



Stormwater Pollution Prevention Plan (SWPPP)

Sedona–Oak Creek Airport

FEBRUARY 2021

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PREPARED FOR

Sedona–Oak Creek Airport Authority

PREPARED BY

SWCA Environmental Consultants

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SEDONA–OAK CREEK AIRPORT

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SWCA Project No. 61800

February 11, 2021

CONTACTS FOR SEDONA–OAK CREEK AIRPORT STORMWATER POLLUTION PREVENTION TEAM

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Eric Brunner	Individual Operator Site Safety Officer, Sedona Air Tours (including Sky Safari, Red Rock Biplane and Helicopter Tours, Dakota Air Tours)	1225 Airport Road, Sedona, Arizona 86336	928-204-5939	
Jamaica Bergstrom	Individual Operator Site Safety Officer, Guidance Aviation (including Westwind Air Service)	1200 Airport Road, Sedona, Arizona 86336	(928) 351-1000	
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Victoria Naylor	Individual Operator Site Safety Officer, Sky Ranch Lodge	1105 Airport Road, Sedona, Arizona 86336	928-282-6400	
John Rosenthal	Individual Operator Site Safety Officer, Civil Air Patrol – Unit 205	175 Kallof Place Sedona, Arizona 86336	(928) 852-0440	
(currently inactive/vacant)	Masonic Lodge	135 Shrine Road, Sedona, Arizona 86336	(928) 282-9012	

SWPPP REVIEW AND ACCEPTANCE SHEET

**Sedona–OakCreek Airport
235 Air Terminal Drive
Sedona, Arizona 86336**

We, the undersigned have reviewed the Sedona–Oak Creek Airport Stormwater Pollution Prevention Plan (SWPPP) and any revisions in their entirety and to the best of our knowledge believe all information to be true and factual and will implement the SWPPP in accordance with the requirements herein.

Plan Reviewed and Accepted by:

Name: _____ Date: _____
Airport Manager

Name: _____ Date: _____
Sedona–Oak Creek Airport Board Director

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1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the Sedona–Oak Creek Airport (herein called the Airport) site, located in Sedona, Yavapai County, Arizona (site maps are provided in Attachments A and B). The Airport site covered under this SWPPP includes all industrial facilities located within Yavapai County Parcel No. 408-27-001A, including the Airport and other industrial tenants as listed in Section 2 of this SWPPP. These industrial tenants are subject to the compliance requirements as outlined in this SWPPP. Non-industrial tenants located within the parcel are also identified in Section 2. They must practice good housekeeping with regards to their actions. However, since they do not conduct industrial activities that may be exposed to stormwater, they are not subject compliance requirements under this SWPPP.

1.1 Regulatory Requirements

Under the Clean Water Act of 1972, it is unlawful to discharge any pollutant into waters of the U.S.,¹ except in compliance with applicable laws and regulations (33 United States Code 1311). Since 1992, the U.S. Environmental Protection Agency (EPA) has issued a series of stormwater Construction General Permits (CGPs) that provide permit coverage in states where the EPA is the permitting authority. The Arizona Department of Environmental Quality (ADEQ) received authorization to administer the National Pollutant Discharge Elimination System (NPDES) program in Arizona on December 5, 2002, and issued its first, 5-year CGP in February 2003. Subsequent permits were issued in 2008 and 2013. On non-tribal lands in Arizona, the ADEQ administers the Arizona Pollutant Discharge Elimination System (AZPDES) program, which provides authorization for discharges of pollutants from a point source to waters of the U.S. in compliance with Section 402 of the Clean Water Act through the issuance of various types of AZPDES permits, including for common industrial activities.

The Airport has the potential to discharge stormwater containing pollutants to nearby waters of the U.S., and therefore requires authorization under the AZDPES program. The Airport is eligible for coverage under the AZPDES Industrial Multi-Sector General Permit (MSGP), for Sector S (Air Transportation Facilities). ADEQ recently issued an updated *General Permit for Stormwater Discharges Associated with Industrial Activity to Waters of the United States* (AZMSG2019-001) for common industrial activities in a variety of sectors, effective on January 1, 2020 (Attachment C).

1.2 Purpose

This site-specific SWPPP has been prepared in accordance with the 2019 AZPDES MSGP (Permit No. AZMSG2019-001), and in consideration of current Airport site conditions and operational activities. The purpose of this SWPPP is to identify sources of pollutants associated with industrial activity that may affect the quality of stormwater runoff from the Airport, identify and implement stormwater control measures to reduce or eliminate pollutants in stormwater discharges, and identify maintenance procedures for erosion and sediment control and stormwater management for implementation by the operator. The measures and procedures in this SWPPP should reduce the possibility of spills or releases of hazardous materials to the environment and provide guidance on how to address spills and releases to reduce or eliminate the discharge of those pollutants off-site through stormwater.

¹ Waters of the U.S. are defined under 33 Code of Federal Regulations (CFR) 328.3.

