine any illicit connections to the storm drain system and inspect the path of floor drains in older buildings.
- **SMOKE TEST:** Smoke test wastewater and stormwater facilities to determine the presence of illicit connections.
- **DYE TEST:** Release dye into the wastewater effluent process and examine stormwater discharge points for discoloration (the presence of an illicit connection).

Design of New Facilities and Existing Facility Upgrades:

- Follow plan submission and approval procedures required by Aerostar.
- Perform inspections during the project construction phase to ensure correct drainage, waste, and supply connections (no cross connections or illicit hookups).
- Develop a set of as-built prints for all projects. Keep a set of prints at the facility.
- Design projects to include adequate waste repositories near waste origin points.
- Provide adequate and appropriately designed facilities such as steam cleaning, degreasing, painting, mechanical maintenance, chemical/fuel storage and delivery, material handling, waste handling and storage, lavatory service, and food preparation.

Operational Considerations:

- Inspect waste containers frequently for leaks and proper closure seal.
- Use *dry* cleaning and surface preparation techniques where feasible.
- Limit the availability of outdoor water supplies (hose bibs).

Contingency Response:

- Develop and implement an SPCC plan as required under guidelines outlined in 40 CFR, Section 112.3(a), (b).
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

- Develop employee training programs that emphasize the proper disposal procedures for operations-derived waste.
- Provide the appropriate level of employee training in the following areas: spill

response and prevention, stormwater pollution prevention education (see BMP 9 for stormwater pollution education approaches), right-to-know awareness training, and hazardous materials management.

- Post signs at outdoor water sources stating the appropriate uses and discouraging uses that would introduce pollutants to the storm drain system/receiving waters—Mark “No Dumping” on storm drain inlets.

IMPACTS/REQUIREMENTS:

Costs associated with the elimination of non-stormwater discharges can be high.

LIMITATIONS:

Activity-based non-stormwater discharges from a particular facility are typically intermittent and temporary and often require frequent inspections to detect.

REFERENCES

- 29 CFR 1910 (subparts G, H, I, J, and K) Hazardous materials, Environmental Controls, and Personal Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 2: AIRCRAFT, VEHICLE, AND EQUIPMENT MAINTENANCE TARGETED ACTIVITIES:

Aircraft Maintenance, Aircraft Painting/Stripping, Vehicle Maintenance, Equipment Maintenance, Vehicle Painting/Stripping, Floor Wash downs.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from aircraft, vehicles, equipment maintenance, and repair.

APPROACH:

NOTE: The guidelines below suggest reducing pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Provide covered maintenance areas when designing new facilities or upgrading existing facilities. Utilize indoor areas or portable covers.

- In the design of outdoor maintenance areas, consider appropriate stormwater quality structures (oil/water separators, sumps, first flush diversion basins, etc.) and coordinate design and construction activities with Aerostar.
- Consider using rainfall-activated flow diversion valves in outdoor maintenance area drainage systems if appropriate. During dry weather, flows are directed to the sanitary sewer for treatment after passing through a clarifier. After a pre-determined amount of rainfall, usually 0.1 to 0.25 inches, the valve is actuated and directs runoff flow to the storm drain system. To avoid overtaxing the sanitary sewer collection system and treatment plant capacity, the drainage area contributing to runoff in this type of system should be limited to the minimum area required for maintenance activities. The design and implementation of these systems must be coordinated through appropriate airport planning and the Puerto Rico Aqueduct and Sewer Authority.

Operational Considerations:

- Maintain clean equipment, with no excessive external oil and grease buildup. Clean equipment using non-chlorinated solvents and cleaning agents. Use designated washing and steam cleaning / de-greasing areas.
- Use drip pans or absorbent material at potential problem areas. Dispose of absorbent material appropriately. Use absorbent pads where possible to pick up spills.
- Use appropriate vehicle maintenance facilities (indoors where feasible) to perform maintenance, oil changes, and lubrication.
- Drain and crush oil filters before recycling or disposal. Store crushed oil filters and empty lubricant containers in a leak-proof container.
- Clean any catch basins that receive runoff from a maintenance area regularly, especially after larger storms.
- Do not hose down work areas to the storm drain system or use concrete cleaning products; use mops, dry sweeping compound, or contract professional cleaning services.
- Confirm the use of appropriate disposal practices by contract cleaning services.
- Store mechanical parts and equipment under cover when feasible.
- Drain all fluids and remove batteries from salvage aircraft, vehicles, and equipment.
- Recycle or properly dispose of the following: greases, oils, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
- Use recycled products and substitute materials with less hazardous properties where feasible.
- Label storm drain inlets to indicate they are to receive no waste, wastewater, etc.

Contingency Response:

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

- Provide employee stormwater quality awareness training.
- Develop regular maintenance and inspection programs for oil/water separators, clarifiers, and retention/treatment basins (if applicable).
- Characterize waste from oil/water separators, clarifiers, and retention/treatment basins.
- Dispose of these wastes properly and provide appropriate employee training.

IMPACTS / REQUIREMENTS:

- Capital and O&M costs should be low but will vary depending on the size of the facility.
- Maintenance costs should be low.

LIMITATIONS:

- Size, space, and time limitations may preclude all work indoors.
- Identification of engine and equipment leakage points may require using solvents to remove external accumulations of oily grime.
- Spills and leaks occurring after normal work hours may not be immediately mitigated.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 3: AIRCRAFT, VEHICLE, AND EQUIPMENT FUELING

TARGETED ACTIVITIES:

Aircraft Fueling, Vehicle Fueling, Equipment Fueling, Floor Wash waters.

DESCRIPTION:

Prevent fuel spills and leaks and reduce their impacts on stormwater.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Design fueling areas to prevent the run-on of stormwater and the runoff of spills by employing the following approaches:
 - Cover the fueling area if possible.
 - Use a perimeter drain or slope the fueling area to a dead-end sump or oil/water separator.
 - Pave the fueling area with concrete rather than asphalt.
- If a dead-end sump is not used to collect spills, install an appropriately sized oil/water separator, which Aerostar has approved.
- Install and maintain vapor recovery systems where required and/or appropriate.
- Existing underground fuel storage tanks should be upgraded with leak detection, spill containment, and overfill protection.
- Design facilities to include secondary containment where required and/or appropriate.

Operational Considerations:

- Provide appropriate monitoring for tanks containing fuel, such as:
 - Level indicators and gauges.
 - Overfill protection with alarms.
 - Routine inspection/lockout for drainage valves for tank containment areas.
- Fuel distribution system piping should be labeled in accordance with American National Standards Institute (ANSI) and Occupational Safety and Health Administration (OSHA) standards, with hazards color-coded and applicable contents clearly identified. Fuel containers and ASTs should be labeled in accordance with the facility-specific Hazard Communication Program.
- Fuel dispensing equipment should be equipped with "breakaway" hose connections, which will provide an emergency shutdown of flow should the fueling connection be broken during movement.
- Deadman valves should be in place on aircraft fuel tanks. These valves remain closed unless manually opened during fueling-by-fueling equipment specifically designed to do so.
- Install emergency shut-off valves on fuel hydrant systems to manually shut down fuel flow if the breakaway-type hose connections fail.
- Discourage "topping-off" of fuel tanks unless standard high-level shut-off and backup Skully systems are fully operational.
- Employ secondary containment where feasible when transferring fuel from a tank truck to a fuel tank.

- Use absorbent materials and spot cleaning for small spills; do not hose down the area.
- Avoid mobile fueling of mobile equipment if feasible; fuel mobile equipment at designated fueling areas.
- Manage the disposal of water that collects in fueling hydrant sumps according to local and federal regulations and guidelines developed by Aerostar.

Contingency Response:

- Implement the SPCC plan as required under guidelines outlined in 40 CFR, Section 112.3(a), (b).
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training

- Consider performing non-destructive testing procedures on above-ground storage tanks. Non-destructive testing procedures include hydrostatic and acoustic emission testing. The following minimum testing frequencies are suggested:
 - Tank size greater than 10,000 gallons: every three years.
 - Tank size between 1,000 and 10,000 gallons: every five years.
 - Tank size less than 1,000 gallons: discretionary.
- Record all maintenance activities and inspections of fueling equipment and containers in a logbook.
- Underground fuel storage tanks should be tested as federal and local laws require.

Provide the appropriate level of spill response training to proper personnel to address all potential spills.

IMPACTS/REQUIREMENTS:

Capital and O&M Costs:

The cost of retrofitting existing fueling areas to minimize stormwater contamination can be high. Practical design concepts such as incorporating curbs along the upstream side of facilities to prevent stormwater run-on can be of modest cost.

Maintenance:

Clean oil/water separators at appropriate intervals.

Stock adequate supplies of cleanup materials at potential spill points. Inspect fueling areas and storage tanks regularly.

LIMITATIONS:

Properly sized and installed oil/water separators must be regularly maintained to be effective. See BMP 12 for a description of management practices relating to oil/water separator operations and maintenance.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.

- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 4: AIRCRAFT, VEHICLE, AND EQUIPMENT WASHING AND STEAM CLEANING/DE-GREASING

TARGETED ACTIVITIES:

Aircraft and Vehicle Painting/Stripping, Aircraft Washing, Vehicle Washing, Equipment Cleaning/De-greasing.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from aircraft, vehicles, and equipment washing and steam cleaning.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Off-site commercial washing is feasible. Using appropriate off-site facilities will decrease the waste generated on-site.
- Consider incorporating a wash water recycling system into the project design.
- Outdoor washing operations should have the following design characteristics:
 - Paved with Portland cement concrete.
 - Bermed and/or covered (if feasible) to prevent contact with stormwater.
 - Sloped to facilitate wash water collection.
 - Wash water should be collected in a dead-end sump for removal or discharged to the sanitary sewer through a permitted connection. Discharge pipes serving uncovered wash areas should have a positive control valve that allows switching between the storm drain and the sanitary sewer.
 - Clearly designated.
 - Equipped with an appropriately sized and maintained oil/water separator.

Operational Considerations:

- Use designated wash areas, covered and bermed where feasible, to prevent waste contact with stormwater.
- Discharge wash water to the sanitary sewer system through a permitted connection. The Puerto Rico Aqueduct and Sewer Authority may have different regulations and requirements regarding wash water disposal.
- Use *dry* washing and surface preparation techniques where feasible. Several products are currently marketed that can be used to clean even the largest aircraft.
- Provide secondary containment for containers of washing and steam-cleaning additives.

Contingency Response:

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Develop regular maintenance and inspection programs for oil/water separators and clarifiers.
- Characterize wastes derived from oil/water separators and clarifiers. Dispose of these wastes properly and provide appropriate employee training.

IMPACTS/REQUIREMENTS:

- Capital costs vary depending on the measures implemented.
- O&M costs increase with increasing capital investment.
- Maintenance:
 - Berm repair and patching.
 - Inspect and maintain sumps, oil/water separators, and on-site treatment and recycling units.

LIMITATIONS:

- Some wastewater agencies may require pretreatment and monitoring wash water discharges to the sanitary sewer system.
- Steam cleaning and de-greasing operations can generate significant pollutant concentrations, which may require permits, monitoring, pretreatment, and inspections.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.

- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 5: OUTDOOR MATERIAL HANDLING TARGETED ACTIVITIES:

Aircraft Lavatory Service, Cargo Handling, Fuel Storage, Chemical Storage, Pesticide/Herbicide Storage, and Equipment Storage.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from loading and unloading material and cargo.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Design loading/unloading areas to prevent stormwater run-on using the following practices:
 - Grading or berming.
 - Positioning roof downspouts to direct stormwater away from loading/unloading areas.
- Design facilities so that materials that may contribute pollutants to stormwater may be stored indoors or under cover.
- Consider relocating or raising storm drain inlets in areas of fuel hydrants.
- Incorporate oil/water separators into exposed loading dock designs.

Operational Considerations:

- Position tank trucks or delivery vehicles to contain possible spills or leaks.
- Cover loading/unloading docks to reduce exposure of materials to rain.
- Seals or door skirts between vehicles and structures can also prevent material exposure to rainfall.
- Contain and absorb leaks during transfers and spillage from hose disconnections;

dispose of residue properly.

- Avoid transferring materials close to storm drain inlets.
- Use drip pans under hoses.
- Transfer liquids only in paved areas. Portland cement paving should be used if the liquid is asphalt reactive.
- Provide contractors and haulers with copies of pertinent BMPs. Contractor/hauler adherence to BMP specifications is required.
- Consider contracting maintenance operations for material handling equipment. Designate an appropriate area for contractors to perform maintenance activities. Verify proper waste disposal practices of contractors.

Contingency Response:

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
- Include spill kits on appropriate material handling vehicles and equipment.

Inspection and Training:

- Develop and implement a written operations plan which describes loading/unloading procedures.
- Provide proper training for forklift operators.
- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

IMPACTS/REQUIREMENTS:

- Capital and O&M costs should be low except when covering large loading/unloading areas.
- Maintenance:
 - Conduct regular inspections and make repairs, as necessary.
 - Check loading/unloading equipment (valves, pumps, flanges, and connections) regularly for leaks.

LIMITATIONS:

Space and time limitations may preclude the indoor or covered cargo transfer and materials.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.

- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 6: OUTDOOR FUEL AND CHEMICAL STORAGE TARGETED ACTIVITIES:

Aircraft Maintenance, Vehicle Maintenance, Cargo Handling, Chemical Storage, Pesticide/Herbicide Storage, Equipment Maintenance, Equipment Storage.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from outdoor fuel and chemical storage areas.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Develop standard conditions for tenant and authority projects such as:
 - Prohibit non-storm water from the storm drain system.
 - Require the use of appropriate water quality control structures for fuel and chemical storage areas such as clarifiers and sumps. Develop appropriate minimum performance standards for these structures and implement a reporting program to monitor their performance and maintenance.
- Chemical, fuel, and oil dispensing areas should be covered.
- Develop standard guidelines for the management of stormwater collected in secondary containment areas.

Operational Considerations:

- The storage of flammable and combustible liquids should comply with the following federal regulations and guidelines: NEPA Codes 30 and 30A, OSHA regulations, 29 CFR 1910.106, and all applicable local regulations.
- Limit the quantities of chemicals stored outside to the minimum required volume based on release potential, usage, and shelf life.
- Avoid dispensing from drums positioned horizontally in cradles. Dispensing materials from upright drums equipped with hand pumps is preferred. Always use drip pans and self-closing valves if dispensing from horizontally positioned drums.
- Store drums and containers on pallets or other structures to keep the container out of contact with stormwater.
- Use drum lids to prevent rainfall from washing materials and drippage from the top of containers to the storm drain system.
- Discharge collected stormwater from secondary containment areas according to guidelines developed by Aerostar.

Contingency Response:

- Implement an SPCC plan as required under guidelines outlined in 40 CFR, Section 112.3(a), (b).

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspect/on and Training:

- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document in a logbook weekly inspection: inspection items should include the following:
 - Check for external corrosion and structural failure.
 - Check for spills and overfills due to operator failure.
 - Check for piping system failure (pipes, pumps, flanges, couplings, hoses, and valves). Check for leaks or spills during pumping of liquids or gases.
 - Inspect new tanks or containers for loose fittings, poor welds, and improper or poorly fitted gaskets.
 - Inspect tank foundations and storage area coatings.

IMPACTS/REQUIREMENTS:

Capital and O&M costs will vary widely depending on the size of the facility and the necessary controls.

LIMITATIONS:

Storage structures must meet local buildings and applicable local Uniform Fire Code (UFC) requirements. However, spills and releases are frequently caused by improper handling rather than structural deficiencies.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 7: WASTE HANDLING AND DISPOSAL TARGETED ACTIVITIES:

Aircraft Maintenance, Aircraft Fueling, Aircraft Painting/Stripping, Aircraft Lavatory Service, Vehicle Maintenance, Fuel Storage, Chemical Storage, Pesticide/Herbicide Storage, Equipment Maintenance, Vehicle Painting/Stripping.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from waste handling and disposal by tracking waste generation, storage, and disposal, reducing waste generation and disposal through source reduction, reuse, and recycling, and preventing run-on and runoff from waste management areas.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Develop standard conditions for tenant and Aerostar projects such as:
 - Prohibit non-storm water from the storm drain system.
 - Require the use of appropriate water quality control structures for waste storage areas such as clarifiers and sumps. Develop appropriate minimum performance standards for these structures and implement a reporting program to monitor their performance and maintenance.
- If possible, avoid the following characteristics when examining candidate sites for storing waste:
 - Excessive slope.
 - High water table.
 - Locations near storm drain inlets, wetlands, or other sensitive habitats.
 - Locations near public access areas.
- Waste handling and storage areas should be covered.
- Develop standard guidelines for the management of stormwater collected in secondary containment areas.
- Design facilities to provide shelter for open dumpsters.
- If approved by local regulators, incorporate sanitary sewer drains into bermed, outdoor, non-hazardous waste storage areas.

Operations/ Considerations:

- Perform regular housekeeping activities in waste storage areas and surroundings.
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- Maintain a minimal inventory of required chemicals to reduce the magnitude of potential spills and limit waste generation.
- Find substitutes for harmful chemicals; properly dispose of unusable chemical inventory.

- SARA Title III, Section 313 requires reporting for over 300 listed chemicals and compounds. This requirement can be used to track these chemicals, although it is not as accurate as other approaches.
- Track waste generated.
 - Characterize waste streams.
 - Evaluate the process of generating waste.
 - Using manifests, bills of lading, biennial reports, permits, environmental audits, SARA Title III reports, emission reports, material safety data sheets (MSDS), and NPDES discharge monitoring reports, prioritize the waste streams.
 - Inventory reports.
 - Data on chemical spills.
 - Emissions.
 - Shelf-life expiration.
- Recycle materials whenever possible.
- Maintain list and amount of material disposed of.
- Waste segregation and separation.
- Inspect waste management areas for spills and leaks.
- The following additional approaches apply to production facilities:
 - Raw material substitution or elimination. ○ Process or equipment modification.
 - Production planning and sequencing.
 - Use design data and review process flow diagrams, materials and applications diagrams, piping and instructions, equipment lists, and plot plans.
 - Use raw material and production data and review composition sheets, MSDSs, batch sheets, product or raw material inventory records, production schedules, and operator data logs.
 - Use economic data and review waste treatment and disposal costs, product utility and financial costs, and operation and maintenance labor costs.
 - Cover, enclose, or berm industrial wastewater management areas whenever possible to prevent contact with runoff or run-on.
- Ensure that sediments and wastes are prevented from being tracked off-site.
- Mark "No Dumping" warnings on storm drain inlets.
- Minimize spills and fugitive losses such as dust or mist from loading areas.

Contingency Response:

- Implement the SPCC plan as required under guidelines outlined in 40 CFR, Section 112.3(a), (b).
- Maintain adequate supplies of spill response equipment and materials in accessible

locations near areas where spills may be likely to occur.

- Equip waste transport vehicles with spill containment equipment.

Inspection and Training:

- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document in a logbook weekly inspection of hazardous and non-hazardous waste storage areas: inspection items should include the following:
 - Check for external corrosion and structural failure.
 - Check for spills and overfills due to operator failure.
 - Check for piping system failure (pipes, pumps, flanges, couplings, hoses, and valves).
 - Check for leaks or spills during pumping of liquids or gases.
 - Inspect new tanks or containers for loose fittings, poor welds, and improper or poorly fitted gaskets.
 - Inspect tank foundations and storage area coatings.

IMPACTS/REQUIREMENTS:

Capital and O&M costs for these programs will vary substantially depending on the size of the facility and the types of waste handled.

Maintenance:

None except for maintaining equipment for material tracking programs.

LIMITATIONS:

Hazardous waste that cannot be reused or recycled must be disposed of by a licensed hazardous waste hauler.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 8: BUILDING AND GROUNDS MAINTENANCE TARGETED ACTIVITIES:

Building and Grounds Maintenance.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance by washing and cleaning up with as little water as possible, preventing and cleaning up spills immediately, keeping debris from storm drains, and maintaining the stormwater collection system.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Incorporate areas of the landscape into project design. Landscape areas are pervious and will result in less runoff discharge from a site.
- Incorporate design considerations such as leaving or planting native vegetation to reduce irrigation, fertilizer, and pesticide needs.
- Select landscaping plants that require little maintenance and/or pest control.

Operational Considerations:

- Minimize the use of pesticides and fertilizers. Use pesticides and fertilizers according to directions. Seek less harmful/toxic pesticides and fertilizers to replace the ones currently used.
- Integrate pest management where appropriate.
- Sweep paved surfaces regularly.
- The stormwater drainage system should be cleaned at appropriate intervals according to the local government or Aerostar guidelines. Do not simply flush waste to receive water.
- Properly dispose of landscape waste, wash water, sweepings, and sediments.
- Do not contract with auto detailers and other cleaning companies that utilize wet operations that discharge to the storm drain system or receiving waters.

Contingency Response:

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

IMPACTS/REQUIREMENTS:

- Capital and O&M Costs:

- Costs will vary depending on the type and size of the facility.
- Overall costs should be low in comparison to other BMPs.

LIMITATIONS:

Alternative pest/weed controls may not be available, suitable, or effective in every case.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 9: STORMWATER POLLUTION PREVENTION EDUCATION

TARGETED ACTIVITIES:

Aircraft Maintenance, Fueling, Painting/Stripping, Washing, Aircraft Lavatory Service, Vehicle Maintenance, Fueling, Washing, Apron Washing, Cargo Handling, Fuel Storage, Chemical Storage, Pesticide/Herbicide Storage, Equipment Cleaning/De-greasing, Equipment Maintenance, Equipment Storage, Vehicle Painting/Stripping, and Floor washdowns.

DESCRIPTION:

Implement an education program targeting the public, vendors, and employees to prevent or reduce the discharge of pollutants to stormwater from activities.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Work early on with design and construction engineers and local agencies to incorporate practical stormwater management features into projects, such as decreased impervious areas, infiltration BMPs, biofilters, oil/water separators, etc.
- Inform all construction contractors of their responsibility to comply with adopted BMPs and regulations prohibiting cross connections between sanitary sewers and storm drains. Provide contractors and subcontractors with copies of BMPs during specification and bidding phases. Include penalty language in contracts for contractors failing to comply with stormwater management objectives.

Operational Considerations:

- Perform and document frequent inspections of work areas, waste storage facilities, maintenance areas, and contractor projects in a logbook to examine compliance with BMPs. Follow up with additional training or discipline as required. Incorporate inspection findings into subsequent training efforts.

Contingency Response:

- Provide adequate implementation training for the facility's SPCC plan, which was developed under guidelines set forth in 40 CFR, Section 112.3(a), (b).
- Adequately train employees in the use of spill response equipment and materials.
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Inspection and Training:

- Design stormwater pollution education programs to contain the following elements:
 - Promote the proper storage, use, and disposal of landscape maintenance chemicals and other potentially harmful chemicals.
 - Promote safer alternatives such as short-lived pesticides, non-chlorinated solvents, water-based paints, and non-aerosol products.
 - Encourage using "dry" washing processes for aircraft, vehicles, and equipment. Encourage efficient and safe housekeeping practices in industrial activity areas.
 - Increase awareness of the damaging environmental impacts when fuel, antifreeze, pesticides, lubricants, detergents, paints, and other wastes are dumped onto the ground or into storm drains.
 - Promote source reduction and recycling of waste materials.
 - Increase awareness of possible penalties and fines associated with waste dumping.
 - Increase awareness of the relationship between air pollution and stormwater quality.
 - Encourage the practice of car-pooling, ride-sharing, and public transportation.
 - Increase awareness of what is and is not allowed to enter storm drains.

Provide a mechanism for violations to be reported.

IMPACTS/REQUIREMENTS:

- Capital and O&M costs are minimal for educational programs.
- Educational programs need to be ongoing. Information and training must be conducted at regular intervals.

LIMITATIONS:

The success of educational programs takes time to measure. Acceptance and awareness are critical factors.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.

- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 10: LAVATORY SERVICE OPERATIONS TARGETED ACTIVITIES:

Aircraft Lavatory Service.

DESCRIPTION:

Perform best management practices associated with ground servicing of aircraft lavatory facilities. The sanitary sewage and associated rinse waters produced during the servicing of aircraft lavatory facilities must be discharged to, under appropriate permitting, a wastewater treatment facility. Trucks or trailers with bulk storage tanks are typically used to service lavatory facilities. Non-stormwater discharges and residuals associated with servicing these facilities can be classified as follows:

- Discharges and residuals associated with diluting and mixing the surfactants and disinfectants used for servicing lavatory facilities.
- Discharges and residuals associated with transferring materials from the aircraft.
- Discharges and residuals associated with transporting and disposing materials to the sanitary sewer system.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Operational Considerations:

- Use only surfactants and disinfectants approved for discharge to the sanitary sewer system. Do not discharge or rinse other unapproved chemicals or materials into the sanitary sewer.
- Carefully handle chemicals and chemical concentrations. Immediately collect dry chemicals or absorb liquid chemicals for proper disposal. Do not hose down spills unless the discharge enters the sanitary sewer system through a permitted connection.
- Do not discharge lavatory waste to sanitary sewer connections other than the designated facilities. Other industrial-type connections may be equipped with bypass gates, which may be discharged to the stormwater collection system if improperly maintained or defective.

- Perform surfactant/disinfectant mixing and transfers in the designated area or under cover if possible. This will allow the rinsing of minor spills and splashes to enter the sanitary sewer system.
- As feasible, use buckets or pans to capture drippage from aircraft lavatory access fittings. Immediately dump the drippage into the bulk storage tank on the service cart or truck.
- After servicing an aircraft, drain the aircraft connecting hose as completely as possible into the storage tank. Properly secure all hoses, valves, and equipment when transporting waste to eliminate leakage and spills.
- Practice good housekeeping techniques at the designated facility. Immediately clean spills of waste and chemicals.

Contingency Response:

- Carry absorbent and other containment equipment on the service equipment.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

- Perform regular inspections of the hose and fittings used for transferring lavatory waste. Keep the equipment in good working order. Replace worn equipment before leaks develop. Notify appropriate ground service personnel if it is noticed that the aircraft lavatory fittings require maintenance.
- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

IMPACTS/REQUIREMENTS:

Costs associated with eliminating discharges resulting from aircraft lavatory servicing are generally low. Most management practices are based on careful material handling, good housekeeping, and awareness of maintenance requirements.

LIMITATIONS:

Facilities may have a limited number of permitted sanitary sewer access points.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K), Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 11: SPILL RESPONSE TARGETED ACTIVITIES:

Aircraft Maintenance, Aircraft Fueling, Aircraft Painting/Stripping, Aircraft Washing, Aircraft Lavatory Service, Vehicle Maintenance, Vehicle Fueling, Vehicle Washing, Vehicle Painting/Stripping, Apron Washing, Floor Wash downs, Cargo Handling, Fuel Storage, Chemical Storage, Pesticide/Herbicide Storage, Equipment Cleaning/De-greasing, Equipment Maintenance, Equipment Fueling, Building and Grounds Maintenance.

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from spills of petroleum products or other materials.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Incorporate adequate chemical and fuel storage facilities into projects described in BMP 6, Chemical and Fuel Storage.
- Employ portable and permanent secondary containment features for wastes, chemicals, and fuels.
- Incorporate oil/water separators, sumps, or other water quality control devices into projects as needed and/or required.

Operational Considerations:

- Containment and cleanup of spills shall begin immediately.
- The following procedures should be followed when implementing an emergency spill cleanup plan:
 - Key personnel should receive formal training in plan execution with additional training to the first responder level (29 CFR 1910.120). All employees should have basic knowledge of spill control procedures.
 - A summary of the plan should be posted at appropriate site locations. It should identify the spill cleanup coordinators, the location of cleanup equipment, and the phone numbers of regulatory agencies to be contacted in the event of a spill.

Contingency Response:

- Owners and operators of facilities that store, process, or refine oil or oil products may be required by Federal Law (40 CFR 112) to develop and implement an SPCC Plan. Emergency spill cleanup plans should include the following information:
 - A description of the facility includes the owner's name and address, the nature of the facility activity, and the general types and quantities of chemicals stored there.
 - A site plan showing the location of chemical storage areas, storm drains, site drainage patterns, fire water source locations, and the location and description of any devices used to contain spills, such as positive control valves.

- In the event of a spill, notification procedures, such as those for key company personnel and local and federal agencies, are to be implemented.
- Instructions regarding cleanup procedures.
- Designated personnel with overall spill response cleanup responsibility.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
- Perform the notifications listed below in the event of a spill:
 - Call the Local Fire Department (911)
 - EPA National Response Center (800) 424-8802

Inspection and Training

- In a logbook, perform and document weekly inspections of chemical and waste storage areas. Inspection items should include the following:
 - Check for external corrosion and structural failure.
 - Check for spills and overfills due to operator failure.
 - Check for piping system failure (pipes, pumps, flanges, couplings, hoses, and valves).
 - Check for leaks or spills during pumping of liquids or gases.
 - Visually inspect new tanks or containers for loose fittings, poor welds, and improper or poorly fitted gaskets.
 - Inspect tank foundations and storage area coatings.
- In case of a spill and response operation, perform a post-event discussion and evaluation with all personnel involved. Identify weak portions of the response operation and proposed remedies. Modify training procedures as required.

IMPACTS/REQUIREMENTS:

- Capital and O&M costs should be small to moderate depending on the types and quantities of on-site chemicals.
- Maintenance costs would include periodic training and equipment replacement.

LIMITATIONS:

Spills occurring after work hours in unconfined areas may go undetected until impacting off-site areas or water bodies.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K), Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.

- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.

BMP 12: OIL WATER SEPARATORS TARGETED ACTIVITIES:

Aircraft Maintenance, Aircraft Fueling, Aircraft Painting/Stripping, Aircraft Washing, Vehicle Maintenance, Vehicle Fueling, Vehicle Washing, Apron Washing, Cargo Handling, Fuel Storage, Chemical Storage, Equipment Cleaning/De-greasing, Equipment Maintenance, Equipment Fueling, Equipment Storage, Apron Wash down, Floor Wash downs.

DESCRIPTION:

Oil/water separators are baffled chambers designed to remove petroleum compounds and grease from stormwater. Oil/water separators also remove floatable debris and settleable solids (sediment).

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants entering the storm drain system. When implementing best management practices, always comply with applicable local and federal regulations (see References section).

Design of New Facilities and Existing Facility Upgrades:

- Oil/water separators are typically used in areas where petroleum hydrocarbons, floatables, or sediment concentrations may be abnormally high and source control techniques are not highly effective. There are two common oil/water separators: the American Petroleum Institute (API) separator and the coalescing plate separator (CPS). Design, sizing, and placement of oil/water separators depend on several factors, including tributary area, type of activity, pollutant type and concentration, and water temperature.
- Determine the necessity of stormwater control devices such as oil/water separators early in the conceptual phases of projects to minimize the tributary area for the devices.
- General Sizing Guidelines for API-Separators:
 - Horizontal velocity: 3 feet per minute.
 - Depth of 3 to 8 feet.
 - Depth-to-width ratio of 0.3 to 0.5.
 - Width of 6 to 16 feet.
 - Baffle height-to-depth ratios of 0.85 for top baffles and 0.15 for bottom baffles.
- CPS-separator sizing is more complex. Sizing calculations require including information such as packing plate surface areas and plate angles. Due to their packed plate design, CPS separators can remove the same quantities of oils and grease while

occupying less space.

Operational Considerations:

- To be effective stormwater quality controls, separators must be inspected and cleaned frequently of accumulated oil, grease, and floating debris.
- Oil absorbent pads are to be replaced as needed but will always be replaced before the wet season.
- The effluent shutoff valve will be closed during cleaning operations.
- Any standing water removed during the cleaning operation must be disposed of by local and federal requirements.

Contingency Response:

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

Inspection and Training:

- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document all inspections and maintenance operations in a logbook.
- Develop a written operating, sampling, and reporting procedure under local agency/PRPA guidelines. Train appropriate employees to implement these procedures.

IMPACTS/REQUIREMENTS:

- Capital and O&M Costs:

Costs increase as the tributary area increases.

LIMITATIONS:

Oil/water separator installations should be designed and installed by experienced individuals. Little data on the characteristics of petroleum hydrocarbons in stormwater leads to considerable uncertainty about separator performance.

REFERENCES:

- 29 CFR 1910 (Subparts G, H, I, J, and K), Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 122 NPDES Regulations for Stormwater Discharges.
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 C F R 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.

- 40 CFR 761 Toxic Substances.

BMP 13: SEDIMENT AND EROSION CONTROL TARGETED ACTIVITIES:

Excavation, Grading, Clearing and Grubbing, Stockpiling of soils or debris, Runway, Taxiway, or Apron Reconstruction or Expansion, Underground utility construction or repairs, Installation and Removal of Underground Storage Tanks, Facility/Building Construction.

DESCRIPTION:

Prevent or reduce soil erosion and sedimentation from construction activities.

APPROACH:

NOTE: The guidelines listed below suggest methods to reduce pollutants associated with sedimentation and erosion. When implementing best management practices, always comply with applicable local and federal regulations. The literature provides additional details on sedimentation and erosion control BMPs (See References section).

Design of New Facilities and Existing Facility Upgrades:

- Limit the amount of exposed soil in construction areas
- Consider embankment stabilization/improvement as a technique to limit erosion.
- Prepare a sediment and erosion control plan for appropriate construction.

Several different source-control mechanisms can be utilized to prevent exposed soil from contributing sediment and suspended solids to the stormwater system and receiving water through erosion. Below are brief descriptions of several construction BMPs.

- Vegetation
 - Sowing of annual grasses, small grains, or legumes to provide interim and permanent vegetative stabilization from disturbed areas.
- Mulching
 - A layer of chopped straw, hay, or other material should be applied and spread uniformly over barren areas to reduce the effects of erosion from rainfall.
- Straw Bale Barriers/Silt Fences
 - Straw bales were placed along a level contour in a shallow trench and staked to hold them in place. It detains runoff, creating a pond behind the barrier where sedimentation occurs.
 - A silt fence is made of a filter fabric that has been entrenched, attached to supporting poles, and sometimes backed by a wire fence for support.
- Interceptor Swale
 - Small V-shaped or parabolic channel that collects runoff and directs it to a desired location.
- Pipe Slope Drain
 - Temporary pipeline typically utilizes flexible pipes that conveys runoff down

unstable slopes.

- Erosion Control Mats
 - Geomembrane or biodegradable fabric is placed over disturbed areas to limit the effects of erosion due to rainfall impact and runoff across barren soil.
- Permanent Structural Controls
 - A wide variety of erosion prevention methods, including gabions, retaining walls, and riprap.
- Triangular Sediment Filter Dike
 - Self-contained silt fence consisting of filter fabric wrapped around welded wire fabric shaped into a triangular cross section.
- Sediment Basin or Sedimentation Pond
 - A small berm or excavation collected sediment-laden runoff, creating the ponding area, which acts as a settling basin for suspended sediment.
- Inlet Protection
 - Consists of various methods of intercepting sediment at low point inlets using filter fabric and other materials.
- Stone Outlet Sediment Trap
 - Small ponding area formed by placing a stone embankment or gabion core with an integral stone filter outlet across a drainage swale to detain sediment-laden runoff generated by construction activities.
- Check Dams
 - Small barriers consisting of straw bales, rock, or earth berms placed across a drainage swale or ditch.
- Floating Turbidity Barriers
 - Consist of permeable curtains reaching the bottom of the ponds.

Contingency Response:

- Maintain adequate supplies of filter fabric materials in accessible locations near areas where erosion/sedimentation may be likely to occur.

Inspection and Operational Considerations

- All BMPs should be evaluated weekly and after each significant runoff event to verify proper operation. Take corrective actions, as necessary.
- All disturbed areas and material stockpiles must be evaluated weekly to determine if sediments are being transported off-site.
- Each discharge location must be evaluated weekly to determine the effectiveness of the BMPs.
- Each entrance/exit must be evaluated weekly to determine if the sediments are being tracked off-site.

- If the inspector determines that the implemented BMPs are ineffective, the BMPs must be reevaluated and either modified or replaced by other BMPs.

REQUIREMENTS:

Costs associated with the various BMPs vary greatly and the cost-effectiveness of several of the methods is dependent upon the specific drainage area and the size and nature of the flow.

IMPACTS/REQUIREMENTS:

Capital costs vary depending on the measures implemented. (See U.S. EPA's Stormwater Management for Industrial Activities - Developing Pollution Prevention Plans and Best Management Practices for cost estimates of various BMPs).

LIMITATIONS:

- Some methods have limited applications regarding the size of the drainage area, the cost of construction, and the nature and intensity of the flow.
- Several techniques are not total treatment techniques and must be used in conjunction with one or more other methods.
- Ponding occurs directly upstream of many of the source control mechanisms, creating the possibility for flooding.
- Many erosions and sediment control BMPs require cleaning or other repairs following runoff events. Their effectiveness is directly related to how well they are maintained.
- From a practical perspective, erosion and sediment controls function well for small, frequent rainfall events. Their effectiveness is greatly diminished for large rainfall events which exceed their capacity.

REFERENCES:

- 40 CFR 122.26(b)(14)(x)
- Stormwater Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices; U.S. EPA, September 1992.

10.7 Attachment G – Inspection Forms

NPDES MSGP Routine Inspection/Visual Assessment
§3.1.6 & §3.2.3 Field Sheet



Date, Begin & End times: _____

Weather: General, % CC, Temp °F, Wind (speed/dir) Rain (inches, duration, hours from previous event) _____

Observations: appropriateness, condition and implementation of stormwater (SW) control measures

Site (# from map)	Corrective Action Required (Y/N)	Comments

SW control measures' maintenance, repairs, or replacement needs. Additional SW control measures needed? Incidents? Previously unidentified non-stormwater discharges? Evidence of, or the potential for, pollutants entering the stormwater drainage system?

Visual Assessment of Discharge Points

Observe physical condition of and around SW discharge points, flow dissipation devices, evidence of pollutants in discharges and receiving water.

Monitoring Point	Presently Discharging? If Yes, estimated Flow (gpm)	Color	Odor	Clarity	Floating Solids	Settled Solids	Suspended Solids	Foam	Comments

I certify under penalty of law that the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. Inspector(s) name(s) and signature(s).

Signature _____
Print

Signature _____
Print

NPDES MSGP Routine Inspection/Visual Assessment
§3.1.6 & §3.2.3 Field Sheet



Preparation for Routine Inspection/Visual Assessment

Review: Non-Numeric Effluent Limits §2.1.2 and Inspections §3.1

Field materials & supplies

Camera	Rebar (¼"-dia, 8' long)
Clear glass jar	Safety glasses
Field Sheets (front and back)	Safety shoes
High reflective vest	SWPPP summary handout
Pen/pencil	Vinyl gloves

Where to look

Areas covered by the MSGP §3.1.2

- where industrial materials or activities are exposed to stormwater
- areas identified in the SWPPP and those that are potential pollutant sources
- where spills and leaks have occurred in the past three years
- discharge points
- control measures used to comply with the effluent limits

What to look for

Appropriateness, condition and implementation of stormwater control measures §2.1.2.3, §3.1.6, §5.1.3.1, §5.1.3.2, §5.3.2

Inquire about training/reminders on Good Housekeeping practices §2.1.2.2

Inquire about procedures & supplies in case of spills §2.1.2.4 Disposal of spent spill control materials?

Catch basin maintenance: debris depth reaches $\geq \frac{1}{4}$ of the sump depth §2.1.2

Are exposed storage/cleaning/maintenance/fueling areas demarcated? Are there SW barriers? Is there SW treatment provided? Is the area's SW contained? §8.S.4.1.2, §8.S.4.1.3

Are exposed solid waste dumpsters/materials storage provided cover? §2.1.2.1

FORM 2 ANNUAL INSPECTION - BMP EVALUATION				
Use this form to evaluate BMP effectiveness for each activity present at site				
Facility:				
Name of Reviewer:			Date:	
(Check each activity present at site, evaluate BMP's in place and list any required BMP's that are not in place).				
ACTIVITY		BMP EFFECTIVENESS		
		HIGH	MED	LOW
	Non-storm water discharges to drains. Storm Water Pollutant Source: Pollutants of Concern:			
	Aircraft, vehicle, and equipment fueling. Storm Water Pollutant Source: Pollutants of Concern:			
	Aircraft, vehicle, and equipment washing and steam cleaning. Storm Water Pollutant Source: Pollutants of Concern:			
	Aircraft, vehicle, and equipment maintenance. Storm Water Pollutant Source: Pollutants of Concern:			
	Outdoor handling (loading/unloading) of significant materials (i.e. fuel, oil, chemicals, etc.). Storm Water Pollutant Source: Pollutants of Concern:			
	Outdoor storage of significant materials (i.e. fuel, oil, chemicals, etc.).			

	Storm Water Pollutant Source: Pollutants of Concern:			
	Outdoor waste handling and disposal. Storm Water Pollutant Source: Pollutants of Concern:			
	Building and ground maintenance (i.e. pesticide/herbicide usage, painting, remodeling, etc.). Storm Water Pollutant Source: Pollutants of Concern:			
	Aircraft sanitary services. Storm Water Pollutant Source: Pollutants of Concern:			
	Erodible surface areas. Storm Water Pollutant Source: Pollutants of Concern:			
Evaluate other BMP's that may be in place, and list others that are not in place:				

FORM 4 QUARTERLY VISUAL INSPECTION WAIVER									
Use this form if you are unable to perform Visual Monitoring due to insufficient runoff									
GENERAL INSPECTION INFORMATION									
Outfall #:	Photograph #:								
Location:									
CERTIFICATION									
<p>I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THERE WERE NO QUALIFYING RAINFALL EVENT OR NO RUNOFF OCCURRED AT THE ABOVE-MENTIONED LOCATION AND OUTFALL DURING THE FOLLOWING QUARTER:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tbody> <tr> <td style="width: 30px; height: 20px;"></td> <td style="padding: 2px 5px;">January - March</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="padding: 2px 5px;">April - June</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="padding: 2px 5px;">July - September</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="padding: 2px 5px;">July - September</td> </tr> </tbody> </table>			January - March		April - June		July - September		July - September
	January - March								
	April - June								
	July - September								
	July - September								
Name and Title:	Date:								
Signature:	Facility Name:								

10.8 Attachment H – USFWS Consultation & Response Letter

Appendix C

P.R. U.S. FISH AND WILDLIFE SERVICE CONSULTATION & RESPONSE LETTER.

FROM : Panasonic FAX SYSTEM

PHONE NO. :

Aug. 18 2000 12:04PM P2



May 29, 2001

SUBJECT: Endangered Species Coordination for NPDES, Luis Muñoz
Marín International Airport, Isla Verde Ward,
Carolina, Puerto Rico

Mr. James P. Oland
Field Supervisor
US Fish & Wildlife Service
Boquerón Field Office
P.O. Box 491
Boquerón, P. R. 00622

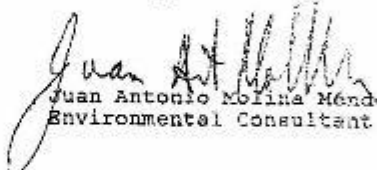
Dear Mr. Oland:

During the last few weeks we have been coordinating with members of your staff on the subject project. The purpose of this project is to update and bring into regulation all stormwater discharges within the Luis Muñoz Marín International Airport.

No construction activities are included. Drawings showing exact location of stormwater discharges will be filed for approval at the Environmental Protection Agency.

The bringing into bearing the ongoing activities in the Luis Muñoz Marín International Airport will have no negative impact on any endangered species. The Luis Muñoz Marín International Airport provides no habitat to endangered species. Nearby wetlands will be undisturbed by the procurement of this administrative process.