1.3 SWPPP Management

(see Attachment C, MSGP Part 8.S.3)

This is a comprehensive SWPPP that has been developed for all stormwater discharges associated with industrial activity at the airport; it encompasses responsibilities of the Sedona–Oak Creek Airport Authority (SOCAA) and all industrial Airport tenants. Unless otherwise specified, the SOCAA On-Site Environmental Coordinator will ensure compliance with this SWPPP on behalf of itself and all industrial tenants. The On-Site Environmental Coordinator will report monitoring/sampling results, inspection findings, corrective actions, and SWPPP modifications to all affected and responsible tenants in writing (via email or letter) prior to submitting any reports to ADEQ or other agencies, except in case of an emergency. The On-Site Environmental Coordinator will allow adequate time (within the timeframes outlined in the MSGP) for the applicable and responsible tenant(s) to correct any issues.

This SWPPP will be implemented prior to commencement of stormwater discharge from the site. The owner/operator and all industrial tenants must file a Notice of Intent (NOI) with the ADEQ (Attachment D) and must comply with all conditions of the MSGP. The SWPPP shall be kept at the SOCAA administration office located at 235 Air Terminal Drive, Sedona, Arizona, and will be made available upon request to representatives of the EPA or the ADEQ.

This SWPPP will be amended if any of the following occur:

- There is a change in site operations that may affect the quality of stormwater runoff.
- The SWPPP is in violation or does not adequately meet conditions of the AZPDES MSGP.
- A revision is requested by the EPA or ADEQ.

If a change of ownership occurs, the new owner shall be informed of the provisions of the MSGP and provided with a copy of this SWPPP for use until the new owner can develop a SWPPP.

This SWPPP (including any modifications), together with all inspection reports, Corrective Action Reports, Control Measure Assessment Reports, and all certifications required by the MSGP for the Airport, shall be retained at the Airport. All reports and records will be made available, upon request, for a period of at least 3 years from the date the facility's MSGP coverage expires or is terminated.

2 FACILITY DESCRIPTION

2.1 Facility Information

(see Attachment C, MSGP Part 5.1.1)

Name of Facility: Sedona-Oak Creek Airport

Street: 235 Air Terminal Drive

City: Sedona

State: Arizona

Zip: 86336

Previous Permit Tracking Number: AZMS82575

Facility Latitude/Longitude

Latitude: 34.850027°N (decimal degrees) Longitude: -111.789628°W (decimal degrees)

Parcel Number: 408-27-001A

Driving Directions:

From downtown Phoenix, travel north on Interstate 17 (I-17) for approximately 99 miles. Take Exit 298 for State Route 179 (SR 179) toward Sedona. Travel north on SR 179 for approximately 14.5 miles, continuing on SR 179 by taking the second exit through nine traffic circles. After the ninth traffic circle (at the split with Schnebly Hill Road), turn left on Ranger Road, then right on Brewer Road, then take the second exit onto SR 89A. Travel 1 mile west along SR 89A, then turn left on Airport Road and travel generally south/southwest for approximately 1.2 miles.

Method for determining latitude/longitude (check one):

USGS topographic map (specify scale): ADEQ Web site GPS
 Other (please specify):

Is the facility located in Indian Country?

Yes

No

If yes, ADEQ cannot permit this facility. Please contact EPA as the permitting authority of the Reservation.

List total number of acres exposed to stormwater: approximately 66 acres²

Additional Site Information: The Airport is classified as a general aviation airport. The site parcel is bounded on all sides by Coconino National Forest lands. Roads, sidewalks, select ground vehicle parking areas, the runway, taxiways, aprons, and structure foundations are paved with an impervious surface (i.e., asphalt or concrete). All other areas are bare ground or contain oak woodlands vegetation (e.g., dominated by evergreen oaks, with some pine, cypress, juniper, manzanita, sumac, and various grasses [U.S. Geological Survey 2011]).

The Airport is located atop Table Top Mountain, with an elevation ranging from approximately 4,737 feet to 4,830 feet above mean sea level (see Attachment A, Figures A-1 and A-2). The site is located in the Upper Verde sub-basin watershed (8-digit Hydrologic Unit Code 15060202), which drains to the Verde River, an indirect tributary to the Gila River (a Traditional Navigable Waters from Powers Butte to Gillespie Dam). The nearest main receiving water is Oak Creek.

² Includes only impervious areas such as asphalt, concrete, and rooftops, and hard-packed dirt/gravel areas that are likely to contribute to stormwater runoff during and following storm events. Vegetated and undisturbed bare ground areas are excluded from this number. Total site acreage, including developed and undeveloped portions of the parcel, is 241.31 acres.

Oak Creek is perennial in the vicinity of the Airport and is designated as an Outstanding Arizona Waters (Arizona Administrative Code [AAC] R18-11-112[G]). The segment of Oak Creek in the vicinity of the Airport (i.e., from Slide Rock State Park to Dry Creek; EPA ID: AZ15060202-018C) is impaired for *Escherichia coliform* (*E. coli*) (ADEQ 2020a). An Improvement Plan (Oak Creek Watershed Council 2012) and Total Maximum Daily Loads (ADEQ 2010, 2020b) have been established for Oak Creek. No wetlands are present within or adjacent to the Airport. However, conditions within the floodplain of Oak Creek may support the development of wetlands.

The Federal Emergency Management Agency (FEMA) maps the site as Zone X, area of minimal flood hazard (FEMA 2010). Oak Creek is the nearest area mapped as a Special Flood Hazard Area, which is an area inundated by the 1-percent annual chance flood, also known as the 100-year floodplain. Oak Creek is mapped as a Zone AE regulatory floodway with base flood elevations.

2.2 Discharge Information

(see Attachment C, MSGP Part 5.1.1)

Is stormwater discharged to a Municipal Separate Storm Sewer System (MS4)? Yes No

If yes, provide the name of the city/county/university/military installation/VA hospital who owns the MS4: City of Sedona

Surface water from the scenic overlook parking lot and Airport Road may flow alongside Airport Road past the cattle guard at the Airport site entrance, travel down the mesa near Outfall 3, and discharge into an existing City of Sedona concrete-lined surface water channel.

List of Outfall(s): (Enter all locations where industrial stormwater leaves the property, this may be a pipe, sheet flow, curb cut, ditch, etc.)

The Airport has an on-site drainage system with human-made unlined and lined swales and drainage channels, culverts, a retention basin (northwest of the main terminal building), grated catch basins, storm drainpipes, and outfalls. Stormwater from the Airport leaves the site through one of four outfalls. Outfall 1 discharges from an on-site culvert near the northernmost hangar on the north end of the site and travels overland as sheetflow before reaching Carroll Canyon located 0.3 mile west of the site and ultimately discharging into Oak Creek; it receives stormwater from the northern portion of the site, including the northernmost hangars and surrounding area. Outfall 2 discharges to a small unnamed ephemeral tributary located approximately 800 feet to the west of the site near the end of the runways; it receives stormwater from the majority of the site. Outfall 3 discharges as sheetflow from the scenic overlook on the west side of the site to Carroll Canyon; it receives stormwater from the northern portion of the site including the scenic overlook, Masonic Lodge, and associated ground vehicle parking areas. Outfall 4 discharges as sheetflow from the southeast side of the site to Oak Creek located approximately 0.4 mile to the southeast. The flow path from two of the four outfalls (Outfalls 2 and 4) to Oak Creek is under 2.5 miles. The flow path for Outfalls 1 and 3 through Carroll Canyon is over 3 miles to Oak Creek. Table 1 includes locations and descriptions of the four outfalls; Figure A-3 in Attachment A shows the approximate flow paths from the site outfalls to Oak Creek.

Table 1. Outfall Locations

Outfall Name	Latitude (decimal degrees)	Longitude (decimal degrees)	Description	Receiving Water
Outfall 1	34.854144	-111.784827	Culvert outlet near the northernmost hangar on the north end of the site	Oak Creek via Carroll Canyon*
Outfall 2	34.845496	-111.793866	Culvert outlet on the southwest corner of the site, includes rock riprap and erosion control fabric at the terminus of the existing channel as it exits the Airport security fencing	Oak Creek via an unnamed tributary
Outfall 3	34.853506	-111.789758	Sheetflow off the edge of the scenic overlook on the northwestern portion of the site	Oak Creek via Carroll Canyon*
Outfall 4	34.845618	-111.788887	Sheetflow off the edge of the mesa on the southeastern portion of the site	Oak Creek via an unnamed tributary

Note: Locations for Outfalls 1–4 were identified by the July 2020 Drainage Master Plan prepared for the Airport (Dibble Engineering 2020) and confirmed at the August 17, 2020 site visit. They do not necessarily match outfall locations identified in previous SWPPPs for the Airport. In the case of a discrepancy, the locations and names in this table should be used.

* Outfalls 1 and 3 are greater than 2.5 stream miles from Oak Creek.

2.3 Receiving Waters

(see Attachment C, MSGP Part 1.1.4)

Will industrial stormwater discharge to an “Impaired Water”? Yes No

If Yes, a copy of the SWPPP must be submitted to ADEQ for review with the NOI (new permit coverage only, unless otherwise requested by ADEQ).

Name of the impaired water: (and segment, if applicable): Oak Creek (from Slide Rock State Park to Dry Creek); EPA ID: AZ15060202-018C.

Pollutant(s) causing the impairment: *Escherichia coliform (E. coli)*

For pollutants identified, could those pollutants be present in the stormwater discharge?

Yes No

If no, explain why:

For those pollutants identified, is there a completed TMDL?

Yes No

TMDL information is available at ADEQ’s website: <http://www.azdeq.gov>

Are any of your discharges directly into any segment of an “Outstanding Arizona Water (OAW)”?

Yes No

If Yes, a copy of the SWPPP must be submitted to ADEQ for review with the NOI (new permit coverage only).

List the parameters that will be monitored for the OAW: None specified by ADEQ (see Section 6.4)

Is any part of the facility within 2.5 miles of an impaired water or OAW? Yes No

Effluent Limitation Guidelines (ELG):

Are any of your stormwater discharges subject to an ELG?

Yes No

If Yes, which ELG(s) apply (List Sector and Activity)?