Cordially,


Juan Antonio Molina Méndez
Environmental Consultant



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Boqueron Field Office
P.O. Box 491
Boqueron, Puerto Rico 00622



June 18, 2001

Mr. Juan A. Molina Mendez
501 Water View Mansion 613
Ponce de Leon Ave., Miramar
San Juan, PR 00907

Re: End. Sp. Coordination for NPDES,
Luis Muñoz Marín International
Airport, Isla Verde Ward,
Carolina, Puerto Rico

Dear Mr. Molina:

Thank you for your letter of May 29, 2001, concerning the above-mentioned project. The project involves the update and bring to regulation of all stormwater discharges within the Luis Muñoz Marín International Airport. Our comments are provided in accordance with the Endangered Species Act of 1973 (Act), as amended (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on a review of the information provided and that available in this office, we do not have records of threatened or endangered species from the project area. Therefore no further consultation is required. Nevertheless, if the project is modified or if information on impacts to listed species become available, this office should be contacted concerning the need for a consultation under section 7 of the Act.

Sincerely yours,

A handwritten signature in black ink, appearing to read "James P. Oland".

James P. Oland
Field Supervisor

mv
cc:
EPA, San Juan

10.9 Attachment I – SHPO

GOBIERNO
del
ESTADO LIBRE ASOCIADO
de la
ISLA DE PUERTO RICO



OFICINA DEL GOBERNADOR
LA FORTALEZA
SAN JUAN DE PUERTO RICO

MARIANO GERARDO CORONAS CASTRO
DIRECTOR / OFICIAL

January 18, 1989

Mr. José A. Buitrago
Autoridad de Puertos
Box 2829
San Juan, Puerto Rico 00936-2829

RE: SHPO#10-19-88-02 Construcción de Area de Seguridad,
Aeropuerto Internacional, Carolina, Puerto Rico

Dear Mr. Buitrago:

Our Office has reviewed the above referenced project in accordance with the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 CFR, Part 800). The State Historic Preservation Office has been requested by the Advisory Council to comment on the impact which federally funded, licensed or assisted projects may have on historic or archaeological sites. The authorities for these procedures are the National Historic Preservation Act of 1966 (Public Law 89-665) as amended, and Presidential Executive Order 11593 ("Protection and Enhancement of the Cultural Environment").

A review of our islandwide files does not indicate any archaeological or historical sites, nor any properties listed or eligible for listing in the National Register of Historic Places in the area or close proximity of the proposed project.

OFICINA ESTATAL DE PRESERVACION HISTORICA
CALLE SAN JOSE NUM. 109, SAN JUAN ANTIGUO / APARTADO 02, SAN JUAN, P.R. 00901 / TELEFONO 721-3737

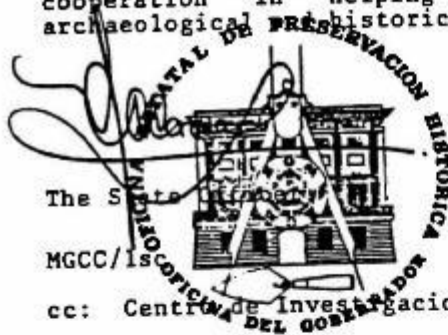
Mariano G. Coronas Castro

Standard Endorsement Form
Page 2

Mr. José A. Buitrago

It is our determination that this project will have no effect upon historic properties, and recommend it proceed as planned. However, since the level of research is very low you should be advised that potential resources are unknown. We recommend that caution be exercised during the early stages of earthmovement. Should any unrecorded cultural resources (historic or prehistoric) be encountered you must notify our Office immediately so that we may take the appropriate steps under 36CFR, Part 800.11.

If you have any questions concerning our comments, please do not hesitate to contact us. Your interest and cooperation in helping to protect Puerto Rico's archaeological and prehistorical resources are appreciated.



10.10 Attachment J – Stormwater Sewer Systems and Associated Ditch Systems



LEGEND:

1. 24" x 24" MANHOLE	2. 18" x 18" MANHOLE	3. 15" x 15" MANHOLE	4. 12" x 12" MANHOLE
5. 10" x 10" MANHOLE	6. 8" x 8" MANHOLE	7. 6" x 6" MANHOLE	8. 4" x 4" MANHOLE
9. 3" x 3" MANHOLE	10. 2" x 2" MANHOLE	11. 1" x 1" MANHOLE	12. 0.5" x 0.5" MANHOLE

LEGEND:

1. 18" x 18" MANHOLE	2. 15" x 15" MANHOLE	3. 12" x 12" MANHOLE	4. 10" x 10" MANHOLE
5. 8" x 8" MANHOLE	6. 6" x 6" MANHOLE	7. 4" x 4" MANHOLE	8. 3" x 3" MANHOLE
9. 2" x 2" MANHOLE	10. 1" x 1" MANHOLE	11. 0.5" x 0.5" MANHOLE	12. 0.25" x 0.25" MANHOLE

ABBREVIATIONS:

1. 18" x 18" MANHOLE	2. 15" x 15" MANHOLE	3. 12" x 12" MANHOLE	4. 10" x 10" MANHOLE
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UTILITY LEGEND:

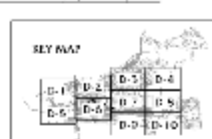
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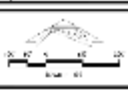
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SCALE	AS SHOWN

CLIENT	THE MUÑOZ MARÍN AIRPORT AUTHORITY
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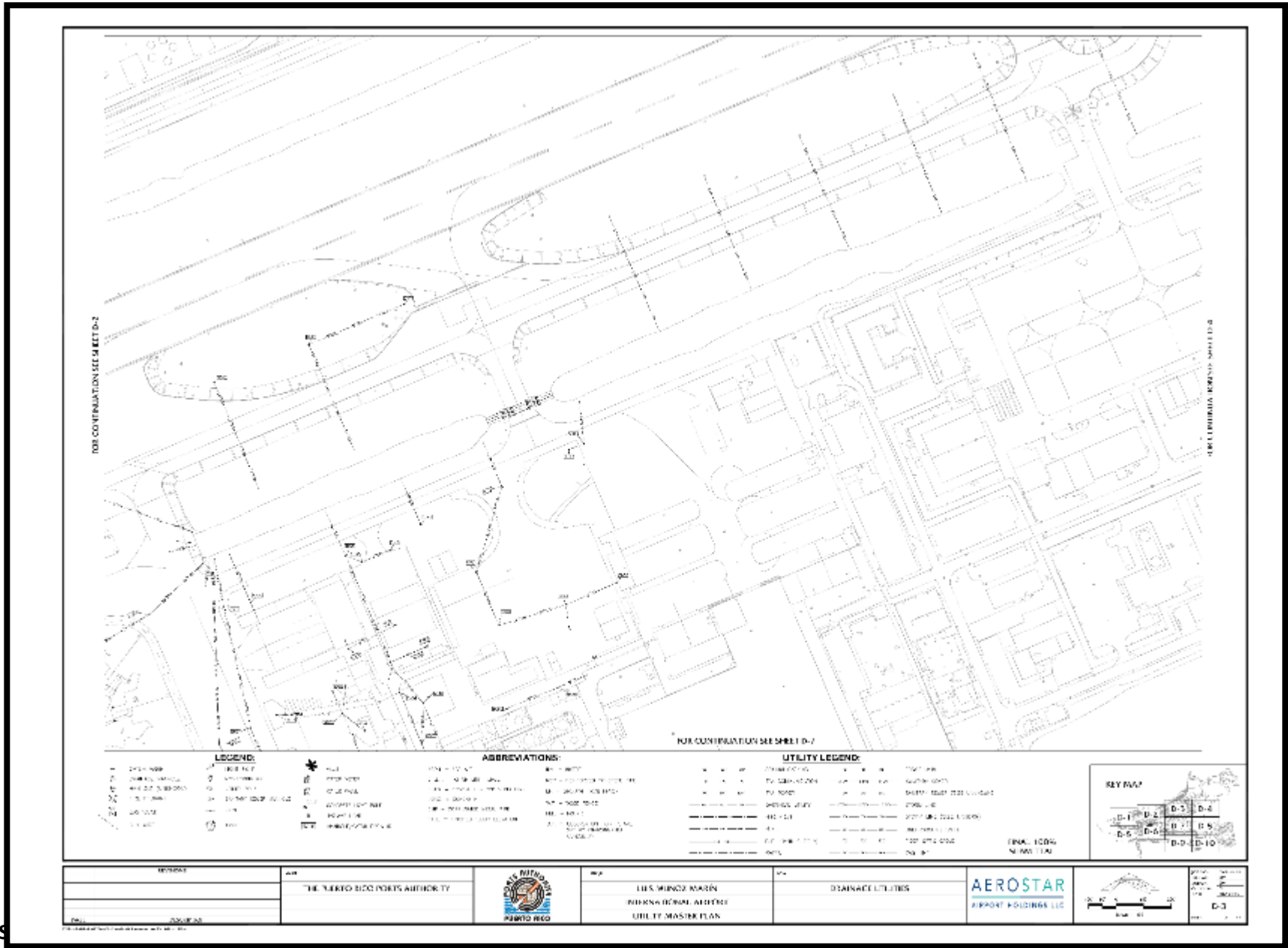


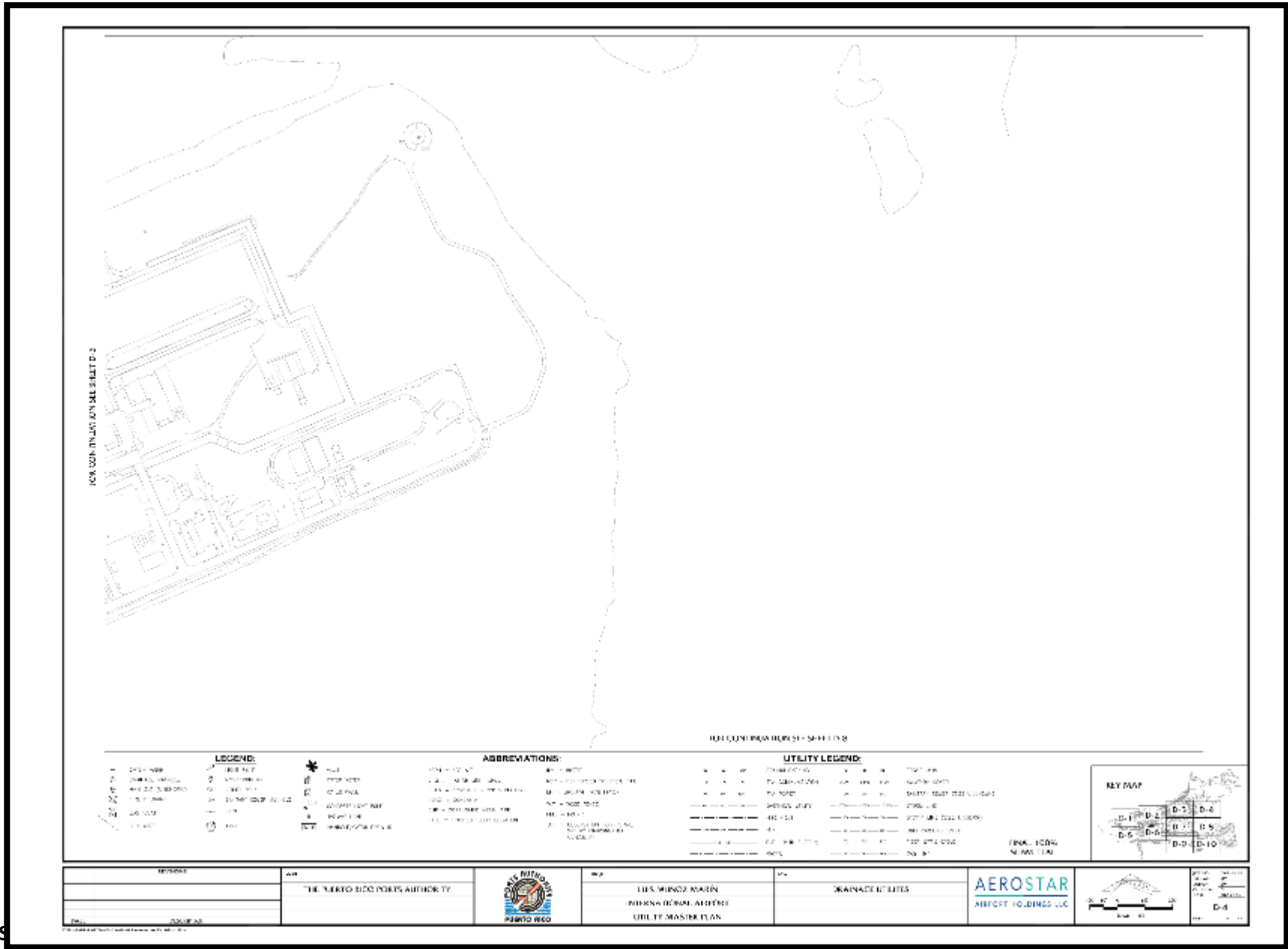
PROJECT	LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT UTILITY MASTER PLAN
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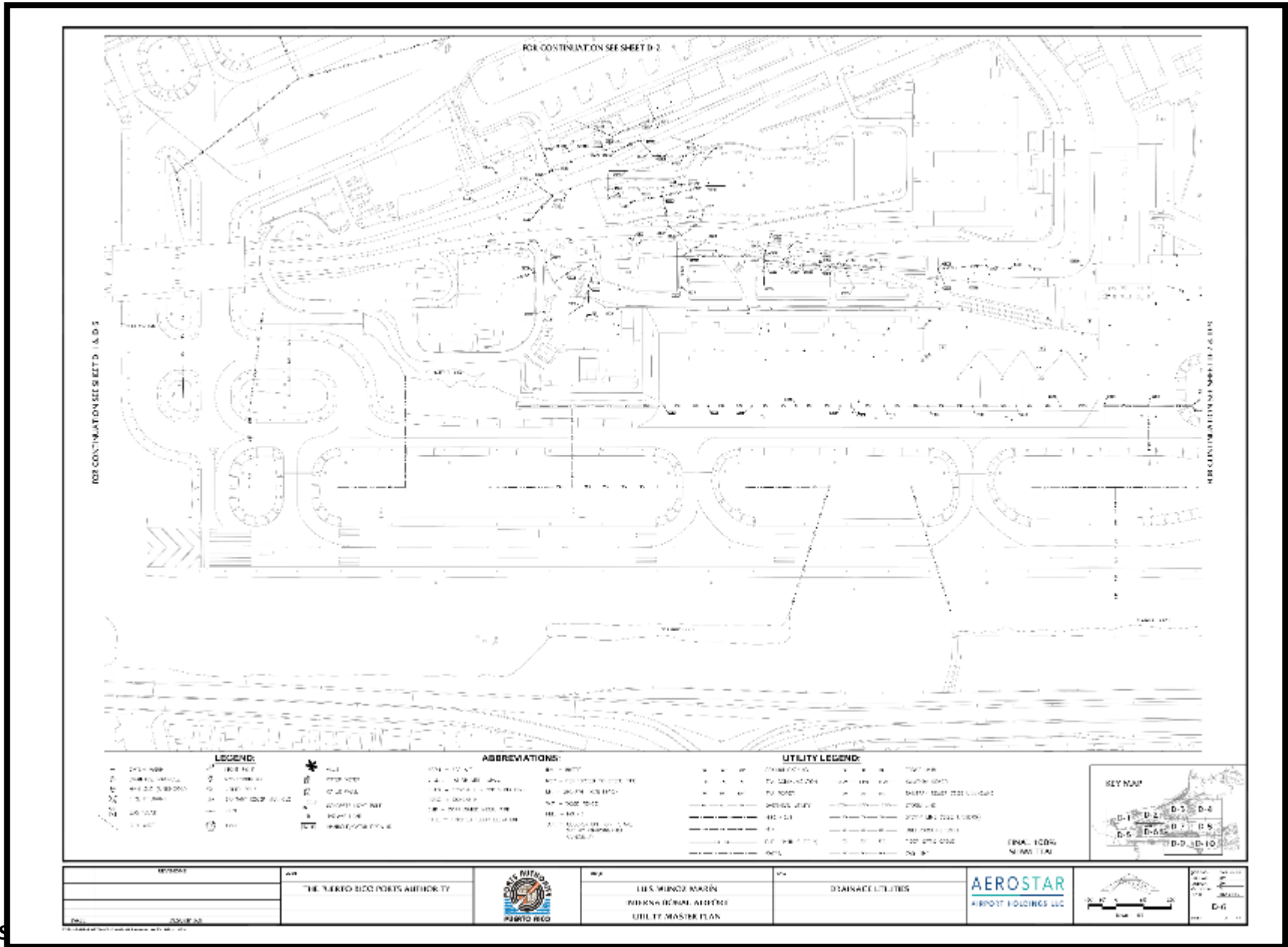
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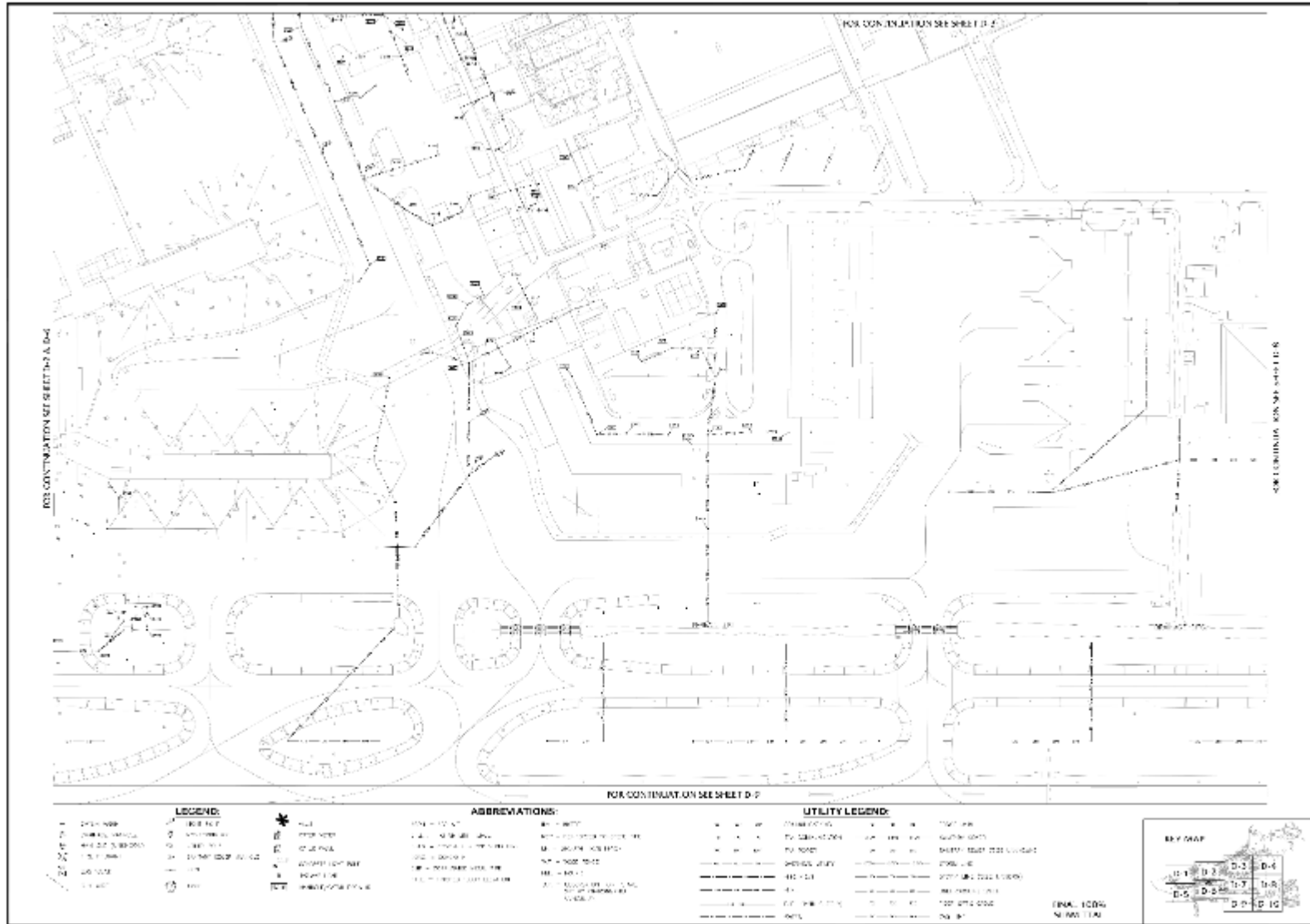


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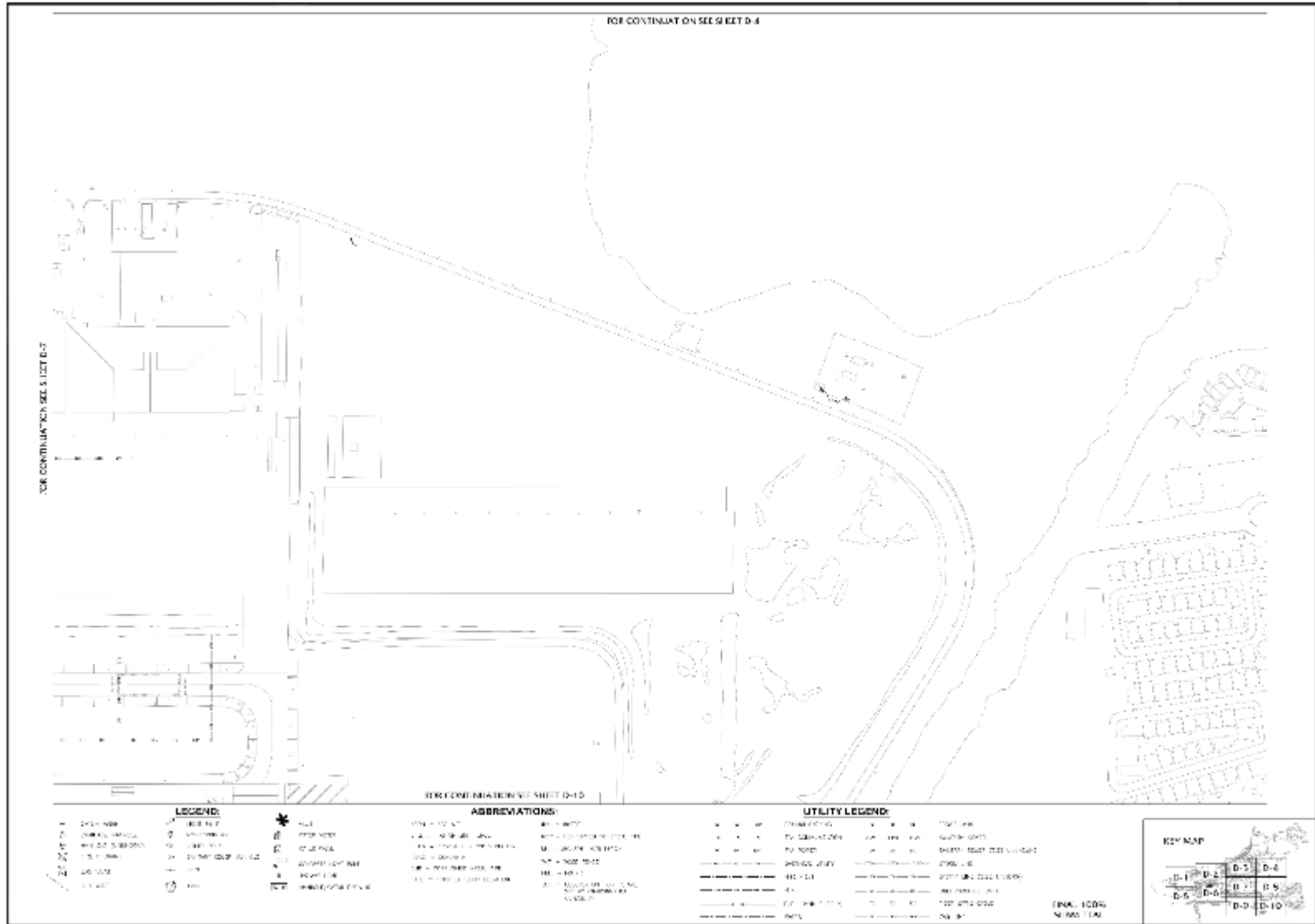




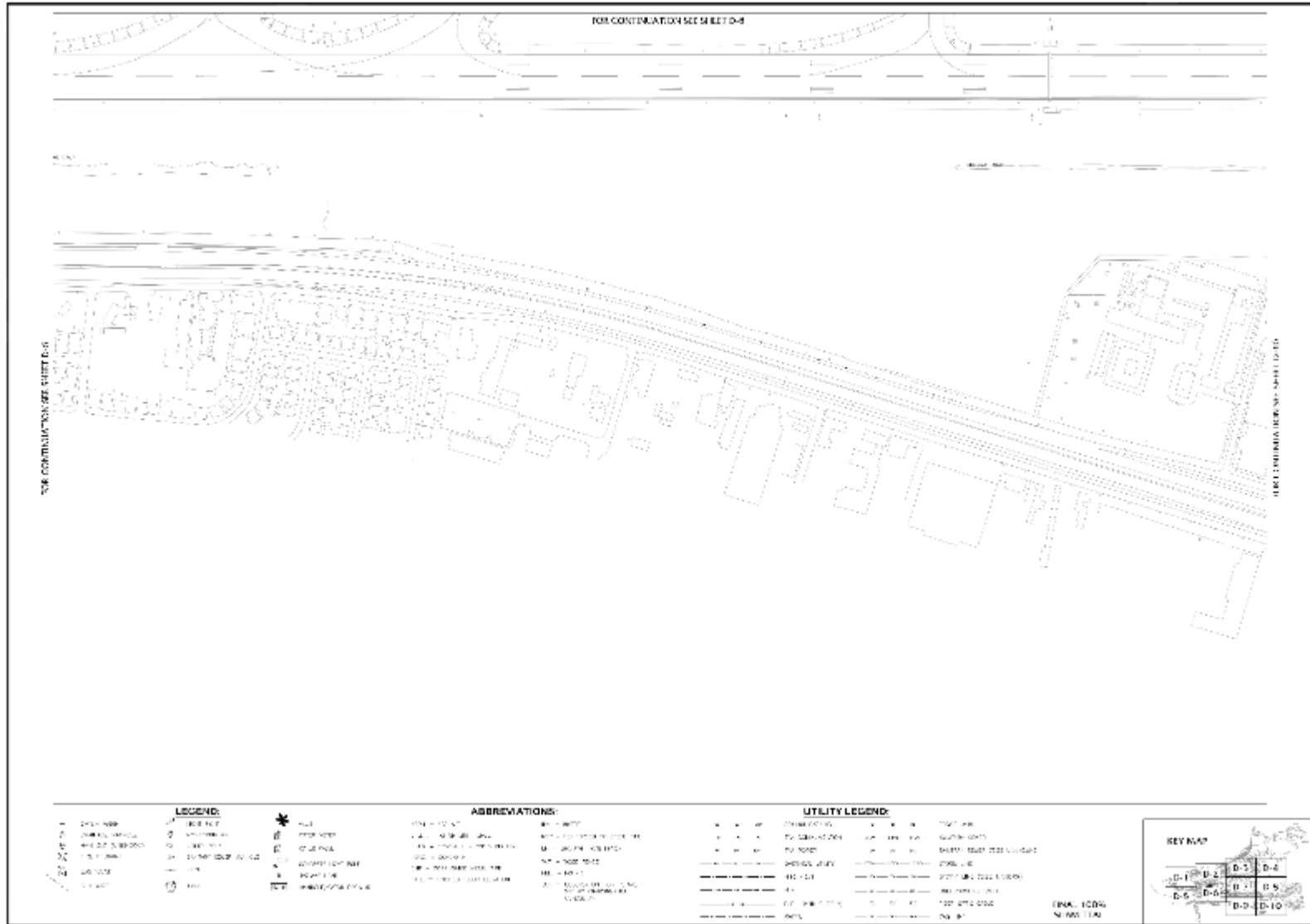




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SHEET NO. DATE DRAWN BY	PROJECT THE MUÑOZ MARÍN AIRPORT	 PUERTO RICO	CLIENT LUIS MUÑOZ MARÍN INTERNACIONAL AEROPUERTO UTILITY MASTER PLAN	TITLE DETAILED UTILITIES		 SCALE: 1" = 50'	SHEET NO. D-8
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LEGEND:

1	20' WIDE ASPHALT DRIVE	1	10' WIDE ASPHALT DRIVE
2	15' WIDE ASPHALT DRIVE	2	5' WIDE ASPHALT DRIVE
3	10' WIDE ASPHALT DRIVE	3	CONCRETE DRIVE
4	5' WIDE ASPHALT DRIVE	4	CONCRETE DRIVE
5	CONCRETE DRIVE	5	CONCRETE DRIVE
6	CONCRETE DRIVE	6	CONCRETE DRIVE
7	CONCRETE DRIVE	7	CONCRETE DRIVE
8	CONCRETE DRIVE	8	CONCRETE DRIVE
9	CONCRETE DRIVE	9	CONCRETE DRIVE
10	CONCRETE DRIVE	10	CONCRETE DRIVE

ABBREVIATIONS:

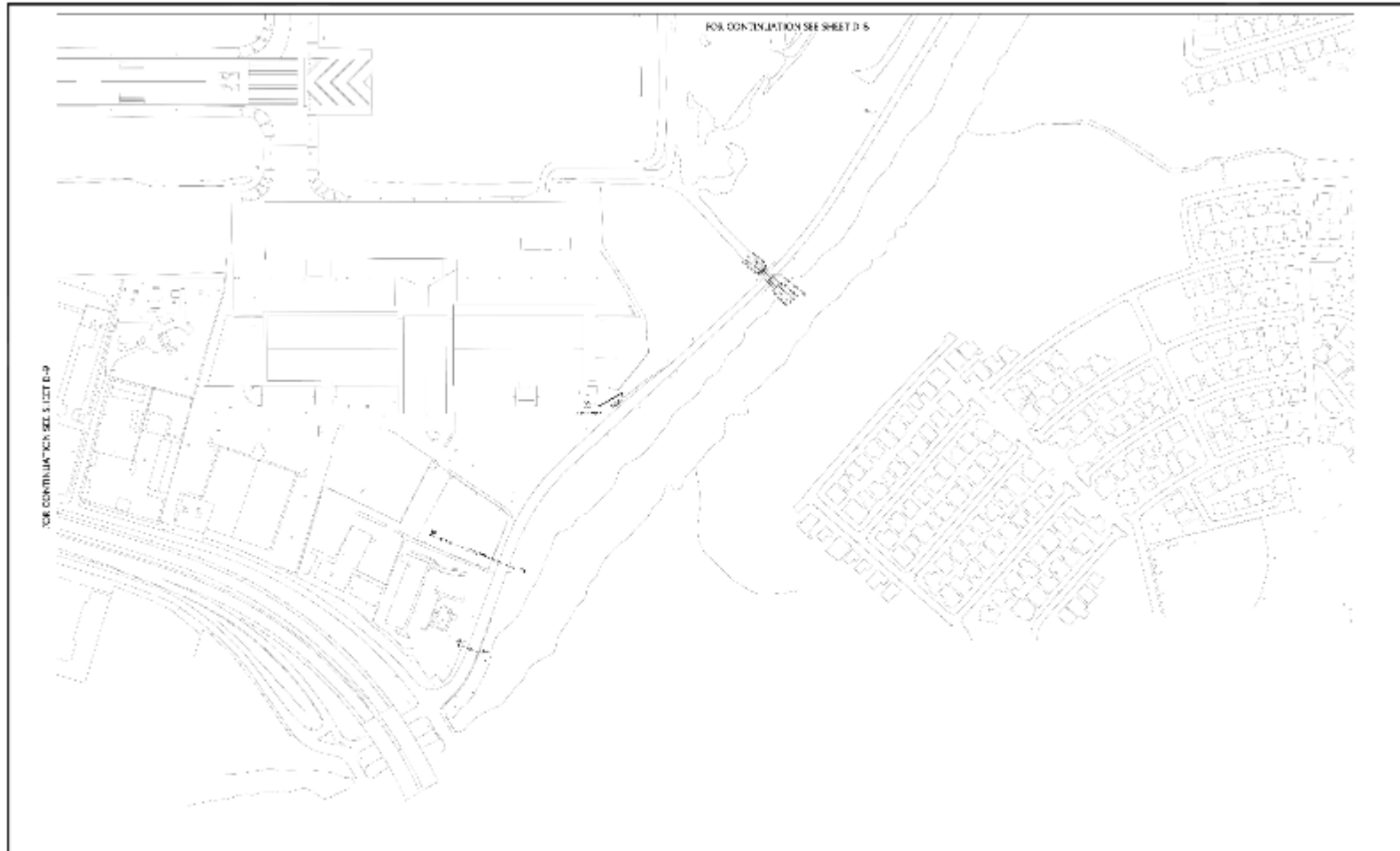
1	10' WIDE ASPHALT DRIVE	1	10' WIDE ASPHALT DRIVE
2	15' WIDE ASPHALT DRIVE	2	15' WIDE ASPHALT DRIVE
3	20' WIDE ASPHALT DRIVE	3	20' WIDE ASPHALT DRIVE
4	CONCRETE DRIVE	4	CONCRETE DRIVE
5	CONCRETE DRIVE	5	CONCRETE DRIVE
6	CONCRETE DRIVE	6	CONCRETE DRIVE
7	CONCRETE DRIVE	7	CONCRETE DRIVE
8	CONCRETE DRIVE	8	CONCRETE DRIVE
9	CONCRETE DRIVE	9	CONCRETE DRIVE
10	CONCRETE DRIVE	10	CONCRETE DRIVE

UTILITY LEGEND:

1	10" WATER	1	10" WATER
2	12" WATER	2	12" WATER
3	15" WATER	3	15" WATER
4	20" WATER	4	20" WATER
5	30" WATER	5	30" WATER
6	42" WATER	6	42" WATER
7	54" WATER	7	54" WATER
8	72" WATER	8	72" WATER
9	90" WATER	9	90" WATER
10	108" WATER	10	108" WATER



<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>	<p>CLIENT: THE AIRPORT ECONOMIC DEVELOPMENT AUTHORITY</p>		<p>DESIGNED BY: LUIS MUÑOZ MARÍN</p> <p>INTERNATIONAL AIRPORT</p> <p>UTILITY MASTER PLAN</p>	<p>SCALE: 1" = 100'</p> <p>DATE: 03/20/24</p>	<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>	<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>	<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>	<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>		<p>PROJECT: LUIS MUÑOZ MARÍN INTERNATIONAL AIRPORT</p> <p>DATE: 03/20/24</p>
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LEGEND:

1. 24" x 36" MANHOLE	2. 36" x 36" MANHOLE	3. 48" x 36" MANHOLE	4. 60" x 36" MANHOLE	5. 72" x 36" MANHOLE	6. 36" x 48" MANHOLE	7. 36" x 60" MANHOLE	8. 36" x 72" MANHOLE	9. 48" x 48" MANHOLE	10. 48" x 60" MANHOLE	11. 48" x 72" MANHOLE	12. 60" x 48" MANHOLE	13. 60" x 60" MANHOLE	14. 60" x 72" MANHOLE	15. 72" x 48" MANHOLE	16. 72" x 60" MANHOLE	17. 72" x 72" MANHOLE
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LEGEND:

1. 18" x 18" x 18" MANHOLE	2. 24" x 24" x 18" MANHOLE	3. 30" x 30" x 18" MANHOLE	4. 36" x 36" x 18" MANHOLE	5. 42" x 42" x 18" MANHOLE	6. 48" x 48" x 18" MANHOLE	7. 54" x 54" x 18" MANHOLE	8. 60" x 60" x 18" MANHOLE	9. 66" x 66" x 18" MANHOLE	10. 72" x 72" x 18" MANHOLE
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ABBREVIATIONS:

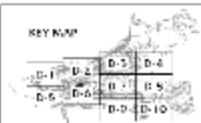
1. 18" x 18" x 18" MANHOLE	2. 24" x 24" x 18" MANHOLE	3. 30" x 30" x 18" MANHOLE	4. 36" x 36" x 18" MANHOLE	5. 42" x 42" x 18" MANHOLE	6. 48" x 48" x 18" MANHOLE	7. 54" x 54" x 18" MANHOLE	8. 60" x 60" x 18" MANHOLE	9. 66" x 66" x 18" MANHOLE	10. 72" x 72" x 18" MANHOLE
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UTILITY LEGEND:

1. 18" x 18" x 18" MANHOLE	2. 24" x 24" x 18" MANHOLE	3. 30" x 30" x 18" MANHOLE	4. 36" x 36" x 18" MANHOLE	5. 42" x 42" x 18" MANHOLE	6. 48" x 48" x 18" MANHOLE	7. 54" x 54" x 18" MANHOLE	8. 60" x 60" x 18" MANHOLE	9. 66" x 66" x 18" MANHOLE	10. 72" x 72" x 18" MANHOLE
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UTILITY LEGEND:

1. 18" x 18" x 18" MANHOLE	2. 24" x 24" x 18" MANHOLE	3. 30" x 30" x 18" MANHOLE	4. 36" x 36" x 18" MANHOLE	5. 42" x 42" x 18" MANHOLE	6. 48" x 48" x 18" MANHOLE	7. 54" x 54" x 18" MANHOLE	8. 60" x 60" x 18" MANHOLE	9. 66" x 66" x 18" MANHOLE	10. 72" x 72" x 18" MANHOLE
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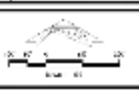
DATE	2024.07.24
SCALE	AS SHOWN

CLIENT	THE AIRPORT BUILDINGS AUTHORITY
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DESIGNER	LUIS MUÑOZ MARÍN INGENIERO EN GEOMÁTICA INGENIERO EN SISTEMAS DE AGUAS UTILIDAD MASTER PLAN
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DATE	2024.07.24
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SHEET NO.	D-10
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10.11 Attachment K – NPDES Permit

2021 MSGP

Permit Parts 1-7 (as modified)

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
MULTI-SECTOR GENERAL PERMIT (MSGP)
FOR STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY**

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 U.S.C. 1251 et seq.), operators of stormwater discharges associated with industrial activity located in an area identified in Appendix C where EPA is the permitting authority are authorized to discharge to waters of the United States in accordance with the eligibility and Notice of Intent (NOI) requirements, effluent limitations, inspection requirements, and other conditions set forth in this permit. This permit is structured as follows:

- **Parts 1-7:** General requirements that apply to all facilities;
- **Part 8:** Industry sector-specific requirements;
- **Part 9:** Specific requirements that apply in individual states and Indian country; and
- **Appendices A through P:** Additional permit conditions that apply to all operators covered under this permit.

This permit becomes effective on **September 29, 2021**. This permit and the authorization to discharge shall expire at 11:59 pm eastern time, **February 28, 2026**.

Signed and issued this 29th day of September 2021

KENNETH MORAFF
Kenneth Moraff,
Director, Water Division, EPA Region 1.

*Digitally signed by KENNETH MORAFF
Date: 2021.09.29
09:47:51 -0400*

Signed and issued this 29th day of September 2021

CHARLES MAGUIRE
Charles Maguire,
Director, Water Division, EPA Region 6.

*Digitally signed by CHARLES MAGUIRE
Date: 2021.09.29
09:47:51 -0400*

Signed and issued this 29th day of September 2021

Laureano, Javier
Javier Laureano,
Director, Water Division, EPA Region 2.

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Date: 2021.09.29
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Signed and issued this 29th day of September 2021

JEFFERY ROBICHAUD
Jeffery Robichaud,
Director, Water Division, EPA Region 7.

*Digitally signed by JEFFERY ROBICHAUD
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

CARMEN GUERRERO PEREZ
Carmen R. Guerrero-Perez,
Director, Caribbean Environmental Protection Division, EPA Region 9.

*Digitally signed by CARMEN GUERRERO PEREZ
Date: 2021.09.29 13:07:47 -0400*

Signed and issued this 29th day of September 2021

HUMBERTO GARCIA
Humberto Garcia,
Acting Director, Water Division, EPA Region 5.

*Digitally signed by HUMBERTO GARCIA
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

CATHERINE LIBERTZ
Catherine A. Libertz,
Director, Water Division, EPA Region 3.

*Digitally signed by CATHERINE LIBERTZ
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

TOMAS TORRES
Tomas Torres,
Director, Water Division, EPA Region 9.

*Digitally signed by TOMAS TORRES
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

JEANEANNE GETTLE
Jeaneanne Gettle,
Director, Water Division, EPA Region 4.

*Digitally signed by JEANEANNE GETTLE
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

DANIEL OPALSKI
Daniel D. Opalski,
Director, Water Division, EPA Region 10.

*Digitally signed by DANIEL OPALSKI
Date: 2021.09.29
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Signed and issued this 29th day of September 2021

TERA FONG
Tera L. Fong,
Director, Water Division, EPA Region 5.

*Digitally signed by TERA FONG
Date: 2021.09.29
12:34:59 -0600*

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1 How to Obtain Coverage Under the 2021 MSGP

To be covered under this permit, you must meet all of the eligibility conditions and follow the requirements for obtaining permit coverage in Part 1.

1.1 Eligibility Conditions

1.1.1 Location of Your Facility. Your facility must be located in an area where EPA is the permitting authority and where coverage under this permit is available (see Appendix C);¹

1.1.2 Your Discharges Are Associated with Industrial Activity. Your facility must have an authorized stormwater discharge or an authorized non-stormwater discharge per Part 1.2 associated with industrial activity from your "primary industrial activity" (as defined in Appendix A and as listed in Appendix D), or you have been notified by EPA that you are eligible for coverage under Sector AD.

1.1.3 Limitations on Coverage. Discharges from your facility are **not**:

1.1.3.1 Discharges mixed with non-stormwater discharges. Discharges mixed with non-stormwater discharges other than those mixed with authorized non-stormwater discharges listed in Part 1.2.2, and/or those mixed with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES authorization.

1.1.3.2 Stormwater discharges associated with construction activity. Stormwater discharges associated with construction activity disturbing one acre or more, or that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more, unless in conjunction with mining activities or certain oil and gas extraction activities as specified in Sectors G, H, I, and J of this permit.

1.1.3.3 Discharges already covered by another NPDES permit. Unless you have received written notification from EPA specifically allowing these discharges to be covered under this permit, you are not eligible for coverage under this permit for any of the following:

- a. Stormwater discharges associated with industrial activity that are currently covered under an individual NPDES permit or an alternative NPDES general permit;
- b. Stormwater discharges covered within five years prior to the effective date of this permit by an individual NPDES permit or alternative NPDES general permit where that permit established site-specific numeric water quality-based effluent limitations developed for the industrial stormwater component of the discharge; or
- c. Discharges from facilities where any NPDES permit has been or is in the process of being denied, terminated, or revoked by EPA (this does not apply to the routine expiration and reissuance of NPDES permits every five years).

1.1.3.4 Stormwater Discharges Subject to Effluent Limitations Guidelines. Stormwater discharges subject to stormwater effluent limitation guidelines under 40 CFR, Subchapter N, other than those listed in Table 1-1 of this permit.

¹ This condition also applies in the limited circumstances where your facility is located in a jurisdiction where EPA is not the permitting authority, but your discharge point location is to a water of the United States where EPA is the permitting authority.