Primary Industrial Activity (refer to Appendix C of the MSGP): Air Transportation Facilities

Identify your Primary sector and subsector: Sector S (S1)

Primary Standard Industrial Classification (SIC) Code or 2-letter Activity Code: 4581

Of the total acres exposed to stormwater, how many acres are being used for the primary activity:
approximately 58 acres³

Co-located Industrial Activity (if applicable): Not applicable

SIC Code or 2-letter Activity Code: Not applicable

Of the total acres exposed to stormwater, how many acres are being used for the secondary activity:
Not applicable

³ Excludes non-industrial facilities, such as the Sky Ranch Lodge, scenic overlook and associated public parking lot, Masonic Lodge and associated parking lot, communication towers, water tanks, souvenir/ticket offices, and Mesa Grill restaurant.

3 CONTACT INFORMATION

3.1 Owner/Operator(s)

Facility Operator:

Contact Name: Edward Rose, Airport Manager
Contact Telephone Number: (928) 440-2514
Contact Cell Phone Number: (845) 380-5269
Contact Email Address: Ed@SedonaAirport.org
Contact Fax Number: Not applicable
Operator Business Name: Sedona–Oak Creek Airport Authority (SOCAA)
Operator Mailing Address: 235 Air Terminal Drive, Sedona, Arizona 86336

SWPPP Contact (24-hour emergency contact):

SWPPP Contact Name: Edward Rose, Airport Manager
SWPPP Contact Telephone Number: (928) 440-2514
Contact Cell Phone Number: (845) 380-5269
SWPPP Contact Email Address: Ed@SedonaAirport.org

Facility Owner:

Facility Owner Name: Jack Fields, Assistant County Administrator/
Risk Manager
Facility Owner Business Name: Yavapai County
Facility Owner Address: 1015 Fair Street, Prescott, Arizona 86305
Facility Owner Telephone Number: (928) 771-3200
Facility Owner Fax Number: (928) 771-3257
Facility Owner Email Address: jack.fields@yavapai.us

3.2 Tenants and Key Contacts

Industrial and non-industrial tenant information is provided in Table 2 and Table 3, respectively. Key waste stream contacts are provided in Table 4. The Airport is surrounded by Coconino National Forest lands; contact information for the Coconino National Forest is provided after Table 4.

Industrial tenants are required to submit their own NOI and obtain authorization under this MSGP (see Attachment D). Separately prepared SWPPPs would not be required for industrial tenants; however, they will be obligated to follow this SOCAA SWPPP. Each industrial tenant must certify they received a copy of the SWPPP and understand the requirements under the SWPPP as they are subject to the compliance requirements. Non-industrial tenants must certify they received a copy of the SWPPP and must practice good housekeeping with regards to their actions. However, since they do not conduct industrial activities that may be exposed to stormwater, they are not subject compliance requirements under this SWPPP.

Table 2. Industrial Tenants

Organization/Company	Facility Description	Inside Airport Secure Area	Associated Locations on Figure B-1
Sedona Car Rentals	Maintains and operates a ticket counter and administrative offices for commercial car rentals in the main terminal; stores and conducts routine maintenance for rental cars for the public in the adjacent ground vehicle parking lot	No	J, K
Civil Air Patrol – Unit 205	Maintains administrative offices and meeting rooms within the private aircraft storage/hangars area; flights originate from other regional airports	Yes	P, V (in hangar area)
Guidance Aviation (including Westwind Air Service)	Maintains and operates a souvenir shop, ticket counter, administration offices, and recreational helicopter tours for the public; helicopters are stored in an on-site hangar; maintenance is not conducted on-site; shares an on-site septic tank/leach field for sanitary wastes with Sedona Air Tours	Helicopter use and storage only	B, L, O, P
Red Rock Aviation– Aviation Fuel Service	Serves as the Fixed Base Operator (FBO), maintains aboveground storage tanks in the tank farm; maintains and operates administrative offices and a customer service counter in the main terminal; manages rentals for the private aircraft storage/hangars, utilizes an on-site septic tank/leach field for sanitary wastes at the main terminal and within the private aircraft storage/hangars area	Yes	A, B, C, D, E, F, G, H, I, K, L, M, P
Red Rock Balloons	Operates recreational hot air balloon tours for the public	Yes	C, P
Sedona Air Tours (including Sky Safari, Red Rock Biplane and Helicopter Tours, Dakota Air Tours)	Maintains and operates a souvenir shop, ticket counter, administration offices, and recreational biplane and helicopter tours for the public; biplanes and helicopters are stored, serviced, and maintained at the City of Cottonwood Airport; shares an on-site septic tank/leach field for sanitary wastes with Guidance Aviation	Biplane and helicopter use only	B, L, O, P

Note: Refer to the Contacts for Sedona–Oak Creek Airport Stormwater Pollution Prevention Team table (page i of this SWPPP) for specific contact names and phone numbers.

Table 3. Non-industrial Tenants

Organization/Company	Facility Description	Inside Airport Secure Area	Associated Locations on Figure B-1
Masonic Lodge	Maintains a private meeting hall that is currently inactive/vacant	No	S, T
Mesa Grill	Operates and maintains a restaurant for the public; utilizes an on-site septic tank/leach field for sanitary wastes	No	N
SOCAA Scenic Overlook	Maintains a publicly accessible scenic overlook and associated gravel parking area, with non-hazardous solid waste containers and port-a-johns for sanitary waste.	No	R
Sedona Fire Department	Operates and maintains radio antennae and cell phone communication towers	No	U, W
Sky Ranch Lodge	Operates and maintains hotel accommodations, including routine housekeeping and landscaping activities; utilizes a series of on-site septic tanks/leach fields for sanitary wastes	No	Q

Note: Refer to the Contacts for Sedona–Oak Creek Airport Stormwater Pollution Prevention Team table (page i of this SWPPP) for specific contact names and phone numbers.