- 1.1.4 Eligibility Related to Endangered Species Act (ESA) listed Species and Critical Habitat Protection.** You are able to demonstrate that your stormwater discharges, authorized non-stormwater discharges, and stormwater discharge-related activities are not likely to adversely affect any species that are federally listed as endangered or threatened ("ESA-listed") and are not likely to adversely affect habitat that is designated as "critical habitat" under the Endangered Species Act (ESA), or said discharges and activities were the subject of an ESA Section 7 consultation or an ESA Section 10 permit. You must follow the procedures outlined in the Endangered Species Protection section of the NOI in EPA's NPDES eReporting Tool (Net-MSGP) and meet one of the criteria listed in Appendix E. You must comply with any measures that formed the basis of your criteria eligibility determination to be in compliance with the MSGP. These measures become permit requirements per Part 2.3. Documentation of these measures must be kept as part of your Stormwater Pollution Prevention Plan (SWPPP) (see Part 6.2.6.1).
- 1.1.5 Eligibility related to National Historic Preservation Act (NHPA)-Protected Properties.** You must follow the procedures outlined in the Historic Properties section of the NOI in Net-MSGP to demonstrate that your stormwater discharges, authorized non-stormwater discharges, and stormwater discharge-related activities meet one of the eligibility criteria in Appendix F.
- 1.1.6 Eligibility for "New Dischargers" and "New Sources" (as defined in Appendix A) ONLY.**
- 1.1.6.1 Eligibility for "New Dischargers" and "New Sources" Based on Water Quality Standards.** Your stormwater discharge must be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards. You are ineligible for coverage under this permit if EPA determines prior to your authorization to discharge that your stormwater discharges will not be controlled as necessary such that the receiving water of the United States will not meet an applicable water quality standard. In such case, EPA may notify you that an individual permit application is necessary per Part 1.3.8, or, alternatively, EPA may authorize your coverage under this permit after you implement additional control measures so that your stormwater discharges will be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards.
- 1.1.6.2 Eligibility for "New Dischargers" and "New Sources" for Water-Quality Impaired Waters.** If you discharge to an "impaired water" (as defined in Appendix A), you must do one of the following:
- a. Prevent all exposure to stormwater of the pollutant(s) for which the waterbody is impaired, and retain documentation of procedures taken to prevent exposure onsite with your SWPPP;
 - b. When submitting your NOI in Net-MSGP, provide the technical information or other documentation to support your claim that the pollutant(s) for which the waterbody

"New Discharger" means a facility from which there is or may be a discharge, that did not commence the discharge of pollutants at a particular site prior to August 13, 1979, which is not a new source, and which has never received a final effective NPDES permit for discharges at that site. See 40 CFR 122.2.

"New Source" means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced: (i) after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or (j) after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

is impaired is not present at your facility, and retain such documentation with your SWPPP; or

- c. When submitting your NOI in Net-MSGP, provide either data or other technical documentation, to support a conclusion that the stormwater discharge will be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards and retain such information with your SWPPP. The information you submit must demonstrate:
 - i. For discharges to waters without an EPA-approved or established total maximum daily load (TMDL), that the discharge of the pollutant for which the water is impaired will be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards at the point of discharge to the waterbody; or
 - ii. For discharges to waters with an applicable EPA-approved or established TMDL that there are, in accordance with 40 CFR 122.4(j), sufficient remaining wasteload allocations in the TMDL to allow your discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards (e.g., a reserve allocation for future growth).

1.1.6.3 Eligibility for "New Dischargers" and "New Sources" for Waters with High Water Quality (Tier 2, 2.5, and 3).

- a. For new dischargers and new sources to Tier 2 or Tier 2.5 waters, your discharge must not lower the water quality of the applicable water. See a list of Tier 2 and Tier 2.5 waters in Appendix L.
- b. For new dischargers and new sources to waters designed by a state or tribe as Tier 3 waters² (i.e., outstanding national resource waters) for antidegradation purposes under 40 CFR 131.12(a)(3), you are not eligible under this permit and you must apply for an individual permit. See a list of Tier 3 waters in Appendix L.

1.1.7 Eligibility for Discharges to a Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Site.

If you discharge to a federal CERCLA Site listed in Appendix P, you must notify the EPA Region 10 Office when submitting your NOI, and the EPA Region 10 Office must determine that you are eligible for permit coverage. In determining eligibility for coverage under this Part, the EPA Region 10 Office may evaluate whether you are implementing or plan to implement adequate controls and/or procedures to ensure that your discharge will not lead to recontamination of aquatic media at the CERCLA Site (i.e., your stormwater discharge will be controlled as necessary such that the receiving water of the United States will meet an applicable water quality standard). If it is determined that your facility discharges to a CERCLA Site listed in Appendix P after you have obtained coverage under this permit, you must contact the EPA Region 10 Office and ensure that you either have implemented or will implement adequate controls and/or procedures to ensure that your discharges will not lead to recontamination of aquatic media at the

² For the purposes of this permit, your project is considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first water of the United States to which you discharge is identified by a state, tribe, or EPA as a Tier 2, Tier 2.5, or Tier 3 water. For discharges that enter a separate storm sewer system prior to discharge, the first water of the United States to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system (separate storm sewer systems (MS4s and non-municipal storm sewers systems) do not include combined sewer systems or separate sanitary sewer systems).

2021 MSGP

Permit Parts 1-7 (as modified)

CERCLA Site such that your stormwater discharge will be controlled as necessary such that the receiving water of the United States will meet an applicable water quality standard.

For the purposes of this permit, a facility discharges to a federal CERCLA Site if the discharge flows directly into the site through its own conveyance, or through a conveyance owned by others, such as a municipal separate storm sewer system (MS4).

1.2 Types of Discharges Authorized Under the MSGP⁴

1.2.1 Authorized Stormwater Discharges. If you meet all the eligibility criteria in Part 1.1, then the following discharges from your facility are authorized under this permit:

1.2.1.1 Stormwater discharges associated with industrial activity for any "primary industrial activities" and "co-located industrial activities" (as defined in Appendix A) except for any stormwater discharges prohibited in Part 8;

1.2.1.2 Discharges EPA has designated as needing a stormwater permit as provided in Sector AD;

1.2.1.3 Discharges that are not otherwise required to obtain NPDES permit authorization but are mixed with discharges that are authorized under this permit; and

1.2.1.4 Stormwater discharges from facilities subject to any of the national stormwater-specific effluent limitations guidelines listed in Table 1-1.

Table 1-1. Stormwater-Specific Effluent Limitations Guidelines

Regulated Discharge	40 CFR Section	MSGP Sector	New Source Performance Standard (NSPS)	New Source Date
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart J	A	Yes	1/26/81
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A	C	Yes	4/8/74
Runoff from asphalt emulsion facilities	Part 443, Subpart A	D	Yes	7/28/75
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	E	Yes	2/20/74
Mine dewatering discharges of crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, and D	J	No	N/A
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B	K, L	Yes	2/2/00

⁴ Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under Clean Water Act (CWA) section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), or during an inspection.

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Regulated Discharge	40 CFR Section	MSGP Sector	New Source Performance Standard (NSPS)	New Source Date
Runoff from coal storage piles at steam electric generating facilities	Part 423	C	Yes	11/19/82 (10/8/74) ¹
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449	S	Yes	6/15/1

¹ NSPS promulgated in 1974 were not removed via the 1982 regulation; therefore, wastewaters generated by 40 CFR Part 423-applicable sources that were New Sources under the 1974 regulations are subject to the 1974 NSPS.

1.2.2 Authorized Non-Stormwater Discharges. Below is the list of non-stormwater discharges authorized under this permit. Unless specifically listed in this Part, this permit does not authorize any other non-stormwater discharges requiring NPDES permit coverage and you must either eliminate those discharges or they must be covered under another NPDES permit; this includes the sector-specific non-stormwater discharges that are listed in Part 8 as prohibited (a non-exclusive list is provided only to raise awareness of contaminants or sources of contaminants generally characteristic of certain sectors).

1.2.2.1 Authorized Non-Stormwater Discharges for All Sectors. The following are the only non-stormwater discharges authorized under this permit for all sectors provided that all discharges comply with the effluent limits set forth in Parts 2 and 8.

- a. Discharges from emergency/unplanned fire-fighting activities;
- b. Fire hydrant flushings;
- c. Potable water, including uncontaminated water line flushings;
- d. Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
- e. Irrigation/landscape drainage, provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling;
- f. Pavement wash waters, provided that detergents or hazardous cleaning products are not used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part 6.2.3), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
- g. External building/structure washdown / power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
- h. Uncontaminated ground water or spring water;

- i. Foundation or footing drains where flows are not contaminated with process materials;
- j. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown; drains); and
- k. Any authorized non-stormwater discharge listed above in this Part 1.2.2 or any stormwater discharge listed in Part 1.2.1 mixed with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.2.2.2 Additional Authorized Non-Stormwater Discharge for Sector A Facilities. 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, provided the non-stormwater component of the discharge is in compliance with the non-numeric effluent limits requirements in Part 2.1.2.

1.2.2.3 Additional Authorized Non-Stormwater Discharges for Earth-Disturbing Activities Conducted Prior to Active Mining Activities for Sectors G, H and J Facilities. The following non-stormwater discharges identified in a, b, and c are only authorized for earth-disturbing activities conducted prior to active mining activities, as defined in Part 8.G.3.2, 8.H.3.2, and 8.J.3.2, provided that, with the exception of water used to control dust, these discharges are not routed to areas of exposed soil and all discharges comply with the permit's effluent limits:

- a. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
- b. Water used to control dust; and
- c. Dewatering water that has been treated by an appropriate control under Parts 8.G.4.2.9, 8.H.4.2.9, or 8.J.4.2.9.

Once the earth-disturbing activities conducted prior to active mining activities have ceased, the only authorized non-stormwater discharges for Sectors G, H, and J are those listed in Part 1.2.2.1.

1.3 Obtaining Authorization to Discharge

1.3.1 Prepare Your Stormwater Pollution Prevention Plan (SWPPP) Prior to Submitting Your Notice of Intent (NOI). You must develop a SWPPP or update your existing SWPPP per Part 6 prior to submitting your NOI for coverage under this permit, per Part 1.3.2 below. You must make your SWPPP publicly available by either attaching it to your NOI, including a URL in your NOI, or providing additional information from your SWPPP on your NOI, per Part 6.4.

1.3.2 How to Submit Your NOI to Get Permit Coverage. To be covered under this permit, you must use EPA's NPDES eReporting Tool for the MSGP (Net-MSGP) to electronically prepare and submit to EPA a complete and accurate NOI by the deadline applicable to your facility presented in Table 1-2. The NOI certifies to EPA that you are eligible for coverage according to Part 1.1 and provides information on your industrial activities and related discharges. Per Part 7.1, you must submit your NOI electronically via Net-MSGP, unless the applicable EPA Regional Office grants you a waiver from electronic reporting, in which case you may use the paper NOI form in Appendix G. To access

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Net-MSGP, go to <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#accessinmsgp>

- 1.3.3 **Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage.** Table 1-2 provides the deadlines for submitting your NOI and your official start date of permit coverage.

Table 1-2. NOI Submittal Deadlines and Discharge Authorization Dates

Category of Facility/Operator	NOI Submission Deadline	Discharge Authorization Date ^{1, 2}
Existing MSGP facility. Operators of industrial activities whose stormwater discharges were covered under the 2015 MSGP.	No later than May 30, 2021.	30 calendar days after EPA notifies you that it has received a complete NOI, unless EPA notifies you that your authorization has been denied or delayed. Note: You must review and update your SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI. Provided you submit your NOI in accordance with the deadline, your authorization under the 2015 MSGP is automatically continued until you have been granted coverage under this permit or an alternative permit, or coverage is otherwise terminated.
Operator operating consistent with EPA's No Action Assurance and submitted an Intent to Operate (ITO) form. Operators of industrial activities who commenced discharging between June 4, 2020 and March 1, 2021 and have been operating consistent with EPA's June 3, 2020 'No Action Assurance for the NPDES Stormwater Multi-Sector General Permit for Industrial Activities.'	As soon as possible, but see the June 3, 2020 'No Action Assurance for the NPDES Stormwater Multi-Sector General Permit for Industrial Activities' (and any updates to that document) for additional guidance on deadlines.	30 calendar days after EPA notifies you that it has received a complete NOI, unless EPA notifies you that your authorization has been denied or delayed.
New facility without MSGP coverage. Operators of industrial activities that will commence discharging after March 1, 2021.	At least 30 calendar days prior to commencing discharge.	30 calendar days after EPA notifies you that it has received a complete NOI, unless EPA notifies you that your authorization has been denied or delayed.
Existing facility covered under an alternative permit. Operators seeking coverage for stormwater discharges previously covered under an individual permit or an alternative general permit.	At least 30 calendar days prior to commencing discharge.	
Existing MSGP facility with a new operator. New operators of existing industrial activities with stormwater discharges previously authorized under the 2021 MSGP.	At least 30 calendar days prior to the date of transfer of control to the new operator.	

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Category of Facility/Operator	NOI Submission Deadline	Discharge Authorization Date ^{1, 2}
Existing facility without MSGP coverage. Operators of industrial activities that commenced discharging prior to March 1, 2021, but whose stormwater discharges were not covered under the 2015 MSGP or another NPDES permit and have not been operating consistent with EPA's No Action Assurance for EPA's NPDES MSGP.	Immediately; your stormwater discharges are currently unpermitted.	

¹ If you have missed the deadline to submit your NOI, any and all discharges from your industrial activities will continue to be unauthorized under the CWA until they are covered by this or a different NPDES permit. EPA may take enforcement action for any unpermitted discharges that occur between the commencement of discharging and discharge authorization.

² Discharges are not authorized if your NOI is incomplete or inaccurate or if you are ineligible for permit coverage.

- 1.3.4 Modifying your NOI.** If after submitting your NOI, you need to correct or update any fields, you may do so by submitting a "Change NOI" form using Net-MSGP. Per Part 7.2.1, you must submit your Change NOI electronically via Net-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you may use the suggested format for the paper Change NOI form.
- 1.3.4.1** For an existing operator, if any of the information supplied on the NOI changes, you must submit a Change NOI form within thirty (30) calendar days after the change occurs.
- 1.3.4.2** At a facility where there is a transfer in operator or a new operator takes over operational control at an existing facility, the new operator must submit a new NOI no later than thirty (30) calendar days after a change in operators. The previous operator must submit a Notice of Termination (NOT) no later than thirty (30) calendar days after MSGP coverage becomes active for the new operator, as specified in Part 1.4.
- 1.3.5 Requirement to Post a Sign of your Permit Coverage.** You must post a sign or other notice of your permit coverage at a safe, publicly accessible location in close proximity to your facility. Public signage is not required where other laws or local ordinances prohibit such signage, in which case you must document in your SWPPP a brief explanation for why you cannot post a sign and a reference to the law or ordinance. You must use a font large enough to be readily viewed from a public right-of-way and perform periodic maintenance of the sign to ensure that it remains legible, visible, and factually correct. At minimum, the sign must include:
- 1.3.5.1** The following statement: "[Name of facility] is permitted for industrial stormwater discharges under the U.S. EPA's Multi-Sector General Permit (MSGP)";
- 1.3.5.2** Your NPDES ID number;
- 1.3.5.3** A contact phone number for obtaining additional facility information;
- 1.3.5.4** One of the following:
- a. The Uniform Resource Locator (URL) for the SWPPP (if available), and the following statement: "To report observed indicators of stormwater pollution, contact [optional: include facility point of contact and] EPA at: [include the applicable

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MSGP Regional Office contact information found at <https://www.epa.gov/nodes/contact-us-stormwater#regional>; or

- b. The following statement: "To obtain the Stormwater Pollution Prevention Plan (SWPPP) for this facility or to report observed indicators of stormwater pollution, contact [optional: include facility point of contact and] EPA at [include the applicable MSGP Regional Office contact information found at <https://www.epa.gov/nodes/contact-us-stormwater#regional>]."

1.3.6 Your Official End Date of Permit Coverage. Once covered under this permit, your coverage will last until the date that:

1.3.6.1 You terminate permit coverage by submitting a Notice of Termination (NOT) per Part 1.4; or

1.3.6.2 You receive coverage under a different NPDES permit or a reissued or replacement version of this permit after it expires on February 28, 2024; or

1.3.6.3 You fail to submit an NOI for coverage under a reissued or replacement version of this permit before the required deadline.

1.3.7 Continuation of Coverage for Existing Operators After the Permit Expires

1.3.7.1 Note that if the 2021 MSGP is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with section 558(c) of the Administrative Procedure Act (see 40 CFR 122.6) and remain in force and effect for operators that were covered prior to its expiration. All operators authorized to discharge prior to the expiration date of the 2021 MSGP will automatically remain covered under the 2021 MSGP until the earliest of:

- a. The date the operator is authorized for coverage under a new version of the MSGP following the timely submittal of a complete and accurate NOI. Note that if a timely NOI for coverage under the reissued or replacement permit is not submitted, coverage will terminate on the date that the NOI was due; or
- b. The date of the submittal of a Notice of Termination; or
- c. Issuance of an individual permit for the facility's discharge(s); or
- d. A final permit decision by EPA not to reissue the MSGP, at which time EPA will identify a reasonable time period for covered operators to seek coverage under an alternative general permit or an individual permit. Coverage under the 2021 MSGP will terminate at the end of this time period.

1.3.7.2 EPA reserves the right to modify or revoke and reissue the 2021 MSGP under 40 CFR 122.62 and 63, in which case operators will be notified of any relevant changes or procedures to which they may be subject. If EPA fails to issue another general permit prior to the expiration of a previous one, EPA does not have the authority to provide coverage to industrial operators not already covered under that prior general permit. If the five-year expiration date for the 2021 MSGP has passed and a new MSGP has not been reissued, new operators seeking discharge authorization should contact EPA regarding the options available, such as applying for individual permit coverage.

1.3.8 Coverage Under Alternative Permits. EPA may require you to apply for and/or obtain authorization to discharge under an alternative permit, i.e., either an individual NPDES

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permit or an alternative NPDES general permit, in accordance with 40 CFR 122.64 and 124.5. If EPA requires you to apply for an alternative permit, the Agency will notify you in writing that a permit application or NOI is required. This notification will include a brief statement of the reasons for this decision and will contain alternative permit application or NOI requirements, including deadlines for completing your application or NOI.

1.3.8.1 Denial of Coverage for New or Previously Unpermitted Facilities. For new or previously unpermitted facilities, following the submittal of your NOI, you may be denied coverage under this permit and must apply for and/or obtain authorization to discharge under an alternative permit.

1.3.8.2 Loss of Authorization Under the 2021 MSGP for Existing Permitted Facilities. If your stormwater discharges are covered under this permit, you may receive a written notification that you must either apply for coverage under an individual NPDES permit or submit an NOI for coverage under an alternative general NPDES permit. In addition to the reasons for the decision and alternative permit application or NOI deadlines, the notice will include a statement that on the effective date of your alternative permit coverage, your coverage under the 2021 MSGP will terminate. EPA will terminate your MSGP permit coverage in Net-MSGP at that time. EPA may grant additional time to submit the application or NOI if you request it. If you fail to submit an alternative permit application or NOI as required by EPA, then your authorization to discharge under the 2021 MSGP is terminated at the end of the day EPA required you to submit your alternative permit application or NOI. EPA may take appropriate enforcement action for any unpermitted discharge.

1.3.8.3 Operators Requesting Coverage Under an Alternative Permit. You may request to be covered under an individual permit. In such a case, you must submit an individual permit application in accordance with the requirements of 40 CFR 122.22(b)(3)(iii), with reasons supporting the request, to the applicable EPA Regional Office listed in Part 7.8 of this permit. The request may be granted by issuance of an individual permit if your reasons are adequate to support the request. When you are authorized to discharge under an alternative permit, your authorization to discharge under the 2021 MSGP is terminated on the effective date of the alternative permit.

1.4 Terminating Permit Coverage

1.4.1 How to Submit your Notice of Termination (NOT) to Terminate Permit Coverage. To terminate permit coverage, you must use EPA's NPDES eReporting Tool for the MSGP (Net-MSGP) to electronically prepare and submit to EPA a complete and accurate NOT. Per Part 7.1, you must submit your NOT electronically via Net-MSGP, unless the EPA Regional Office grants you a waiver from electronic reporting, in which case you may use the paper NOT form in Appendix H. To access Net-MSGP, go to <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#accessinamsqp>.

Your authorization to discharge under this permit terminates at midnight of the day that you are notified that your complete NOT has been processed. If you submit a NOT without meeting one or more of the conditions in Part 1.4.2 then your NOT is not valid. Until you terminate permit coverage, you must comply with all conditions and effluent limitations in the permit.

1.4.2 When to Submit Your Notice of Termination. You must submit a NOT within 30 days after one or more of the following conditions have been met:

- 1.4.2.1 A new owner or operator has received authorization to discharge under this permit; or
- 1.4.2.2 You have ceased operations at the facility and/or there are not or no longer will be discharges of stormwater associated with industrial activity from the facility, and you have already implemented necessary sediment and erosion controls per Part 2.1.2.5; or
- 1.4.2.3 You are a Sector G, H, or J facility and you have met the applicable termination requirements; or
- 1.4.2.4 You obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit, unless EPA terminates your coverage for you per Part 1.3.8.

1.5 Conditional Exclusion for No Exposure

If you are covered by this permit and become eligible for a "no exposure" exclusion from permitting under 40 CFR 122.26(g), you may file a No Exposure Certification (NEC). You are no longer required to have a permit upon submission of a complete and accurate NEC to EPA. If you are no longer required to have permit coverage because of a no exposure exclusion and have submitted a NEC form to EPA, you are not required to submit a NOT. You must submit a NEC form to EPA once every five years.

You must use EPA's NPDES eReporting Tool for the MSGP (NeT-MSGP) to electronically prepare and submit to EPA a complete and accurate NEC. Per Part 7.2.1, you must submit your NEC electronically via NeT-MSGP, unless the applicable EPA Regional Office grants you a waiver from electronic reporting, in which case you may use the paper NEC form in Appendix K. To access NeT-MSGP, go to <https://edknode.nepa.gov/net-msgp/action/login>

1.6 Permit Compliance

Any noncompliance with any of the requirements of this permit constitutes a violation of this permit, and thus is a violation of the CWA. As detailed in Part 5, failure to take any required corrective actions constitutes an independent, additional violation of this permit, in addition to any original violation that triggered the need for a corrective action. As such, any actions and time periods specified for remedying noncompliance do not absolve you of the initial underlying noncompliance.

Where an Additional Implementation Measure (AIM) is triggered by an event that does not itself constitute permit noncompliance (i.e., an exceedance of an applicable benchmark), there is no permit violation provided you comply with the required responses within the relevant deadlines established in Part 5.

1.7 Severability

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit is to remain in effect to the extent possible; in the event that any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

2. Control Measures and Effluent Limits

In the technology based limits included in Parts 2.1 and 8, the term "minimize" means to reduce and/or eliminate to the extent achievable using stormwater control

measures (SCMs) (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice. The term "infeasible" means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.

2.1 **Stormwater Control Measures**

You must select, design, install, and implement stormwater control measures (including best management practices) to minimize pollutant discharges that address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in Part 2.1.2, meet limits contained in applicable effluent limitations guidelines in Part 2.1.3, and meet the water quality-based effluent limitations in Part 2.2.

The selection, design, installation, and implementation of control measures to comply with Part 2 must be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part 6.2.4. You must modify your stormwater control measures per Part 5.1 if you find that your control measures are not achieving their intended effect of minimizing pollutant discharges (i.e., your discharges will be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards or meet any of the other non-numeric effluent limits in this permit). Regulated stormwater discharges from your facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at your facility.

- 2.1.1 **Stormwater Control Measure Selection and Design Considerations.** You must consider the following when selecting and designing control measures:
 - 2.1.1.1 Preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
 - 2.1.1.2 Using stormwater control measures in combination may be more effective than using control measures in isolation for minimizing pollutants in your stormwater discharge;
 - 2.1.1.3 Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective stormwater control measures that will achieve the limits in this permit;
 - 2.1.1.4 Minimizing impervious areas at your facility and infiltrating stormwater onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce the frequency and volume of discharges and improve ground water recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;
 - 2.1.1.5 Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
 - 2.1.1.6 Conserving and/or restoring riparian buffers will help protect streams from stormwater discharges and improve water quality;

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- 2.1.1.7** Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants; and
- 2.1.1.8** Implementing structural improvements, enhanced/resilient pollution prevention measures, and other mitigation measures can help to minimize impacts from stormwater discharges from major storm events such as hurricanes, storm surge, extreme/heavy precipitation,⁶ and flood events. If such stormwater control measures are already in place due to existing requirements mandated by other state, local or federal agencies, you should document in your SWPPP a brief description of the controls and a reference to the existing requirement(s). If your facility may be exposed to or has previously experienced such major storm events,⁶ additional stormwater control measures that may be considered include, but are not limited to:
- a.** Reinforce materials storage structures to withstand flooding and additional exertion of force;
 - b.** Prevent floating of semi-stationary structures by elevating to the Base Flood Elevation (BFE)⁷ level or securing with non-corrosive device;
 - c.** When a delivery of exposed materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate (refer to emergency procedures);
 - d.** Temporarily store materials and waste above the BFE level;
 - e.** Temporarily reduce or eliminate outdoor storage;
 - f.** Temporarily relocate any mobile vehicles and equipment to higher ground;
 - g.** Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors; and
 - h.** Conduct staff training for implementing your emergency procedures at regular intervals.

Note: Part 2.1.1 requires that you must consider Parts 2.1.1.1 through 2.1.1.8 when selecting and designing control measures to minimize pollutant discharges via stormwater. Part 2.1.1 does not require nor prescribe specific control measure to be implemented; however, you must document in your SWPPP per Part 6.2.4 the

⁶ Heavy precipitation refers to instances during which the amount of rain or snow experienced in a location substantially exceeds what is normal. What constitutes a period of heavy precipitation varies according to location and season. Heavy precipitation does not necessarily mean the total amount of precipitation at a location has increased—just that precipitation is occurring in more intense or more frequent events.

⁷ To determine if your facility is susceptible to an increased frequency of major storm events that could impact the discharge of pollutants in stormwater, you may reference FEMA, NOAA, or USGS flood map products at https://www.usgs.gov/faqs/where-can-i-find-flood-maps?qt-news_science_products=0#qt-news_science_products.

⁸ Base Flood Elevation (BFE) is the elevation of surface water resulting from a flood that has a 1% chance of equalling or exceeding that level in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM) for zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30 and VE. [Source: <https://www.fema.gov/nads/404233>]. The FEMA Flood Map Service Center can be accessed through <https://msc.fema.gov/porta/search>.

considerations made to select and design control measures at your facility to minimize pollutants discharged via stormwater.

- 2.1.2 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)**⁴ You must comply with the following non-numeric effluent limits as well as any sector-specific non-numeric effluent limits in Part 8, except where otherwise specified.

Effluent limit requirements in Part 2.1.2 that do not involve the site-specific selection of a control measure or are specific activity requirements (e.g., "Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth, in line with manufacturer specifications, whichever is lower, and keeping the debris surface at least six inches below the lowest outlet pipe") are marked with an asterisk (*). When documenting in your SWPPP, per Part 6, how you will comply with the requirements marked with an asterisk, you have the option of including additional information or you may just "copy-and-paste" those effluent limits word-for-word from the permit into your SWPPP without providing additional documentation (see Part 6.2.4).

- 2.1.2.1 Minimize Exposure.** You must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and stormwater in order to minimize pollutant discharges by either locating these industrial materials and activities inside or protecting them with storm resistant coverings. Unless infeasible, you must also:

- a. Use grading, berming or curbing to prevent discharges of contaminated flows and divert run-on away from these areas;
- b. Locate materials, equipment, and activities so that potential leaks and spills are contained or able to be contained or diverted before discharge;
- c. Store leaky vehicles and equipment indoors;
- d. Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent discharges and run-on and also that capture any overspray; and
- e. Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.

Note: Industrial materials do not need to be enclosed or covered if stormwater from affected areas does not discharge pollutants to waters of the United States or if discharges are authorized under another NPDES permit.

- 2.1.2.2 Good Housekeeping.** You must keep clean all exposed areas that are potential sources of pollutants. You must perform good housekeeping measures in order to minimize pollutant discharges, including but not limited to, the following:

- a. Sweep or vacuum at regular intervals or, alternatively, wash down the area and collect and/or treat, and properly dispose of the washdown water;

⁴ BPT is Best Practicable Control Technology Currently Available, as set forth in CWA section 304(b)(1) and Appendix A; BAT is Best Available Technology Economically Achievable, as set forth in CWA section 304(b)(2) and Appendix A; and BCT is Best Conventional Pollutant Control Technology, as set forth in CWA section 304(b)(4) and Appendix A.

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- b. Store materials in appropriate containers;
- c. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). Consistent with Part 1.2.2 above, this permit does not authorize dry weather discharges from dumpsters or roll off boxes;[†]
- d. Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.
- e. Plastic Materials Requirements: Facilities that handle pre-production plastic must implement control measures to eliminate discharges of plastic in stormwater.[‡] Examples of plastic material required to be addressed as stormwater pollutants include plastic resin pellets, powders, flakes, additives, regrind, scrap, waste and recycling.

2.1.2.3 Maintenance.

- a. **Maintenance Activities.** You must maintain all control measures that are used to achieve the effluent limits in this permit in effective operating condition, as well as all industrial equipment and systems, in order to minimize pollutant discharges. This includes:
 - ii. Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in discharges of pollutants via stormwater.
 - iii. Maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained).
 - iv. Inspecting and maintaining baghouses at least quarterly to prevent the escape of dust from the system and immediately removing any accumulated dust at the base of the exterior baghouse.*
 - v. Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth, or in line with manufacturer specifications, whichever is lower, and keeping the debris surface at least six inches below the lowest outlet pipe.†
- b. **Maintenance Deadlines.**
 - ii. If you find that your control measures need routine maintenance, you must conduct the necessary maintenance immediately in order to minimize pollutant discharges.

[‡] Examples of appropriate control measures include but are not limited to: installing a containment system, or other control, at each on-site storm drain discharge point down gradient of areas containing plastic material, designed to trap all particles retained by a 1 mm mesh screen; using a durable sealed container designed not to rupture under typical loading and unloading activities at all points of plastic transfer and storage; using capture devices as a form of secondary containment during transfers, loading, or unloading plastic materials, such as catch pans, tarps, berms or any other device that collects errant material; having a vacuum or vacuum-type system for quick cleanup of fugitive plastic material available for employees; for facilities that maintain outdoor storage of plastic materials, do so in a durable, permanent structure that prevents exposure to precipitation that could cause the material to be discharged via stormwater.

- iii. if you find that your control measures need to be repaired or replaced, you must immediately take all reasonable steps to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be discharged during subsequent storm events. Final repairs/replacement of stormwater controls should be completed as soon as feasible but must be no later than the timeframe established in Part 5.1.3 for corrective actions, i.e., within 14 days or, if that is infeasible, within 45 days. If the completion of stormwater control repairs/replacement will exceed the 45 day timeframe, you may take the minimum additional time necessary to complete the maintenance, provided that you notify the EPA Regional Office of your intention to exceed 45 days, and document in your SWPPP your rationale for your modified maintenance timeframe. If a control measure was never installed, was installed incorrectly or not in accordance with Parts 2 and/or 8, or is not being properly operated or maintained, you must conduct corrective action as specified in Part 5.1.

Note: in this context, the term "immediately" means the day you identify that a control measure needs to be maintained, repaired, or replaced, you must take all reasonable steps to minimize or prevent the discharge of pollutants until you can implement a permanent solution. However, if you identify a problem too late in the work day to initiate action, you must perform the action the following work day morning. "All reasonable steps" means you must respond to the conditions triggering the action, such as, cleaning up any exposed materials that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangements (i.e., scheduling) for a new SCM to be installed.

2.1.2.4 Spill Prevention and Response. You must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur in order to minimize pollutant discharges. You must conduct spill prevention and response measures, including but not limited to, the following:

- a. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- b. Use drip pans and absorbents if leaky vehicles and/or equipment are stored outdoors;
- c. Use spill/overflow protection equipment;
- d. Plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- e. Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
- f. Develop training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;

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- g. Keep spill kits onsite, located near areas where spills may occur or where a rapid response can be made; and
- h. Notify appropriate facility personnel when a leak, spill, or other release occurs.

Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC, metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available.

2.1.2.5 Erosion and Sediment Controls. To minimize pollutant discharges in stormwater, you must minimize erosion by stabilizing exposed soils at your facility and placing flow velocity dissipation devices at discharge locations to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points. You must also use structural and non-structural control measures to minimize the discharge of sediment. If you use polymers and/or other chemical treatments as part of your controls, you must identify the polymers and/or chemicals used and the purpose in your SWPPP. There are many resources available to help you select appropriate SCMs for erosion and sediment control, including EPA's Stormwater Discharges from Construction Activities website at: <https://www.epa.gov/npdes/stormwater-discharges-construction-activities>.

2.1.2.6 Management of Stormwater. You must divert, infiltrate, reuse, contain, or otherwise reduce stormwater to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with EPA's resources relating to stormwater management, including the sector-specific *Industrial Stormwater Fact Sheet Series*, (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#factsheets>) and any similar state or tribal resources.

2.1.2.7 Salt Storage Piles or Piles Containing Salt. You must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, in order to minimize pollutant discharges. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered pursuant to this permit if stormwater from the piles is not discharged or if discharges from the piles are authorized under another NPDES permit.

2.1.2.8 Employee Training.

- a. **Types of Personnel Who Require Training.** You must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to comply with this permit (e.g., inspectors, maintenance personnel), including all members of your stormwater pollution prevention team. You must ensure the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- i. Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures);
 - ii. Personnel responsible for the storage and handling of chemicals and materials that could become pollutants discharged via stormwater;
 - iii. Personnel who are responsible for conducting and documenting inspections and monitoring as required in Parts 3 and 4; and
 - iv. Personnel who are responsible for taking and documenting corrective actions as required in Part 5.
- b. **Areas of Required Training.** Personnel must be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):
- i. An overview of what is in the SWPPP;
 - ii. Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
 - iii. The location of all the controls required by this permit, and how they are to be maintained;
 - iv. The proper procedures to follow with respect to the permit's pollution prevention requirements; and
 - v. When and how to conduct inspections, record applicable findings, and take corrective actions; and
 - vi. The facility's emergency procedures, if applicable per Part 2.1.1.8.
- 2.1.2.9 Non-Stormwater Discharges.** You must evaluate for the presence of non-stormwater discharges. You must eliminate any non-stormwater discharges not explicitly authorized in Part 1.2.2 or covered by another NPDES permit, including vehicle and equipment/tank wash water (except for those authorized in Part 1.2.2.3 for Sectors G, H, and J). If not covered under a separate NPDES permit, wastewater, wash water and any other unauthorized non-stormwater must be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or otherwise disposed of appropriately.
- 2.1.2.10 Dust Generation and Vehicle Tracking of Industrial Materials.** You must minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutants discharged via stormwater.
- 2.1.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines.** If you are in an industrial category subject to one of the effluent limitations guidelines identified in Table 4-3 (see Part 4.2.3.1), you must meet the effluent limits referenced in Table 2-1 below:

Table 2-1. Applicable Effluent Limitations Guidelines

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	See Part 5.A.8

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Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products [SIC 2874]	Part 418, Subpart A	See Part 8.C.5
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Part 8.D.5
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Part 8.E.6
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D	See Part 8.J.10
Runoff from hazardous waste landfills	Part 445, Subpart A	See Part 8.K.7
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Part 8.L.11
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Part 8.O.8
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449	See Part 8.S.9

2.2 Water Quality-Based Effluent Limitations

2.2.1 Water Quality Standards. Your discharge must be controlled as necessary to meet applicable water quality standards of all affected states.

EPA expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your stormwater discharge will not be controlled as necessary such that the receiving water of the United States will not meet an applicable water quality standard, you must take corrective action(s) as required in Part 5.1 and document the corrective actions as required in Part 5.3. You must also comply with any additional requirements that your state or tribe requires in Part 9.

EPA may also require that you undertake additional control measures (to meet the narrative water quality-based effluent limit above) on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI, required reports, or from other sources indicates that your discharges are not controlled as necessary such that the receiving water of the United States will not meet applicable water quality standards. You must implement all measures necessary to be consistent with an available wasteload allocation in an EPA-established or approved TMDL.

2.2.2 Discharges to Water Quality-Impaired Waters. You are considered to discharge to an impaired water if the first water of the United States to which your discharge is identified by a state, tribe or EPA as not meeting an applicable water quality standard, and:

- Requires development of a TMDL (pursuant to section 303(d) of the CWA);
- Is addressed by an EPA-approved or established TMDL; or
- Is not in either of the above categories but the waterbody is covered by a pollution control program that meets the requirements of 40 CFR 130.7(b)(1).

Note: For discharges that enter a separate storm sewer system²⁹ prior to discharge, the first water of the United States to which you discharge is the waterbody that receives the water from the storm sewer system.

- 2.2.2.1 Existing Discharge to an Impaired Water with an EPA-Approved or Established TMDL.** If you discharge to an impaired water with an EPA-approved or established TMDL, EPA will inform you whether any additional measures are necessary for your discharge to be consistent with the assumptions and requirements of the applicable TMDL and its wasteload allocation, or if coverage under an individual permit is necessary per Part 1.3.8.
- 2.2.2.2 Existing Discharge to an Impaired Water without an EPA-Approved or Established TMDL.** If you discharge to an impaired water without an EPA-approved or established TMDL, you are still required to comply with Part 2.2.1 and the monitoring requirements of Part 4.2.5.1. Note that the impaired waters monitoring requirements of Part 4.2.5.1 also apply where EPA determines that your discharge is not controlled as necessary such that the receiving water of the United States will not meet applicable water quality standards in an impaired downstream water segment, even if your discharge is initially to a receiving water(s) that is not identified as impaired according to Part 2.2.2.
- 2.2.2.3 New Discharger or New Source to an Impaired Water.** If your authorization to discharge under this permit relied on Part 1.1.6.2 for a new discharger or a new source to an impaired water, you must implement and maintain any measures that enabled you to become eligible under Part 1.1.6.2, and modify such measures as necessary pursuant to any Part 5 corrective actions. You also must comply with Part 2.2.1 and the monitoring requirements of Part 4.2.5.1.
- 2.2.3 Tier 2 Antidegradation Requirements for New Dischargers, New Sources, or Increased Discharges.** If you are a "new discharger" or a "new source" (as defined in Appendix A), or an existing discharger required to notify EPA of an increased discharge consistent with Part 7.6 (i.e., a "planned changes" report), and you discharge directly to waters designated by a state or tribe as Tier 2 or Tier 2.5 for antidegradation purposes under 40 CFR 131.12(a), EPA may require that you undertake additional control measures as necessary to ensure compliance with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.3.8. See list of Tier 2 and 2.5 waters in Appendix L.
- 2.3 Requirements Relating to Endangered Species, Historic Properties, and CERCLA Sites**
- If your eligibility under either Part 1.1.4, Part 1.1.5, and/or Part 1.1.7 was made possible through your, or another operator's, agreement to undertake additional measures, you must comply with all such measures to maintain eligibility under the MSGP. Note that if at any time you become aware, or EPA determines, that your discharges and/or discharge-related activities have the potential to adversely affect listed species and/or critical habitat, have an effect on historic properties, or that your facility discharges to a CERCLA Site listed in Appendix P after you have obtained coverage under this permit, EPA may inform you of the need to implement additional measures on a site-specific basis to meet the effluent limits in this permit, or require you to obtain coverage under an individual permit.

²⁹ Separate storm systems include both municipal storm sewer systems (MS4s) and non-municipal separate storm sewers. Separate storm systems do not include combined sewer systems or sanitary sewer systems.

3. **Inspections**

3.1 **Routine Facility Inspections**

3.1.1 **Inspection Personnel.** Qualified personnel (as defined in Appendix A) must perform the inspections. The qualified personnel may be a member of your stormwater pollution prevention team, or if the qualified personnel is a third-party you hire (i.e., a contractor), at least one member of your stormwater pollution prevention team must participate in the inspection. Inspectors must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting inspections.

3.1.2 **Areas that You Must Inspect.** During normal facility operating hours, the qualified personnel must conduct inspections of areas of the facility covered by the requirements in this permit, including, but not limited to, the following:

3.1.2.1 Areas where industrial materials or activities are exposed to stormwater;

3.1.2.2 Areas identified in the SWPPP and those that are potential pollutant sources (see Part 6.2.3);

3.1.2.3 Areas where spills and leaks have occurred in the past three years;

3.1.2.4 Discharge points; and

3.1.2.5 Control measures used to comply with the effluent limits contained in this permit.

3.1.3 **What You Must Look for During an Inspection.** During the inspection, the qualified personnel must examine or look out for, including, but not limited to, the following:

3.1.3.1 Industrial materials, residue or trash that may have or could come into contact with stormwater;

3.1.3.2 Leaks or spills from industrial equipment, drums, tanks and other containers;

3.1.3.3 Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;

3.1.3.4 Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas;

3.1.3.5 Erosion of soils at your facility, channel and streambank erosion and scour in the immediate vicinity of discharge points, per Part 2.1.2.5;

3.1.3.6 Non-authorized non-stormwater discharges, per Part 2.1.2.9;

3.1.3.7 Control measures needing replacement, maintenance or repair; and

3.1.3.8 During an inspection occurring during a stormwater event or stormwater discharge, you must observe control measures implemented to comply with effluent limits to ensure they are functioning correctly. You must also observe discharge points, as defined in Appendix A, during this inspection. If such discharge locations are inaccessible, you must inspect nearby downstream locations.

3.1.4 **Inspection Frequency.** The qualified personnel must conduct inspections at least quarterly (i.e., once each calendar quarter), or in some instances more frequently

(e.g., monthly). Increased frequency may be appropriate for some types of equipment, processes and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater. At least once each calendar year, the routine inspection must be conducted during a period when a stormwater discharge is occurring.

- 3.1.5 Exceptions to Routine Facility Inspections for Inactive and Unstaffed Facilities.** The requirement to conduct facility inspections on a routine basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. Such a facility is only required to conduct an annual site inspection in accordance with Part 3.1. To invoke this exception, you must indicate that your facility is inactive and unstaffed on your NOI. If you are already covered under the permit and your facility has changed from active to inactive and unstaffed, you must modify and re-certify your NOI. You must also include a statement in your SWPPP per Part 6.2.5.2 indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix B, Subsection 11. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies, and you must immediately resume routine facility inspections. If you are not qualified for this exception at the time you become authorized under this permit, but during the permit term you become qualified because your facility becomes inactive and unstaffed, and there are no industrial materials or activities exposed to stormwater, you must include the same signed and certified statement as above and retain it with your records pursuant to Part 6.5.

Inactive and unstaffed facilities covered under Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing) are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this exception from routine inspections, per Parts 8.G.8.5, 8.H.9.1, and 8.J.9.1.

- 3.1.6 Routine Facility Inspection Documentation.** You must document the findings of your facility inspections and maintain this report with your SWPPP as required in Part 6.5. You must conduct any corrective action required as a result of a routine facility inspection consistent with Part 5. If you conducted a discharge visual assessment required in Part 3.2 during your facility inspection, you may include the results of the assessment with the report required in this Part, as long as you include all components of both types of inspections in the report.

Do not submit your routine facility inspection report to EPA, unless specifically requested to do so. However, you must summarize your findings in the Annual Report per Part 7.4. Document all findings, including but not limited to, the following information.

- 3.1.6.1** The inspection date and time;
- 3.1.6.2** The name(s) and signature(s) of the inspector(s);
- 3.1.6.3** Weather information;
- 3.1.6.4** All observations relating to the implementation of stormwater control measures at the facility, including:

- a. A description of any stormwater discharges occurring at the time of the inspection;
 - b. Any previously unidentified stormwater discharges from and/or pollutants at the facility;
 - c. Any evidence of, or the potential for, pollutants entering the stormwater drainage system;
 - d. Observations regarding the physical condition of and around all stormwater discharge points, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water;
 - e. Any stormwater control measures needing maintenance, repairs, or replacement;
- 3.1.6.5 Any additional stormwater control measures needed to comply with the permit requirements;
- 3.1.6.6 Any incidents of non-compliance; and
- 3.1.6.7 A statement, signed and certified in accordance with Appendix B, Subsection 11.
- 3.2 Quarterly Visual Assessment of Stormwater Discharges**
- 3.2.1 **Visual Assessment Frequency.** Once each quarter for your entire permit coverage, you must collect a stormwater sample from each discharge point (except as noted in Part 3.2.4) and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but must be collected in such a manner that the samples are representative of the stormwater discharge. Guidance on monitoring is available at https://www.epa.gov/sites/production/files/2015-11/documents/msgp_monitoring_guide.pdf.
- 3.2.2 **Visual Assessment Procedures.** You must do the following for the quarterly visual assessment:
- 3.2.2.1 Make the assessment of a stormwater discharge sample in a clean, colorless glass or plastic container, and examined in a well-lit area;
 - 3.2.2.2 Make the assessment of the sample you collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and you must document why it was not possible to take the sample within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge; and
 - 3.2.2.3 For storm events, make the assessment on discharges that occur at least 72 hours (three days) from the previous discharge. The 72-hour (three-day) storm interval does not apply if you document that less than a 72-hour (three-day) interval is representative for local storm events during the sampling period.
 - 3.2.2.4 Visually inspect or observe for the following water quality characteristics, which may be evidence of stormwater pollution:
 - a. Color;
 - b. Odor;

- c. Clarity (diminished);
- d. Floating solids;
- e. Settled solids;
- f. Suspended solids;
- g. Foam;
- h. Oil sheen; and
- i. Other obvious indicators of stormwater pollution.