Utilities at the Airport include potable water provided by the Oak Creek Water Company, electrical power provided by Arizona Public Service (APS), telecommunications (telephone and internet services) provided by Century Link, and propane gas provided by Graves Propane. The Airport also has a diesel emergency generator to power runway and taxiway edge lights, runway end identifier lights (REILs), and precision approach path indicators (PAPIs). The Airport site utilizes septic tank/leach field systems for sanitary sewer waste, including one adjacent to the northwest of the main terminal, one within the private aircraft storage/hangars area, one between Sedona Air Tours and Guidance Aviation, one near Mesa Grill, and a series of them adjacent to the lodging areas at Sky Ranch Lodge. Sanitary waste is collected in waste containers, hauled, and disposed by Septic Services. Propane gas is stored in large-capacity aboveground storage tanks at several locations, including the main terminal building, tank farm, hangars, Mesa Grill, communication towers/water tanks, and Sky Ranch Lodge. See Attachment B, Figure B-1 for locations of septic tank/leach field systems and storage tanks.

Table 4. Key Waste Stream Contacts

Activity/Waste Stream	Supplier/Contractor	Phone Number
Solid Waste (Trash) Disposal	Taylor and Sons Hauling	(928) 649-8335
Waste Oil Recycle	Safety Kleen	(480) 940-7202
Sanitary Waste	Septic Services	(928) 779-2144
Hazardous Waste Disposal	Four Corners Environmental	(928) 714-9374
Repairs of Aircraft Equipment	Sedona Air Tours Guidance Aviation	(928) 204-5939 (928) 351-1000

Adjacent landowner emergency contact information:

Amy Tinderholt
 District Ranger, Coconino National Forest Red Rock District
 Mailing address: P. O. Box 20429, Sedona, Arizona 86341-0429
 Physical address: 8375 State Route 179, Sedona, Arizona
 Phone: (928) 203-2900
SM.FS.Cof_Webmail@usda.gov

3.3 Stormwater Pollution Prevention Team

(see Attachment C, MSGP Part 5.1.1)

The SOCAA has selected a Stormwater Pollution Prevention Team (SWPPT) consisting of SOCAA and industrial tenant staff that have been drawn from different areas of the facility operations to best utilize the experience of each team member. This team is responsible for assisting the On-Site Environmental Coordinator in development and implementation of this SWPPP. Team members are each responsible for one or more areas of stormwater pollution prevention. Individual team members and their responsibilities are identified in Table 5. For ease of future revisions, individual SWPPT member names and contact numbers are provided on the Contact List on page i of this SWPPP.

Table 5. Stormwater Pollution Prevention Plan Team Responsibilities

Team Member	Responsibilities
Operator	
SOCAA (On-Site Environmental Coordinator)	Oversight of SWPPP compliance; maintain and update SWPPP, review tenant routine inspections, coordinate training, collect spill and release data, coordinate spill response and reporting, main task manager for water quality monitoring, conduct periodic inspections, construction inspections, contact Owner in case of incident
Owner	
Yavapai County	To be contacted in case of incident
Industrial Tenants	
Sedona Car Rentals	Implementation of and compliance with control measures and best management practices (BMPs) at the car washing station and associated parking and storage areas
Civil Air Patrol – Unit 205	Compliance with control measures and BMPs at the Civil Air Patrol administrative offices and meeting rooms, tank farm, private aircraft storage/hangars, runways, and associated parking and storage areas
Guidance Aviation (including Westwind Air Service)	Compliance with control measures and BMPs at the Guidance Air souvenir/ticket office, tank farm, private aircraft storage/hangars, runways, and associated parking and storage areas
Red Rock Aviation–Aviation Fuel Service (FBO)	Implementation of and compliance with control measures and BMPs at the main terminal building, tank farm, private aircraft storage/hangars, runways, and associated parking and storage areas
Red Rock Balloons	Compliance with control measures and BMPs at the tank farm, private aircraft storage/hangars, runways, and associated parking and storage areas
Sedona Air Tours (including Sky Safari, Red Rock Biplane and Helicopter Tours, Dakota Air Tours)	Compliance with control measures and BMPs at the Sky Safari/Red Rock Biplanes and Helicopter Tours/Dakota Air Tours souvenir/ticket office, tank farm, private aircraft storage/hangars, runways, and associated parking and storage areas

Note: Refer to the Contacts for Sedona–Oak Creek Airport Stormwater Pollution Prevention Team table (page i of this SWPPP) for specific contact names and phone numbers.

4 SUMMARY OF POLLUTANT SOURCES

4.1 Airport Activities

(see Attachment C, MSGP Part 5.1.1)

Yavapai County leases land in the site parcel to private parties for various industrial and non-industrial commercial services and activities. The primary use of the Airport site is as a general aviation airport managed by SOCAA. As part of the County lease agreements, the lessors are required to abide by all federal, State, and local laws, regulations, and rules, including those in effect at the time the lease is entered into and any that may be promulgated during the lease term. For industrial tenants, this includes abiding by conditions in the MSGP as outlined in this SWPPP. Forms for tenants' acknowledgement of the SWPPP are provided in Attachment E.