3.2.2.5 Whenever the visual assessment shows evidence of stormwater pollution in the discharge, you must initiate the corrective action procedures in Part 5.1.1.

3.2.3 **Visual Assessment Documentation.** You must document the results of your visual assessments and maintain this documentation onsite with your SWPPP as required in Part 6.5. Any corrective action required as a result of a quarterly visual assessment must be conducted consistent with Part 5 of this permit. You are not required to submit your visual assessment findings to EPA, unless specifically requested to do so. However, you must summarize your findings in the annual report per Part 7.4. Your documentation of the visual assessment must include, but not be limited to:

3.2.3.1 Sample location(s);

3.2.3.2 Sample collection date and time, and visual assessment date and time for each sample;

3.2.3.3 Personnel collecting the sample and conducting visual assessment, and their signatures;

3.2.3.4 Nature of the discharge (i.e., stormwater from rain or snow);

3.2.3.5 Results of observations of the stormwater discharge;

3.2.3.6 Probable sources of any observed stormwater contamination;

3.2.3.7 If applicable, why it was not possible to take samples within the first 30 minutes; and

3.2.3.8 A statement, signed and certified in accordance with Appendix B, Subsection 11.

3.2.4 **Exceptions to Quarterly Visual Assessments**

3.2.4.1 **Adverse Weather Conditions.** When adverse weather conditions prevent the collection of stormwater discharge sample(s) during the quarter, you must take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter must be included with your SWPPP records as described in Part 6.5. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, electrical storms, or situations that otherwise make sampling impractical, such as extended frozen conditions.

3.2.4.2 **Climates with Irregular Stormwater Discharges.** If your facility is located in an area where limited rainfall occurs during many parts of the year (e.g., arid or semi-arid climate) or in an area where freezing conditions exist that prevent discharges from occurring for extended periods, then your samples for the quarterly visual assessments may be distributed during seasons when precipitation more regularly occurs.

- 3.2.4.3 Areas that Receive Snow.** If the facility is in an area that typically receives snow and the facility receives snow at least once over a period of four quarters, at least one quarterly visual assessment must capture snowmelt discharge, as described in Part 4.1.3, taking into account the exception described above for climates with irregular stormwater discharges.
- 3.2.4.4 Inactive and Unstaffed Facilities.** The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you must maintain a statement in your SWPPP per Part 6.2.5.2 indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix B, Subsection 11. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies, and you must immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility becomes inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must include the same signed and certified statement as above and retain it with your records pursuant to Part 6.6. Inactive and unstaffed facilities covered under Sectors G (Metal Mining), H (Coal Mines and Coal Mining-Related Facilities), and J (Non-Metallic Mineral Mining and Dressing), are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this exception from quarterly visual assessments, consistent with the requirements established in Parts 5.G.8.5, 5.H.9.1, and 8.J.9.1.
- 3.2.4.5 Substantially Identical Discharge Points (SIDP).** If your facility has two or more discharge points that discharge substantially identical stormwater effluents, as documented in Part 6.2.5.3, you may conduct quarterly visual assessments of the discharge at just one of the discharge points and report that the results also apply to the SIDPs provided that you conduct visual assessments on a rotating basis of each SIDP throughout the period of your coverage under this permit. If stormwater contamination is identified through visual assessment conducted at a SIDP, you must assess and modify your stormwater control measures as appropriate for each discharge point represented by the monitored discharge point.
- 4. Monitoring**
- You must collect and analyze stormwater samples and document monitoring activities consistent with the procedures described in Part 4 and Appendix B, Subsections B.10 – 12, and any additional sector-specific or state/tribal-specific requirements in Parts 8 and 9, respectively. Refer to Part 7 for reporting and recordkeeping requirements.
- 4.1 Monitoring Procedures**
- 4.1.1 Monitored Stormwater Discharge Points.** Applicable monitoring requirements apply to each discharge point authorized by this permit, except as otherwise exempt from monitoring as a "substantially identical discharge point" (SIDP). If your facility has two or more discharge points that you believe discharge substantially identical stormwater effluents, based on the similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to stormwater,

and runoff coefficients of their drainage areas, you may monitor the effluent of just one of the discharge points and report that the results also apply to the SIDP(s). As required in Part 6.2.5.3, your SWPPP must identify each discharge point authorized by this permit and describe the rationale for any SIDP determinations. The allowance for monitoring only one of the SIDP is not applicable to any discharge points with numeric effluent limitations. You are required to monitor each discharge point covered by a numeric effluent limit as identified in Part 4.2.3.

4.1.2 Commingled Discharges. If any authorized stormwater discharges commingle with discharges not authorized under this permit, you must conduct any required sampling of the authorized discharges at a point before they mix with other waste streams, to the extent practicable.

4.1.3 Measurable Storm Events. You must conduct all required monitoring on a storm event that results in an actual discharge ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (three days). The 72-hour (3-day) storm interval does not apply if you are able to document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. In the case of snowmelt, you must conduct monitoring at a time when a measurable discharge occurs.

For each monitoring event, except snowmelt monitoring, you must identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event. For snowmelt monitoring, you must identify the date of the sampling event.

4.1.4 Sample Type. You must take a minimum of one grab sample from a discharge resulting from a measurable storm event as described in Part 4.1.3. You must collect samples within the first 30 minutes of a discharge associated with a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, you must collect the sample as soon as possible after the first 30 minutes and keep documentation with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, you must take samples during a period with a measurable discharge.

For indicator monitoring and benchmark monitoring, you may choose to use a composite sampling method instead of taking grab samples. This composite method may be either flow-weighted or time-weighted and performed manually or with the use of automated sampling equipment. For the purposes of this permit, a flow-weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant or variable time interval, where the volume of each aliquot included in the composite sample is proportional to the estimated or measured incremental discharge volume at the time of the aliquot collection compared to the total discharge volume estimated or measured over the monitoring event. For the purposes of this permit, a time-weighted composite sample means a composite sample consisting of a mixture of equal volume aliquots collected at a regular defined time interval over a specific period of time. Composite sampling must be initiated during the first 30 minutes of the same storm event. If it is not possible to initiate composite sampling within the first 30 minutes of a measurable storm event, you must initiate composite sampling as soon as possible after the first 30 minutes and keep documentation with the SWPPP explaining why it was not possible to initiate composite sampling within the first 30 minutes. You must submit all monitoring results to EPA per Part 4.1.9. Composite sampling may not be used in situations where hold times for processing or sample preservation requirements cannot be satisfied. For parameters

measured in-situ with a probe or meter such as dissolved oxygen, conductivity, pH, or temperature, the composite sampling method shall be modified by calculating an average of individual measurements, weighted by flow volume if applicable.

4.1.5 Adverse Weather Conditions. When adverse weather conditions as described in Part 3.2.4.1 prevent the collection of stormwater discharge samples according to the relevant monitoring schedule, you must take a substitute sample during the next qualifying storm event. Adverse weather does not exempt you from having to file a benchmark monitoring report in accordance with your sampling schedule. As specified in Part 7.3.4, you must indicate in Net-DMR any failure to monitor during the regular reporting period.

4.1.6 Facilities in Climates with Irregular Stormwater Discharges. If your facility is located in areas where limited rainfall occurs during parts of the year (e.g., arid or semi-arid climates) or in areas where freezing conditions exist that prevent discharges from occurring for extended periods, you may distribute your required monitoring events during seasons when precipitation occurs, or when snowmelt results in a measurable discharge from your facility. You must still collect the required number of samples. As specified in Part 7.3.4, you must also indicate in Net-DMR that there was no monitoring for the respective monitoring period.

4.1.7 Monitoring Periods. Your monitoring requirements in this permit begin in the first full quarter following either May 30, 2021 or your date of discharge authorization, whichever date comes later.

- January 1 – March 31
- April 1 – June 30
- July 1 – September 30
- October 1 – December 31

For example, if you obtain permit coverage on April 10, 2021, then your first monitoring quarter for benchmark monitoring is July 1, 2021 – September 30, 2021 and your first monitoring year for discharges to impaired waters or discharges subject to an effluent limitation guideline is July 1, 2021 – June 30, 2022. This monitoring schedule may be modified in accordance with Part 4.1.6 if you document the revised schedule in your SWPPP. However, you must indicate in Net-DMR any 3 month interval that you did not take a sample.

4.1.8 Monitoring for Authorized Non-Stormwater Discharges. You are only required to monitor authorized non-stormwater discharges (as delineated in Part 1.2.2) when they are commingled with stormwater discharges associated with industrial activity.

4.1.9 Monitoring Reports. You must report monitoring data using Net-DMR, EPA's electronic DMR tool, as described in Part 7.3 (unless the applicable EPA Regional Office grants you a waiver from electronic reporting, in which case you may submit a paper DMR form).

4.2 Required Monitoring

This permit includes six types of required analytical monitoring, one or more of which may apply to your stormwater discharge:

- Indicator monitoring (Part 4.2.1);

- Benchmark monitoring (Part 4.2.2);
- Annual effluent limitations guidelines monitoring (Part 4.2.3);
- State- or tribal-specific monitoring (Part 4.2.4);
- Impaired waters monitoring (Part 4.2.5); and
- Other monitoring as required by EPA (Part 4.2.6).

Unless otherwise specified, samples must be analyzed consistent with 40 CFR Part 136 analytical methods that are sufficiently sensitive for the monitored parameter. When more than one type of monitoring for the same pollutant at the same discharge point applies (e.g., total suspended solids once per year for an effluent limitation and once per quarter for benchmark monitoring of a given discharge point), you may use a single sample to satisfy both monitoring requirements [i.e., one sample satisfying both the annual effluent limitation sample and one of the four quarterly benchmark monitoring samples]. Similarly, when the same type of monitoring is required for the same pollutant but for different activities, you may use a single sample to satisfy both monitoring requirements [i.e., when you are required to monitor for PAHs in stormwater discharges from paved surfaces that will be sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit and you are also required to monitor for PAHs in stormwater discharges since you manufacture, use, or store creosote or creosote-treated wood in areas that are exposed to precipitation].

When the effluent limitation is lower than the benchmark threshold for the same pollutant, your Additional Implementation Measure (AIM) trigger is based on an exceedance of the effluent limitation threshold, which would subject you to the AIM requirements of Part 5.2. Exceedance of an effluent limitation associated with the results of any analytical monitoring type required by this Part subjects you to the corrective action requirements of Part 5.1. You must conduct all required monitoring in accordance with the procedures described in Appendix B, Subsection B.10.

Per Part 1.3.7, in the event that the permit is administratively continued, monitoring requirements remain in force and effect at their original frequency during any continuance for operators that were covered prior to permit expiration. In the event that monitoring results are unable to be electronically reported in Net DMR, operators must maintain monitoring results and records within their SWPPP.

Table 4-1. Summary of Each Type of Monitoring

Monitoring Type	Monitoring Type Applies To	Frequency	Duration	Follow-up Action	Permit Part Reference
Indicator – pH, TSS, COD	Subsectors B2, C5, D2, E3, F5, I1, J3, L2, N2, O1, P1, R1, T1, U3, V1, W1, X1, Y2, Z1, AB1, AC1, and AD1	Quarterly	Entirety of permit coverage	None	Part 4.2.1.1a
Indicator – PAHs*	Operators with stormwater discharges from paved surfaces that will be sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit; sectors; Sector A facilities that manufacture, use, or	Bi-annually (2 times per year)	First year and fourth year	None	Part 4.2.1.1b

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Monitoring Type	Monitoring Type Applies To	Frequency	Duration	Follow-up Action	Permit Part Reference
	store creosote or creosote-treated wood in areas that are exposed to precipitation; and Sectors C (SIC 2911), D, F, H, I, M, O, P (SIC 4011, 4013, and S171), Q (SIC 4493), R, and S				
Benchmark	Subsectors A1, A2, A3, A4, B1, C1, C2, C3, C4, D1, E1, E2, F1, F2, F3, F4, G1, G2, H1, J1, J2, K1, L1, M1, N1, Q1, S1, U1, U2, Y1, AA1, AA2	Quarterly	First year and fourth year	AIM. See Part 5.2.	Part 4.2.2
Effluent limitation guidelines (ELG)	See Part 4.2.3	Annually	Entirety of permit coverage	See Part 5.1	Part 4.2.3
State- or tribal-specific	Depends on the discharge location of your facility. See Part 9.				
Impaired Waters	Depends on the receiving waterbody. See Part 4.2.5				
Other as required by EPA	See Part 4.2.6				

* Monitoring is required for the 14 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[ghi]perylene, indeno[1,2,3-cd]pyrene, and dibenz[a,h]anthracene.

4.2.1 Indicator Monitoring. This permit requires indicator monitoring of stormwater discharges for three parameters – pH, Total Suspended Solids (TSS), and Chemical Oxygen Demand (COD) – for certain sectors/subsectors (see Part 4.2.1.1.a below) and for polycyclic aromatic hydrocarbons (PAHs) for certain sectors/activities, with additional limitations (see Part 4.2.1.1.b below). Indicator monitoring data will provide you and EPA with a baseline and comparable understanding of industrial stormwater discharge quality and potential water quality problems. The indicator monitoring parameters are "report-only" and do not have thresholds or baseline values for comparison, therefore no follow-up action is triggered or required under this part. The requirement in Part 2.2.1 that your stormwater discharge be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards still applies. You may find it useful to evaluate and compare your indicator monitoring data over time to identify any fluctuating values and why they may be occurring, and to further inform any revisions to your SWPPP/SCMs if necessary.¹⁾ Indicator monitoring is report-only and is neither benchmark monitoring nor an effluent limitation. Instead, it is a permit condition. Thus, failure to conduct indicator monitoring is a permit violation.

¹⁾ Examples of possible reviews and revisions to the SWPPP/SCMs that could be informed by indicator monitoring values include: reviewing sources of pollution or any changes to performed industrial activities and processes; reviewing spill and leak procedures, and/or non-stormwater discharges; conducting a single comprehensive clean-up, implementing a new control measure, and/or increasing inspections. EPA notes, however, that these actions are not required under the 2021 MSGP in response to indicator monitoring.

4.2.1.1 Applicability and Schedule of Indicator Monitoring

a. pH, Total Suspended Solids (TSS), and Chemical Oxygen Demand (COD)

- i. **Applicability.** Operators in the following subsectors must monitor stormwater discharges for pH, TSS, and COD (also specified in the sector-specific requirements in Part 8): B2, C5, D2, E3, F5, I1, J3, L2, N2, O1, P1, R1, T1, U3, V1, W1, X1, Y2, Z1, AB1, AC1, and AD1). Samples must be analyzed consistent with 40 CFR Part 136 analytical methods.
- ii. **Schedule.** You must conduct indicator monitoring of stormwater discharges for pH, TSS, and COD each quarter, beginning in your first full quarter of permit coverage as identified in Part 4.1.7.

b. Polycyclic Aromatic Hydrocarbons (PAHs)

- i. **Applicability.** The following operators must monitor stormwater discharges for the 16 individual priority pollutant PAHs (also specified in the sector-specific requirements in Part 8): operators in all sectors with stormwater discharges from paved surfaces that will be sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit; operators in sectors A (facilities that manufacture, use, or store creosote or creosote-treated wood in areas that are exposed to precipitation), C (SIC Code 2911), D, F, H, I, M, O, P (SIC Codes 4011, 4013, and 5171), Q (SIC Code 4493), R, and S. Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene. Samples must be analyzed using EPA Method 625.1, or EPA Method 610/Standard Method 6440B if preferred by the operator, consistent with 40 CFR Part 136 analytical methods.
- ii. **Schedule.** You must conduct indicator monitoring of stormwater discharges for PAHs bi-annually (i.e., sample twice per year) in the first and fourth years of permit coverage. Your first year of permit coverage begins in your first full quarter of permit coverage, identified in Part 4.1.7, commencing no earlier than May 30, 2021, followed by two years of no monitoring. Bi-annual monitoring resumes in your fourth year of permit coverage for another year, after which you may discontinue bi-annual PAH monitoring for the remainder of your permit coverage.

4.2.1.2 Exception for Facilities in Climates with Irregular Stormwater Discharges. As described in Part 4.1.6, facilities in climates with irregular stormwater discharges may modify this schedule provided you report this revised schedule directly to EPA by the due date of the first indicator monitoring sample (see EPA Regional contacts in Part 7.8), and you keep this revised schedule with the facility's SWPPP as specified in Part 6.5. As noted in Part 4.1.7, you must indicate in Net-DMR any 3-month interval that you did not take a sample.

4.2.1.3 Exception for Inactive and Unstaffed Facilities. The requirement for indicator monitoring does not apply at a facility that is inactive and unstaffed, provided that there are no industrial materials or activities exposed to stormwater. To invoke this exception, you must do the following:

- a. Maintain a statement with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Appendix 3, Subsection 11.
- b. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable indicator monitoring requirements under Part 4.2.1 as if you were in your first year of permit coverage. You must indicate in your NOI that your facility has materials or activities exposed to stormwater or has become active and/or staffed.
- c. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must notify EPA of this change on your NOI form. You may discontinue indicator monitoring once you have notified EPA, and prepared and signed the certification statement described above concerning your facility's qualification for this special exception.

Note: This exception has different requirements for Sectors G, H, and J (see Part 8).

- 4.2.2 Benchmark Monitoring.** This permit requires benchmark monitoring parameters of stormwater discharges for certain sectors/subsectors. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of your stormwater control measures and to assist you in determining when additional action(s) may be necessary to comply with the effluent limitations in Part 2.

The benchmark thresholds are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. However, if a benchmark exceedance triggers Additional Implementation Measures (AIM) in Part 5.2, failure to conduct any required measures is a permit violation. At your discretion, you may take more than four samples during separate stormwater discharge events to determine the average benchmark parameter value for facility discharges.

4.2.2.1 Applicability of Benchmark Monitoring

You must monitor stormwater discharges for any benchmark parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to your discharge listed in Part 8. If your facility is in one of the industrial sectors subject to benchmark thresholds that are hardness-dependent, you must include in your NOI a hardness value, established consistent with the procedures in Appendix J, that is representative of your receiving water. Hardness is not a specific benchmark and therefore the permit does not include a benchmark threshold with which to compare.

Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark thresholds for all benchmark parameters for which you are required to sample, i.e., sufficiently sensitive methods. For averaging purposes, you may use a value of zero for any individual sample parameter which is determined to be less than the method detection limit. For sample values that fall between the method detection limit and the quantitation limit

(i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantification limit.

4.2.2.2 Summary of the 2021 MSGP Benchmark Thresholds

The Table 4-2 presents the 2021 MSGP's freshwater and saltwater benchmark thresholds. Sector-specific benchmark requirements are detailed in [Part 8](#). Values match the original units found in the source documents, detailed in the corresponding section of the fact sheet.

Table 4-2 2021 MSGP Benchmark Thresholds

Pollutant		2021 MSGP Benchmark Threshold
Total Recoverable Aluminum (T)		1,100 µg/L
Total Recoverable Beryllium		130 µg/L
Biochemical Oxygen Demand (5-day)		30 mg/L
pH		6.0 – 9.0 s.u.
Chemical Oxygen Demand		120 mg/L
Total Phosphorus		2.0 mg/L
Total Suspended Solids (TSS)		100 mg/L
Nitrate and Nitrite Nitrogen		0.68 mg/L
Turbidity		50 NTU
Total Recoverable Antimony		640 µg/L
Ammonia		2.14 mg/L
Total Recoverable Cadmium	Freshwater ^a	1.8 µg/L
	Saltwater	33 µg/L
Total Recoverable Copper	Freshwater	5.19 µg/L
	Saltwater	4.8 µg/L
Total Recoverable Cyanide	Freshwater	22 µg/L
	Saltwater	1 µg/L
Total Recoverable Mercury	Freshwater	1.4 µg/L
	Saltwater	1.8 µg/L
Total Recoverable Nickel	Freshwater ^c	470 µg/L
	Saltwater	74 µg/L
Total Recoverable Selenium	Freshwater	1.5 µg/L for still/standing (lentic) waters 3.1 µg/L for flowing (lotic) waters
	Saltwater	290 µg/L
Total Recoverable Silver	Freshwater ^c	3.2 µg/L
	Saltwater	1.9 µg/L
Total	Freshwater ^b	120 µg/L

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Pollutant		2021 MSGP Benchmark Threshold
Recoverable Zinc	Saltwater	90 µg/L
Total Recoverable Arsenic	Freshwater	150 µg/L
	Saltwater	69 µg/L
Total Recoverable Lead	Freshwater ^c	82 µg/L
	Saltwater	210 µg/L

^c These pollutants are dependent on water hardness where discharged into freshwaters. The freshwater benchmark value listed is based on a hardness of 100 mg/L. When a facility analyzes receiving water samples for hardness, the operator must use the hardness ranges provided in Table 1 in Appendix J of the 2021 MSGP and in the appropriate tables in Part 8 of the 2021 MSGP to determine applicable benchmark values for that facility. Benchmark thresholds for discharges of these pollutants into saline waters are not dependent on receiving water hardness and do not need to be adjusted.

4.2.2.3 Benchmark Monitoring Schedule. Benchmark monitoring of stormwater discharges is required quarterly, as identified in Part 4.1.7, in the first and fourth year of permit coverage, as follows:

- a. **Year one of permit coverage:** You must conduct benchmark monitoring for all parameters applicable to your subsector(s) for four quarters in your first year of permit coverage, beginning in your first full quarter of permit coverage, no earlier than May 30, 2021.
 - i. If the annual average¹² for a parameter does not exceed the benchmark threshold, you can discontinue benchmark monitoring for that parameter for the next two years (i.e., eight quarters).
 - ii. If the annual average for a parameter exceeds the benchmark threshold, you must comply with Part 5.2 (Additional Implementation Measures responses and deadlines) and continue quarterly benchmark monitoring for that parameter until results indicate that the annual average is no longer exceeded, after which you can discontinue benchmark monitoring for that parameter until monitoring resumes in year four of permit coverage, per Part 4.2.2.3.b below.
- b. **Year four of permit coverage:** You must conduct benchmark monitoring for all parameters applicable to your subsector(s) for four quarters in your fourth year of permit coverage (i.e., your thirteenth through sixteenth quarters), unless the first quarter of your fourth year of permit coverage occurs on or after the date this permit expires.

¹² For this permit, an annual average exceedance for a parameter can occur if: (a) The four-quarter annual average for a parameter exceeds the benchmark threshold; or (b) Fewer than four quarterly samples are collected, but a single sample or the sum of any sample results within the sampling year exceeds the benchmark threshold by more than four times for a parameter. The result in (b) indicates an exceedance is mathematically certain (i.e., the sum of quarterly sample results to date is already more than four times the benchmark threshold). For pH, an annual average exceedance can only occur if the four-quarter annual average exceeds the benchmark threshold.

- i. If the annual average¹⁰ for a parameter does not exceed the benchmark threshold, you can discontinue benchmark monitoring for that parameter for the remainder of your permit coverage.
- ii. If the annual average for a parameter exceeds the benchmark threshold, you must comply with Part 5.2 (Additional Implementation Measures responses and deadlines) and continue quarterly benchmark monitoring for that parameter until results indicate that the annual average is no longer exceeded, after which you can discontinue benchmark monitoring for that parameter for the remainder of permit coverage.

4.2.2.4 Exception for Facilities in Climates with Irregular Stormwater Discharges. As described in Part 4.1.6, facilities in climates with irregular stormwater discharges may modify this quarterly schedule provided you report this revised schedule directly to EPA by the due date of the first benchmark sample (see EPA Regional contacts in Part 7.8), and you keep this revised schedule with the facility's SWPPP as specified in Part 6.5. When conditions prevent you from obtaining four samples in four consecutive quarters, you must continue monitoring until you have the four samples required for calculating your benchmark monitoring average. As noted in Part 4.1.7, you must indicate in Net-DMR any 3-month interval that you did not take a sample.

4.2.2.5 Exception for Inactive and Unstaffed Facilities. The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, provided that there are no industrial materials or activities exposed to stormwater. To invoke this exception, you must do the following:

- a. Maintain a statement with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Appendix B, Subsection 11.
- b. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable benchmark monitoring requirements under Part 4.2.2 as if you were in your first year of permit coverage. You must indicate in your NOI that your facility has materials or activities exposed to stormwater or has become active and/or staffed.
- c. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must notify EPA of this change on your NOI form. You may discontinue benchmark monitoring once you have notified EPA, and prepared and signed the certification statement described above concerning your facility's qualification for this special exception.

Note: This exception has different requirements for Sectors C, H, and J (see Part 8).

¹⁰ Ibid.

4.2.3 Effluent Limitations Monitoring

4.2.3.1 Monitoring Based on Effluent Limitations Guidelines. Table 4-3 identifies the stormwater discharges subject to effluent limitation guidelines that are authorized for coverage under this permit. An exceedance of the effluent limitation is a permit violation. Beginning in the first full quarter following May 30, 2021, or your date of discharge authorization, whichever date comes later, you must monitor once per year at each stormwater discharge point containing the discharges identified in Table 4-3 for the parameters specified in the sector-specific section of Part 8.

Table 4-3. Required Monitoring for Effluent Limits Based on Effluent Limitations Guidelines

Regulated Activity	Effluent Limit	Monitoring Frequency	Sample Type
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	See Part 8.A.8	1/year	Grab
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	See Part 8.C.5	1/year	Grab
Runoff from asphalt emulsion facilities	See Part 8.D.5	1/year	Grab
Runoff from material storage piles at cement manufacturing facilities	See Part 8.E.6	1/year	Grab
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	See Part 8.J.10	1/year	Grab
Runoff from hazardous waste landfills	See Part 8.K.7	1/year	Grab
Runoff from non-hazardous waste landfills	See Part 8.L.11	1/year	Grab
Runoff from coal storage piles at steam electric generating facilities	See Part 8.O.8	1/year	Grab
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures.	See Part 8.S.9	1/year	Grab

4.2.3.2 Substantially Identical Discharge Points Not Applicable. You must monitor each discharge point discharging stormwater from any regulated activity identified in Table 4-3. The substantially identical discharge points (SIDP) monitoring provisions are not available for numeric effluent limit monitoring.

4.2.3.3 Follow-up Actions if Discharge Exceeds Numeric Effluent Limitation. If any monitoring value exceeds a numeric effluent limitation contained in this permit, you must indicate the exceedance on a "Change NOI" form in the NPDES eReporting Tool (NeT), and you must conduct follow-up monitoring within 30 calendar days (or during the next measurable storm event, should none occur within 30 days) of implementing corrective action(s) taken per Part 5.1. If your follow-up monitoring exceeds the applicable effluent limitation, you must:

- a. **Submit an Exceedance Report:** You must submit an Exceedance Report no later than 30 days after you have received your laboratory result consistent with Part 7.5; and

- b. **Continue to Monitor:** You must monitor, at least quarterly, until your stormwater discharge is in compliance with the effluent limit or until EPA waives the requirement for additional monitoring. Once your discharge is back in compliance with the effluent limitation you must indicate this on a "Change NOI" form per Part 7.3.

4.2.4 State or Tribal Required Monitoring

4.2.4.1 Sectors Required to Conduct State or Tribal Monitoring. You must comply with any state or tribal monitoring requirements in Part 9 of the permit applicable to your facility's discharge location.

4.2.4.2 State or Tribal Monitoring Schedule. If a monitoring frequency is not specified for an applicable requirement in Part 9, you must monitor once per year for the duration of your permit coverage.

4.2.5 Impaired Waters Monitoring For the purposes of this permit, your facility is considered to discharge to an impaired water if the first water of the United States to which you discharge is identified by a state, tribe, or EPA pursuant to section 303(d) of the CWA as not meeting an applicable water quality standard (i.e., without an EPA-approved or established TMDL, see Part 4.2.5.1.a below), or has been removed from the 303(d) list either because the impairments are addressed by an EPA-approved or established TMDL or is covered by pollution control requirements that meet the requirements of 40 CFR 130.7(b)(1) (see Part 4.2.5.1.b below). For discharges that enter a separate storm sewer system¹⁴ prior to discharge, the first water of the United States to which you discharge is the waterbody that receives the stormwater discharge from the separate storm sewer system.

4.2.5.1 Facilities Required to Monitor Stormwater Discharges to Impaired Waters

a. Discharges to impaired waters without an EPA-approved or established TMDL:

Monitoring is required annually in the first year of permit coverage and again in the fourth year of permit coverage as follows, unless you detect a pollutant causing an impairment, in which case annual monitoring must continue.

- i. **Year one of permit coverage:** You must take your first annual sample in your first year of permit coverage, which begins in the first full quarter following May 30, 2021 or your date of discharge authorization, whichever date comes later. You must monitor for all pollutants causing impairments using a standard analytical method, provided one exists (see 40 CFR Part 136), once at each discharge point (except substantially identical discharge points) discharging stormwater to impaired waters without an EPA-approved or established TMDL. Note: Except where otherwise directed by EPA, if the pollutant of concern for the impaired waterbody is suspended solids, turbidity, or sediment/sedimentation, you must monitor for Total Suspended Solids (TSS). If a pollutant of concern is expressed in the form of an indicator or surrogate pollutant, you must monitor for that indicator or surrogate pollutant. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the

¹⁴ Separate storm sewer systems do not include combined sewer systems or sanitary sewer systems. Separate storm sewer systems include both municipal storm sewer systems (MS4s) and non-municipal separate storm sewers.

impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or other non-pollutant. Operators must consult the applicable EPA Regional Office for any available guidance regarding required monitoring parameters under this part.

- 1) If monitoring results indicate the monitored pollutant is not detected in your discharge, or is within the acceptable range for a given parameter for the waterbody to meet its designated use (e.g., pH or temperature),¹⁵ you may discontinue monitoring for that pollutant for the next two years. You must resume monitoring for that pollutant in year four of permit coverage, if applicable, per Part 4.2.5.1.a.ii.
 - 2) If monitoring results indicate that the monitored pollutant is detected in your stormwater discharge, or is outside the acceptable range for a given parameter (e.g., pH or temperature) for the waterbody to meet its designated use,¹⁶ you must continue to monitor for the pollutant(s) annually until no longer detected, after which you may discontinue monitoring for that pollutant until monitoring resumes in year four of permit coverage, if applicable, per Part 4.2.5.1.a.ii.
- ii. **Year four of permit coverage.** Annual monitoring resumes in your fourth year of permit coverage for another year for a sub-set of parameters monitored for in the first monitoring year. In the fourth year of permit coverage, you must monitor for all pollutants causing impairment(s) that are associated with your industrial activity and/or are listed as a benchmark parameter for your subsector(s) (regardless of whether you have satisfied benchmark monitoring for the parameter per Part 4.2.2). To determine these pollutants, start with the list of pollutants for which the receiving waterbody is impaired and for which a standard analytical method exists (see 40 CFR Part 136), then compare that list to the industrial pollutants you identified in Part 6.2.3.2 and any sector-specific benchmark monitoring pollutants in Part B and, if applicable, Part 9. You must monitor for pollutants that appear on both the impairments list and either your industrial pollutants and/or your benchmark parameter list, including "indicator" or "surrogate" pollutants (as described in the "note" in 1 above). You must monitor once at each discharge point (except substantially identical discharge points (SIDPs)) for these pollutants. Consistent with Part 4.2, annual samples may be used to also satisfy any single remaining quarterly benchmark monitoring requirement applicable to your discharge.
- 1) If monitoring results indicate the monitored pollutant is not detected in your discharge, or is within the acceptable range for a given parameter for the waterbody to meet its designated use (e.g., pH or temperature),¹⁷ you may discontinue monitoring for that pollutant for the remainder of your permit coverage.
 - 2) If the monitoring results indicate that the monitored pollutant is detected in your discharge, or is outside the acceptable range for a given parameter (e.g., pH or temperature) for the waterbody to meet its designated use, you must continue to monitor for the pollutant(s)

¹⁵ Refer to your state's Water Quality Standards or contact the EPA Regional Office for assistance.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

annually until no longer detected, after which you may discontinue monitoring for that pollutant for the remainder of your permit coverage.

- iii. **Exception:** If sampling results in either Part 4.2.5.1.a.i or Part 4.2.5.1.a.ii above indicate the monitored pollutant is detected in your discharge, but you have determined that its presence is caused solely by natural background sources, you may discontinue monitoring for that pollutant for the duration of your permit coverage.

To support a determination that the pollutant's presence is caused solely by natural background sources, you must document and maintain with your SWPPP, as required by Part 6.5:

- 1) An explanation of why you believe that the presence of the pollutant of concern in your discharge is not related to the activities or materials at your facility; and
- 2) Data and/or studies that tie the presence of the pollutant of concern in your discharge to natural background sources in the watershed.

Natural background pollutants include those that occur naturally as a result of native soils, and vegetation, wildlife, or ground water. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources that are not naturally occurring. However, you may be eligible to discontinue annual monitoring for pollutants that occur solely from these sources and should consult the applicable EPA Regional Office for related guidance.

- b. **Discharges to impaired waters with an EPA-approved or established TMDL:** For stormwater discharges to waters for which there is an EPA-approved or established TMDL, you are not required to monitor for the pollutant(s) for which the TMDL was written unless EPA informs you, upon examination of the applicable TMDL and its wasteload allocation, that you are subject to such a requirement consistent with the assumptions and findings of the applicable TMDL and its wasteload allocation. EPA's notice will include specifications on stormwater discharge monitoring parameters and frequency. If there are questions, you may consult the applicable EPA Regional Office for guidance regarding required monitoring under this Part.

4.2.5.2 Exception for Inactive and Unstaffed Facilities. The requirement for impaired waters monitoring does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to stormwater. To invoke this exception, you must do the following:

- a. Maintain a statement with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.25(g) and sign and certify the statement in accordance with Appendix B, Subsection 11.
- b. If circumstances change and industrial materials or activities become exposed to stormwater or your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable impaired waters monitoring requirements under Part 4.2.5 as if you were in your first year of permit coverage. You must indicate in a "Change NOI" form per Part

7.2 that your facility has materials or activities exposed to stormwater or has become active and/or staffed.

- c. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then you must notify EPA of this change on your NOI form. You may discontinue impaired waters monitoring once you have notified EPA, and prepared and signed the certification statement described above concerning your facility's qualification for this special exception.

Note: This exception has different requirements for Sectors G, H, and J (see Part 8).

- 4.2.6 **Additional Monitoring Required by EPA.** EPA may notify you of additional stormwater discharge monitoring requirements that EPA determines are necessary to meet the permit's effluent limitations. Any such notice will briefly state the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

5. **Corrective Actions and Additional Implementation Measures (AIM)**

5.1 **Corrective Action**

- 5.1.1 **Conditions Requiring SWPPP Review and Revision to Ensure Effluent Limits are Met.** When any of the following conditions occur or are detected during an inspection, monitoring or other means, or EPA or the operator of the MS4 through which you discharge informs you that any of the following conditions have occurred, you must review and revise, as appropriate, your SWPPP (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of your stormwater control measures) so that this permit's effluent limits are met and pollutant discharges are minimized:
 - 5.1.1.1 An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the United States) occurs at your facility.
 - 5.1.1.2 A discharge violates a numeric effluent limit listed in Table 2-1 and/or in your Part 8 sector-specific requirements.
 - 5.1.1.3 Your stormwater control measures are not stringent enough for your stormwater discharge to be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards or to meet the non-numeric effluent limits in this permit.
 - 5.1.1.4 A required control measure was never installed, was installed incorrectly, or not in accordance with Parts 2 and/or 5, or is not being properly operated or maintained.
 - 5.1.1.5 Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).
- 5.1.2 **Conditions Requiring SWPPP Review to Determine if Modifications Are Necessary.** If construction or a change in design, operation, or maintenance at your facility occurs that significantly changes the nature of pollutants discharged via stormwater from your facility, or significantly increases the quantity of pollutants discharged, you must review your SWPPP (e.g., sources of pollution, spill and leak procedures, non-stormwater

discharges, selection, design, installation and implementation of your stormwater control measures) to determine if modifications are necessary to meet the effluent limits in this permit.

5.1.3 Deadlines for Corrective Actions

5.1.3.1 Immediate Actions. You must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until you can implement a permanent solution, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events. In Part 5, the term "immediately" means that the day you find a condition requiring corrective action, you must take all reasonable steps to minimize or prevent the discharge of pollutants until you can implement a permanent solution. However, if you identify a problem too late in the work day to initiate corrective action, you must perform the corrective action the following work day morning. The term "all reasonable steps" means you must respond to the conditions triggering the corrective action, such as cleaning up any exposed materials that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangements (i.e., scheduling) for a new SCM to be installed.

5.1.3.2 Subsequent Actions. If additional actions are necessary beyond those implemented pursuant to Part 5.1.3.1, you must complete the corrective actions (e.g., install a new or modified control and make it operational, complete the repair) before the next storm event if possible, and within 14 calendar days from the time of discovery that the condition in Part 5.1.3.1 is not met. If it is infeasible to complete the corrective action within 14 calendar days, you must document why it is infeasible to complete the corrective action within the 14-day timeframe. You must also identify your schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45-day timeframe, you may take the minimum additional time necessary to complete the corrective action, provided that you notify the appropriate EPA Regional Office of your intention to exceed 45 days, your rationale for an extension, and a completion date, which you must also include in your corrective action documentation (see Part 5.3). Where your corrective actions result in changes to any of the controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 14 calendar days of completing corrective action work.

These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements do not persist indefinitely.

5.1.4 Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. EPA may consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

5.1.5 Substantially Identical Discharge Points. If the event triggering corrective action is associated with a discharge point that had been identified as a "substantially identical discharge point" (SIDP) (see Parts 3.2.4.5 and 4.1.1), your review must assess the need for corrective action for all related SIDPs. Any necessary changes to control measures that affect these other discharge points must also be made before the next storm

event if possible, or as soon as practicable following that storm event. Any corrective actions must be conducted within the timeframes set forth in Part 5.1.3.

5.2 Additional Implementation Measures (AIM)

If any of the following AIM triggering events in Parts 5.2.3, 5.2.4, or 5.2.5 occur, you must follow the response procedures described in those parts, called "additional implementation measures" or "AIM." There are three AIM levels: AIM Level 1, Level 2, and Level 3. You must respond as required to different AIM levels which prescribe sequential and increasingly robust responses when a benchmark exceedance occurs. You must follow the corresponding AIM level responses and deadlines described in Parts 5.2.3, 5.2.4, and 5.2.5 unless you qualify for an exception under Part 5.2.6.

5.2.1 Baseline Status

Once you receive discharge authorization under this permit per Part 1.3, you are in a baseline status for all applicable benchmark parameters. If an AIM triggering event occurs and you have proceeded sequentially to AIM Level 1, 2 or 3, you may return directly to baseline status once the corresponding AIM-level response and conditions are met.

5.2.2 AIM Triggering Events. If an annual average exceeds an applicable benchmark threshold based on the following events, the AIM requirements have been triggered for that benchmark parameter. You must follow the corresponding AIM-level responses and deadlines described in Parts 5.2.3, 5.2.4, and 5.2.5 unless you qualify for an exception under Part 5.2.6. An annual average exceedance for a parameter can occur if:

5.2.2.1 The four-quarterly annual average for a parameter exceeds the benchmark threshold, or

5.2.2.2 Fewer than four quarterly samples are collected, but a single sample or the sum of any sample results within the sampling year exceeds the benchmark threshold by more than four times for a parameter. This result indicates an exceedance is mathematically certain [i.e., the sum of quarterly sample results to date is already more than four times the benchmark threshold].²

5.2.3 AIM Level 1

Your status changes from baseline to AIM Level 1 if quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred, unless you qualify for an exception under Part 5.2.6.

5.2.3.1 AIM Level 1 Responses. If any of the triggering events in Part 5.2.2 occur, you must:

Review SWPPP/Stormwater Control Measures. Immediately review your SWPPP and the selection, design, installation, and implementation of your stormwater control measures to ensure the effectiveness of your existing measures and

² For pH, an annual average exceedance can only occur if the four-quarter annual average exceeds the benchmark threshold.

determine if modifications are necessary to meet the benchmark threshold for the applicable parameter,¹⁹ and

Implement Additional Measures. After reviewing your SWPPP/stormwater control measures, you must implement additional measures, considering good engineering practices, that would reasonably be expected to bring your exceedances below the parameter's benchmark threshold; or if you determine nothing further needs to be done with your stormwater control measures, you must document per Part 5.3 and include in your annual report why you expect your existing control measures to bring your exceedances below the parameter's benchmark threshold for the next 12-month period.

5.2.3.2 AIM Level 1 Deadlines. If any modifications to or additional control measures are necessary in response to AIM Level 1, you must implement those modifications or control measures within 14 days of receipt of laboratory results, unless doing so within 14 days is infeasible. If doing so within 14 days is infeasible, you must document per Part 5.3 why it is infeasible and implement such modifications within 45 days.

5.2.3.3 Continue Quarterly Benchmark Monitoring. After compliance with AIM Level 1 responses and deadlines, you must continue quarterly benchmark monitoring for the next four quarters for the parameter(s) that caused the AIM triggering event at all affected stormwater discharge points, beginning no later than the next full quarter after compliance.

5.2.3.4 AIM Level 1 Status Update. While in AIM Level 1 status, you may either:

- a. **Return to Baseline Status.** Your AIM Level 1 status will return to baseline status if the AIM Level 1 responses have been met and continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has not occurred after four quarters of monitoring (i.e., the benchmark threshold is no longer exceeded for the parameter(s)). You may discontinue benchmark monitoring for that parameter until monitoring resumes in year 4 of permit coverage per Part 4.2.2.3 or if you have fulfilled all benchmark monitoring requirements per Part 4.2.2.3, then you may discontinue monitoring for that parameter for the remainder of the permit.
- b. **Advance to AIM Level 2.** Your AIM Level 1 status advances to AIM Level 2 status if you have completed AIM Level 1 responses and the continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred (i.e., the benchmark threshold continues to be exceeded for the same parameter(s)).

5.2.4 AIM Level 2

Your status changes from AIM Level 1 to AIM Level 2 if your continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred (i.e., the benchmark threshold continues to be exceeded for the parameter(s)), unless you qualify for an exception under Part 5.2.6.

¹⁹ Examples may include: review sources of pollution, spill and leak procedures, and/or non-stormwater discharges; conducting a single comprehensive clean up, making a change in subcontractor, implementing a new control measure, and/or increasing inspections.