A site visit was conducted on August 17, 2020, to verify and identify any changes to on-site activities. The following is a list of current facilities at the Airport, including industrial and non-industrial facilities, with a description of associated activities (Appendix B, Figure B-1 map key letters provided in parentheses):

- **Main Terminal (K):** The main terminal building was constructed in September 1989. Red Rock Aviation currently maintains administrative offices and a customer service counter, Sedona Car Rentals operates a ticket counter and offices for commercial car rentals, and the SOCAA maintains an administrative office for airport management within the main terminal building.
- **Helipads (B), Aprons (C), Taxiways (G), and Runways (H):** The main runways and associated taxiways run southwest to northeast on the southeastern portion of the site. Aprons are located northwest of the taxiways. Helipads are located in several locations, generally in the southwestern portion of the site near the Tank Farm. The runways, taxiways, helipads, and aprons are paved with asphalt or concrete. Maintenance includes sweeping, weed control, and crack repair. Temporary parking of private vehicles and aircraft may occur on aprons.
- **Aboveground Storage Tank Farm and Fuel Trucks (D):** Red Rock Aviation, the Fixed Base Operator (FBO), provides fuel service, management, and oversight of hangar leasing and catering. To provide fuel service, Red Rock Aviation maintains a tank farm for aircraft fuel and provides fuel trucks for the distribution of fuel to commercial and private aircraft. The tank farm consists of two 10,000-gallon aboveground storage tanks (ASTs) that contain Jet Fuel A and 100 Low Lead Aviation Gas (AV Gas 100 LL). There are two 500-gallon ASTs in the tank farm containing gasoline and diesel fuel, respectively. One fuel truck holds a 1,000-gallon tank of AV Gas and one fuel truck holds a 3,000-gallon tank of Jet Fuel A. Guidance Helicopter tours also maintains a 50-gallon mobile AST containing AV Gas 100 LL. The fuel trucks are parked on asphalt-paved aprons within the Airport's secure area near the tank farm. Aircraft are fueled outdoors on the aprons within the Airport's secure area. The tank farm is located west of Taxiway A within the Airport's secure area. All of the tank farm ASTs are constructed on engineered compacted fill with a gravel surface. Each AST has an interstitial lining and an emergency alarm system in accordance with ADEQ specifications. A small storage shed containing spill kits and other tools is located within the tank farm area. Several empty 55-gallon drums are located adjacent to the storage shed for future use.

- **Waste Oil Storage Area (E):** The main waste oil storage area is located immediately adjacent to the north of the tank farm and contains waste motor oil and pre-flight fuel. It consists of a safety storage cabinet and two 55-gallon drums, all placed on risers and covered by a roof structure. A spill kit is provided at the main waste oil storage area. Waste oil is also present in limited amounts inside private hangars. Table 4 includes waste oil and hazardous waste removal contact information.
- **Equipment Storage Area (F):** Maintenance equipment and materials are stored north of the tank farm in a large storage hut. The ground is asphalt-paved in the front portion of the shed and gravel in the back portion of the shed. Small, standard equipment for grounds maintenance were observed, as well as large bags of fertilizer stored on pallets. Several empty 55-gallon drums are located adjacent to the storage shed for future use.
- **Private Aircraft Storage/Hangars (P):** Privately leased hangars include conventional box hangars and maintenance and storage hangars located to the east of the main terminal within the Airport's secure area. Aircraft tie-downs at these hangars are used by local and temporary aircraft for parking and refueling by the airport FBO. As allowed by SOCAA specifications, hangar tenants can perform routine maintenance and care of aircraft within the hangars. Aircraft may also temporarily be parked outside the hangars on adjacent apron areas. Dry aircraft washing may occur in these areas, consisting of spraying on a cleaner and then wiping down the aircraft with washable rags or disposable paper towels. Wet washing is not permitted. Aircraft washing consists of only dry washing the body of the aircraft.
- **Car Rental Area (J):** Sedona Car Rentals stores and conducts cleaning and minor maintenance services for rental cars for the public in the parking lot adjacent to the main terminal, outside the Airport's secure area. Minor routine vehicle maintenance is conducted on-site (e.g., washing and windshield wiper fluid replacement). Fueling is conducted off-site at commercial fueling stations. An oil/water separator and a locked storage shed with cleaning supplies is present in the small rental car service area.
- **Soil Stockpile Area (A):** Stockpiles that consist of clean earthen material are kept in a bermed area located on the southwestern corner of the site. Stockpiled soils are generally temporary and are stored for future on-site use.
- **Restaurant (N):** The Mesa Grill operates a public restaurant located outside the Airport's secure area that is serviced by an on-site septic tank/leach field.
- **Souvenir/Ticket Offices Outside Main Terminal (O):** Sedona Air Tours (including Sky Safari, Red Rock Biplane and Helicopter Tours, Dakota Air Tours) operates a souvenir shop, a ticket counter, and administration offices in a small building adjacent to the Mesa Grill outside the Airport's secure area. Guidance Aviation (including Westwind Air Service) similarly operates a souvenir shop, a ticket counter, and administration offices in a small building to the northwest.
- **Hotel Accommodations (Q):** Sky Ranch Lodge operates hotel accommodations in buildings outside of the Airport's secure area. Sky Ranch Lodge utilizes a series of on-site septic tanks/leach fields for sanitary wastes. Maintenance activities include routine housekeeping of rental units and landscaping.
- **Scenic Overlook (R):** The SOCAA-managed scenic overlook consists of a pedestrian-only area with informational signage on the north side of the Airport outside of the Airport's secure area. An adjacent gravel parking lot and crosswalk provide public access to the overlook. Port-a-johns are available on the northeast corner of the parking lot for public use.

- **Outdoor Stage (S) and Meeting Hall (T):** The Masonic Lodge maintains an outdoor stage and meeting hall in a building outside of the Airport’s secure area; the Masonic Lodge has traditionally held monthly meetings but is currently inactive/vacant.
- **Communication Towers (U):** Sedona Fire Department operates and maintains radio antennae and cell phone communication towers on the north end of the site outside of the Airport’s secure area.
- **Administrative Offices Outside Main Terminal (V):** The Civil Air Patrol maintains administrative offices and meeting rooms on airport property near the hangars within the Airport’s secure area.
- **Water Tanks (W):** Two large water tanks and associated pumps and pressure tank maintained by Oak Creek Water Company are located near the communication towers on the north end of the site outside of the Airport’s secure area. A third large water tank and associated pump is located south of the Sky Ranch Lodge and is maintained by SOCAA. The water tanks store and supply water to the facilities on-site.
- **Solid Waste Management:** Each tenant manages their own solid waste and is responsible for daily inspection of their waste containers and surrounding areas. All outdoor waste containers should be secured and covered to prevent stormwater exposure, wind dispersion, or leaching via rainwater. Table 4 includes solid waste removal contact information.
- **Drainage System Operation and Maintenance:** Stormwater control structures, such as human-made unlined and lined swales and drainage channels, subsurface pipe culverts, a retention basin (northwest of the main terminal building), grated catch basins, subsurface storm drain pipes, and outfalls are present throughout the site. Dibble Engineering prepared a Drainage Master Plan for the Airport that indicates locations of hydraulic structures and surface water flow (Dibble Engineering 2020).

4.2 Potential Pollutants

(see Attachment C, MSGP Part 5.1)

The MSGP authorizes stormwater discharges from only those portions of the site that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing operations. The SOCAA has completed an inventory of industrial activities and processes conducted at the Airport that may include the use, storage, or transport of hazardous or regulated materials that may potentially be exposed to stormwater (Table 6). The areas at the Airport where these activities are conducted are illustrated on Figure B-1 in Attachment B. Section 5 of this SWPPP details the control measures and specific best management practices (BMPs) in place at the Airport to assure that pollutants from these activities are not present in stormwater discharge.

Table 6. Inventory of Airport Activities and Associated Potential Pollutants

Activity	Associated Pollutants/Pollutant Constituents	Applicable Locations (Map Key Letters)*	Associated Outfalls
Aircraft fueling and preflight fluid sampling	Fuels (Jet A fuel, AV Gas 100 LL), oils, lubricants, and fuel additives	Aboveground Storage Tank Farm and Fuel Trucks in Aircraft Parking Area (C, D)	Outfall 2
Aircraft maintenance and mechanical repairs	Accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), oils, lubricants, fuels, fuel additives, mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, brake fluids, and disposal of waste parts such as batteries, fuel filters, and oily rags	Private Aircraft Storage/Hangars (P)	Outfalls 1, 2, and 3
Aircraft washing (dry washing only)	Chemical solvents, chlorinated solvents, detergents, glycol compounds (antifreeze), hydraulic fluid, oils, lubricants, fuels, fuel additives, suspended solids, and accumulated particulate matter	Private Aircraft Storage/Hangars (P)	Outfalls 1, 2, and 3
Deicing	Urea or potassium acetate (glycols not currently used at the Airport)	Runways (H) and Taxiways (G)	Outfalls 2 and 4
Ground vehicle fueling (FBO fuel trucks only)	Fuels (Jet A fuel, AV Gas 100 LL), oils, lubricants, and fuel additives	Aboveground Storage Tank Farm and Fuel Trucks in Aircraft Parking Area (D)	Outfall 2
Ground vehicle washing (rental vehicles)	Chemical solvents, chlorinated solvents, detergents, glycol compounds (antifreeze), hydraulic fluid, oils, lubricants, fuel, and fuel additives suspended solids, and accumulated particulate matter	Car Rental Area (J)	Outfall 2
Ground vehicle/equipment maintenance and mechanical repairs	Windshield washer fluid, motor oil, fuel additives, glycol compounds (antifreeze), transmission fluid, power steering fluid, lead, battery acid/alkaline waste, hydraulic fluids, transmission oil, radiator fluids, chemical solvents, and disposal of waste parts such as batteries, fuel filters, and oily rags	Car Rental Area (J), Equipment Storage Area (F)	Outfall 2
Regulated and hazardous materials and waste storage	Fuels (Jet A fuel, AV Gas 100 LL, gasoline, diesel), oils, lubricants, fuel additives, hydraulic fluid, brake fluid, heavy metals, paint, chlorinated solvents, detergents, phosphorous, and acid/alkaline wastes	Waste Oil Storage Area (E), Equipment Storage Area (F), Private Aircraft Storage/Hangars (P), Car Rental Area (J)	Outfalls 1, 2, and 3
Runway, taxiway, helipads, and apron maintenance	Accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), oils, lubricants, fuels, fuel additives, mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, and brake fluids	Runways (H), Taxiways (G), Helipads (B), and Aprons (C)	Outfalls 2 and 4
Soil storage	Sediment	Soil Storage Area (A)	Outfall 2
Solid waste management (non-hazardous)	Plastic, paper, glass, metal, food, non-hazardous liquids, and de minimus levels of detergents, paints, etc.	Main Terminal (K), Private Aircraft Storage/Hangars (P), Car Rental Area (J), Restaurant (N), Souvenir/Ticket Offices (O), Hotel Accommodations (Q), Scenic Overlook (R), Administrative Offices (V), Meeting Hall (T)	Outfalls 1, 2, and 3