- 5.2.4.1 AIM Level 2 Responses.** If any of the events in Part 5.2.2 occur, you must review your SWPPP and implement additional pollution prevention/good housekeeping SCMs, considering good engineering practices, beyond what you did in your AIM Level 1 responses that would reasonably be expected to bring your exceedances below the parameter's benchmark threshold. Refer to the MSGP sector-specific fact sheets for recommended controls found at [<https://www.epa.gov/nodes/stormwater-discharges-industrial-activities-fact-sheets-and-guidance>].
- 5.2.4.2 AIM Level 2 Deadlines.** You must implement additional pollution prevention/good housekeeping SCMs within 14 days of receipt of laboratory results that indicate an AIM triggering event has occurred and document per Part 5.3 how the measures will achieve benchmark thresholds. If it is feasible for you to implement a measure, but not within 14 days, you may take up to 45 days to implement such measure. You must document per Part 5.3 why it was infeasible to implement such measure in 14 days. EPA may also grant you an extension beyond 45 days, based on an appropriate demonstration by you, the operator.
- 5.2.4.3 Continue Quarterly Benchmark Monitoring.** After compliance with AIM Level 2 responses and deadlines, you must continue quarterly benchmark monitoring for the next four quarters for the parameter(s) that caused the AIM triggering event at all affected discharge points, beginning no later than the next full quarter after compliance.
- 5.2.4.4 AIM Level 2 Status Update.** While in AIM Level 2 status, you may either:
- a. Return to Baseline Status.** Your AIM Level 2 status will return to baseline status if the AIM Level 2 responses have been met and the continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has not occurred after four quarters of monitoring (i.e., the benchmark threshold is no longer exceeded for the parameter(s)). You may discontinue benchmark monitoring for that parameter until monitoring resumes in year 4 of permit coverage per Part 4.2.2.3, or if you have fulfilled all benchmark monitoring requirements per Part 4.2.2.3, then you may discontinue monitoring for that parameter for the remainder of the permit.
 - b. Advance to AIM Level 3.** Your AIM Level 2 status advances to AIM Level 3 status if you have completed the AIM Level 2 responses and the continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred (i.e., the benchmark threshold continues to be exceeded for the same parameter(s)).
- 5.2.5 AIM Level 3**
- Your status changes from AIM Level 2 to AIM Level 3 if your continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred (i.e., the benchmark threshold continues to be exceeded for the parameter(s)), unless you qualify for an exception per Part 5.2.6.
- 5.2.5.1 AIM Level 3 Responses.** If any of the triggering events in Part 5.2.2 occur, you must install structural source controls (e.g., permanent controls such as permanent cover, berms, and secondary containment), and/or treatment controls (e.g., sand fillers, hydrodynamic separators, oil-water separators, retention ponds, and infiltration structures), except as provided in Part 5.2.6 (AIM Exceptions). The controls or treatment technologies or treatment train you install should be appropriate for the pollutants that

triggered AIM Level 3 and should be more rigorous than the pollution prevention/good housekeeping-type stormwater control measures implemented under AIM Level 2 in Part 5.2.4. You must select controls with pollutant removal efficiencies that are sufficient to bring your exceedances below the benchmark threshold. You must install such stormwater control measures for the discharge point(s) in question and for substantially identical discharge points (SIDPs), unless you individually monitor those SIDPs and demonstrate that AIM Level 3 requirements are not triggered at those discharge points.

5.2.5.2 AIM Level 3 Deadlines. You must identify the schedule for installing the appropriate structural source and/or treatment stormwater control measures within 14 days and install such measures within 60 days. If it is not feasible within 60 days, you may take up to 90 days to install such measures, documenting in your SWPPP per Part 5.3 why it is infeasible to install the measure within 60 days. EPA may also grant you an extension beyond 90 days, based on an appropriate demonstration by you, the operator.

5.2.5.3 Continue Quarterly Benchmark Monitoring. After compliance with AIM Level 3 responses and deadlines, you must continue quarterly benchmark monitoring for the next four quarters for the parameter(s) that caused the AIM triggering event at all affected discharge points, beginning no later than the next full quarter after compliance.

5.2.5.4 AIM Level 3 Status Update. While in AIM Level 3 status, you may either:

- a. **Return to Baseline Status.** Your AIM Level 3 status will return to baseline status if the AIM Level 3 response(s) have been met and the continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has not occurred after four quarters of monitoring (i.e., the benchmark threshold is no longer exceeded for the parameter(s)). You may discontinue benchmark monitoring for that parameter until monitoring resumes in what would be year 4 of permit coverage per Part 4.2.2.3, or if you have fulfilled all benchmark monitoring requirements per Part 4.2.2.3, then you may discontinue monitoring for that parameter for the remainder of the permit.
- b. **Continue in AIM Level 3.** Your AIM Level 3 status will remain at Level 3 if you have completed the AIM Level 3 responses and the continued quarterly benchmark monitoring results indicate that an AIM triggering event per Part 5.2.2 has occurred (i.e., the benchmark threshold continues to be exceeded for the same parameter(s)). You must continue quarterly benchmark monitoring for the next four quarters for the parameter(s) that caused the AIM triggering event at all affected discharge points, beginning no later than the next full quarter after compliance. If you continue to exceed the benchmark threshold for the same parameter even after compliance with AIM Level 3, EPA may require you to apply for an individual permit.

5.2.6 AIM Exceptions

Following the occurrence of an AIM triggering event per Part 5.2.2, at any point or tier level of AIM and following four quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than four quarters of data), you may qualify for an exception below from AIM requirements and continued benchmark monitoring. Regardless if you qualify for and claim an exception, you must still review your SCMs, SWPPP, and other on-site activities to determine if actions or modifications are necessary or appropriate in light of your benchmark exceedance(s). If claiming an AIM exception, you must follow the requirements to demonstrate that you qualify for the

exception as provided below. If you qualify for an exception, you are not required to comply with the AIM responses or the continuation of quarterly benchmark monitoring for any parameters for which you can demonstrate that the benchmark exceedance is:

- 5.2.6.1 Solely Attributable to Natural Background Pollutant Levels:** You must demonstrate that the benchmark exceedance is solely attributable to the presence of that pollutant in natural background sources, provided that all the following conditions are met and you submit your analysis and documentation to the applicable EPA Regional Office upon request:
- The four-quarter average concentration of your benchmark monitoring results (or fewer than four-quarters of data that trigger an exceedance) is less than or equal to the concentration of that pollutant in the natural background; and
 - You document and maintain with your SWPPP, as required in Part 6.5.9, your supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. You must include in your supporting rationale any data previously collected by you or others (including literature studies) that describe the levels of natural background pollutants in your stormwater discharge. Natural background pollutants are those substances that are naturally occurring in soils or ground water. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring, such as other industrial facilities or roadways.
- 5.2.6.2 Due to Run-On:** You must demonstrate and obtain EPA agreement that run-on from a neighboring source (e.g., a source external to your facility) is the cause of the exceedance, provided that all the following conditions are met and you submit your analysis and documentation to the applicable EPA Regional Office for concurrence:
- After reviewing and revising your SWPPP, as appropriate, you should notify the other facility or entity contributing run-on to your discharges and request that they abate their pollutant contribution.
 - If the other facility or entity fails to take action to address their discharges or sources of pollutants, you should contact your applicable EPA Regional Office.
- 5.2.6.3 Due to an abnormal event:** You must immediately document per Part 5.3 that the AIM triggering event was abnormal, a description explaining what caused the abnormal event, and how any measures taken within 14 days of such event will prevent a recurrence of the exceedance. You must also collect a sample during the next measurable storm event to demonstrate that the result is less than the benchmark threshold, in which case you do not trigger any AIM requirements based on the abnormal event. You must report the result of this sample in Net-DMR in lieu of the result from the sample that caused the AIM triggering event. You may avail yourself of the "abnormal" demonstration opportunity of any AIM Level, one time per parameter, and one time per discharge point, which shall include substantially identical discharge points (SDP), provided you qualify for the exception.
- 5.2.6.4 For Aluminum and Copper benchmark parameters only: Demonstrated to not result in an exceedance of your facility-specific value using the national recommended water quality criteria in-lieu of the applicable MSGP benchmark threshold:**

To be eligible for the exception, you must demonstrate to EPA that your stormwater discharge(s) that exceeded the applicable nationally representative MSGP benchmark threshold would not result in an exceedance of a derived facility-specific value. The demonstration to EPA, which will be made publicly available, must meet the minimum elements below in order to be considered for and approved by the applicable EPA Regional Office. If you exceed the MSGP benchmark threshold for aluminum or copper, you must still comply with any applicable AIM requirements and additional benchmark monitoring until the demonstration is made to and approved by the applicable EPA Regional Office. In this case, EPA suggests that samples collected for any continued benchmark monitoring also be analyzed for the required input parameters for each model for efficiency. If you are an existing operator and you anticipate an exceedance of the MSGP benchmark(s) based on previous monitoring data and expect to utilize this exception(s), EPA recommends you begin the required data collection in your first year of permit coverage.

a. Aluminum (only for discharges to freshwater):

- i. Conditions for this exception are:
 - 1) Use of EPA's 2018 National Recommended Aluminum Aquatic Life Criteria: <https://www.epa.gov/wqc/aquatic-life-criteria-aluminum>;
 - 2) In-stream waterbody sampling for the three water quality input parameters for the recommended criteria model: pH, total hardness, and dissolved organic carbon (DOC); and
 - 3) Completion of sampling events sufficient to capture spatial and temporal variability. Sampling events must adequately represent each applicable season at the facility's location, which would likely be over the course of at least one year. An equal number of ambient waterbody samples must be collected at a single upstream and downstream location from the operator's discharge point(s) to the receiving water of the United States. Where there exists no ambient source water upstream of the operator's discharge point(s) to the receiving water of the United States, samples of the ambient downstream waterbody conditions are sufficient.
- ii. The demonstration provided to EPA must include, at minimum:
 - 1) A description of the sampling, analysis, and quality assurance procedures that were followed for data collection, following the guidance in Section 3 of EPA's Industrial Stormwater Monitoring and Sampling Guide, https://www.epa.gov/sites/production/files/2015-11/documents/msgp_monitoring_guide.pdf;
 - 2) The input parameters and export of results from the Aluminum Criteria Calculator, available at: <https://www.epa.gov/sites/production/files/2018-12/aluminum-criteria-calculator-v20.xlsm>; and,
 - 3) A narrative summary of results.

b. Copper (only for discharges to freshwater):

- i. Conditions for this exception are:
 - 1) Use of EPA's 2007 National Recommended Freshwater Copper Aquatic Life Criteria: <https://www.epa.gov/wqc/aquatic-life-criteria-copper>;
 - 2) In-stream waterbody sampling for the 10 water quality input parameters

to the BLM for copper; pH; dissolved organic carbon (DOC); alkalinity; temperature; major cations (calcium, magnesium, sodium, and potassium); and major anions (sulfate, chloride);

- 3) The water quality input parameters, with the exception of temperature, must fall within the range of conditions recommended for use in the BLM, found in Table 1-1 of the Data Requirements document: <https://www.epa.gov/sites/production/files/2015-11/documents/copper-data-requirements-training.pdf>; and
- 4) Completion of sampling events sufficient to capture spatial and temporal variability. Because some of the BLM input parameters are known to vary seasonally, EPA suggests a possible starting point of at least one sampling event per season.²⁰ Sampling events must adequately represent each applicable season at the facility's location, which would likely be over the course of at least one year. An equal number of ambient waterbody samples must be collected at a single upstream and downstream location from the operator's discharge point(s) to the receiving water of the United States. Where there exists no ambient source water upstream of the operator's discharge point(s) to the receiving water of the United States, samples of the ambient downstream waterbody conditions are sufficient.
 - ii. The demonstration provided to EPA must include, at minimum:
 - 1) A description of the sampling, analysis, and quality assurance procedures that were followed for data collection, following the guidance in Section 3 of EPA's Industrial Stormwater Monitoring and Sampling Guide, https://www.epa.gov/sites/production/files/2015-11/documents/msgp_monitoring_guide.pdf;
 - 2) A discussion of how the data collected reflects the site-specific characteristics and how the operator considered special circumstances that may affect copper toxicity throughout the expected range of receiving water conditions;
 - 3) The input file and export of the results from the BLM software, which can be requested at: <https://www.epa.gov/was-tech/copper-biotic-ligand-mode>; and
 - 4) A narrative summary of results.

5.2.6.5 Demonstrated to not result in any exceedance of water quality standards: You must demonstrate to EPA within 30 days of the AIM triggering event that the triggering event does not result in any exceedance of water quality standards. If it is not feasible to complete this demonstration within 30 days, you may take up to 90 days, documenting

²⁰ EPA training materials on Copper BLM for Data Requirements states that spatial variability in the BLM input parameters caused by physical factors such as watershed size or the presence or absence of a point source discharge(s) to a waterbody should also be considered when determining how many sampling events should be collected when using the BLM to develop site-specific copper criteria. Spatial variability in the BLM input parameters should also be considered when determining how many sampling locations should be selected for development of site-specific copper criteria using the BLM. Regardless of the number of sampling events involved, data collection should reflect site-specific characteristics and consider special circumstances that may affect copper toxicity throughout the expected range of receiving water conditions. See <https://www.epa.gov/sites/production/files/2015-11/documents/copper-data-requirements-training.pdf>.

In your SWPPP why it is infeasible to complete the demonstration within 30 days. EPA may also grant you an extension beyond 90 days, based on an appropriate demonstration by you, the operator. The demonstration to EPA, which will be made publicly available, must include the following minimum elements in order to be considered for approval by the EPA Regional Office:

- a. the water quality standards applicable to the receiving water;
- b. the average flow rate of the stormwater discharge;
- c. the average instream flow rates of the receiving water immediately upstream and downstream of the discharge point;
- d. the ambient concentration of the parameter(s) of concern in the receiving water immediately upstream and downstream of the discharge point demonstrated by full-storm composite sampling;
- e. the concentration of the parameter(s) of concern in the stormwater discharge demonstrated by full-storm, flow-weighted composite sampling;
- f. any relevant dilution factors applicable to the discharge; and
- g. the hardness of the receiving water.

Timeframe of EPA Review of Your Submitted Demonstration: EPA will review and either approve or disapprove of such demonstration within 90 days of receipt (EPA may take up to 180 days upon notice to you before the 90th day that EPA needs additional time).

- **EPA Approval of Your Submitted Demonstration.** If EPA approves such demonstration within this timeframe, you have met the requirements for this exception, and you do not have to comply with the corresponding AIM requirements and continued benchmark monitoring.
- **EPA Disapproval of Your Submitted Demonstration.** If EPA disapproves such demonstration within this timeframe, you must comply with the corresponding AIM requirements and continued benchmark monitoring, as required. Compliance with the AIM requirements would begin from the date EPA notifies you of the disapproval unless you submit a Notice of Dispute to the applicable EPA Regional Office in Part 7 within 30 days of EPA's disapproval.
- **EPA Does Not Provide Response Related to Your Submitted Demonstration.** If EPA does not provide a response on the demonstration within this timeframe, you may submit to the EPA Regional Office in Part 7 a Notice of Dispute.
- **Operator Submittal of Notice of Dispute.** You may submit all relevant materials, including support for your demonstration and all notices and responses to the Water Division Director for the applicable EPA Region to review within 30 days of EPA's disapproval or after 90 days (or 180 days if EPA has provided notice that it needs more time) of not receiving a response from EPA.
- **EPA Review of Notice of Dispute.** EPA will send you a response within 30 days of receipt of the Notice of Dispute. Time for action by you, the operator, upon disapproval shall be tolled during the period from filing of the Notice of Dispute until the decision on the Notice of Dispute is issued by the Water Division Director for the applicable EPA Region.

5.3 **Corrective Action and AIM Documentation**

- 5.3.1 **Documentation within 24 Hours.** You must document the existence of any of the conditions listed in Parts 5.1.1, 5.2.3, 5.2.4, or 5.2.5 within 24 hours of becoming aware of

such condition. You are not required to submit this documentation to EPA, unless specifically required or requested to do so. However, you must summarize your findings in the annual report per Part 7.4. Include the following information in your documentation:

- 5.3.2** Description of the condition or event triggering the need for corrective action review and/or AIM response. For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharges of pollutants to waters of United States, through stormwater or otherwise:
 - 5.3.2.1** Date the condition/triggering event was identified;
 - 5.3.2.2** Description of immediate actions taken pursuant to Part 5.1.3.1 to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures taken to prevent the recurrence of such releases (see Part 2.1.2.4); and
 - 5.3.2.3** A statement, signed and certified in accordance with Appendix B, Subsection 11.
- 5.3.3** **Documentation within 14 Days.** You must also document the corrective actions and/or AIM responses you took or will take as a result of the conditions listed in Parts 5.1.1, 5.2.3, 5.2.4, and/or 5.2.5 within 14 days from the time of discovery of any of those conditions/triggering events. Provide the dates when you initiated and completed (or expect to complete) each corrective action and/or AIM response. If infeasible to complete the necessary corrective actions and/or AIM responses within the specified timeframe, per Parts 5.1.1, 5.2.3, 5.2.4, or 5.2.5, you must document your rationale and schedule for installing the controls and making them operational as soon as practicable after the specified timeframe. If you notified EPA regarding an allowed extension of the specified timeframe, you must document your rationale for an extension. Include any additional information and/or rationale that is required and/or applicable to the specified corrective action and/or AIM response in Part 5. You are not required to submit this documentation to EPA, unless specifically required or requested to do so. However, you must summarize your corrective actions and/or AIM responses in the Annual Report per Part 7.4.

6. Stormwater Pollution Prevention Plan (SWPPP)

You must prepare a SWPPP for your facility before submitting your NOI for permit coverage. If you prepared a SWPPP for coverage under a previous version of this permit, you must review and update the SWPPP to implement all provisions of this permit prior to submitting your NOI. The SWPPP does not contain effluent limitations; such limitations are contained in Parts 2, 5, and 7 of the permit. The SWPPP is intended to document the selection, design, and installation of stormwater control measures to meet the permit's effluent limits. The SWPPP is a living document. Facilities must keep their SWPPP up-to-date throughout their permit coverage, such as making revisions and improvements to their stormwater management program based on new information and experiences with major storm events. As distinct from the SWPPP, the additional documentation requirements (see Part 6.5) are so that you document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

Note: Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under CWA section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the SWPPP, during an inspection, etc.

6.1 Person(s) Responsible for Preparing the SWPPP

You shall prepare the SWPPP in accordance with good engineering practices and to industry standards. The SWPPP may be developed by either a person on your staff or a third party you hire, but it must be developed by a "qualified person" and must be certified per the signature requirements in Part 6.2.7. If EPA concludes that the SWPPP is not in compliance with Part 6.2 of this permit, EPA may require the SWPPP to be reviewed, amended as necessary, and certified by a Professional Engineer, or for Sector G, H or J, by a Professional Geologist, with the education and experience necessary to prepare an adequate SWPPP.

Note: A "qualified person," as defined in Appendix A, is a person knowledgeable in the principles and practices of industrial stormwater controls and pollution prevention, and possesses the education and ability to assess conditions of the industrial facility that could impact stormwater quality, and the education and ability to assess the effectiveness of stormwater controls selected and installed to meet the requirements of the permit.

6.2 Required Contents of Your SWPPP

To be covered under this permit, your SWPPP must contain all of the following elements:

- Stormwater pollution prevention team (Part 6.2.1);
- Site description (Part 6.2.2);
- Summary of potential pollutant sources (Part 6.2.3);
- Description of stormwater control measures (Part 6.2.4);
- Schedules and procedures (Part 6.2.5);
- Documentation to support eligibility pertaining to other federal laws (Part 6.2.6); and
- Signature requirements (Part 6.2.7).

Where your SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS), copies of the relevant portions of those documents must be kept with your SWPPP.

6.2.1 Stormwater Pollution Prevention Team. You must identify the staff members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. Your stormwater pollution prevention team is responsible for overseeing development of the SWPPP, any modifications to it, and for implementing and maintaining control measures and taking corrective actions and/or AIM responses, when required. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

6.2.2 Site Description. Your SWPPP must include the following:

- 6.2.2.1 Activities at the facility.** Provide a description of the nature of the industrial activities at your facility.
- 6.2.2.2 General location map.** Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your stormwater discharges.
- 6.2.2.3 Site map.** Provide a map showing:
- a. Boundaries of the property and the size of the property in acres;
 - b. Location and extent of significant structures and impervious surfaces;
 - c. Directions of stormwater flow (use arrows), including flows with a significant potential to cause soil erosion;
 - d. Locations of all stormwater control measures;
 - e. Locations of all receiving waters, including wetlands, in the immediate vicinity of your facility. Indicate which waterbodies are listed as impaired and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters;
 - f. Locations of all stormwater conveyances including ditches, pipes, and swales;
 - g. Locations of potential pollutant sources identified under Part 6.2.3.2;
 - h. Locations where significant spills or leaks identified under Part 6.2.3.3 have occurred;
 - i. Locations of all stormwater monitoring points;
 - j. Locations of stormwater inlets and discharge points, with a unique identification code for each discharge point (e.g., 001, 002), indicating if you are treating one or more discharge points as "substantially identical" under Parts 3.2.4.5, 6.2.5.3, and 4.1.1, and an approximate outline of the areas draining to each discharge point;
 - k. If applicable, municipal separate storm sewer systems (MS4s) and where your stormwater discharges to them;
 - l. Areas of Endangered Species Act-designated critical habitat for endangered or threatened species, if applicable;
 - m. Locations of the following activities where such activities are exposed to precipitation:
 - i. fueling stations;
 - ii. vehicle and equipment maintenance and/or cleaning areas;
 - iii. loading/unloading areas;
 - iv. locations used for the treatment, storage, or disposal of wastes;
 - v. liquid storage tanks;
 - vi. processing and storage areas;
 - vii. immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 - viii. transfer areas for substances in bulk;
 - ix. machinery;

- x. locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.

6.2.3 **Summary of Potential Pollutant Sources.** You must describe in the SWPPP areas at your facility where industrial materials or activities are exposed to stormwater or from which authorized non-stormwater discharges originate. Industrial materials or activities include but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For structures located in areas of industrial activity, you must be aware that the structures themselves are potential sources of pollutants. This could occur, for example, when metals such as aluminum or copper are leached from the structures as a result of acid rain.

For each area identified, the description must include:

6.2.3.1 **Activities in the Area.** A list of the industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).

6.2.3.2 **Pollutants.** A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents) associated with each identified activity, which could be exposed to rainfall or snowmelt and could be discharged from your facility. The pollutant list must include all significant materials that have been handled, treated, stored or disposed, and that have been exposed to stormwater in the three years prior to the date you prepare or amend your SWPPP.

6.2.3.3 **Spills and Leaks.** You must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding discharge point(s) that would be affected by such spills and leaks. You must document all significant spills and leaks of oil or toxic or hazardous substances that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date you prepare or amend your SWPPP.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC § 9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

6.2.3.4 **Unauthorized Non-Stormwater Discharges Evaluation.** By the end of the first year of your permit coverage under this permit, you must inspect and document all discharge points at your facility as part of the SWPPP. If it is infeasible to complete the evaluation within the first year of permit coverage, you must document in your SWPPP why this is the case and identify the schedule by which you expect to complete the evaluation. Documentation of your evaluation must include:

- a. The date of the evaluation;
- b. A description of the evaluation criteria used;
- c. A list of the discharge points or onsite drainage points that were directly observed during the evaluation; and

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- d. If there are any unauthorized non-stormwater discharges (see Part 1.2.2 for the exclusive list of authorized non-stormwater discharges under this permit) you must immediately take action(s), such as implementing control measures, to eliminate those discharges or seek an individual NPDES wastewater permit and document that you obtained the permit (for example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge).
- e. An explanation of everything you did to immediately eliminate the unauthorized discharge per Part 5 Corrective Actions.

6.2.3.5 Salt Storage. You must document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

6.2.3.6 Sampling Data. Existing permitted facilities must summarize all stormwater discharge sampling data collected at the facility during the previous permit term. The summary shall include a narrative description (and may include data tables/figures) that adequately summarizes the collected sampling data to support identification of potential pollution sources at your facility. New dischargers and new sources must provide a summary of any available stormwater data they may have.

6.2.4 Description of Stormwater Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits. You must document the location and type of stormwater control measures you have specifically chosen and/or designed to comply with:

6.2.4.1 Part 2.1.2: Non-numeric technology-based effluent limits;

6.2.4.2 Parts 2.1.3 and 8: Applicable numeric effluent limitations guidelines-based limits;

6.2.4.3 Part 2.2: Water quality-based effluent limits;

6.2.4.4 Part 2.3: Any additional measures that formed the basis of eligibility regarding Endangered Species Act-listed threatened and endangered species or their critical habitat, National Historic Preservation Act historic properties, and/or federal CERCLA Site requirements;

6.2.4.5 Parts 8 and 9: Applicable effluent limits;

6.2.4.6 Regarding your control measures, you must also document, as appropriate:

- a. How you addressed the selection and design considerations in Part 2.1.1;
- b. How they address the pollutant sources identified in Part 6.2.3.

Effluent limit requirements in Part 2.1.2 that do not involve the site-specific selection of a stormwater control measure or are specific activity requirements (e.g., "cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth, or in line with manufacturer specifications, whichever is lower, and keeping the debris surface at least six inches below the lowest outlet pipe") are marked with an asterisk (*). For the requirements marked with an asterisk, you may include extra information, or you may just "copy-and-paste" these effluent limits word-for-word into your SWPPP without providing additional documentation.

6.2.5 Schedules and Procedures

6.2.5.1 Pertaining to Stormwater Control Measures Used to Comply with the Effluent Limits in Part 2. You must document the following in your SWPPP:

- a. **Good Housekeeping (see Part 2.1.2.2)** – A schedule or the convention used for determining when pickup and disposal of waste materials occurs. Also provide a schedule for routine inspections for leaks and conditions of drums, tanks and containers.
- b. **Maintenance (see Part 2.1.2.3)** – Preventative maintenance procedures, including regular inspections, testing, maintenance and repair of all stormwater control measures to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a storm event resulting in a stormwater discharge occur while a control measure is off-line. The SWPPP shall include the schedule or frequency for maintaining all control measures used to comply with the effluent limits in Part 2.
- c. **Spill Prevention and Response Procedures (see Part 2.1.2.4)** – Procedures for preventing and responding to spills and leaks, including notification procedures. For preventing spills, include in your SWPPP the stormwater control measures for material handling and storage, and the procedures for preventing spills that can contaminate stormwater. Also specify cleanup equipment, procedures and spill logs, as appropriate, in the event of spills. You may reference the existence of other plans for Spill Prevention, Control and Countermeasure (SPCC) developed for the facility under section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review consistent with Part 6.4.
- d. **Erosion and Sediment Controls (see Part 2.1.2.5)** – If you use polymers and/or other chemical treatments as part of your erosion and sediment controls, you must identify the polymers and/or chemicals used and the purpose.
- e. **Employee Training (see Part 2.1.2.8)** – The elements of your employee training plan shall include all, but not necessarily limited to, the requirements set forth in Part 2.1.2.8, and also the following:
 - ii. The content of the training;
 - iii. The frequency/schedule of training for employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit;
 - iv. A log of the dates on which specific employees received training.

6.2.5.2 Pertaining to Inspections and Assessments. You must document in your SWPPP your procedures for performing, as appropriate, the types of inspections specified by this permit, including:

- a. Routine facility inspections (see Part 3.1) and;
- b. Quarterly visual assessment of stormwater discharges (see Part 3.2).

For each type of inspection performed, your SWPPP must identify:

- a. Person(s) or positions of person(s) responsible for the inspection;
- b. Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular stormwater discharges (see Part 3.2.4);
- c. Specific items to be covered by the inspection, including schedules for specific discharge points.

If you are invoking the exception for inactive and unstaffed facilities relating to routine facility inspections and quarterly visual assessments, you must include in your SWPPP the information to support this claim as required by Parts 3.1.5 and 3.2.4.

4.2.5.3 Pertaining to Monitoring

- a. **Procedures for Each Type of Monitoring.** You must document in your SWPPP procedures for conducting the six types of analytical stormwater discharge monitoring specified by this permit, where applicable to your facility, including:
 - i. Indicator monitoring (Part 4.2.1);
 - ii. Benchmark monitoring (Part 4.2.2);
 - iii. Effluent limitations guidelines monitoring (Part 4.2.3);
 - iv. State- or tribal-specific monitoring (Part 4.2.4);
 - v. Impaired waters monitoring (Part 4.2.5);
 - vi. Other monitoring as required by EPA (Part 4.2.6).
- b. **Documentation for Each Type of Monitoring.** For each type of stormwater discharge monitoring, you must document in your SWPPP:
 - i. Locations where samples are collected, including any determination that two or more discharge points are substantially identical;
 - ii. Parameters for sampling and the frequency of sampling for each parameter;
 - iii. Schedules for monitoring at your facility, including schedule for alternate monitoring periods for climates with irregular stormwater discharges (see Part 4.1.6);
 - iv. Any numeric control values (benchmark thresholds, effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to stormwater discharges from each discharge point;
 - v. Procedures (e.g., responsible staff, logistics, laboratory to be used) for gathering storm event data, as specified in Part 4.1.
- c. **Exception for Inactive and Unstaffed Facilities.** If you are invoking the exception for inactive and unstaffed facilities for indicator monitoring, benchmark monitoring or impaired waters monitoring, you must include in your SWPPP the information to support this claim as required by Parts 4.2.2.5 and 4.2.5.2.
- d. **Exception for Substantially Identical Discharge Points (SIDP).** You must document the following in your SWPPP if you plan to use the SIDP exception for your quarterly visual assessment requirements in Part 3.2.4 or your indicator.

benchmark, or impaired waters monitoring requirements in Parts 4.2.1, 4.2.2, and 4.2.5, respectively (see also Part 4.1.1):

- i. Location of each SIDP;
- ii. Description of the general industrial activities conducted in the drainage area of each discharge point;
- iii. Description of the control measures implemented in the drainage area of each discharge point;
- iv. Description of the exposed materials located in the drainage area of each discharge point that are likely to be significant contributors of pollutants via stormwater discharges;
- v. An estimate of the runoff coefficient of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%);
- vi. Why the discharge points are expected to discharge substantially identical effluents.

6.2.6 Documentation to Support Eligibility Pertaining to Other Federal Laws

6.2.6.1 Documentation Regarding Endangered Species Act-Listed Threatened and Endangered Species and Critical Habitat Protection. You must keep with your SWPPP the documentation supporting your determination with regard to Part 1.1.4.

6.2.6.2 Documentation Regarding National Historic Preservation Act Historic Properties. You must keep with your SWPPP the documentation supporting your determination with regard to Part 1.1.5.

6.2.7 Signature Requirements. You must sign and date your SWPPP in accordance with Appendix B, Subsection 11.

6.3 Required SWPPP Modifications

You must modify your SWPPP based on any corrective actions and deadlines required under Part 5. You must sign and date any SWPPP modifications in accordance with Appendix B, Subsection 11.

6.4 SWPPP Availability

You must retain a complete copy of your current SWPPP required by this permit at the facility in any accessible format. A complete SWPPP includes any documents incorporated by reference and all documentation supporting your permit eligibility pursuant to Part 1.1 of this permit, as well as your signed and dated certification page. Regardless of the format, the SWPPP must be immediately available to facility employees, EPA, a state or tribe, the operator of an MS4 into which you discharge, and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an on-site inspection.

Your current SWPPP or certain information from your current SWPPP described below must also be made available to the public (except any confidential business information (CBI) or restricted information [as defined in Appendix A]), but you must clearly identify those portions of the SWPPP that are being withheld from public access; to do so, you must comply with one of the following two options:

6.4.1 Making Your SWPPP Publicly Available

You have three options to comply with the public availability requirements for the SWPPP: attaching your SWPPP to your NOI; providing a URL of your SWPPP in your NOI; or providing SWPPP information in your NOI. To remain current for all three options, you must update your SWPPP (by updating the attachment per Part 6.4.1.1 via a Change NOI), updating your webpage per Part 6.4.1.2, or updating the SWPPP information in the NOI per Part 6.4.1.3 via a Change NOI no later than 45 days after conducting the final routine facility inspection for the year required in Part 3.1. You may switch your preferred option throughout your permit coverage, but you must update your NOI as necessary to indicate your change in option. You are not required to post any CBI or restricted information (as defined in Appendix A) (such information may be redacted), but you must clearly identify those portions of the SWPPP that are being withheld from public access. CBI may not be withheld from those staff cleared for CBI review within EPA, USFWS or NMFS.

6.4.1.1 Attaching Your SWPPP to your NOI: You may attach a copy of your SWPPP, and any SWPPP modifications, records, and other reporting elements that must be kept with your SWPPP, to your NOI in NeT-MSGP.

6.4.1.2 Providing a URL of your SWPPP in your NOI: You may provide a URL in your NOI in NeT-MSGP where your SWPPP can be found, and maintain your current SWPPP at this URL. You must post any SWPPP modifications, records, and other reporting elements that must be kept with your SWPPP required for the previous year at the same URL as the main body of the SWPPP.

6.4.1.3 Providing SWPPP Information in your NOI: You may include the following information in your NOI in NeT-MSGP. Irrespective of this requirement, EPA may provide access to portions of your SWPPP to a member of the public upon request (except any CBI or restricted information (as defined in Appendix A)).

- a. Onsite industrial activities exposed to stormwater, including potential spill and leak areas (see Parts 6.2.3.1, 6.2.3.3 and 6.2.3.5);
- b. Pollutants or pollutant constituents associated with each industrial activity exposed to stormwater that could be discharged in stormwater and/or any authorized non-stormwater discharges listed in Part 1.2.2 (see Part 6.2.3.2);
- c. Stormwater control measures you employ to comply with the non-numeric technology-based effluent limits required in Parts 2.1.2 and 8, and any other measures taken to comply with the requirements in Part 2.2 Water Quality-Based Effluent Limitations (see Part 6.2.4). If you use polymers and/or other chemical treatments as part of your erosion and sediment controls, you must identify the polymers and/or chemicals used and the purpose; and
- d. Schedule for good housekeeping and maintenance (see Part 6.2.5.1) and schedule for all inspections required in Part 3 (see Part 6.2.5.2).

6.5 Additional Documentation Requirements

You are required to keep the following inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit:

6.5.1 A copy of the NOI submitted to EPA along with any correspondence exchanged between you and EPA specific to coverage under this permit;

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- 6.5.2 A copy of the authorization email you receive from the EPA assigning your NPDES ID;
 - 6.5.3 A copy of this permit (either a hard copy or an electronic copy easily available to SWPPP personnel);
 - 6.5.4 Documentation of any maintenance and repairs of stormwater control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 2.1.2.3);
 - 6.5.5 All inspection reports, including the Routine Facility Inspection Reports (see Part 3.1.6) and Visual Assessment Documentation (see Part 3.2.3);
 - 6.5.6 Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 3.2.4 and 4.1.5);
 - 6.5.7 Corrective action documentation required per Part 5.1;
 - 6.5.8 Documentation of any benchmark threshold exceedances, which AIM Level triggering event the exceedance caused, and AIM response you employed per Part 5.2, including:
 - 6.5.8.1 The AIM triggering event;
 - 6.5.8.2 The AIM response taken;
 - 6.5.8.3 Any rationale that SWPPP/SCM changes were unnecessary;
 - 6.5.8.4 Any documentation required to meet any AIM exception per Part 5.2.6.
 - 6.5.9 Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge after three years or were solely attributable to natural background sources (see Part 4.2.5.1); and
 - 6.5.10 Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part 3.1.5), quarterly visual assessments (see Part 3.2.4.4), benchmark monitoring (see Part 4.2.2.5), and/or impaired waters monitoring (see Part 4.2.5.2).
- 7. Reporting and Recordkeeping**
- 7.1 Electronic Reporting Requirement**
- You must submit all NOIs, NOTs, NECs, Annual Reports, Discharge Monitoring Reports (DMRs), and other reporting information as appropriate electronically, unless the EPA Regional Office grants you a waiver based on one of the following conditions:
- If your headquarters is physically located in a geographic area (i.e., zip code or census tract) that is identified as under-served for broadband Internet access in the most recent report from the Federal Communications Commission; or

- If you have limitations regarding available computer access or computer capability,

Waivers are only granted for a one-time use for a single information submittal, e.g., an initial waiver for an NOI does not apply for the entire term of the permit for other forms. If you need to submit information on paper after your first waiver, you must apply for a new waiver. The EPA Regional Office may extend a waiver on a case-by-case basis.

If you wish to obtain a waiver from submitting a report electronically, you must submit a request to the applicable EPA Regional Office, found in Part 7.8. In that request you must document which exemption you meet, provide evidence supporting any claims, and a copy of your completed paper form. A waiver may only be considered granted once you receive written confirmation from EPA or its authorized representative.

7.2 **Submitting Information to EPA**

- 7.2.1 **Submitting Forms via Net-MSGP.** You must submit all required information via EPA's electronic NPDES eReporting tool (Net), unless the permit states otherwise or unless you have been granted a waiver per Part 7.1. You can both prepare and submit required information in Net-MSGP using specific forms, also found in the permit's appendices. To access Net-MSGP, go to <https://cdxnodenan.epa.gov/net-msgp/action/login>.

Information you must submit to EPA via Net-MSGP:

- Notice of Intent (NOI) (Part 1.3);
- Change Notice of Intent (NOI) (Part 1.3.4);
- No Exposure Certification (NEC) (Part 1.5);
- Notice of Termination (NOT) (Part 1.4); and
- Annual Report (AR) (Part 7.4).

Note: You must submit Discharge Monitoring Reports (see Part 7.3) electronically using Net-DMR.

If the applicable EPA Regional Office grants you a waiver from electronic reporting, you must use the required forms found in the Appendices.

- 7.2.2 **Other Information Required to be Submitted.** Information required to be submitted to the applicable EPA Regional Office at the address in Part 7.8:

- New Dischargers and New Sources to Water Quality-Impaired Waters (Part 1.1.6.2);
- Exceedance Report for Numeric Effluent Limitations (Part 7.5); and
- Additional Reporting (Part 7.6)

7.3 **Reporting Monitoring Data to EPA**

- 7.3.1 **Submitting Monitoring Data via Net-DMR.** You must submit all stormwater discharge monitoring data collected pursuant to Part 4 to EPA using Net-DMR, EPA's electronic DMR system (for more information visit: <https://www.epa.gov/compliance/npdes-ereporting> (unless the applicable EPA Regional Office grants you a waiver from electronic reporting, in which case you may submit a paper DMR form) no later than 30 days after you have received your complete laboratory results for all monitoring discharge points for the reporting period. Your monitoring requirements (i.e., parameters required to be monitored and sample frequency) will be prepopulated on your electronic Discharge Monitoring Report (DMR) form based on the information you

reported on your NOI form through the Net-MSGP. Accordingly, you must certify the following changes to your monitoring frequency to EPA by submitting a Change NOI in Net-MSGP, unless EPA has completed the development of planned features in the electronic systems to process submitted monitoring results to automatically turn monitoring on/off as applicable, which will trigger changes to your monitoring requirements in Net-DMR:

- 7.3.1.1 All benchmark monitoring requirements have been fulfilled for the permit term;
- 7.3.1.2 All impaired waters monitoring requirements have been fulfilled for the permit term;
- 7.3.1.3 Benchmark monitoring requirements no longer apply because the EPA Regional Office has concurred with your assessment that run-on from a neighboring source is the cause of the exceedance;
- 7.3.1.4 Benchmark and/or impaired monitoring requirements no longer apply because your facility is inactive and unstaffed;
- 7.3.1.5 Benchmark and/or impaired monitoring requirements now apply because your facility has changed from inactive and unstaffed to active and staffed;
- 7.3.1.6 For Sector G2 only: Discharges from waste rock and overburden piles have exceeded benchmark thresholds;
- 7.3.1.7 A numeric effluent limitation guideline has been exceeded;
- 7.3.1.8 A numeric effluent limitation guideline exceedance is back in compliance.
- 7.3.2 **When You Can Discontinue Submission of Monitoring Data.** Once you have completely fulfilled applicable monitoring requirements, you are no longer required to report monitoring results using Net-DMR. If you have only partially fulfilled your benchmark monitoring and/or impaired waters monitoring requirements (e.g., your four quarterly average is below the benchmark for some, but not all, parameters; you did not detect some, but not all, impairment pollutants), you must continue to report your results in Net-DMR for the remaining monitoring requirements. If the EPA Regional Office grants you a waiver per Part 7.1, you must submit paper reporting forms by the same deadline.
- 7.3.3 **State or Tribal Required Monitoring Data.** See Part 9 for specific reporting requirements applicable to individual states or tribes.
- 7.3.4 **Submission Deadline for Indicator and Benchmark Monitoring Data.** For both indicator and benchmark monitoring, you are required to submit sampling results to EPA no later than 30 days after receiving your complete laboratory results for all monitored discharge points for each monitoring period that you are required to collect samples, per Part 4.2.1, and Part 4.2.2. If you collect samples during multiple storm events in a single quarter (e.g., due to adverse weather conditions, climates with irregular stormwater discharges, or areas subject to snow), you are required to submit all sampling results for each storm event to EPA within 30 days of receiving all laboratory results for the event. Or, for any of your monitored discharge points that did not have a discharge within the reporting period, using Net-DMR, you must report that no discharges occurred for that discharge point no later than 30 days after the end of the reporting period.

7.4 Annual Report

You must submit an Annual Report to EPA via Net-MSGP, per Part 7.2, by January 30th for each year of permit coverage containing information generated from the past calendar year. You must include the following information in the Annual Report:

- 7.4.1** A summary of your past year's routine facility inspection documentation required (Part 3.1.6). In addition, if you are an operator of an airport facility (Sector 5) that is subject to the airport effluent limitations guidelines and are complying with the Part 8.S.9.1 effluent limitation through the use of non-urea-containing deicers, provide a statement certifying that you do not use pavement deicers containing urea. (Note: Operators of airport facilities that are complying with Part 8.S.9.1 by meeting the numeric effluent limitation for ammonia do not need to include this statement.)
- 7.4.2** A summary of your past year's visual assessment documentation (see Part 3.2.3);
- 7.4.3** A summary of your past year's corrective action and any required AIM documentation (see Part 5.3). If you have not completed required corrective action or AIM responses at the time you submit your annual report, you must describe the status of any outstanding corrective action(s) or AIM responses. Also describe any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that you are in compliance with the permit.

Your Annual Report must also include a statement, signed and certified in accordance with Appendix B, Subsection 11.

7.5 Numeric Effluent Limitations Exceedance Report

If follow-up monitoring per Part 4.2.3.3 exceeds a numeric effluent limit, you must submit an Exceedance Report to EPA no later than 30 days after you have received your laboratory results. Send the Exceedance Report to the applicable EPA Regional Office listed in Part 7.8, and report the monitoring data through Net-DMR. Your report must include the following:

- 7.5.1** NPDES ID;
- 7.5.2** Facility name, physical address and location;
- 7.5.3** Name of receiving water;
- 7.5.4** Monitoring data from this and the preceding monitoring event(s);
- 7.5.5** An explanation of the situation, including what you have done and intend to do (should your corrective actions not yet be complete) to correct the violation;
- 7.5.6** An appropriate contact name and phone number.

7.6 Additional Standard Recordkeeping and Reporting Requirements

In addition to the reporting requirements stipulated in Part 7, you are also subject to the standard permit reporting provisions of Appendix B, Subsection 12. You must submit the following reports to the applicable EPA Regional Office listed in Part 7.8, as applicable. If you discharge through an MS4, you must also submit these reports to the MS4 operator (identified pursuant to Part 6.2.2).

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- 7.6.1** 24-hour reporting (see Appendix B, Subsection 12.F) – You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances;
- 7.6.2** 5-day follow-up reporting to the 24-hour reporting (see Appendix B, Subsection 12.F) – A written submission must also be provided within five days of the time you become aware of the circumstances;
- 7.6.3** Reportable quantity spills (see Part 2.1.2.4) – You must provide notification, as required under Part 2.1.2.4, as soon as you have knowledge of a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity;
- 7.6.4** Planned changes (see Appendix B, Subsection 12.A) – You must give notice to EPA promptly, no fewer than 30 days prior to making any planned physical alterations or additions to the permitted facility that qualify the facility as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged;
- 7.6.5** Anticipated noncompliance (see Appendix B, Subsection 12.B) – You must give advance notice to EPA of any planned changes in the permitted facility or activity which you anticipate will result in noncompliance with permit requirements;
- 7.6.6** Compliance schedules (see Appendix B, Subsection 12.E) – Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date;
- 7.6.7** Other noncompliance (see Appendix B, Subsection 12.G) – You must report all instances of noncompliance not reported in your Annual Report, compliance schedule report, or 24-hour report at the time monitoring reports are submitted; and
- 7.6.8** Other information (see Appendix B, Subsection 12.H) – You must promptly submit facts or information if you become aware that you failed to submit relevant facts in your NOI, or that you submitted incorrect information in your NOI or in any report.
- 7.7** **Record Retention Requirements**
You must retain copies of your SWPPP (including any modifications made during the term of this permit), additional documentation requirements pursuant to Part 6.5 (including documentation related to any corrective actions or AIM responses taken pursuant to Part 5), all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that your coverage under this permit expires or is terminated.

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7.8 Addresses for Reports

Permit Part	EPA Region	Areas Covered	Address
7.8.1	1	Connecticut Massachusetts New Hampshire Rhode Island Vermont	U.S. EPA Region 1 Water Division Stormwater and Construction Permits Section 5 Post Office Square, Ste. 100 (06-1) Boston, MA 02109-3912
7.8.2	2	New Jersey New York	U.S. EPA Region 2 NPDES Stormwater Program 290 Broadway, 24th Floor New York, NY 10007-1866
		Puerto Rico Virgin Islands	U.S. EPA Region 2 Caribbean Environmental Protection Division NPDES Stormwater Program City View Plaza II – Suite 7000 48 Rd. 165 Km 1.2 Guaynabo, PR 00968-8069
7.8.3	3	Delaware District of Columbia Maryland Pennsylvania Virginia West Virginia	U.S. EPA Region 3 NPDES Permits Section, MC 3WD41 1650 Arch Street Philadelphia, PA 19103
7.8.4	4	Alabama Florida Georgia Kentucky Mississippi North Carolina South Carolina Tennessee	U.S. EPA Region 4 Water Division NPDES Stormwater Program Atlanta Federal Center 61 Forsyth Street SW Atlanta, GA 30303-3104
7.8.5	5	Illinois Indiana Michigan Minnesota Ohio Wisconsin	U.S. EPA Region 5 NPDES Program Branch 77 W. Jackson Blvd. MC WPI 6J Chicago, IL 60604-3507
7.8.6	6	Arkansas Louisiana Oklahoma Texas New Mexico (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)	U.S. EPA Region 6 Permitting Section (WD-PE) 1201 Elm Street, Suite 500 Dallas, TX 75270
7.8.7	7	Iowa Kansas Missouri	U.S. EPA Region 7 NPDES Stormwater Program 11201 Renner Blvd

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Permit Part	EPA Region	Areas Covered	Address
		Nebraska	Lenexa, KS 66219
7.8.8	8	Colorado Montana North Dakota South Dakota Wyoming Utah (except see Region 9 for Goshute Reservation and Navajo Reservation lands) The Ute Mountain Reservation in New Mexico The Pine Ridge Reservation in Nebraska	EPA Region 8 Storm Water Program M/C: 8P-W-WW 1595 Wynkoop Street Denver, CO 80202-1129
7.8.9	9	Arizona California Hawaii Nevada Guam American Samoa The Commonwealth of the Northern Mariana Islands The Goshute Reservation in Utah and Nevada The Navajo Reservation in Utah, New Mexico, and Arizona The Duck Valley Reservation in Idaho Fort McDermitt Reservation in Oregon	U.S. EPA Region 9 Water Division NPDES Stormwater Program (WTR-2-3) 75 Hawthorne Street San Francisco, CA 94105-3901
7.8.10	10	Alaska Idaho Oregon (except see Region 9 for Fort McDermitt Reservation) Washington	U.S. EPA Region 10 Water Division NPDES Stormwater Program (19-C04) 1200 4th Avenue, Suite 155 Seattle, WA 98101-3188
7.8.11	State and Tribal Addresses		See Part 9 (states and tribes) for the addresses of applicable states or tribes that require submission of information to their agencies.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart A – Sector A – Timber Products

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.A.2 Limitations on Coverage

8.A.2.1 Prohibition of Discharges. (See also Part 1.1.3) Not covered by this permit: stormwater discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate NPDES permit.

8.A.2.2 Authorized Non-Stormwater Discharges. (See also Part 1.2.2) 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 minimize the discharge of wood debris, leachate generated from decaying wood materials, and the generation of dust.

8.A.4 Additional SWPPP Requirements

8.A.4.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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 6.2.3.2) Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in your 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.

8.A.4.3 Description of Stormwater Management Controls. (See also Part 6.2.4) 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 your 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 3.1)

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

8.A.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.A-1 identifies indicator monitoring that applies to the specific subsectors of Sector A. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector A (Subsectors A1, A2, A3, and A4) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Applies to all Sector A (Subsectors A1, A2, A3, and A4) facilities that manufacture, use, or store creosote or creosote-treated wood in areas that are exposed to precipitation	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.A.7 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.A-2 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

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Part 8 – Sector-Specific Requirements (as modified)

Subsector (You 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)	120.0 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Zinc (freshwater) ¹ Total Recoverable Zinc (saltwater) ²	Hardness Dependent 90 µg/L
Subsector A2. Wood Preserving (SIC 2491)	Total Recoverable Arsenic (freshwater)	150 µg/L
	Total Recoverable Arsenic (saltwater)	69 µg/L
	Total Recoverable Copper (freshwater)	5.19 µg/L
	Total Recoverable Copper (saltwater) ²	4.8 µg/L
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)	120.0 mg/L
	Total Suspended Solids (TSS)	100.0 mg/L

¹ The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix L "Calculating Hardness in Receiving Waters for Hardness-Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness-Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (µg/l)
0-24.99 mg/L	57
25-49.99 mg/L	52
50-74.99 mg/L	80
75-99.99 mg/L	107
100-124.99 mg/L	132
125-149.99 mg/L	157
150-174.99 mg/L	181

Freshwater Hardness Range	Zinc (µg/l)
175-199.99 mg/L	204
200-224.99 mg/L	227
225-249.99 mg/L	249
250+ mg/L	260

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

8.A.8 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.A-3 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 waste streams 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

¹ Monitor annually.

8.A.8.1 Credit for Pollutants in Intake Water. For discharges that are comprised solely of water drawn from the same body of water into which the discharges flow and that exceed an applicable effluent limitation, you may be eligible for a credit to the extent necessary to meet the limitation. To obtain this credit, you must show that your discharge would meet the limitation in the absence of the pollutant(s) in the intake water by demonstrating that the control measures you use to meet the limitation would, if properly installed and operated, meet the limitations for the pollutant (i.e., the pollutant level in your discharge is in exceedance of the limitation due to the pollutant concentration in the source or intake water). You must consult the appropriate EPA Regional Office for guidance in seeking a pollutant credit under this Part. EPA will notify you whether you are eligible for the credit, and, if so, provide the scope of such credit.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart B – Sector B – Paper and Allied Products

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.B.2 Indicator Monitoring (See also Part 4.2.1)

Table 8.B-1 identifies indicator monitoring that applies to the specific subsectors of Sector B. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector B (Subsectors B1 and B2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector B2. Pulp Mills (SIC Code 2611); Paper Mills (SIC Code 2621); Paperboard Containers and Boxes (SIC Code 2652-2657); Converted Paper and Paperboard Products, Except Containers and Boxes (SIC Code 2671-2679)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 15 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.B.3 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.B-2 identifies benchmarks that apply to the specific subsectors of Sector B. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.B-2		
Subsector (You 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.C.2 Limitations on Coverage

8.C.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) 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; wash water from material handling and processing areas; and wash water from drum, tank or container rinsing and cleaning. (EPA includes this prohibited non-stormwater discharge here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.C.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.C-1 identifies indicator monitoring that applies to the specific subsectors of Sector C. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.C-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector C (Subsectors C1, C2, C3, C4, and C5) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.C-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Subsector C5. Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances (SIC Code 2833-2836); Paints, Varnishes, Lacquers, Enamels, and Allied Products (SIC Code 2851); Industrial Organic Chemicals (SIC Code 2841-2847); Miscellaneous Chemical Products (SIC Code 2891-2899); Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Points for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors (SIC Code 3952 (limited to list of inks and paints)); Petroleum Refining (SIC Code 2911);	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
Subsector C5. Petroleum Refining (SIC Code 2911);	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.C.4 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.C-2 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.C-2		
Subsector (You 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 Recoverable Lead (freshwater) ²	Hardness Dependent
	Total Recoverable Lead (saltwater) ¹	210 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
	Total Recoverable Zinc (saltwater) ¹	90 µg/L
	Total Phosphorus	2.0 mg/L

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Part 8 – Sector-Specific Requirements (as modified)

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	Total Recoverable Aluminum	1,100 µg/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 Recoverable Zinc (freshwater) ²	Hardness Dependent
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Recoverable Zinc (saltwater) ¹	90 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
	Total Recoverable Zinc (saltwater) ¹	90 µg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 4.3.2.1. To identify the applicable "hardness range" for determining their benchmark value applicable to their facility, Hardness Dependent benchmarks follow in the table below:

Freshwater Hardness Range	Lead (µg/l)	Zinc (µg/l)
0-24.99 mg/l	14	37
25-49.99 mg/L	21	52
50-74.99 mg/L	43	90
75-99.99 mg/L	69	107
100-124.99 mg/l	95	132
125-149.99 mg/L	123	157
150-174.99 mg/l	152	181
175-199.99 mg/L	182	204
200-224.99 mg/l	213	227
225-249.99 mg/L	246	249
250+ mg/L	282	280

8.C.5 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.C-3 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 waste streams that may be covered under this permit.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.C-3¹		
Industrial Activity	Parameter	Effluent
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)	105.0 mg/L, daily maximum
		35 mg/L, 30-day avg.
	Fluoride	75.0 mg/L, daily maximum
		25.0 mg/L, 30-day avg.

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 1.1.3):

8.D.2.1 Stormwater 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)

The following stormwater discharges associated with industrial activity are not authorized under Sector D:

8.D.2.2 Stormwater discharges from oil recycling facilities, which are covered under Sector N (see Part 8.N); and

8.D.2.3 Stormwater discharges associated with fats and oils rendering, which are covered under Sector U (see Part 8.U).

8.D.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.D-1 identifies indicator monitoring that applies to the specific subsectors of Sector D. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.D-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector D (Subsectors D1 and D2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector D1. Asphalt Paving and Roofing Materials (SIC Code 2951, 2952)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

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Table 8.D-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Subsector D2. Miscellaneous Products of Petroleum and Coal (SIC Code 2992, 2999)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.D.4 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.D-2 identifies benchmarks that apply to the specific subsectors of Sector D. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.D-2		
Subsector	Parameter	Benchmark Monitoring Concentration
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2961, 2952)	Total Suspended Solids (TSS)	100 mg/L

8.D.5 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.D-3 identifies effluent limitations that apply to the industrial activities described below. Compliance with these effluent limitations is to be determined based on discharges from these industrial activities independent of commingling with any other waste streams that may be covered under this permit.

Table 8.D-3 ¹		
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	15.0 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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) As part of your good housekeeping program, 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. Sweep or vacuum paved surfaces of the site that are exposed to stormwater at regular intervals or use other equivalent measures (e.g., wash down the area and collect and/or treat and properly dispose of the washdown water) to minimize the potential discharge of these materials in stormwater. Indicate in your SWPPP the frequency of sweeping, vacuuming or other 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 in areas where cement, aggregate, kiln dust, fly ash or settled dust are being handled or processed and may be discharged in stormwater. You must also prevent the exposure of fine granular solids (e.g., cement, fly ash, kiln dust) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, buildings or under other covering.

8.E.3 Additional SWPPP Requirements

8.E.3.1 Drainage Area Site Map. (See also Part 6.2.2) 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 Discharge Testing. (See also Part 6.2.3.4) For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge testing a description of measures that ensure that process wastewaters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES wastewater permit requirements or are recycled.

8.E.4 Indicator Monitoring (See also Part 4.2.1)

Table 8.E-1 identifies indicator monitoring that applies to the specific subsectors of Sector E. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

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Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector E (Subsectors E1, E2, and E3) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during your coverage under this permit.	Polyaromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector E3: Flat Glass (SIC Code 3211); Glass and Glassware, Pressed or Blown (SIC Code 3221, 3229); Glass Products Made of Purchased Glass (SIC Code 3231); Hydraulic Cement (SIC Code 3241); Cut Stone and Stone Products (SIC Code 3281); Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products (SIC Code 3291-3299)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.E.5 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.E-2 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You 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 Recoverable Aluminum	1,100 µg/L
Subsector E2: Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	Total Suspended Solids (TSS)	100 mg/L

8.E.6 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.E-3 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 waste streams that may be covered under this permit.

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Table 8.E-3 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from material storage piles at cement manufacturing facilities (SIC 3241)	Total Suspended Solids (TSS)	50 mg/L daily maximum
	pH	6.0 – 9.0 s.u.f.

¹ Monitor annually.

² Any untreated overflow from facilities designed, constructed and operated to treat the volume of stormwater from materials storage piles which is associated with a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations [40 CFR 411.32(b)].

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart F – Sector F – Primary Metals

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 your good housekeeping program, you must implement a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust or debris may accumulate to minimize the discharge of pollutants in stormwater. The cleaning and maintenance program must encompass, as appropriate, areas where material loading and unloading, storage, handling and processing occur.

Stabilize unpaved areas using vegetation or paving where there is vehicle traffic or where material loading and unloading, storage, handling and processing occurs, unless feasible.

For paved areas of the facility where particulate matter, dust or debris may accumulate, to minimize the discharge of pollutants in stormwater, implement control measures such as the following, where determined to be feasible (list not exclusive): sweeping or vacuuming at regular intervals; and washing down the area and collecting and/or treating and properly disposing of the washdown water. For unstabilized areas or for stabilized areas where sweeping, vacuuming, or washing down is not possible, to minimize the discharge of particulate matter, dust, or debris or other pollutants in stormwater, implement stormwater management devices such as the following, where determined to be feasible (list not exclusive): sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, and 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 6.2.2) Identify in the SWPPP where any of the following activities may be exposed to precipitation or stormwater: 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 6.2.3) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or

stormwater: areas where there is the potential for deposition of particulate matter from process air emissions or losses during material-handling activities.

8.F.4 Additional Inspection Requirements (See also Part 3.1)

As part of conducting your routine facility inspections at least quarterly (Part 3.1), address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, cyclones), for any signs of degradation (e.g., leaks, corrosion, improper operation) that could limit their efficiency and lead to excessive emissions. Consider monitoring air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater.

8.F.5 Indicator Monitoring (See also Part 4.2.1)

Table 8.F-1 identifies indicator monitoring that applies to the specific subsectors of Sector F. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.F-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector F (Subsectors F1, F2, F3, F4, and F5) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC Code 3312-3317)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector F2. Iron and Steel Foundries (SIC Code 3321-3325)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC Code 3351-3357)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector F4. Nonferrous Foundries (Castings) (SIC Code 3363-3369)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

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Table 8.F-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Subsector F5. Primary Smelting and Refining of Nonferrous Metals (SIC Code 3331-3339); Secondary Smelting and Refining of Nonferrous Metals (SIC Code 3341); Miscellaneous Primary Metal Products (SIC Code 3398, 3399)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.F.6 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.F-2 identifies benchmarks that apply to the specific subsectors of Sector F. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.F-2		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Recoverable Aluminum	1,100 µg/L
	Total Recoverable Zinc (freshwater)?	Hardness Dependent
	Total Recoverable Zinc (saltwater)	90 µg/L
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	Total Recoverable Aluminum	1,100 µg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Copper (freshwater)	5.19 µg/L
	Total Recoverable Copper (saltwater)	4.8 µg/L
	Total Recoverable Zinc (freshwater)?	Hardness Dependent
Total Recoverable Zinc (saltwater)	90 µg/L	

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Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Recoverable Copper (freshwater)	5.19 µg/L
	Total Recoverable Copper (saltwater) ¹	4.8 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Recoverable Copper (freshwater)	5.19 µg/L
	Total Recoverable Copper (saltwater) ¹	4.8 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
	Total Recoverable Zinc (saltwater)	90 µg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix L, "Calculating Hardness in Receiving Waters for Hardness-Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness-Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (µg/l)
0-24.99 mg/l	37
25-49.99 mg/l	52
50-74.99 mg/l	60
75-99.99 mg/l	107
100-124.99 mg/l	132
125-149.99 mg/l	157
150-174.99 mg/l	181
175-199.99 mg/l	204
200-224.99 mg/l	227
225-249.99 mg/l	249
250+ mg/l	260

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart G – Sector G – Metal Mining

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

Note: Where compliance with a requirement in a separate exploration permit, mining permit, reclamation plan, Surface Mining Control and Reclamation Act (SMCRA) requirements, etc. will result in you fully meeting any requirement in this Subpart, you are considered to have complied with the relevant requirement in this Subpart. You must include documentation in your SWPPP describing your rationale for concluding that any particular action on your part is sufficient to comply with the corresponding requirement in this Subpart.

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 D-1 of Appendix D. Coverage is required for metal mining facilities that discharge stormwater contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

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

8.G.1.2 Covered Discharges from Active and Temporarily Inactive Facilities. Only the stormwater discharges from the following areas are covered:

- Waste rock and overburden piles if composed entirely of stormwater and not combined with mine drainage;
- Topsoil piles;
- Offsite haul and access roads;
- Onsite haul and access roads constructed of waste rock, overburden or spent ore if composed entirely of stormwater and not combining with mine drainage;
- Onsite haul and access roads not constructed of waste rock, overburden or spent ore except if mine drainage is used for dust control;
- Discharges from tailings dams or dikes when not constructed of waste rock or tailings and no process fluids are present;
- Discharges from tailings dams or dikes when constructed of waste rock or tailings and no process fluids are present, if composed entirely of stormwater and not combining with mine drainage;
- Concentration building if no contact with material piles;
- Mill site if no contact with material piles;
- Office or administrative building and housing if mixed with stormwater from industrial area;
- Chemical storage area;

- Docking facility if no excessive contact with waste product that would otherwise constitute mine drainage;
- Explosive storage;
- Fuel storage;
- Vehicle and equipment maintenance area and building;
- Parking areas (if necessary);
- Power plant;
- Truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage;
- Unreclaimed, disturbed areas outside of active mining area;
- Reclaimed areas released from reclamation requirements prior to December 17, 1990;
- Partially or inadequately reclaimed areas or areas not released from reclamation requirements.

8.G.1.3 Covered Discharges from Earth-Disturbing Activities Conducted Prior to Active Mining Activities. 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).

Note: Stormwater discharges from these sources are subject to 40 CFR Part 440 if they are mixed with other discharges subject to Part 440. In this case, they are not eligible for coverage under this permit. 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 would be available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, and meets the other eligibility criteria contained in Part 1.1.1 of the permit. Operators bear the initial responsibility for determining if they are eligible for coverage under this permit, or must seek coverage under another NPDES permit. EPA recommends that operators contact the relevant NPDES permit issuance authority for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

8.G.2.2 *Prohibition of Non-Stormwater Discharges.* Not authorized by this permit: acid 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 1.1.3). (EPA includes these prohibited non-stormwater discharges

here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2)

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)(1)(4)(ii).

8.G.3.1 Mining operations. For this permit, mining operations are grouped into two distinct categories, with distinct effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities; and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

8.G.3.2 Earth-disturbing activities conducted prior to active mining activities. Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities:

- a. activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation activities on any areas where active mining activities have not yet commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and
- b. construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be "construction" and have additional effluent limits in Part 8.G.4.2.

8.G.3.3 Active mining activities. Activities related to the extraction, removal or recovery, and beneficiation of metal ore from the earth; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the "active mining area." Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in Part 8.G.4 have been met, and a well-delineated "active mining area" has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are "active mining activities."

8.G.3.4 Active mining area. A place where work or other activity related to the extraction, removal or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

Note: Earth-disturbing activities described in the definition in Part 8.G.3.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered "earth-disturbing conducted prior to active mining activities", and must comply with the requirements in Part 8.G.4.

8.G.3.5 *Inactive metal mining facility.* A site or portion of a site where metal mining and/or milling occurred in the past but there are no active mining activities occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.

8.G.3.6 *Temporarily inactive metal mining facility.* A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable state or federal agency.

8.G.4 Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

Stormwater discharges from earth-disturbing activities conducted prior to active mining activities (defined in Part 8.G.3.2) are covered under this permit. For such earth-disturbing activities, you must comply with all applicable requirements in Parts 1-9 of the MSGP except for the technology-based effluent limits in Parts 2.1.2 and 8.G.5, the inspection requirements in Parts 3 and 8.G.7, and the monitoring requirements in Parts 4 and 8.G.8.

Authorized discharges from areas where earth-disturbing activities have ceased and stabilization as specified in Part 8.G.4.1.9 or 8.G.4.2.11, where appropriate, has been completed (stabilization is not required for areas where active mining activities will occur), are no longer subject to the Part 8.G.4 requirements. At such time, authorized discharges become subject to all other applicable requirements in the MSGP, including the effluent limits in Parts 2.1.2 and 8.G.5, the inspection requirements in Parts 3 and 8.G.7, and the monitoring requirements in Parts 4 and 8.G.8.

8.G.4.1 *Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* The following technology-based effluent limits apply to authorized discharges from all earth-disturbing activities conducted prior to active mining activities defined in Parts 8.G.3.2(a) and 8.G.3.2(b). These limits supersede the technology-based limits listed in Parts 2.1.2 and 8.G.5 of the MSGP.

8.G.4.1.1 *Erosion and sediment control installation requirements.*

- By the time construction activities commence, install and make operational downgradient sediment controls, unless this timeframe is infeasible. If infeasible you must install and make such controls operational as soon as practicable or as soon as site conditions permit.
- All other stormwater controls described in the SWPPP must be installed and made operational as soon as conditions on each portion of the site allows.

8.G.4.1.2 *Erosion and sediment control maintenance requirements. You must:*

- Ensure that all erosion and sediment controls remain in effective operating condition.
- Wherever you determine that a stormwater control needs maintenance to continue operating effectively, initiate efforts to fix

the problem immediately after its discovery, and complete such work by the end of the next work day.

- When a stormwater control must be replaced or significantly repaired, complete the work within 7 days, unless infeasible. If 7 days is infeasible, you must complete the installation or repair as soon as practicable.

8.G.4.1.3 Perimeter controls. You must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).
- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.

8.G.4.1.4 Sediment track-out. For construction vehicles and equipment exiting the site directly onto paved roads, you must:

- Use appropriate stabilization techniques to minimize sediment track-out from vehicles and equipment prior to exit;
- Use additional controls to remove sediment from vehicle and equipment tires prior to exit, where necessary;
- Remove sediment that is tracked out onto paved roads by end of the work day.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 8.G.4.1.4.

8.G.4.1.5 Soil or sediment stockpiles. You must:

- Minimize erosion of stockpiles from stormwater and wind via temporary cover, if feasible.
- Prevent up-slope stormwater flows from causing erosion of stockpiles (e.g., by diverting flows around the stockpile).
- Minimize sediment from stormwater that runs off of stockpiles, using sediment controls (e.g., a sediment barrier or downslope sediment control).

8.G.4.1.6 Sediment basins. If you intend to install a sediment basin to treat stormwater from your earth-disturbing activities, you must:

- Provide storage for either (1) the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained.
- Prevent erosion of (1) basin embankments using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet points of the basin using erosion controls and velocity dissipation devices.

8.G.4.1.7 Minimize dust. You must minimize the generation of dust through the appropriate application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

8.G.4.1.8 Restrictions on use of treatment chemicals. If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPPP documentation.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA Regional Office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

8.G.4.1.9 Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in Part 8.G.3.2(a) (i.e., not applicable to construction of staging areas for structures and access roads as defined in Part 8.G.3.2(b)).

You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance) (although you are encouraged to do so within the active mining area, where appropriate):

- **Temporary stabilization of disturbed areas.** Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.G.3.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.
- **Final stabilization of disturbed areas.** Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.G.3.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-

arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

8.G.4.2 Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads. The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in Part 8.G.3.2(b). These limits supersede the technology-based limits listed in Parts 2.1.2 and 8.G.5 of the MSGP. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.G.3.2(a)).

8.G.4.2.1 Area of disturbance. You must minimize the amount of soil exposed during construction activities.

8.G.4.2.2 Erosion and sediment control design requirements. You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from construction activities. Account for the following factors in designing your erosion and sediment controls:
 - The expected amount, frequency, intensity and duration of precipitation;
 - The nature of stormwater discharges and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
 - The range of soil particle sizes expected to be present on the site.
- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

8.G.4.2.3 Natural Buffers. For any stormwater discharges from construction activities within 50 feet of a water of the U.S., you must comply with one of the following compliance alternatives:

1. Provide a 50-foot undisturbed natural buffer between construction activities and the water of the U.S.; or
2. Provide an undisturbed natural buffer that is less than 50 feet supplemented by additional erosion and sediment controls, which in combination, achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer; or
3. If it is infeasible to provide an undisturbed natural buffer of any size, implement erosion and sediment controls that achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer.

There are exceptions when buffer requirements do not apply:

- There is no stormwater discharge from construction disturbances to a water of the U.S.;
- The natural buffer has already been eliminated by preexisting development disturbances;
- The disturbance is for the construction of a water-dependent structure or construction approved under a CWA section 404 permit;
- For linear construction projects, you are not required to comply with the requirements if there are site constraints provided that, to the extent feasible, you limit disturbances within 50 feet of a water of the U.S. and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from any disturbances within 50 feet of a water of the U.S.

See EPA's industrial stormwater website under "Fact Sheets and Guidance" for information on complying with these alternatives:
<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>.

8.G.4.2.4 Soil or sediment stockpiles. In addition to the requirements in Part 8.G.4.1.5, you must locate any piles outside of any natural buffers established under Part 8.G.4.2.3.

8.G.4.2.5 Sediment basins. In addition to the requirements in Part 8.G.4.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established under Part 8.G.4.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

8.G.4.2.6 Native topsoil preservation. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

8.G.4.2.7 Steep slopes. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes.

Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road cut in mountainous terrain; for grading

steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

8.G.4.2.8 Soil compaction. Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

8.G.4.2.9 Dewatering Practices. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems). Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control. (An uncontaminated discharge is a discharge that meets applicable water quality standards.)

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
 - No discharging visible floating solids or foam;
 - Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
 - Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
 - Implement velocity dissipation devices at all points where dewatering water is discharged;
 - Haul backwash water away for disposal or return it to the beginning of the treatment process; and
 - Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
- Treatment chemical restrictions: If you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in Part 8.G.4.1.8.

8.G.4.2.10 Pollution prevention requirements.

- Prohibited discharges (this non-exhaustive list of prohibited non-stormwater discharges is included here as a reminder that only the only authorized non-stormwater discharges are those enumerated in Part 1.2.2):
 - Wastewater from washout of concrete;
 - Wastewater from washout and cleanout of stucco, paint, form

density of native vegetation.

- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
 - o Install or apply all non-vegetative measures;
 - o Cover all areas of exposed soil.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization: 1. Prepping the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid (if construction occurs during seasonally dry period), or drought-stricken areas:
 - o Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
 - o Initiate vegetative stabilization as soon as conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that within 3 years the 70% cover requirement is met.
- Sites affected by severe storm events or other unforeseen circumstances:
 - o Initiate vegetative stabilization as soon conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that so that within 3 years the 70% cover requirement is met.

8.G.4.3 Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in Parts 8.G.3.2(a) and 8.G.3.2(b), in addition to the water quality-based limits in Part 2.2 of the MSGP.

Stricter requirements apply if your site will discharge to an impaired water or a water that is identified by your state, tribe, or EPA as a Tier 2 or Tier 2.5 for antidegradation purposes:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping earth-disturbing work.
- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

8.G.4.4 Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following requirements supersede the inspection requirements in Parts 3 and 8.G.7 of the MSGP for earth-disturbing activities conducted prior to active mining activities defined in Parts 8.G.3.2(a) and 8.G.3.2(b).

8.G.4.4.1 Inspection frequency

- At least once every 7 calendar days, or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note:

- a. Inspections only required during working hours;
- b. Inspections not required during unsafe conditions; and
- c. If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station)

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

8.G.4.4.2 Reductions in inspection frequency.

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to Part 8.G.4.1.9 or 8.G.4.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

8.G.4.4.3 Areas to be inspected. You must at a minimum inspect all of the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;
- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

8.G.4.4.4 What to check for during inspections. At a minimum you must check:

- Whether all stormwater controls are installed, operational and working as intended;
- Whether any new or modified stormwater controls are needed;
- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge.

If a discharge is occurring, check:

- The quality and characteristics of the discharge;
- Whether controls are operating effectively.

8.G.4.4.5 Inspection report. Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.

8.G.5 Technology-Based Effluent Limits for Active Mining Activities

Note: These requirements do not apply for any discharges from earth-disturbing activities conducted prior to active mining as defined in Part 8.G.3.2(a) or 8.G.3.2(b).

8.G.5.1 Employee training. (See also Part 2.1.2.8) Conduct employee training at least annually at active and temporarily inactive facilities.

8.G.5.2 Stormwater controls. Apart from the control measures you implement to meet your Part 2 technology-based effluent limits, where necessary to minimize pollutant discharges in stormwater, implement the following control measures at your site. The potential pollutants identified in Part 8.G.6.3 shall determine the priority and appropriateness of the control measures selected. For mines subject to dust control requirements under state or county air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Part 2.1.2.10.

Stormwater diversions: Divert stormwater away from potential pollutant sources through implementation of control measures such as the following, where determined to be feasible (list not exclusive): interceptor or diversion controls (e.g., dikes, swales, curbs, 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.

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

Treatment: If treatment of stormwater (e.g., chemical or physical systems, oil - 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 is encouraged, where feasible. Treated stormwater 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** **Discharge testing.** (See also Part 6.2.3.4) Test or evaluate all discharge points covered under this permit for the presence of specific mining-related but unauthorized non-stormwater discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. Alternatively (if applicable), you may keep a certification with your SWPPP consistent with Part 8.G.6.6.

8.G.6 **Additional SWPPP Requirements for Mining Operations**

Note: The requirements in Part 8.G.6 are not applicable to inactive metal mining facilities.

- 8.G.6.1** **Nature of industrial activities.** (See also Part 6.2.2) Briefly document in your 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 6.2.2) Document in your 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 discharge point within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit; outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles and ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

- 8.G.6.3** **Potential pollutant sources.** (See also Part 6.2.3) For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the ore and waste rock (e.g.,

acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update your SWPPP with this information.

8.G.6.4 Documentation of control measures. Document all control measures that you implement consistent with Part 8.G.5.2. 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 your SWPPP. If you are in compliance with dust control requirements under state or county air quality permits, you must include (or summarize, as necessary) what the state or county air quality permit dust control requirements are and how you've achieved compliance with them.

8.G.6.5 Employee training. All employee training(s) must be documented in the SWPPP.

8.G.6.6 Certification of permit coverage for commingled non-stormwater discharges. If you are able, consistent with Part 8.G.5.3 above, to certify that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate NPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, retain such certification with your SWPPP. This certification must identify the non-stormwater discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

8.G.7 Additional Inspection Requirements (See also Part 3.1)

Except for earth disturbing activities conducted prior to active mining activities as defined in Part 8.G.3.2(a) and 8.G.3.2(b), which are subject to Part 8.G.4.4, inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters designated as Tier 2 or 2.5 or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 8.G.8.5 for inspection requirements for inactive and unstaffed sites.

8.G.8 Monitoring and Reporting Requirements (See also Part 4)

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

8.G.8.1 Indicator Monitoring (See also Part 4.2.1)

Table 8.G-1 identifies indicator monitoring that applies to the specific subsectors of Sector G. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

2021 MSGP

Part 8 – Sector-Specific Requirements (as modified)

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector G (Subsectors G1 and G2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

*Monitoring is required for the 13 individual PAHs identified in Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.G.8.2 Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities.

Table 8.G-2 identifies benchmarks that apply to active copper ore mining and dressing facilities. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You 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)	20 mg/L

8.G.8.3 Benchmark Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities. For discharges from waste rock and overburden piles, perform benchmark monitoring once in the first year for the parameters listed in Table 8.G-3, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. You are also required to conduct analytic monitoring for the parameters listed in Table 8.G-4 in accordance with the requirements in Part 8.G.8.4. The Director may also notify you that you must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from your waste rock and overburden piles.

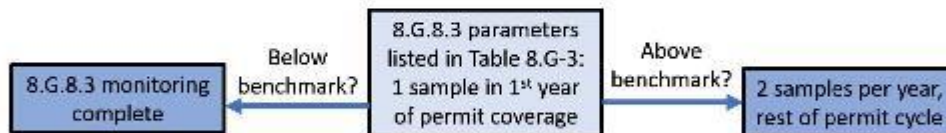


Table 8.G-3		
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector G2: Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099) [Note: when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and have hardness calculated than to require hardness analysis separately]	Total Suspended Solids (TSS)	100 mg/L
	Turbidity	50 NTU
	pH	6.0-9.0 s.u.
	Hardness (as CaCO ₃ ; calc. from Ca, Mg) ²	no benchmark value
	Total Recoverable Antimony	640 µg/L
	Total Recoverable Arsenic (freshwater)	150 µg/L
	Total Recoverable Arsenic (saltwater) ¹	69 µg/L
	Total Recoverable Beryllium	130 µg/L
	Total Recoverable Cadmium (freshwater) ²	Hardness Dependent
	Total Recoverable Cadmium (saltwater) ¹	33 µg/L
	Total Recoverable Copper (freshwater)	5.19 µg/L
	Total Recoverable Copper (saltwater) ¹	4.8 µg/L
	Total Recoverable Lead (freshwater) ²	Hardness Dependent
	Total Recoverable Lead (saltwater) ¹	210 µg/L
	Total Recoverable Mercury (freshwater)	1.4 µg/L
	Total Recoverable Mercury (saltwater) ¹	1.8 µg/L
	Total Recoverable Nickel (freshwater) ²	Hardness Dependent
	Total Recoverable Nickel (saltwater) ¹	74 µg/L
	Total Recoverable Selenium (freshwater)	1.5 µg/L for still/standing (lotic) waters
	Total Recoverable Selenium (saltwater) ¹	3.1 µg for flowing (lotic) waters 290 µg/L
Total Recoverable Silver (freshwater) ²	Hardness Dependent	
Total Recoverable Silver (saltwater) ¹	1.9 µg/L	
Total Recoverable Zinc (freshwater) ²	Hardness Dependent	
Total Recoverable Zinc (saltwater) ¹	90 µg/L	

1. Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.
 2. The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness-Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness-Dependent benchmarks follow in the table below:

Freshwater Hardness Range	Cadmium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)
0-24.99 mg/L	0.49	14	145	0.37	37
25-49.99 mg/L	0.73	21	203	0.80	52
50-74.99 mg/L	1.0	45	314	1.9	80
75-99.99 mg/L	1.7	69	418	3.3	107
100-124.99 mg/L	2.1	85	518	5.0	132
125-149.99 mg/L	2.6	123	614	7.1	157
150-174.99 mg/L	3.1	132	707	9.4	181
175-199.99 mg/L	3.5	182	798	12	204
200-224.99 mg/L	4.0	213	888	15	227
225-249.99 mg/L	4.4	246	975	18	249
250+ mg/L	4.7	262	1019	20	260

8.G.8.4 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.8.3 for discharges from waste rock and overburden piles, you must also conduct monitoring for additional parameters based on the type of ore you mine at your site. The schedule for monitoring for this Part 8.G.8.4 is the same as specified in Part 8.G.8.3: once in the first year for the parameters listed in Table 8.G-4 (except radium and uranium), and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. Where a parameter in Table 8.G-4 is the same as a pollutant you are required to monitor for in Table 8.G-3 (i.e., for all of the metals), you must use the corresponding benchmark in Table 8.G-3 and you may use any monitoring results conducted for Part 8.G.8.3 to satisfy the monitoring requirement for that parameter for Part 8.G.8.4. For radium and uranium, which do not have corresponding benchmarks in Table 8.G-3, there are no applicable benchmarks. For radium and uranium, you must monitor quarterly (as identified in Part 4.1.7) for your first four full quarters of permit coverage commencing no earlier than May 30, 2021, after which you may discontinue monitoring for these two parameters.

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

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

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

8.G.8.5 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Quarterly Visual Assessments and Routine Facility Inspections. As a Sector G facility, if you are seeking to exercise a waiver from the quarterly visual assessment and routine facility inspection requirements for inactive and unstaffed sites (including temporarily inactive sites), you are conditionally exempt from the requirement to certify that "there are no industrial materials or activities exposed to stormwater" in Parts 3.1.5 and 3.2.4.4. This exemption is conditioned on the following:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the quarterly visual assessment requirements; and
- EPA 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 your facility is inactive and unstaffed, you are waived from the requirement to conduct quarterly visual assessments and routine facility inspections. You must still do an annual site inspection in accordance with Part 3.1. You are encouraged to inspect your site more frequently where you have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

Discharge/Source of Discharge	Note/Comment
Piles	
Waste rock/overburden	Covered under the MSGP if composed entirely of stormwater and not combined with mine drainage. See note below.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.G-5 Applicability of the Multi-Sector General Permit to Stormwater from Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation	
Discharge/Source of Discharge	Note/Comment
Topsail	--
Roads constructed of waste rock or spent ore	
Onsite haul roads	Covered under the MSGP if composed entirely of stormwater and not combined with mine drainage. See note below.
Offsite haul and access roads	--
Roads not constructed of waste rock or spent ore	
Onsite haul roads	Covered under the MSGP except if mine drainage is used for dust control.
Offsite haul and access roads	--
Milling/concentrating	
Runoff from tailings dams and dikes when constructed of waste rock/tailings	Covered under the MSGP except if process fluids are present and only if composed entirely of stormwater and not combined with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock and tailings	Covered under the MSGP except if process fluids are present.
Concentration building	Covered under the MSGP if stormwater only and no contact with piles.
Mill site	If stormwater only and no contact with piles.
Ancillary areas	
Office and administrative building and housing	Covered under the MSGP if mixed with stormwater from the industrial area.
Chemical storage area	--
Docking facility	Covered under the MSGP except if excessive contact with waste product that would otherwise constitute mine drainage.
Explosive storage	--
Fuel storage (oil tanks/coal piles)	--
Vehicle and equipment maintenance area/building	--
Parking areas	Covered under the MSGP but coverage unnecessary if only employee and visitor-type parking.
Power plant	
Truck wash area	Covered under the MSGP except when excessive contact with waste product that would otherwise constitute mine drainage.
Reclamation-related areas	
Any disturbed area (unreclaimed)	Covered under the MSGP only if not in active mining area.
Reclaimed areas released from reclamation requirements prior to Dec. 17, 1990	--
Partially/inadequately reclaimed areas or areas not released from reclamation requirements	--

Note: Stormwater from these sources are subject to the NPDES program for stormwater unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-stormwater discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless: (1) it drains naturally (or is intentionally diverted) to a point source; and (2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in Part 1.1 of the permit.

Operators bear the initial responsibility for determining the applicable technology-based standard for such discharges. EPA recommends that operators contact the relevant NPDES permit issuance authority for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

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 has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.G.3.3.

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 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, soil disturbing activities related to mining at the sites or portion of the site have been completed, (2) the site or portion of the site has been stabilized to minimize soil erosion, and (3) 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

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

Note: Where compliance with a requirement in a separate exploration permit, mining permit, reclamation plan, Surface Mining Control and Reclamation Act (SMCRA) requirements, etc. will result in you fully meeting any requirement in this Subpart, you are considered to have complied with the relevant requirement in this Subpart. You must include documentation in your SWPPP describing your rationale for concluding that any particular action on your part is sufficient to comply with the corresponding requirement in this Subpart.

8.H.1 Covered Stormwater Discharges

The requirements in Subpart H apply to stormwater discharges associated with industrial activity from Coal Mines and Coal Mining-Related facilities as identified by the SIC Codes specified under Sector H in Table D-1 of Appendix D.

8.H.2 Limitations on Coverage

8.H.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) Not covered by this permit: discharges from pollutant seeps or underground drainage from inactive coal mines and refuse disposal areas that do not result from precipitation events, and discharges from floor drains in maintenance buildings and other similar drains in mining and preparation plant areas. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2).

8.H.2.2 Discharges Subject to Stormwater Effluent Guidelines. (See also Part 1.2.1.4) Not authorized by this permit: stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 434.

8.H.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) (1-4)(ii).

8.H.3.1 Mining operations – For this permit, mining operations are grouped into two distinct categories, with distinct effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities; and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

8.H.3.2 Earth-disturbing activities conducted prior to active mining activities – Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities:

- a. Activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation

activities on any areas where active mining activities have not yet commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and

- b. Construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be "construction" and have additional effluent limits in Part 8.H.4.2.

8.H.3.3 Active mining activities – Activities related to the extraction, removal or recovery, and preparation of coal; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the "active mining area." Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in Part 8.H.4 have been met, and a well-delineated "active mining area" has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are "active mining activities."

8.H.3.4 Active mining area – A place where work or other activity related to the extraction, removal or recovery of coal is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

Note: Earth-disturbing activities described in the definition in Part 8.H.3.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered "earth-disturbing conducted prior to active mining activities", and must comply with the requirements in Part 8.H.4.

8.H.3.5 Inactive coal mining facility – A site or portion of a site where coal mining and/or milling occurred in the past but there are no active mining operations occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive coal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.

8.H.3.6 Temporarily inactive coal mining facility – A site or portion of a site where coal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the applicable state or federal agency.

8.H.4 Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

Stormwater discharges from earth-disturbing activities conducted prior to active mining activities (defined in Part 8.H.3.2) are covered under this permit. For such earth-disturbing activities, you must comply with all applicable requirements in Parts 1-9 of the MSGP except for the

technology-based effluent limits in Parts 2.1.2 and 8.H.5, the inspection requirements in Parts 3 and 8.H.7, and the monitoring requirements in Parts 4 and 8.H.8.

Authorized discharges from areas where earth-disturbing activities have ceased and stabilization as specified in Part 8.H.4.1.9 or 8.H.4.2.11, where appropriate, has been completed (stabilization is not required for areas where active mining activities will occur), are no longer subject to the Part 8.H.4 requirements. At such time, authorized discharges become subject to all other applicable requirements in the MSGP, including the effluent limits in Parts 2.1.2 and 8.H.5, the inspection requirements in Parts 3 and 8.H.7, and the monitoring requirements in Parts 4, 8.H.8, and 8.H.9.

8.H.4.1 Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Conducted Prior to Active Mining Activities. The following technology-based effluent limits apply to authorized discharges from all earth-disturbing activities conducted prior to active mining activities defined in Parts 8.H.3.2(a) and 8.H.3.2(b). These limits supersede the technology-based limits listed in Parts 2.1.2 and 8.H.5 of the MSGP.

8.H.4.1.1 Erosion and sediment control installation requirements.

- By the time construction activities commence, install and make operational downgradient sediment controls. Unless this timeframe is infeasible, if infeasible you must install and make such controls operational as soon as practicable or as soon as site conditions permit.
- All other stormwater controls described in the SWPPP must be installed and made operational as soon as conditions on each portion of the site allows.

8.H.4.1.2 Erosion and sediment control maintenance requirements. You must:

- Ensure that all erosion and sediment controls remain in effective operating condition.
- Whenever you determine that a stormwater control needs maintenance to continue operating effectively, initiate efforts to fix the problem immediately after its discovery, and complete such work by the end of the next work day.
- When a stormwater control must be replaced or significantly repaired, complete the work within 7 days, unless infeasible. If 7 days is infeasible, you must complete the installation or repair as soon as practicable.

8.H.4.1.3 Perimeter controls. You must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).
- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.

8.H.4.1.4 Sediment track-out. For construction vehicles and equipment exiting the site directly onto paved roads, you must:

- Use appropriate stabilization techniques to minimize sediment track-out from vehicles and equipment prior to exit;
- Use additional controls to remove sediment from vehicle and

equipment tires prior to exit), where necessary;

- Remove sediment that is tracked out onto paved roads by end of the work day.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 8.H.4.1.4.

8.H.4.1.5 Soil or sediment stockpiles. You must:

- Minimize erosion of stockpiles from stormwater and wind via temporary cover, if feasible.
- Prevent up-slope stormwater flows from causing erosion of stockpiles (e.g., by diverting flows around the stockpile).
- Minimize sediment from stormwater that runs off of stockpiles, using sediment controls (e.g., a sediment barrier or downslope sediment control).

8.H.4.1.6 Sediment basins. If you intend to install a sediment basin to treat stormwater from your earth-disturbing activities, you must:

- Provide storage for either (1) the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained.
- Prevent erosion of (1) basin embankments using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet points of the basin using erosion controls and velocity dissipation devices.

8.H.4.1.7 Minimize dust. You must minimize the generation of dust through the appropriate application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

8.H.4.1.8 Restrictions on use of treatment chemicals. If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPPP documentation.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA Regional Office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

8.H.4.1.9 *Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in Part 8.H.3.2(a)* (i.e., not applicable to construction of staging areas for structures and access roads as defined in Part 8.H.3.2(b)). You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- **Temporary stabilization of disturbed areas.** Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.H.3.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.
- **Final stabilization of disturbed areas.** Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.H.3.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

8.H.4.2 ***Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads.*** The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in Part 8.H.3.2(b). These limits supersede the technology-based limits listed in Parts 2.1.2 and 8.H.5 of the MSGP. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.H.3.2(c)).

8.H.4.2.1 ***Area of disturbance.*** You must minimize the amount of soil exposed during construction activities.

8.H.4.2.2 Erosion and sediment control design requirements. You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from construction activities. Account for the following factors in designing your erosion and sediment controls:
 - The expected amount, frequency, intensity and duration of precipitation;
 - The nature of stormwater discharges and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
 - The range of soil particle sizes expected to be present on the site.
- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

8.H.4.2.3 Natural Buffers. For any stormwater discharges from construction activities within 50 feet of a water of the U.S., you must comply with one of the following compliance alternatives:

1. Provide a 50-foot undisturbed natural buffer between construction activities and the water of the U.S.; or
2. Provide an undisturbed natural buffer that is less than 50 feet supplemented by additional erosion and sediment controls, which in combination, achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer; or
3. If it is infeasible to provide an undisturbed natural buffer of any size, implement erosion and sediment controls that achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer.

There are exceptions when buffer requirements do not apply:

- There is no stormwater discharge from construction disturbances to a water of the U.S.;
- The natural buffer has already been eliminated by preexisting development disturbances;

- The disturbance is for the construction of a water-dependent structure or construction approved under a CWA section 404 permit;
- For linear construction projects, you are not required to comply with the requirements if there are site constraints provided that, to the extent feasible, you limit disturbances within 50 feet of a water of the U.S. and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from any disturbances within 50 feet of a water of the U.S.

See EPA's industrial stormwater website under "Fact Sheets and Guidance" for information on complying with these alternatives:
<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>.

8.H.4.2.4 Soil or sediment stockpiles. In addition to the requirements in Part 8.H.4.1.5, you must locate any piles outside of any natural buffers established under Part 8.H.4.2.3.

8.H.4.2.5 Sediment basins. In addition to the requirements in Part 8.H.4.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established under Part 8.H.4.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

8.H.4.2.6 Native topsoil preservation. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

8.H.4.2.7 Steep slopes. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes.

Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road cut in mountainous terrain; for grading steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

8.H.4.2.8 Soil compaction. Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

8.H.4.2.9 Dewatering Practices. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems). Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

(An uncontaminated discharge is a discharge that meets applicable water quality standards.)

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
 - a. No discharging visible floating solids or foam;
 - b. Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
 - c. Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
 - d. Implement velocity dissipation devices at all points where dewatering water is discharged;
 - e. Haul backwash water away for disposal or return it to the beginning of the treatment process; and
 - f. Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
 - g. Treatment chemical restrictions: if you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in Part 8.H.4.1.B.

8.H.4.2.10 Pollution prevention requirements.

- Prohibited discharges (this non-exhaustive list of prohibited non-stormwater discharges is included here as a reminder that only the only authorized non-stormwater discharges are those enumerated in Part 1.2.2):
 - a. Wastewater from washout of concrete;
 - b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
 - c. Fuels, oils, or other pollutants used for operation and maintenance of vehicles or equipment;
 - d. Soaps, solvents, or detergents used in vehicle or equipment washing;
 - e. Toxic or hazardous substances from a spill or other release.
- Design and location requirements: Minimize the discharge of pollutants from pollutant sources by:
 - a. Minimizing exposure;
 - b. Using secondary containment, spill kits, or other equivalent measures;
 - c. Locating pollution sources away from surface waters, storm sewer inlets, and drainageways;
 - d. Cleaning up spills immediately (do not clean by hosing area down).
- Pollution prevention requirements for wash waters: Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in

a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

- *Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes:* Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to stormwater. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

8.H.4.2.11 *Site Stabilization requirements for the construction of staging areas for structures and access roads as defined in Part 8.H.3.2(b)* (i.e., not applicable to earth-disturbing activities performed for purposes of mine site preparation as defined in Part 8.H.3.2(a)). You must comply with the following stabilization requirements, except where the intended function of the site accounts for such disturbed earth (e.g., the area of construction will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- By no later than the end of the next work day after construction work in an area has stopped permanently or temporarily ("temporarily" means the land will be idle for a period of 14 days or more but earth-disturbing activities will resume in the future), immediately initiate stabilization measures;
- If using vegetative measures, by no later than 14 days after initiating stabilization:
 - ∴ Seed or plant the area, and provide temporary cover to protect the planted area;
 - ∴ Once established, vegetation must be uniform, perennial (if final stabilization), and cover at least 70% of stabilized area based on density of native vegetation.
- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
 - ∴ Install or apply all non-vegetative measures;
 - ∴ Cover all areas of exposed soil.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization: 1. Preparing the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid (if construction occurs during seasonally dry period), or drought-stricken areas:
 - o Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
 - o Initiate vegetative stabilization as soon as conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that within 3 years the 70% cover requirement is met.
- Sites affected by severe storm events or other unforeseen circumstances:
 - o Initiate vegetative stabilization as soon conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that so that within 3 years the 70% cover requirement is met.

8.H.4.3 Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in Parts 8.H.3.2(a) and 8.H.3.2(b), in addition to the water quality-based limits in Part 2.2 of the MSGP.

Stricter requirements apply if your site will discharge to an impaired water or a water that is identified by your state, tribe, or EPA as a Tier 2 or Tier 2.5 for antidegradation purposes:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping earth-disturbing work.
- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

8.H.4.4 Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following requirements supersede the inspections requirements in Parts 3 and 8.H.7 of the MSGP for earth-disturbing activities conducted prior to active mining activities defined in Parts 8.H.3.2(a) and 8.H.3.2(b).

8.H.4.4.1 Inspection Frequency

- At least once every 7 calendar days, or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note:

- o Inspections only required during working hours;
- o Inspections not required during unsafe conditions; and
- o If you choose to inspect once every 14 days, you must have a

method for measuring rainfall amount on site (either rain gauge or representative weather station)

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

8.H.4.4.2 Reductions in Inspection Frequency

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to Part 8.H.4.1.9 or 8.H.4.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

8.H.4.4.3 Areas to be Inspected. You must at a minimum inspect the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;
- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

8.H.4.4.4 What to Check for During Inspections. At a minimum you must check:

- Whether all stormwater controls are installed, operational, and working as intended;
- Whether any new or modified stormwater controls are needed;
- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge.

If a discharge is occurring:

- The quality and characteristics of the discharge (see Part 3.2.2.4);
- Whether controls are operating effectively.

8.H.4.4.5 Inspection Report. Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.
- *Cessation of Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* The requirements in Part 8.H.4 no longer apply for any earth-disturbing activities conducted prior to active mining activities as defined in Part 8.H.3.2(a) or 8.H.3.2(b) where:
 - Earth-disturbing activities have ceased; and
 - Stabilization has been met consistent with Part 8.H.4.1.9 or 8.H.4.2.11 (not required for areas where active mining activities will occur).

8.H.5 Technology-Based Effluent Limits for Active Mining Activities

Note: These requirements do not apply for any discharges from earth-disturbing activities conducted prior to active mining as defined in Part 8.H.3.2(a) or 8.H.3.2(b).

8.H.5.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2) As part of your good housekeeping program, in order to minimize discharges of pollutants in stormwater, implement control measures such as the following, where determined to be feasible (list not inclusive): using sweepers and covered storage; watering haul roads to minimize dust generation; and conserving vegetation to minimize erosion. For mines subject to dust control requirements under state or county air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Part 2.1.2.10.

8.H.5.2 *Preventive Maintenance.* (See also Part 2.1.2.3) Perform inspections or other equivalent measures of storage tanks and pressure lines of fuels, lubricants, hydraulic fluid, and slurry to prevent leaks due to deterioration or faulty connections.

8.H.6 Additional SWPPP Requirements for Mining Operations

Note: The requirements in Part 8.H.6 are not applicable to inactive coal mining facilities.

8.H.6.1 *Other Applicable Regulations.* Most active coal mining-related areas (SIC Codes 1221-1241) are subject to sediment and erosion control regulations of the U.S. Office of Surface Mining (OSM) that enforces the Surface Mining Control and Reclamation

Act (SMCRA). OSM has granted authority to most coal-producing states to implement SMCRA through State SMCRA regulations. All SMCRA requirements regarding control of stormwater-related pollutant discharges must be addressed and then documented with the SWPPP (directly or by reference).

- 8.H.6.2** **Site Map.** (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: haul and access roads; railroad spurs, siding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; inactive mines and related areas; acidic spoil, refuse, or unreclaimed disturbed areas; and liquid storage tanks containing pollutants such as caustics, hydraulic fluids, and lubricants.
- 8.H.6.3** **Potential Pollutant Sources.** (See also Part 6.2.3) Document in your SWPPP the following sources and activities that have potential pollutants associated with them: truck traffic on haul roads and resulting generation of dust or sediment that could be discharged via stormwater; fuel or other liquid storage; pressure lines containing slurry, hydraulic fluid, or other potential harmful liquids; and loading or temporary storage of acidic refuse or spoil.
- 8.H.6.4** If you are in compliance with dust control requirements under state or county air quality permits, you must include (or summarize, as necessary) what the state or county air quality permit dust control requirements are and how you've achieved compliance with them.
- 8.H.7** **Additional Inspection Requirements (See also Part 3.1)**
- 8.H.7.1** **Inspections of Active Mining-Related Areas.** (See also Part 3) Except for earth-disturbing activities conducted prior to active mining activities as defined in Parts 8.H.3.2(a) and 8.H.3.2(b), which are subject to Part 8.H.4.4, perform routine inspections of active mining areas covered by this permit, corresponding with the inspections as performed by SMCRA inspectors, of all mining-related areas required by SMCRA. Also maintain the records of the SMCRA authority representative. See Part 8.H.9.1 for inspection requirements for inactive and unstaffed sites.
- 8.H.7.2** **Sediment and Erosion Control.** (See also Part 2.1.2.5) As indicated in Part 8.H.6.1, SMCRA requirements regarding sediment and erosion control measures must be complied with for those areas subject to SMCRA authority, including inspection requirements.
- 8.H.7.3** **Routine Site Inspections.** (See also Part 3.1) Your inspection program must include inspections for pollutants entering the drainage system from activities located on or near coal mining-related areas. Among the areas to be inspected are haul and access roads; railroad spurs, siding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas.
- 8.H.8** **Indicator Monitoring (See also Part 4.2.1)**

Table 8.H-1 identifies indicator monitoring that applies to the specific subsectors of Sector H. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector H (Subsector H1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector H1. Coal Mines and Coal Mining-Related Facilities (SIC Code 1221-1241)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysenes, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.H.9 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.H.2 identifies benchmarks that apply to the specific subsectors of Sector H. These benchmarks apply to both your primary industrial activity and any co-located industrial activities. Note: There are no Parts 8.H.8 and 8.H.9 monitoring and reporting or impaired waters monitoring requirements for inactive and unstaffed sites.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector H1. Coal Mines and Related Areas (SIC 1221-1241)	Total Recoverable Aluminum	1,100 µg/L
	Total Suspended Solids (TSS)	100 mg/L

8.H.9.1 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Indicator, Benchmark and Impaired Waters Monitoring. As a Sector H facility, if you are seeking to exercise a waiver from either the quarterly visual assessment or the indicator, benchmark, and/or impaired waters monitoring requirements for inactive and unstaffed sites (including temporarily inactive sites), you are conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in Parts 3.2.4.4, 4.2.1.3, and 4.2.5.2. Additionally, if you are seeking to reduce your required routine inspection frequency, as is allowed under Part 3.1.5, you are also conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to stormwater.” These conditional exemptions are based on the following requirements:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable benchmark monitoring requirements as if you were in your first year of permit coverage, and the quarterly visual assessment requirements; and

- EPA 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 your facility is inactive and unstaffed, you are waived from the requirement to conduct routine facility inspections, quarterly visual assessments, and benchmark and impaired waters monitoring. You must still conduct an annual site inspection in accordance with Part 3.1. You are encouraged to inspect your site more frequently where you have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

8.H.10 Termination of Permit Coverage

8.H.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 no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.H.3.5.

8.H.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 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 I – Sector I – Oil and Gas Extraction

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

8.1.1 Covered Stormwater Discharges.

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

8.1.1.1 Discharges of stormwater from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities are exempt from NPDES permit coverage unless, in accordance with 40 CFR 122.26(c)(1)(iii), the facility:

- Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987; or
- Has had a discharge of stormwater resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- Contributes to a violation of a water quality standard.

Any stormwater discharges that require permit coverage as a result of meeting one of the conditions of 122.26(c)(1)(iii) may be covered under this permit unless otherwise required to obtain coverage under an alternative NPDES general permit or an individual NPDES permit as specified in Part 1.3.8.

8.1.2 Limitations on Coverage

8.1.2.1 Stormwater Discharges Subject to Effluent Limitation Guidelines. [See also Part 4.2.3] This permit does not authorize stormwater discharges from drilling operations that are subject to nationally established effluent limitation guidelines found at 40 CFR Part 435, respectively.

8.1.2.2 Non-Stormwater Discharges, Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit. Alternatively, wash water discharges must be authorized under a separate NPDES permit, or be discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements. (EPA includes this prohibited non-stormwater discharge here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2).

8.1.3 Additional Technology-Based Effluent Limits

8.1.3.1 Vegetative Controls. Implement vegetative practices designed to preserve existing vegetation, where attainable, and revegetate open areas as soon as practicable after grade drilling. Implement appropriate vegetative practices, such as the following (list

not exclusive); temporary or permanent seeding, mulching, sod stabilization, vegetative buffer strips, and tree protection practices. Begin implementing appropriate vegetative practices on all disturbed areas within 14 days following the last activity in that area.

8.1.4 Additional SWPPP Requirements

8.1.4.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: Reportable Quantity (RQ) releases; locations used for the treatment, storage, or disposal of wastes; processing areas and storage areas; chemical mixing areas; construction and drilling areas; all areas subject to the effluent guidelines requirements for "No Discharge" in accordance with 40 CFR 435.32; and the structural controls to achieve compliance with the "No Discharge" requirements.

8.1.4.2 Potential Pollutant Sources. (See also Part 6.2.3) Also document in your SWPPP the following sources and activities that have potential pollutants associated with them: chemical, cement, mud, or gel mixing activities; drilling or mining activities; and equipment cleaning and rehabilitation activities. In addition, include information about the reportable quantity (RQ) release that triggered the permit application requirements: the nature of the release (e.g., spill of oil from a drum storage area), amount of oil or hazardous substance released, amount of substance recovered, date of the release, cause of the release (e.g., poor handling techniques and lack of containment in the area), areas affected by the release (i.e., land and water), procedures to clean up release, actions or procedures implemented to prevent or improve response to a release, and remaining potential contamination of stormwater from release (taking into account human health risks, the control of drinking water intakes, and the designated uses of the receiving water).

8.1.4.3 Erosion and Sediment Controls. (See also Part 2.1.2.5) Unless covered by EPA's Construction General Permit (CGP), the additional documentation requirements for sediment and erosion controls for well drillings and sand/shale mining areas include the following:

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

8.1.4.3.2 Vegetative Controls. Document vegetative practices used consistent with Part 8.1.3.1 in the SWPPP.

8.1.5 Additional Inspection Requirements

All erosion and sediment controls must be inspected either: 1) every 7 days; or 2) once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

8.1.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.1-1 identifies indicator monitoring that applies to the specific subsectors of Sector I. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.1-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector I (Subsector II) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector II. Crude Petroleum and Natural Gas (SIC Code 1311); Natural Gas Liquids (SIC Code 1321); Oil and Gas Field Services (SIC Code 1381-1389)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

Note: Where compliance with a requirement in a separate exploration permit, mining permit, reclamation plan, Surface Mining Control and Reclamation Act (SMCRA) requirements, etc. will result in you fully meeting any requirement in this Subpart, you are considered to have complied with the relevant requirement in this Subpart. You must include documentation in your SWPPP describing your rationale for concluding that any particular action on your part is sufficient to comply with the corresponding requirement in this Subpart.

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 D-1 of Appendix D of the permit.

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

8.J.1.2 *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.

8.J.1.3 *Covered Discharges from Earth-Disturbing Activities Conducted Prior to Active Mining Activities.* 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. The exceptions to this limitation, which are covered by this permit, are mine dewatering discharges composed entirely of stormwater or uncontaminated ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities.

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)(ii).

8.J.3.1 *Mining operations* – For this permit, mining operations are grouped into two distinct categories, with distinct effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities; and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

- 8.J.3.2** **Earth-disturbing activities conducted prior to active mining activities** – Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities:
- a. Activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation activities on any areas where active mining activities have not yet commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and
 - b. Construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be "construction" and have additional effluent limits in Part 8.J.4.2.
- 8.J.3.3** **Active mining activities** – Activities related to the extraction, removal or recovery, and beneficiation of non-metallic minerals from the earth; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the "active mining area." Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in Part 8.J.4 have been met, and a well-delineated "active mining area" has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are "active mining activities."
- 8.J.3.4** **Active mining area** – A place where work or other activity related to the extraction, removal or recovery of non-metallic minerals is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.
- Note: Earth-disturbing activities described in the definition in Part 8.J.3.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered "earth-disturbing conducted prior to active mining activities", and must comply with the requirements in Part 8.J.4.
- 8.J.3.5** **Inactive mineral mining facility** – A site or portion of a site where mineral mining and/or milling occurred in the past but there are no active mining activities occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive 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 NPDES industrial stormwater permit.
- 8.J.3.6** **Temporarily inactive mineral mining facility** – A site or portion of a site where non-metallic mineral mining and/or milling occurred in the past but currently are not

being actively undertaken, and the facility is covered by an active mining permit issued by the applicable state or federal agency.

8.J.4 Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

Stormwater discharges from earth-disturbing activities conducted prior to active mining activities (defined in Part 8.J.3.2) are covered under this permit. For such earth-disturbing activities, you must comply with all applicable requirements in Parts 1-9 of the MSGP except for the technology-based effluent limits in Parts 2.1.2 and 8.J.5, the inspection requirements in Parts 3 and 8.J.7, and the monitoring requirements in Parts 4, 8.J.8, and Part 8.J.9.

Authorized discharges from areas where earth-disturbing activities have ceased and stabilization as specified in Part 8.J.4.1.9 or 8.J.4.2.11, where appropriate, has been completed (stabilization is not required for areas where active mining activities will occur), are no longer subject to the Part 8.J.4 requirements. At such time, authorized discharges become subject to all other applicable requirements in the MSGP, including the effluent limits in Parts 2.1.2 and 8.J.5, the inspection requirements in Parts 3 and 8.J.7, and the monitoring requirements in Parts 4, 8.J.8, and 8.J.9.

8.J.4.1 Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Conducted Prior to Active mining Activities. The following technology-based effluent limits apply to authorized discharges from all earth-disturbing activities conducted prior to active mining activities defined in Parts 8.J.3.2(a) and 8.J.3.2(b). These limits supersede the technology-based limits listed in Parts 2.1.2 and 8.J.5 of the MSGP.

8.J.4.1.1 Erosion and sediment control installation requirements.

- By the time construction activities commence, install and make operational downgradient sediment controls, unless this timeframe is infeasible. If infeasible you must install and make such controls operational as soon as practicable or as soon as site conditions permit.
- All other stormwater controls described in the SWPPP must be installed and made operational as soon as conditions on each portion of the site allows.

8.J.4.1.2 Erosion and sediment control maintenance requirements. You must:

- Ensure that all erosion and sediment controls remain in effective operating condition.
- Whenever you determine that a stormwater control needs maintenance to continue operating effectively, initiate efforts to fix the problem immediately after its discovery, and complete such work by the end of the next work day.
- When a stormwater control must be replaced or significantly repaired, complete the work within 7 days, unless infeasible. If 7 days is infeasible, you must complete the installation or repair as soon as practicable.

8.J.4.1.3 Perimeter controls. You must:

- Install sediment controls along those perimeter areas of your disturbed area that will receive stormwater, except where site conditions prevent the use of such controls (in which case, maximize their installation to the extent practicable).

- Remove sediment before it accumulates to one-half of the above-ground height of any perimeter control.

8.J.4.1.4 Sediment track-out. For construction vehicles and equipment exiting the site directly onto paved roads, you must:

- Use appropriate stabilization techniques to minimize sediment track-out from vehicles and equipment prior to exit;
- Use additional controls to remove sediment from vehicle and equipment tires prior to exit, where necessary;
- Remove sediment that is tracked out onto paved roads by end of the work day.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 8.J.4.1.4.

8.J.4.1.5 Soil or sediment stockpiles. You must:

- Minimize erosion of stockpiles from stormwater and wind via temporary cover, if feasible.
- Prevent up-slope stormwater flows from causing erosion of stockpiles (e.g., by diverting flows around the stockpile).
- Minimize sediment from stormwater that runs off of stockpiles using sediment controls (e.g., a sediment barrier or downslope sediment control).

8.J.4.1.6 Sediment basins. If you intend to install a sediment basin to treat stormwater from your earth-disturbing activities, you must:

- Provide storage for either (1) the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained.
- Prevent erosion of (1) basin embankments using stabilization controls (e.g., erosion control blankets), and (2) the inlet and outlet points of the basin using erosion controls and velocity dissipation devices.

8.J.4.1.7 Minimize dust. You must minimize the generation of dust through the appropriate application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

8.J.4.1.8 Restrictions on use of treatment chemicals. If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPPP documentation.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA Regional Office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

8.J.4.1.9 *Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in Part 8.J.3.2(a)* (i.e., not applicable to construction of staging areas for structures and access roads as defined in Part 8.J.3.2(b)). You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- **Temporary stabilization of disturbed areas.** Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.J.3.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.
- **Final stabilization of disturbed areas.** Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in Part 8.J.3.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

8.J.4.2 ***Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads.*** The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in Part 8.J.3.2(b). These limits supersede the technology-based limits

listed in Parts 2.1.2 and 8.J.5 of the MSGP. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in 8.J.3.2(a)).

8.J.4.2.1 Area of disturbance. You must minimize the amount of soil exposed during construction activities.

8.J.4.2.2 Erosion and sediment control design requirements. You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from construction activities. Account for the following factors in designing your erosion and sediment controls:
 - The expected amount, frequency, intensity and duration of precipitation;
 - The nature of stormwater discharges and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
 - The range of soil particle sizes expected to be present on the site.
- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

8.J.4.2.3 Natural Buffers. For any stormwater discharges from construction activities within 50 feet of a water of the U.S., you must comply with one of the following compliance alternatives:

1. Provide a 50-foot undisturbed natural buffer between construction activities and the water of the U.S.; or
2. Provide an undisturbed natural buffer that is less than 50 feet supplemented by additional erosion and sediment controls, which in combination, achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer; or
3. If it is infeasible to provide an undisturbed natural buffer of any size, implement erosion and sediment controls that achieve a sediment load reduction that is equivalent to a 50-foot undisturbed natural buffer.

There are exceptions when buffer requirements do not apply:

- There is no stormwater discharge from construction disturbances to a water of the U.S;
- The natural buffer has already been eliminated by preexisting development disturbances;
- The disturbance is for the construction of a water-dependent structure or construction approved under a CWA section 404 permit;
- For linear construction projects, you are not required to comply with the requirements if there are site constraints provided that, to the extent feasible, you limit disturbances within 50 feet of a water of the U.S. and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from any disturbances within 50 feet of a water of the U.S.

See EPA's industrial stormwater website under "Fact Sheets and Guidance" for information on complying with these alternatives:

<https://www.epa.gov/nppes/stormwater-discharges-industrial-activities>.

8.J.4.2.4 Soil or sediment stockpiles. In addition to the requirements in Part 8.J.4.1.5, you must locate any piles outside of any natural buffers established under Part 8.J.4.2.3.

8.J.4.2.5 Sediment basins. In addition to the requirements in Part 8.J.4.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established under Part 8.J.4.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

8.J.4.2.6 Native topsoil preservation. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

8.J.4.2.7 Steep slopes. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes.

Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road out in mountainous terrain; for grading steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

8.J.4.2.8 Soil compaction. Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

8.J.4.2.9 Dewatering Practices. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches,

foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems). Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control. (An uncontaminated discharge is a discharge that meets applicable water quality standards.)

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
 - o No discharging visible floating solids or foam;
 - o Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
 - o Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
 - o Implement velocity dissipation devices at all points where dewatering water is discharged;
 - o Haul backwash water away for disposal or return it to the beginning of the treatment process; and
 - o Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
- Treatment chemical restrictions: If you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in Part 8.J.4.1.8.

8.J.4.2.10 Pollution prevention requirements

- Prohibited discharges (this non-exhaustive list of prohibited non-stormwater discharges is included here as a reminder that only the only authorized non-stormwater discharges are those enumerated in Part 1.2.2):
 - o Wastewater from washout of concrete;
 - o Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
 - o Fuels, oils, or other pollutants used for operation and maintenance of vehicles or equipment;
 - o Soaps, solvents, or detergents used in vehicle or equipment washing;
 - o Toxic or hazardous substances from a spill or other release.
- Design and location requirements: Minimize the discharge of pollutants from pollutant sources by:
 - o Minimizing exposure;
 - o Using secondary containment, spill kits, or other equivalent measures;
 - o Locating pollution sources away from surface waters, storm sewer inlets, and drainageways;
 - o Cleaning up spills immediately (do not clean by hosing area

down).

- *Pollution prevention requirements for wash waters:* Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- *Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes:* Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to stormwater. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

8.J.4.2.11 Site Stabilization requirements for the construction of staging areas for structures and access roads as defined in Part 8.J.3.2(b) (i.e., not applicable to earth-disturbing activities performed for purposes of mine site preparation as defined in Part 8.J.3.2(a)). You must comply with the following stabilization requirements, except where the intended function of the site accounts for such disturbed earth (e.g., the area of construction will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- By no later than the end of the next work day after construction work in an area has stopped permanently or temporarily ("temporarily" means the land will be idle for a period of 14 days or more but earth-disturbing activities will resume in the future), immediately initiate stabilization measures;
- If using vegetative measures, by no later than 14 days after initiating stabilization:
 - o Seed or plant the area, and provide temporary cover to protect the planted area;
 - o Once established, vegetation must be uniform, perennial (if final stabilization), and cover at least 70% of stabilized area based on density of native vegetation.
- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
 - o Install or apply all non-vegetative measures;
 - o Cover all areas of exposed soil.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization: 1. Preparing the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid (if construction occurs during seasonally dry period), or drought-stricken areas:
 - o Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
 - o Initiate vegetative stabilization as soon as conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that within 3 years the 70% cover requirement is met.
- Sites affected by severe storm events or other unforeseen circumstances:
 - o Initiate vegetative stabilization as soon conditions on the site allow;
 - o Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - o Plant the area so that so that within 3 years the 70% cover requirement is met.

8.J.4.3 Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in Parts 8.J.3.2(a) and 8.J.3.2(b), in addition to the water quality-based limits in Part 2.2 of the MSGP.

Stricter requirements apply if your site will discharge to an impaired water or a water that is identified by your state, tribe, or EPA as a Tier 2 or Tier 2.5 for antidegradation purposes:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping construction work.
- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

8.J.4.4 Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities

The following requirements supersede the inspections requirements in Parts 3 and 8.J.1.7 of the MSGP for earth-disturbing activities conducted prior to active mining activities defined in Parts 8.J.3.2(a) and 8.J.3.2(b).

8.J.4.4.1 Inspection Frequency

- At least once every 7 calendar days, or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note: Inspections only required during working hours:

- Inspections not required during unsafe conditions; and

- If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station).

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

8.J.4.4.2 Reductions in Inspection Frequency

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to Part 8.J.4.1.9 or Part 8.J.4.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

8.J.4.4.3 Areas to be Inspected. You must at a minimum inspect all of the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;
- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

8.J.4.4.4 What to Check for During Inspections. At a minimum you must check:

- Whether all stormwater controls are installed, operational and working as intended;

- Whether any new or modified stormwater controls are needed;
- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge, if a discharge is occurring;
- The quality and characteristics of the discharge (see Part 3.2.2.4);
- Whether controls are operating effectively.

8.J.4.5 Inspection Report. Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.

8.J.4.5 Cessation of Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities. The requirements in Part 8.J.4 no longer apply for any earth-disturbing activities conducted prior to active mining activities as defined in Part 8.J.3.2(a) or 8.J.3.2(b) where:

1. Earth-disturbing activities have ceased; and
2. Stabilization has been met consistent with Part 8.J.4.1.9 or 8.J.4.2.11 (not required for areas where active mining activities will occur).

8.J.5 Technology-Based Effluent Limits for Active Mining Activities

Note: These requirements do not apply for any discharges from earth-disturbing activities conducted prior to active-mining as defined in Part 8.J.3.2(a) or 8.J.3.2(a).

8.J.5.1 Employee Training. Conduct employee training at least annually at active and temporarily inactive sites. (See also Part 2.1.2.8).

8.J.5.2 Stormwater Controls. Apart from the control measures you implement to meet your Part 2 effluent limits, where necessary to minimize pollutant discharges in stormwater, implement the following control measures at your site. The potential pollutants identified in Part 8.J.6.3 shall determine the priority and appropriateness of the control measures selected.

Stormwater Diversions: Divert stormwater away from potential pollutant sources through implementation of control measures such as the following, where determined to be feasible (list not exclusive): interceptor or diversion controls (e.g., dikes, swales, curbs, 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. For mines subject to dust control requirements under state or county air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Part 2.1.2.10.

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

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 is encouraged. Treated stormwater 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 Discharge Testing.** (See also Part 6.2.3.4) Test or evaluate all discharge points covered under this permit for the presence of specific mining-related but unauthorized non-stormwater discharges such as discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 436). Alternatively (if applicable), you may keep a certification with your SWPPP, per Part 8.J.6.4.

8.J.6 Additional SWPPP Requirements for Mining Operations

Note: 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 6.2.2) Document in your 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 6.2.2) Document in your 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 discharge points within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit; outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage dewatering or other process water; heap leach pads; 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 6.2.3) For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, document in your SWPPP the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. For example, phosphate mining facilities will likely need to document pollutants such as selenium, which can be present in significant amounts in their discharges. Consider these factors: the mineralogy of the waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing waste rock or overburden characterization data and test results for potential generation of acid rock drainage.

- 8.J.6.4 Documentation of Control Measures.** To the extent that you use any of the control measures in Part 8.J.5.2, document them in your SWPPP per Part 6.2.4. If control

measures are implemented or planned but are not listed here (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP. If you are in compliance with dust control requirements under state or county air quality permits, you must state (or summarize, as necessary) what the state or county air quality permit dust control requirements are and how you've achieved compliance with them.

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

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

8.J.7 Additional Inspection Requirements (See also Part 3.1)

Except for earth-disturbing activities conducted prior to active mining activities as defined in Parts 8.J.3.2(a) and 8.J.3.2(b), which are subject to Part 8.J.4.4, perform inspections at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters which are designated as Tier 2 or 2.5 or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 8.J.9.1 for inspection requirements for inactive and unstaffed sites.

8.J.8 Indicator Monitoring (See also Part 4.2.1)

Table 8.J-1 identifies indicator monitoring that applies to the specific subsectors of Sector J. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector J (Subsectors J1, J2, and J3) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector J3, Clay, Ceramic, and Refractory Materials (SIC Code 1455, 1459); Chemical and Fertilizer Mineral Mining (SIC Code 1474-1479)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

¹ Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.J.9 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.J-2 identifies benchmarks that apply to the specific subsectors of Sector J. These benchmarks apply to both your primary industrial activity and any co-located industrial activities. Note: There are no Part 8.J.9 monitoring and reporting or impaired waters monitoring requirements for inactive and unstaffed sites.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector J1. Sand and Gravel Mining (SIC 1442, 1446)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	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.9.1 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Indicator, Benchmark, and Impaired Waters Monitoring.

As a Sector J facility, if you are seeking to exercise a waiver from either the routine inspection, quarterly visual assessment or the indicator, benchmark and/or impaired monitoring requirements for inactive and unstaffed sites (including temporarily inactive sites), you are conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to stormwater” in Parts 3.1.5, 3.2.4.4, 4.2.1.3, and 4.2.5.2. This exemption is conditioned on the following:

- If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable benchmark monitoring requirements as if you were in your first year of permit coverage, and the quarterly visual assessment requirements; and
- EPA 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 your facility is inactive and unstaffed, you are waived from the requirement to conduct routine facility inspections, quarterly visual assessments, and benchmark and impaired waters monitoring. You must still conduct an annual site inspection in accordance with Part 3.1. You are encouraged to inspect your site more frequently where you have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

8.J.10 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.J-3 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 waste streams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation ¹
Mine dewatering discharges of crushed stone mining facilities (SIC 1422 - 1429)	pH	6.0 - 9.0
Mine dewatering discharges of construction sand and gravel mining facilities (SIC 1442)	pH	6.0 - 9.0
Mine dewatering discharges of 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

¹Monitor annually.

8.J.11 Termination of Permit Coverage

8.J.11.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.J.3.5.

8.J.11.2 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 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 and 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 permits.

8.K.3 Limitations on Coverage

8.K.3.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact wash water from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility. [EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.]

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

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.4.4. Some specific areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

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- 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 ground water, 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 wash water from washing truck, equipment, and rail car 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** **Indicator Monitoring (See also Part 4.2.1)**

Table 8.K-1 identifies indicator monitoring that applies to the specific subsectors of Sector K. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector K (Subsector K1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.K.6 **Sector-Specific Benchmarks (See also Part 4.2.2)**

Table 8.K-2 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

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Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector K1. A.I. - Industrial Activity Code "H2" (Note: 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
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Recoverable Arsenic (freshwater)	150 µg/L
	Total Recoverable Arsenic (saltwater) ¹	69 µg/L
	Total Recoverable Cadmium (freshwater) ²	Hardness Dependent
	Total Recoverable Cadmium (saltwater) ¹	33 µg/L
	Total Recoverable Cyanide (freshwater)	22 µg/L
	Total Recoverable Cyanide (saltwater) ¹	1 µg/L
	Total Recoverable Lead (freshwater) ²	Hardness Dependent
	Total Recoverable Lead (saltwater) ¹	210 µg/L
	Total Recoverable Mercury (freshwater)	1.4 µg/L
	Total Recoverable Mercury (saltwater) ¹	1.8 µg/L
	Total Recoverable Selenium (freshwater)	1.5 µg/L for still/standing (lentic) waters
	Total Recoverable Selenium (saltwater) ¹	3.1 µg for flowing (lotic) waters 290 µg/L
Total Recoverable Silver (freshwater) ²	Hardness Dependent	
Total Recoverable Silver (saltwater) ¹	1.9 µg/L	

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology). In accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility, Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Cadmium (µg/L)	Lead (µg/L)	Silver (µg/L)
0-24.99 mg/L	0.49	14	0.37
25-49.99 mg/L	0.73	21	0.80
50-74.99 mg/L	1.2	45	1.9

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Freshwater Hardness Range	Cadmium (µg/L)	Lead (µg/L)	Silver (µg/L)
75-99.99 mg/L	1.7	69	3.3
100-124.99 mg/L	2.1	95	5.0
125-149.99 mg/L	2.6	123	7.1
150-174.99 mg/L	3.1	132	7.4
175-199.99 mg/L	3.5	182	12
200-224.99 mg/L	4.0	213	15
225-249.99 mg/L	4.4	246	18
250+ mg/L	4.7	262	20

8.K.7 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.K-3 identifies effluent limitations that apply to the industrial activities described below. Compliance with these effluent limitations is to be determined based on discharges from these industrial activities independent of commingling with any other waste streams 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
	Total Suspended Solids (TSS)	56 mg/L, monthly avg. maximum
	Ammonia	88 mg/L, daily maximum
	Alpha Terpineol	27 mg/L, monthly avg. maximum
	Aniline	10 mg/L, daily maximum
	Benzoic Acid	4.9 mg/L, monthly avg. maximum
	Naphthalene	0.042 mg/L, daily maximum
	p-Cresol	0.019 mg/L, monthly avg. maximum
	Phenol	0.024 mg/L, daily maximum
	Pyridine	0.015 mg/L, monthly avg. maximum
	Total Arsenic	0.119 mg/L, daily maximum
	Total Chromium	0.073 mg/L, monthly avg. maximum
	Total Zinc	0.059 mg/L, daily maximum
	pH	0.022 mg/L, monthly avg. maximum
		0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
		0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
		0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
	1.1 mg/L, daily maximum	
	0.54 mg/L, monthly avg. maximum	
	1.1 mg/L, daily maximum	
	0.46 mg/L, monthly avg. maximum	
	0.535 mg/L, daily maximum	
	0.296 mg/L, monthly avg. maximum	
	Within the range of 6-9 standard pH units (s.u.)	

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† 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 as identified by the Activity Code specified under Sector L in Table D-1 of Appendix D of the permit.

8.L.2 Industrial Activities Covered by Sector L

This permit may authorize stormwater discharges for Sector L facilities associated with waste disposal at landfills, land application sites 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 1.1.3) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact wash water from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.L.3.2 Prohibition Stormwater Discharges from Open Dumps. Discharges from open dumps as defined under RCRA are also not authorized under this permit.

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 ground water, 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 wash water

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.

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 your preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems; to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary); to minimize the effects of settlement, sinking, and erosion.

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 in order to minimize discharges of pollutants in stormwater: 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.6 Additional SWPPP Requirements

8.L.6.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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 stormwater, and leachate collection and handling systems.

8.L.6.2 Summary of Potential Pollutant Sources. (See also Part 6.2.3) Document in your 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 3)

8.L.7.1 Inspections of Active Sites. Except in arid and semi-arid climates, inspect operating landfills, open dumps, and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas; areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.

8.1.7.2 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.

8.1.8 Additional Post-Authorization Documentation Requirements

8.1.8.1 Recordkeeping and Internal Reporting. Keep records with your 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.

8.1.9 Indicator Monitoring (See also Part 4.2.1)

Table 8.1-1 identifies indicator monitoring that applies to the specific subsectors of Sector L. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector L (Subsectors L1 and L2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
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 (Activity Code LF)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysenes, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.1.10 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.1-2 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration¹
Subsector 11. All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code "LF")	Total Suspended Solids (TSS)	100 mg/L

¹ Benchmark monitoring required only for discharges not subject to effluent limitations in 40 CFR Part 445 Subpart B (see Table L-3 below).

8.L.11 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

Table 8.L-3 identifies effluent limitations that apply to the industrial activities described below. Compliance with these effluent limitations is to be determined based on discharges from these industrial activities independent of commingling with any other waste streams that may be covered under this permit.

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)	1.40 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	1.0 mg/L, daily maximum 4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum 0.016 mg/L, monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum 0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum 0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum 0.015 mg/L, monthly avg. maximum
	Total Zinc	0.20 mg/L, daily maximum 0.11 mg/L, monthly avg. maximum
	pH	Within the range of 6-9 standard pH units (s.u.)

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

- (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with CWI facilities subject to 40 CFR Part 437, so long as the CWI facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWI facility is subject to this part if the CWI facility discharges landfill wastewater separately.

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- 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 practicable), or employ some other equivalent means to prevent spills and leaks.

8.M.2.2 Employee Training. (See also Part 2.1.2.8) If applicable to your facility, address the following areas (at a minimum) in your employee training program: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents.

8.M.2.3 Management of Stormwater. (See also Part 2.1.2.6) Implement control measures to minimize discharges of pollutants in stormwater such as the following, where determined to be feasible (list not exclusive): 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 6.2.2) Identify locations used for dismantling, storing, and maintaining used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or stormwater: 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 6.2.3) 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 3.1)

Immediately (or as soon thereafter as practicable) 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 Indicator Monitoring (See also Part 4.2.1)

Table 8.M-1 identifies indicator monitoring that applies to the specific subsectors of Sector M. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.M-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector M (Subsector M1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector M1. Automobile Salvage Yards (SIC Code 5015)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysenes, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.M.6 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.M-2 identifies benchmarks that apply to Sector M. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.M-2		
Subsector (You 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 Recoverable Aluminum	1,100 µg/L
	Total Recoverable Lead (freshwater) ² Total Recoverable Lead (saltwater) ¹	Hardness Dependent 210 µg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.
² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology). In accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility, Hardness Dependent Benchmarks follow in the table below:

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Freshwater Hardness Range	Lead (µg/L)
0-24.99 mg/L	14
25-49.99 mg/L	24
50-74.99 mg/L	43
75-99.99 mg/L	69
100-124.99 mg/L	93
125-149.99 mg/L	123
150-174.99 mg/L	152
175-199.99 mg/L	182
200-224.99 mg/L	213
225-249.99 mg/L	246
250+ mg/L	262

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.N.2 Limitation on Coverage

Separate permit requirements have been established for recycling facilities that receive, process, and do wholesale distribution of only 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). See Part 8.N.3.3.

8.N.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.3) Non-stormwater discharges from turnings containment areas are not covered by this permit (see also Part 8.N.3.1.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES permit. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.N.3 Additional Technology-Based Effluent Limits

8.N.3.1 *Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials).* The following requirements are for facilities that receive, process, and do wholesale distribution of non-source separated, nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section is not intended for those facilities that accept recyclables only from primarily non-industrial and residential sources.

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 and through implementation of control measures such as the following, where determined to be feasible (list not exclusive): providing information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to your facility; establishing procedures to minimize the potential of any residual fluids from coming into contact with precipitation or stormwater; establishing 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.3.1.6); providing training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and establishing 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 with stockpiled materials, processed materials, and nonrecyclable wastes through implementation of control measures such as the following, where determined to be feasible (list not exclusive): permanent or semi-permanent covers; sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; dikes, berms, containment trenches, culverts, and surface grading to divert stormwater from storage areas; silt fencing; and 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 stormwater with residual cutting fluids by storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or 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 from these areas can be discharged, provided that any stormwater is first collected and treated by an oil and water separator or its equivalent. You must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.
- 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 stormwater through implementation of control measures such as the following, where determined to be feasible (list not exclusive): good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, and mercury spill kits for spills from storage of mercury switches; not allowing wash water from tipping floors or other processing areas to discharge to the storm sewer system; and 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 stormwater from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with stormwater (i.e., through good housekeeping, preventive maintenance). To minimize discharges of pollutants in stormwater from scrap and recyclable waste processing areas, implement control measures such as the following, where determined to be feasible (list not exclusive): at least once per month inspecting equipment for spills

or leaks and malfunctioning, worn, or corroded parts or equipment; establishing a preventive maintenance program for processing equipment; using dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; on unattended hydraulic reservoirs over 150 gallons in capacity, installing protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; implementing containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater with outdoor processing equipment or stored materials; using oil and water separators or sumps; installing permanent or semi-permanent covers in processing areas where there are residual fluids and grease; and using retention or detention ponds or basins, sediment traps, vegetated swales or strips, and/or catch basin filters or sand filters for pollutant settling and filtration.

8.N.3.1.6 Scrap Lead-Acid Battery Program. To minimize the discharge of pollutants in stormwater from lead-acid batteries, properly handle, store, and dispose of scrap lead-acid batteries, and implement control measures such as the following, where determined to be feasible (list not exclusive): segregating scrap lead-acid batteries from other scrap materials; properly handling, storing, and disposing of cracked or broken batteries; collecting and disposing of leaking lead-acid battery fluid; minimizing or eliminating (if possible) exposure of scrap lead-acid batteries to precipitation or stormwater; and providing employee training for the management of scrap batteries.

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 stormwater. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. To minimize discharges of pollutants in stormwater from indoor waste material storage areas, implement control measures such as the following, where determined to be feasible (list not exclusive): implementing procedures for material handling (including labeling and marking); cleaning up spills and leaks with dry absorbent materials and/or a wet vacuum system; installing appropriate containment structures (e.g., trenching, curbing, gutters, etc.); and installing a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage

should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate NPDES 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 stormwater. The plan may refer to applicable portions of other existing plans, such as SPOC plans required under 40 CFR Part 112.

Discharges of stormwater from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. To minimize discharges of pollutants in stormwater from outdoor waste material storage areas, implement control measures such as the following, where determined to be feasible (list not exclusive): appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; drainage control and other diversionary structures; corrosion protection and/or leak detection systems for storage tanks; and dry-absorbent materials or a wet vacuum system to collect spills.

8.N.3.2.3 Trucks and Rail Car Waste Transfer Areas. Minimize pollutants in stormwater discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. To minimize discharges of pollutants in stormwater from truck and rail car waste transfer areas, implement control measures such as the following, where determined to be feasible (list not exclusive): containment and diversionary structures to minimize contact with precipitation or stormwater; and dry clean-up methods, wet vacuuming, roof coverings, and/or stormwater controls.

8.N.3.3 Recycling Facilities (Source-Separated Materials). The following requirements are for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

8.N.3.3.1 Inbound Recyclable Material Control. Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials and through the implementation of control measures such as the following, where determined to be feasible (list not exclusive): providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials; training drivers responsible for pickup of recycled material; clearly marking public drop-off containers regarding which materials can be accepted; rejecting nonrecyclable wastes or household hazardous wastes at the source; and establishing procedures for handling and disposal of nonrecyclable material.

8.N.3.3.2 Outdoor Storage. Minimize exposure of recyclables to precipitation and stormwater by using good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas and through implementation of control measure such as the following, where determined to be feasible (list not exclusive): providing totally enclosed drop-off containers for the public; installing a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; providing dikes and curbs for secondary

containment (e.g., around bales of recyclable waste paper); diverting stormwater away from outside material storage areas; providing covers over containment bins, dumpsters, and roll-off boxes; and storing the equivalent of one day's volume of recyclable material indoors.

8.N.3.3.3 Indoor Storage and Material Processing. Minimize the release of pollutants from indoor storage and processing areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): scheduling routine good housekeeping measures for all storage and processing areas; prohibiting tipping floor wash water from draining to the storm sewer system; and providing employee training on pollution prevention practices.

8.N.3.3.4 Vehicle and Equipment Maintenance. Minimize the discharge of pollutants in stormwater from areas where vehicle and equipment maintenance occur outdoors through implementation of control measures such as the following, where determined to be feasible (list not exclusive): minimizing or eliminating outdoor maintenance areas; establishing spill prevention and clean-up procedures in fueling areas; avoiding topping off fuel tanks; diverting stormwater from fueling areas; storing lubricants and hydraulic fluids indoors; and providing 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 6.2.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or stormwater: 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. If you are subject to Part 8.N.3.1.3, your 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, per Part 3.1.4, 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.

8.N.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.N-1 identifies indicator monitoring that applies to the specific subsectors of Sector N. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

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Table 8.N-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector N (Subsectors N1 and N2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector N2. Source-separated Recycling Facility (SIC Code 5093)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

8.N.7 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.N-2 identifies benchmarks that apply to Sector N. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.N-2		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector N1. Scrap Recycling and Waste Recycling Facilities except those only receiving source-separated recyclable materials primarily from non-industrial and residential sources (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Aluminum	1,100 µg/L
	Total Recoverable Copper (freshwater) ² Total Recoverable Copper (saltwater) ¹	5.19 µg/L/4.8 µg/L
	Total Recoverable Lead (freshwater) ² Total Recoverable Lead (saltwater) ¹	Hardness Dependent 210 µg/L
	Total Recoverable Zinc (freshwater) ² Total Recoverable Zinc (saltwater) ¹	Hardness Dependent 90 µg/L

¹Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

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The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology). In accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility, Hardness Dependent benchmarks follow in the table below:

Freshwater Hardness Range	Lead (µg/L)	Zinc (µg/L)
0-24.99 mg/L	14	37
25-49.99 mg/L	24	52
50-74.99 mg/L	43	80
75-99.99 mg/L	69	107
100-124.99 mg/L	95	132
125-149.99 mg/L	125	157
150-174.99 mg/L	132	181
175-199.99 mg/L	182	204
200-224.99 mg/L	215	227
225-249.99 mg/L	246	249
250+ mg/L	262	260

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D.

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 (does not include geothermal power);*

8.O.2.2 *Coal pile runoff, including effluent limitations established by 40 CFR Part 423;*

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. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

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 (provided 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);*

8.O.3.2.3 *Cogeneration (combined heat and power) facilities utilizing a gas turbine.*

8.O.4 Additional Technology-Based Effluent Limits. 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 to minimize the tracking of coal dust offsite that could be discharged in stormwater through implementation of control measures such as the following, where determined to be feasible, (list not exclusive): installing specially designed tires; and

washing vehicles in a designated area before they leave the site and controlling the wash water.

- 8.O.4.2 *Delivery Vehicles.*** Minimize contamination of stormwater from delivery vehicles arriving at the plant site. Implement procedures to inspect delivery vehicles arriving at the plant site as necessary to minimize discharges of pollutants in stormwater. Ensure the overall integrity of the body or container of the delivery vehicle and implement procedures to deal with leakage or spillage from delivery vehicles.
- 8.O.4.3 *Fuel Oil Unloading Areas.*** Minimize contamination of precipitation or stormwater from fuel oil unloading areas. Use containment curbs in unloading areas where feasible. In addition, ensure personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries. Ensure that any leaks or spills are immediately contained and cleaned up, and use 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.*** Minimize contamination of precipitation or stormwater from chemical loading and unloading areas. Use containment curbs at chemical loading and unloading areas to contain spills, where practicable. In addition, ensure personnel familiar with spill prevention and response procedures are available to respond expeditiously in the event of a leak or spill during deliveries. Ensure leaks and spills are immediately contained and cleaned up and, where practicable, load and unload in covered areas and store chemicals indoors.
- 8.O.4.5 *Miscellaneous Loading and Unloading Areas.*** Minimize contamination of precipitation or stormwater from loading and unloading areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering the loading area; grading, curbing, or berming 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.*** Minimize contamination of stormwater from above-ground liquid storage tanks through implementation of control measures such as the following, where determined to be feasible, the following (list not exclusive): using protective guards around tanks; using containment curbs; installing spill and overflow protection; using dry cleanup methods; or equivalent measures.
- 8.O.4.7 *Large Bulk Fuel Storage Tanks.*** Minimize contamination of stormwater from large bulk fuel storage tanks. Use containment berms (or their equivalent). You must also comply with applicable state and federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.
- 8.O.4.8 *Spill Reduction Measures.*** Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.
- 8.O.4.9 *Oil-Bearing Equipment in Switchyards.*** Minimize contamination of stormwater from oil-bearing equipment in switchyard areas. Use level grades and gravel surfaces to retard flows and limit the spread of spills, or collect stormwater in perimeter ditches.

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- 8.O.4.10 *Residue-Hauling Vehicles.*** Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.
- 8.O.4.11 *Ash Loading Areas.*** Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water as necessary to minimize discharges of pollutants in stormwater.
- 8.O.4.12 *Areas Adjacent to Disposal Ponds or Landfills.*** Minimize contamination of stormwater 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.*** Minimize the potential for contamination of stormwater from these areas.
- 8.O.5 Additional SWPPP Requirements**
- 8.O.5.1 *Drainage Area Site Map.*** (See also Part 6.2.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or stormwater: 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.*** You must document in your SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 8.O.4.
- 8.O.6 Additional Inspection Requirements**
- As part of your 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 Indicator Monitoring (See also Part 4.2.1)**
- Table 8.O-1 identifies indicator monitoring that applies to the specific subsectors of Sector O. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.O-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector O (Subsector O1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector O1, Steam Electric Generating Facilities, including coal handling sites (SIC Code 55)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.O.8 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 4.2.3.1)

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 waste streams that may be covered under this permit.

Table 8.O-2		
Industrial Activity	Parameter	Effluent Limitation
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/l ⁴
	pH	6.0 min - 9.0 max

⁴ Monitor annually.

⁴ If your facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.P.2 Limitation on Coverage

8.P.2.1 Prohibited Discharges (see also Parts 1.1.3 and 8.P.3.1.4) This permit does not authorize the discharge of vehicle/equipment/surface wash water, including tank cleaning operations. Such discharges must be authorized under a separate NPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

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, you must do 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 through implementation of control measures such as the following, where determined to be feasible (list not exclusive): using of drip pans under vehicles/equipment; storing vehicles and equipment indoors; installing berms or dikes; using of absorbents; roofing or covering storage areas; and cleaning pavement surfaces to remove oil and grease.

8.P.3.1.2 Fueling Areas. Minimize contamination of stormwater from fueling areas through implementation of control measures such as the following, where determined to be feasible: covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/discharges to the fueling area; using dry cleanup methods; and treating and/or recycling collected stormwater.

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"). To minimize discharges of pollutants in stormwater from material storage areas, implement control measures such as the following, where determined to be feasible (list not exclusive): storing the materials indoors; installing berms/dikes around the areas; minimizing discharges of stormwater to the areas; using dry cleanup methods; and treating and/or recycling collected stormwater.

8.P.3.1.4 Vehicle and Equipment Cleaning Areas. Minimize contamination of stormwater from all areas used for vehicle/equipment cleaning through

implementation of control measures such as the following, where determined to be feasible (list not exclusive): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all wash water drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected wash water; or other equivalent measures.

Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit for this sector.

8.P.3.1.5 Vehicle and Equipment Maintenance Areas. Minimize contamination of stormwater from all areas used for vehicle/equipment maintenance through implementation of control measures such as the following, where determined to be feasible (list not exclusive): 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; and minimizing run on/discharges of stormwater to maintenance areas.

8.P.3.1.6 Locomotive Sanding (Loading Sand for Traction) Areas. Minimize discharges of pollutants in stormwater from locomotive sanding areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering sanding areas; minimizing stormwater run on/discharges; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

8.P.3.2 Employee Training. (See also Part 2.1.2.8) 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 6.2.2) Identify in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/stormwater: 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 6.2.3) 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.4.2.1 Description of Good Housekeeping Measures. You must document in your SWPPP the good housekeeping measures you implement consistent with Part 8.P.3.

8.P.4.2.2 Vehicle and Equipment Wash Water Requirements. If wash water is handled in a manner that does not involve separate NPDES permitting

(e.g., hauled offsite), describe the disposal method and include all pertinent information (e.g., frequency, volume, destination, etc.) in your SWPPP. Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit for this sector.

8.P.5 Additional Inspection Requirements (See also Part 3.1)

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.

8.P.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.P-1 identifies indicator monitoring that applies to the specific subsectors of Sector P. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector P (Subsector P1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector P1. Railroad Transportation (SIC Code 4011, 4013); Local and Highway Passenger Transportation (SIC Code 4111-4173); Motor Freight Transportation and Warehousing (SIC Code 4212-4231); United States Postal Service (SIC Code 4311); Petroleum Bulk Stations and Terminals (SIC Code 5171)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
Subsector P1. Railroad Transportation (SIC Code 4011, 4013); Petroleum Bulk Stations and Terminals (SIC Code 5171)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.Q.2 Limitations on Coverage

8.Q.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) The following are not authorized by this permit: discharges from vessels including bilge and ballast water, sanitary wastes, pressure wash water, and cooling water. Any discharge of pollutants from a point source to a water of the U.S. requires coverage under an NPDES permit. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.Q.3 Additional Technology-Based Effluent Limits

8.Q.3.1 Good Housekeeping Measures. You must 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 NPDES permit. Collect or contain the discharges from the pressure washing area so that they are not commingled 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 be discharged into receiving waters or the storm sewer system. Contain 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). At least once per month, you must clean stormwater conveyances of deposits of abrasive blasting debris and paintchips.

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 stormwater from the storage areas. Specify which materials are stored indoors, and contain or enclose or use other measures for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Implement 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 stormwater from all areas used for engine maintenance and repair through implementation of control measures such as the following, where determined to be feasible (list not exclusive): performing all maintenance activities indoors; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup methods; and treating and/or recycling stormwater collected from the maintenance area.
- 8.Q.3.1.5 Material Handling Area.** Minimize the contamination of precipitation or stormwater from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels) through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering fueling areas; using spill and overflow protection; mixing points and solvents in a designated area (preferably indoors or under a shed); and minimizing discharges of stormwater to material handling areas.
- 8.Q.3.1.6 Drydock Activities.** Routinely maintain and clean the drydock to minimize discharges of pollutants in stormwater. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. To minimize discharges of pollutants in stormwater from drydock activities, implement control measures such as the following, where determined to be feasible (list not exclusive): 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 2.1.2.8) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management; spent solvent management; disposal of spent abrasives; disposal of vessel wastewaters; spill prevention and control; fueling procedures; general good housekeeping practices; painting and blasting procedures; and used battery management.
- 8.Q.3.3 Preventive Maintenance.** (See also Part 2.1.2.3) As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.
- 8.Q.4 Additional SWPPP Requirements**
- 8.Q.4.1 Drainage Area Site Map.** (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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).

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8.Q.4.2 Summary of Potential Pollutant Sources. (See also Part 4.2.3) 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 3.1)

Include the following in all quarterly routine facility inspections: pressure washing areas; 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 Indicator Monitoring (See also Part 4.2.1)

Table 8.Q-1 identifies indicator monitoring that applies to the specific subsectors of Sector Q. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector Q (Subsector Q1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector Q1. Water Transportation Facilities (SIC Code 4493 only)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.Q.7 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.Q-2 identifies benchmarks that apply to Sector Q. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Recoverable Aluminum	1,100 µg/L
	Total Recoverable Lead (freshwater) ¹	Hardness Dependent
	Total Recoverable Lead (saltwater) ¹	210 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness

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Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
	Total Recoverable Zinc (saltwater)	Dependent 90 µg/L

¹ Saltwater benchmark values apply to stormwater discharges into saltwater unless otherwise indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix L, "Calculating Hardness in Receiving Waters for Hardness-Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness-Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Lead (µg/L)	Zinc (µg/L)
0-24.99 mg/l	14	37
25-49.99 mg/l	24	53
50-74.99 mg/L	45	80
75-99.99 mg/L	69	107
100-124.99 mg/L	95	132
125-149.99 mg/l	123	157
150-174.99 mg/L	152	181
175-199.99 mg/l	182	204
200-224.99 mg/l	213	227
225-249.99 mg/L	246	249
250+ mg/L	262	260

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.R.2 Limitations on Coverage

8.R.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) The following are not authorized by this permit: discharges from vessels including bilge and ballast water, sanitary wastes, pressure wash water, and cooling water. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

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 NPDES permit.

8.R.3.1.2 Blasting and Painting Area. Minimize the potential for spent abrasives, paint chips, and overspray to be discharged into receiving waters or the storm sewer system. 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). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.

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 stormwater from the storage areas. If abrasive blasting is performed, discuss the storage and disposal 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 stormwater from all areas used for engine maintenance and repair through implementation of control measures such as the following, where determined to be feasible (list not exclusive): performing all maintenance activities indoors; maintaining an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting the practice of hosing down the shop floor; using dry cleanup

methods; and treating and/or recycling stormwater collected from the maintenance area.

8.R.3.1.5 *Material Handling Area.* Minimize the discharge of pollutants in stormwater from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels) through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing stormwater runoff to material handling areas.

8.R.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater. Clean accessible areas of the drydock prior to flooding and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. To minimize discharges of pollutants in stormwater from drydock activities, implement control measures such as the following, where determined to be feasible (list not exclusive): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding; and having absorbent materials and oil containment booms readily available to clean up and contain any spills.

8.R.3.2 *Employee Training.* [See also Part 2.1.2.8] As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

8.R.3.3 *Preventive Maintenance.* [See also Part 2.1.2.3] As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.R.4 Additional SWPPP Requirements

8.R.4.1 *Drainage Area Site Map.* [See also Part 6.2.2] Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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 6.2.3] Document in your 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).

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8.R.4.3 Documentation of Good Housekeeping Measures. Document in your 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., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

8.R.4.3.2 Storage Areas. Specify in your SWPPP which materials are stored indoors, and contain or enclose or use other measures for those stored outdoors.

8.R.5 Additional Inspection Requirements (See also Part 3.1)

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

8.R.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.R-1 identifies indicator monitoring that applies to the specific subsectors of Sector R. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector R (Subsector R1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector R1. Ship and Boat Building or Repairing Yards (SIC Code 3731, 3732)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values
	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart 5 – Sector 5 – Air Transportation

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

8.5.1 Covered Stormwater Discharges

The requirements in Subpart 5 apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes specified under Sector 5 in Table D-1 of Appendix D of the permit.

8.5.2 Limitation on Coverage

8.5.2.1 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: the term "deicing" in this permit will generally be used to mean both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made otherwise.

8.5.2.2 Prohibition of Non-Stormwater Discharges. (See also Parts 1.1.3 and 9.5.5.3) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment wash waters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate NPDES permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.5.3 Multiple Operators at Air Transportation Facilities

Air transportation facilities often have more than one operator who could discharge stormwater associated with industrial activity. Operators include the airport authority and airport tenants, including air passenger or cargo companies, fixed based operators, and other parties who routinely perform industrial activities on airport property.

8.5.3.1 Permit Coverage/Submittal of NOIs. Where an airport transportation facility has multiple industrial operators that discharge stormwater, each individual operator must obtain coverage under an NPDES stormwater permit. To obtain coverage under the MSGP, all such operators must meet the eligibility requirements in Part 1 and must submit an NOI, per Part 1.3.2. (or, if appropriate, a no exposure certification per Part 1.5).

8.5.3.2 MSGP Implementation Responsibilities for Airport Authority and Tenants. The airport authority, in collaboration with its tenants, may choose to implement certain MSGP requirements on behalf of its tenants in order to increase efficiency and eliminate redundancy or duplication of effort. Options available to the airport authority and its tenants for implementation of MSGP requirements include:

- The airport authority performs certain activities on behalf of itself and its tenants and reports on its activities;
- Tenants provide the airport authority with relevant inputs about tenants' activities, including deicing chemical usage*, and the airport authority compiles and reports on tenants' and its own activities;
- Tenants independently perform, document and submit required information on their activities.

*Tenants who report their deicing chemical usage to the airport authority and rely on the airport authority to perform monitoring should not check the glycol and urea use box on their NOI forms.

8.5.3.3 SWPPP Requirements. A single comprehensive SWPPP must be developed for all stormwater discharges associated with industrial activity at the airport before submittal of any NOIs. The comprehensive SWPPP should be developed collaboratively by the airport authority and tenants. If any operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. All operators and their separate SWPPP contributions and compliance responsibilities must be clearly identified in the comprehensive SWPPP, which all operators must sign and certify per Part 6.2.7. As applicable, the SWPPP must clearly specify the MSGP requirements to be complied with by:

- The airport authority for itself;
- The airport authority on behalf of its tenants;
- Tenants for themselves.

For each activity that an operator (e.g., the airport authority) conducts on behalf of another operator (e.g., a tenant), the SWPPP must describe a process for reporting results to the latter operator and for ensuring appropriate follow-up, if necessary, by all affected operators. This is to ensure all actions are taken to correct any potential deficiencies or permit violations. For example, where the airport authority is conducting monitoring for itself and its tenants, the SWPPP must identify how the airport authority will share the monitoring results with its tenants, and then follow-up with its tenants where there are any exceedances of benchmarks, effluent limits, or water quality standards. In turn, the SWPPP must describe how the tenants will also follow-up to ensure permit compliance.

8.5.3.4 Duty to Comply. All individual operators are responsible for implementing their assigned portion of the comprehensive SWPPP, and operators must ensure that their individual activities do not render another operator's stormwater controls ineffective. In addition, the standard permit conditions found in Appendix B apply to each individual operator, including B.1 Duty to Comply (which states, in part, "You [each individual operator] must comply with all conditions of this permit."). For multiple operators at an airport this means that each individual operator remains responsible for ensuring all requirements of its own MSGP coverage are met regardless of whether the comprehensive SWPPP allocates the actual implementation of any of those responsibilities to another entity. That is, the failure of the entity allocated responsibility in the SWPPP to implement an MSGP requirement on behalf of other operators does not negate the other operators' ultimate liability.

8.S.4 Additional Technology-Based Effluent Limits

8.S.4.1 Good Housekeeping Measures. (See also Part 2.1.2.2)

8.S.4.1.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Minimize the contamination of stormwater from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers) through implementation of control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater from the maintenance area and providing treatment or recycling.

8.S.4.1.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of stormwater from cleaning areas.

8.S.4.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and implement control measures to minimize the discharge of pollutants in stormwater from these storage areas such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

8.S.4.1.4 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"). To minimize contamination of precipitation/stormwater from these areas, implement control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

8.S.4.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of pollutants in stormwater from airport fuel system and fueling areas through implementation of control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting stormwater. If you have implemented a SPCC plan developed in accordance with the 2006 amendments to the SPCC rule, you may cite the relevant aspects from your SPCC plan that comply with the requirements of this section in your SWPPP.

- 8.S.4.1.6 Source Reduction.** Consistent with safety considerations, minimize the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used that could add pollutants to stormwater discharges.
- **Runway Deicing Operations.** To minimize the discharge of pollutants in stormwater from runway deicing operations, implement source reduction control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup; heating sand; and product substitution. Chemical options to replace pavement deicers (urea or glycol) include (list not exclusive): potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.
 - **Aircraft Deicing Operations.** Minimize the discharge of pollutants in stormwater from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. Determine whether alternatives to glycol and whether containment measures for applied chemicals are feasible. Implement control measures for reducing deicing fluid such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): 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. Consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems where feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations. The evaluations and determinations required by this Part should be carried out by the personnel most familiar with the particular aircraft and flight operations and related systems in question (versus an outside entity such as the airport authority).
- 8.S.4.1.7 Management of Stormwater.** (See also Part 2.1.2.6) Minimize the discharge of pollutants in stormwater from deicing chemicals in stormwater. To minimize discharges of pollutants in stormwater from aircraft deicing, implement stormwater control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): installing a centralized deicing pad to recover deicing fluid following application; plug-and-pump (PnP); using vacuum/collection trucks (glycol recovery vehicles); storing contaminated stormwater/deicing fluids in tanks; recycling collected deicing fluid where feasible; releasing controlled amounts to a publicly owned treatment works; separation of contaminated snow; conveying contaminated stormwater into an impoundment for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing stormwater into vegetative swales or other

infiltration measures. To minimize discharges of pollutants in stormwater from runway deicing, implement stormwater control measures such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (list not exclusive): mechanical systems (snow plows, brushes); conveying contaminated stormwater into swales and/or an impoundment; and pollution prevention practices such as ice detection systems, and airfield prewetting.

When applying deicing fluids during non-precipitation events (also referred to as “clear ice deicing”), implement control measures to prevent unauthorized discharge of pollutants (dry-weather discharges of pollutants would need coverage under an NPDES wastewater permit), or to minimize the discharge of pollutants from deicing fluids in later stormwater discharges. Implement control measures such as the following, where determined to be feasible and that accommodate considerations safety, space, operational constraints, and flight considerations (list not exclusive): recovering deicing fluids; preventing the fluids from entering storm sewers or other stormwater discharge conveyances (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains); releasing controlled amounts to a publicly owned treatment works Used deicing fluid should be recycled whenever practicable.

- 8.S.4.1.8 Deicing Season.** You must determine the seasonal timeframe (e.g., December- February, October - March) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If you meet the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the deicing season you identified is the timeframe during which you must obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH. See also Part 8.S.8.

8.S.5 Additional SWPPP Requirements

- 8.S.5.1 Drainage Area Site Map.** (See also Part 6.2.2) Document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/stormwater: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- 8.S.5.2 Potential Pollutant Sources.** (See also Part 6.2.3) In the inventory of exposed materials, describe in the SWPPP 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). If deicing chemicals are used, a record of the types (including the Safety Data Sheets [SDS]) used and the monthly quantities, either as measured or, in the absence of metering, using best estimates, must be maintained. 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. Deicing operators must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

8.5.5.3 Vehicle and Equipment Wash Water Requirements. If wash water is handled in a manner that does not involve separate NPDES permitting or local pretreatment requirements (e.g., hauled offsite, retained onsite), describe the disposal method and include all pertinent information (e.g., frequency, volume, destination) in your SWPPP. Discharges of vehicle and equipment wash water are not authorized by this permit for this sector.

8.5.5.4 Documentation of Control Measures Used for Management of Stormwater. Document in your SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

8.5.6 Additional Inspection Requirements

At a minimum, you must conduct facility inspections at least monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Director may specifically require you to increase inspection frequencies.

8.5.7 Indicator Monitoring (See also Part 4.2.1)

Table 8.5-1 identifies indicator monitoring that applies to the specific subsectors of Sector S. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector S (Subsector S1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector S1. Air Transportation Facilities (SIC Code 4512-4581)	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.5.8 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.5-2 identifies benchmarks that apply to Sector S. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.S-2		
Subsector (You 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 pure glycol in glycol-based deicing fluids and/or 100 tons or more of urea on an average annual basis, monitor the first four parameters in ONLY those discharge points that collect stormwater 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	2.14 mg/L
	pH ¹	6.0 - 9.0 s.u.

¹These are deicing-related parameters. Collect the four benchmark samples, and any required follow-up benchmark samples, during the timeframes defined in Part 8.S.4.1.A when deicing activities are occurring.

8.S.9 Effluent Limitations Based on Effluent Limitations Guidelines and New Source Performance Standards (See also Part 4.2.3.1)

8.S.9.1 Airfield Pavement Deicing. For both existing and new "primary airports" (as defined at 40 CFR 449.2) with 1,000 or more annual non-propeller aircraft departures that discharge stormwater from airfield pavement deicing activities, there shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, such airports must do one of the following: (1) certify annually on the annual report that you do not use pavement deicers containing urea, or (2) meet the effluent limitation in Table 8.S-3.

8.S.9.2 Aircraft Deicing. Airports that are both "primary airports" (as defined at 40 CFR 449.2) and new sources ("new airports") with 1,000 or more annual non-propeller aircraft departures must meet the applicable requirements for aircraft deicing at 40 CFR 449.11(a). Discharges of the collected aircraft deicing fluid directly to waters of the U.S. are not eligible for coverage under this permit.

8.S.9.3 Monitoring, Reporting and Recordkeeping. For new and existing airports subject to the effluent limitations in Part 8.S.9.1 or 8.S.9.2 of this permit, you must comply with the applicable monitoring, reporting and recordkeeping requirements outlined in 40 CFR 449.20.

Table 8.S-3		
Industrial Activity	Parameter	Effluent Limitation
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Ammonia as Nitrogen	14.7 mg/L daily maximum

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart T– Sector T – Treatment Works

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 1.1.3) Sanitary and industrial wastewater and equipment and vehicle wash water are not authorized by this permit. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.T.4 Additional Technology-Based Effluent Limits

8.T.4.1 Control Measures. (See also Part 2.1.2) To minimize the discharge of pollutants in stormwater, implement control measures such as the following, where determined to be feasible (list not exclusive): routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grill, 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 2.1.2.8) At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

8.T.5 Additional SWPPP Requirements

8.T.5.1 Site Map. [See also Part 6.2.2] Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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 6.2.3] Document in your 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 Wash Water Requirements. If wastewater and/or vehicle and equipment wash water is not covered by another NPDES permit but is handled in another manner (e.g., hauled offsite, retained onsite), the disposal method must be described and all pertinent information (e.g., frequency, volume, destination) must be included in your SWPPP. Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit for this sector.

8.T.6 Additional Inspection Requirements (See also Part 3.1)

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.

8.T.7 Indicator Monitoring (See also Part 4.2.1)

Table 8.T-1 identifies indicator monitoring that applies to the specific subsectors of Sector T. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector T (Subsector T1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit.	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector T1. Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program.	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.T-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA (Activity Code TW)		

¹ Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.U.2 Limitations on Coverage

8.U.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) 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. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

8.U.3 Additional Technology-Based Limitations

8.U.3.1 Employee Training. (See also Part 2.1.2.8) Address pest control in your employee training program.

8.U.4 Additional SWPPP Requirements

8.U.4.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP the locations of the following activities if they are exposed to precipitation or stormwater: 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 6.2.3) Document in your 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 3.1)

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 Indicator Monitoring (See also Part 4.2.1)

Table 8.U-1 identifies indicator monitoring that applies to the specific subsectors of Sector U. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.U-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector U (Subsectors U1, U2, and U3) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polyaromatic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector U3. Meat Products (SIC Code 2011-2015); Dairy Products (SIC Code 2021-2026); Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties (SIC Code 2032-2038); Bakery Products (SIC Code 2051-2053); Sugar and Confectionery Products (SIC Code 2061-2068); Beverages (SIC Code 2082-2087); Miscellaneous Food Preparations and Kindred Products (SIC Code 2091-2099); Tobacco Products (SIC Code 2111-2141)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.U.7 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.U-2 identifies benchmarks that apply to the specific subsectors of Sector U. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Table 8.U-2		
Subsector (You 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	0.65 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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.V.2 Limitations on Coverage

8.V.2.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.1.3) The following discharges are not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process), reused or recycled water, and waters used in cooling towers. If you have these types of discharges from your facility, you must cover them under a separate NPDES permit. (EPA includes these prohibited non-stormwater discharges here solely as a helpful reminder to the operator that the only non-stormwater discharges authorized by this permit are at Part 1.2.2.)

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 from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or stormwater. Collect and dispose of wash water from these cleanings properly.

8.V.3.1.2 Material Handling Areas. Minimize contamination of stormwater from material handling operations and areas through implementation of control measures such as the following, where determined to be feasible: using spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines and pipes that may carry chemicals, dyes or wastewater.

8.V.3.1.3 Fueling Areas. Minimize contamination of stormwater from fueling areas through implementation of control measures such as the following, where determined to be feasible: covering the fueling area; using spill and overflow protection; minimizing run-on of stormwater to the fueling areas; using dry cleanup methods; and treating and/or recycling stormwater collected from the fueling area.

8.V.3.1.4 Above-Ground Storage Tank Area. Minimize contamination of stormwater from above-ground storage tank areas, including the associated piping and valves, through implementation of control measures such as the following, where determined to be feasible (list not exclusive): regular cleanup of these areas; including measures for tanks, piping and valves explicitly in your SPCC program; minimizing discharges of stormwater from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

8.V.3.1.5 Employee Training. (See also Part 2.1.2.8) As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

8.V.4 Additional SWPPP Requirements

8.V.4.1 Potential Pollutant Sources. (See also Part 6.2.3) Document in your 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 your containment area or enclosure for materials stored outdoors in connection with Part 8.V.3.1.1 above.

8.V.5 Additional Inspection Requirements

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

8.V.6 Indicator Monitoring (See also Part 4.2.1)

Table 8.V-1 identifies indicator monitoring that applies to the specific subsectors of Sector V. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector V (Subsector V1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.V-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Subsector V1. Textile Mill Products (SIC Code 2211-2299); Apparel and Other Finished Products Made from Fabrics and Similar Materials (SIC Code 2311-2399); Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing) (SIC Code 3131-3199)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart W – Sector W – Furniture and Fixtures

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.W.2 Additional SWPPP Requirements

8.W.2.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

8.W.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.W-1 identifies indicator monitoring that applies to the specific subsectors of Sector W. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector W (Subsector W1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector W1, Wood Kitchen Cabinets (SIC Code 2434); Furniture and Fixtures (SIC Code 2511-2599)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

*Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

8.X.2.1.2 Material Handling Area. Minimize contamination of stormwater from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials) through implementation of control measures such as the following, where determined to be feasible (list not exclusive): using spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

8.X.2.1.3 Fueling Areas. Minimize contamination of stormwater from fueling areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering the fueling area; using spill and overflow protection; minimizing discharges of stormwater to the fueling areas; using dry cleanup methods; and treating and/or recycling stormwater collected from the fueling area.

8.X.2.1.4 Above Ground Storage Tank Area. Minimize contamination of the stormwater from above-ground storage tank areas, including the associated piping and valves, through implementation of control measures such as the following, where determined to be feasible (list not exclusive): regularly cleaning these areas; explicitly addressing tanks; piping and valves in the SPCC program; minimizing stormwater discharges from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins; providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

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8.X.2.2 Employee Training. (See also Part 2.1.2.5) As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

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.

8.X.4 Indicator Monitoring (See also Part 4.2.1)

Table 8.X-1 identifies indicator monitoring that applies to the specific subsectors of Sector X. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector X (Subsector X1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector X1. Printing, Publishing, and Allied Industries (SIC Code 2711-2796)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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 your stormwater discharges. Parts 8.Y.2.1.1 to 8.Y.2.1.5 give possible sources of zinc to be reviewed and list control measures to be implemented where determined to be feasible. Implement additional control measures such as the following, where determined to be feasible (list not exclusive): using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize “puffing” losses when the container is opened; and using automatic dispensing and weighing equipment.

8.Y.2.1.1 Zinc Bags. Ensure proper handling and storage of zinc bags at your facility through implementation of control measures such as the following, where determined to be feasible (list not exclusive): employee training on the handling and storage of zinc bags; indoor storage of zinc bags; cleanup of zinc spills without washing the zinc into the storm drain; and the use of 2,500- pound sacks of zinc rather than 50- to 100-pound sacks.

8.Y.2.1.2 Dumpsters. Minimize discharges of zinc from dumpsters through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering the dumpster; moving the dumpster indoors; and providing a lining for the dumpster.

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. Where determined to be feasible, install 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. Where determined to be feasible, use alternative compounds to zinc stearate.

8.Y.2.2 Controls for Plastic Products Manufacturers. Minimize the discharge of plastic resin pellets in your stormwater discharges through implementation of control measures

such as the following, where determined to be feasible (list not exclusive): minimizing spills; cleaning up of spills promptly and thoroughly; sweeping thoroughly; pellet capturing; employee education; and disposal precautions.

8.Y.3 Additional SWPPP Requirements

8.Y.3.1 Potential Pollutant Sources for Rubber Manufacturers. (See also Part 4.2.3) Document in your SWPPP the use of zinc at your facility and the possible pathways through which zinc may be discharged in stormwater.

8.Y.4 Indicator Monitoring (See also Part 4.2.1)

Table 8.Y-1 identifies indicator monitoring that applies to the specific subsectors of Sector Y. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector Y (Subsectors Y1 and Y2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector Y2. Miscellaneous Plastics Products (SIC Code 3081-3089); Musical Instruments (SIC Code 3931); Dolls, Toys, Games, and Sporting and Athletic Goods (SIC Code 3942-3949); Pens, Pencils, and Other Artists' Materials (SIC Code 3951-3955 (except 3952 – see Sector C)); Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal (SIC Code 3961, 3965); Miscellaneous Manufacturing Industries (SIC Code 3991-3999)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.Y.5 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.Y-2 identifies benchmarks that apply to Sector Y. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Y1. Rubber Products Manufacturing	Total Recoverable Zinc	Hardness Dependent

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Part 8 – Sector-Specific Requirements (as modified)

Table 8.Y-2

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
[SIC 3011, 3021, 3052, 3053, 3061, 3069]	(freshwater) ² Total Recoverable Zinc (saltwater)	90 µg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters when indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness-Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness-Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (µg/L)
0-24.99 mg/L	37
25-49.99 mg/L	52
50-74.99 mg/L	80
75-99.99 mg/L	107
100-124.99 mg/L	132
125-149.99 mg/L	157
150-174.99 mg/L	181
175-199.99 mg/L	204
200-224.99 mg/L	227
225-249.99 mg/L	249
250+ mg/L	260

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing

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

8.2.1 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 D-1 of Appendix D of the permit.

8.2.2 Additional Technology-Based Effluent Limits

8.2.2.1 Good Housekeeping Measures. (See also Part 2.1.2.2)

- 8.2.2.1.1 Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products.** Minimize contamination of stormwater from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Store or protect indoors with polyethylene wrapping, tarpaulins, roofed storage, etc. where practicable. Place materials on an impermeable surface and enclose or put berms (or equivalent measures) around the area to prevent stormwater run-on and discharges where practicable.
- 8.2.2.1.2 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.
- 8.2.2.1.3 Buffing and Shaving Areas.** Minimize contamination of stormwater with leather dust from buffing and shaving areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): implementing dust collection enclosures; implementing preventive inspection and maintenance programs; or other appropriate preventive measures.
- 8.2.2.1.4 Receiving, Unloading, and Storage Areas.** Minimize contamination of stormwater from receiving, unloading, and storage areas. If these areas are exposed, implement control measures such as the following, where determined to be feasible (list not exclusive): covering all hides and chemical supplies; diverting drainage to the process sewer; or grade berming or curbing the area to prevent stormwater discharges.
- 8.2.2.1.5 Outdoor Storage of Contaminated Equipment.** Minimize contact of stormwater with contaminated equipment through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering equipment, diverting drainage to the process sewer, and cleaning thoroughly prior to storage.
- 8.2.2.1.6 Waste Management.** Minimize contamination of stormwater from waste storage areas through implementation of control measures such as the following, where determined to be feasible (list not exclusive): covering dumpsters; moving waste management activities indoors; covering waste

piles with temporary covering material such as tarpaulins or polyethylene; and minimizing stormwater discharges by enclosing the area or building berms around the area.

8.7.3 Additional SWPPP Requirements

8.7.3.1 Drainage Area Site Map. (See also Part 6.2.2) Identify in your SWPPP where any of the following may be exposed to precipitation or stormwater: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

8.7.3.2 Potential Pollutant Sources. (See also Part 6.2.3) Document in your 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.

8.7.4 Indicator Monitoring (See also Part 4.2.1)

Table 8.2-1 identifies indicator monitoring that applies to the specific subsectors of Sector 2. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector 2 (Subsector 21) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector 21, Leather Tanning and Finishing (SIC Code 3111)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D 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) Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed:

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

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 through implementation of control measures such as the following, where determined to be feasible (list not exclusive): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

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 where feasible. Install perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures where feasible.

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 6.2.3.3) In your spill prevention and response procedures, required by Part 2.1.2.4, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.

8.AA.3 Additional SWPPP Requirements

8.AA.3.1 Drainage Area Site Map. (See also Part 6.2.2) Document in your SWPPP where any of the following may be exposed to precipitation or stormwater: 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 6.2.3) Document in your 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 3.1) At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, spent solvents and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, drainage from roof and vehicle fueling and maintenance areas. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

8.AA.5 Indicator Monitoring (See also Part 4.2.1)

Table 8.AA-1 identifies indicator monitoring that applies to the specific subsectors of Sector AA. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector AA (Subsectors AA1 and AA2) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

8.AA.6 Sector-Specific Benchmarks (See also Part 4.2.2)

Table 8.AA-2 identifies benchmarks that apply to the specific subsectors of Sector AA. These benchmarks apply to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector AA1. Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Recoverable Aluminum	1,100 µg/L
	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
	Total Recoverable Zinc (saltwater) ²	90 µg/L
	Nitrate plus Nitrite Nitrogen	0.65 mg/L
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Recoverable Zinc (freshwater) ²	Hardness Dependent
	Total Recoverable Zinc (saltwater) ²	90 µg/L
	Nitrate plus Nitrite Nitrogen	0.65 mg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 4.2.2.1, to identify the applicable "hardness range" for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (µg/l)
0-24.99 mg/L	37
25-49.99 mg/L	52
50-74.99 mg/L	60
75-99.99 mg/L	107
100-124.99 mg/L	132
125-149.99 mg/L	157
150-174.99 mg/L	181
175-199.99 mg/L	204
200-224.99 mg/L	227
225-249.99 mg/L	249
250+ mg/L	260

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 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 D-1 of Appendix D of the permit.

8.AB.2 Additional SWPPP Requirements

8.AB.2.1 Drainage Area Site Map. (See also Part 6.2.2) Identify in your SWPPP where any of the following may be exposed to precipitation or stormwater: vents and stacks from metal processing and similar operations.

8.AB.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.AB-1 identifies indicator monitoring that applies to the specific subsectors of Sector AB. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector AB (Subsector AB1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit.	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector AB1. Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC) (SIC Code 3511-3599 (except 3571-3579)); Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R) (SIC Code 3711-3799 (except 3731, 3732))	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 D-1 of Appendix D of the permit.

8.AC.2 Additional Requirements

No additional sector-specific requirements apply.

8.AC.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.AC-1 identifies indicator monitoring that applies to the specific subsectors of Sector AC. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.AC-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector AC (Subsector AC1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector AC1: Computer and Office Equipment (SIC Code 3671-3679); Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks (SIC Code 3812-3873); Electronic and Electrical Equipment and Components, Except Computer Equipment (SIC Code 3612-3699)	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

* Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your 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 your facility may or may not normally be discharging stormwater associated with industrial activity, you must obtain the Director’s written permission to use this permit prior to submitting an NOI. If you are authorized to use this permit, you will still be required to ensure that your discharges meet the basic eligibility provisions of this permit at Part 1.1.

8.AD.2 Sector-Specific Benchmarks and Effluent Limits (See also Part 4)

The Director will establish any additional monitoring and reporting requirements for your facility prior to authorizing you to be covered by this permit. Additional monitoring requirements would be based on the nature of activities at your facility and your stormwater discharges.

8.AD.3 Indicator Monitoring (See also Part 4.2.1)

Table 8.AD-1 identifies indicator monitoring that applies to the specific subsectors of Sector AD. This indicator monitoring applies to both your primary industrial activity and any co-located industrial activities.

Table 8.AD-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Indicator Monitoring Parameter	Indicator Monitoring Threshold
Applies to all Sector AD (Subsectors AD1) facilities with stormwater discharges from paved surfaces that will be initially sealed or re-sealed with coal-tar sealcoat where industrial activities are located during coverage under this permit	Polycyclic Aromatic Hydrocarbons (PAHs)*	Report Only/ No thresholds or baseline values
Subsector AD1. Other stormwater discharges designated by the Director as needing a permit (see 40 CFR 122.26(a)(9)(i)(C) & (D)) or any facility discharging stormwater associated with industrial activity not described by any of Sectors A-AC. NOTE: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.	Chemical Oxygen Demand (COD)	Report Only/ No thresholds or baseline values
	Total Suspended Solids (TSS)	Report Only/ No thresholds or baseline values
	pH	Report Only/ No thresholds or baseline values

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¹ Monitoring is required for the 16 individual PAHs identified at Appendix A to 40 CFR Part 423: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, indeno[1,2,3-c,d]pyrene, and dibenz[a,h]anthracene.



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