* See Section 4.1 for a description of activities at these locations. Map key letters provided in parentheses correspond to associated locations as shown on Appendix B, Figure B-1.

Figure B-1 in Attachment B shows the Airport’s open drainage system, including the outfall locations, and surface water flows. Based on the potential pollutants identified in Table 6 and direction of stormwater flows, the potential pollutants at each of the Airport’s outfalls may include the following:

- **Outfall 1:** Fuels (Jet A fuel, AV Gas 100 LL), fuel additives, oils, lubricants, accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, brake fluids, chemical solvents, chlorinated solvents, detergents, glycol compounds (antifreeze), suspended solids, heavy metals, paint, phosphorous, waste parts (e.g., batteries, fuel filters, and oily rags), and non-hazardous solid waste (e.g., plastic, paper, glass, metal, food, non-hazardous liquids, and de minimus levels of detergents, paints, etc.)
- **Outfall 2:** Fuels (Jet A fuel, AV Gas 100 LL), fuel additives, oils, lubricants, accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, brake fluids, chemical solvents, chlorinated solvents, detergents, glycol compounds (antifreeze), suspended solids, heavy metals, paint, phosphorous, waste parts (e.g., batteries, fuel filters, and oily rags), urea or potassium acetate, windshield washer fluid, transmission fluid/oil, power steering fluid, radiator fluids, sediment, and non-hazardous solid waste (e.g., plastic, paper, glass, metal, food, non-hazardous liquids, and de minimus levels of detergents, paints, etc.)
- **Outfall 3:** Fuels (Jet A fuel, AV Gas 100 LL), fuel additives, oils, lubricants, accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, brake fluids, chemical solvents, chlorinated solvents, detergents, glycol compounds (antifreeze), suspended solids, heavy metals, paint, phosphorous, waste parts (e.g., batteries, fuel filters, and oily rags), and non-hazardous solid waste (e.g., plastic, paper, glass, metal, food, non-hazardous liquids, and de minimus levels of detergents, paints, etc.)
- **Outfall 4:** Fuels (Jet A fuel, AV Gas 100 LL), fuel additives, oils, lubricants, accumulated particulate matter (ferrous and nonferrous metals, plastics, rubber, other), mercury (electrical controls), lead, battery acid/alkaline waste, arsenic, hydraulic fluids, brake fluids, and urea or potassium acetate

4.3 Spills and Leaks

(see Attachment C, MSGP Part 5.1.1)

Refer to Table 6 for potential spill and leak locations, and the associated outfall.

No records of significant spills or leaks have been identified for the Airport in the past 3 years. Minor, unreported spill/leaks of regulated materials (e.g., diesel, fuel, oil) have historically occurred at the site.

4.4 Allowable Non-Stormwater Discharges

(see Attachment C, MSGP Part 1.1.3.1)

Non-stormwater discharges are discharges that do not originate from storm events. Non-stormwater discharges at the Airport may result from site activities such as dust control, hydrostatic testing, and potable water for irrigation or line flushing. Allowable non-stormwater discharges under the MSGP include the following:

- Emergency/unplanned fire-fighting activities
- Firefighting system testing and maintenance, including hydrant flushings
- Discharges related to installation and maintenance of potable water supply systems, including disinfection and flushing activities, discharges resulting from pressure releases or overflows, and discharges from wells approved by ADEQ for drinking water use
- Uncontaminated condensate from air conditioners, evaporative coolers, and other compressors and from the outside storage of refrigerated gases or liquids
- Irrigation drainage and irrigation line flushing
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling
- Pavement wash waters where no detergents or cleaning agents are used and measures are first taken to remove/pickup solids and liquids, and properly disposed
- Routine external building wash-down / power-wash water that does not use detergents or hazardous cleaning agents (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, or nonylphenols)
- Water used to control dust, provided effluent or other wastewaters are not used
- Uncontaminated groundwater or spring water
- Foundation or footing drains where flows are not contaminated with process materials such as solvents
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains)
- Hydrostatic testing of new pipes, tanks, or vessels using potable water, surface water, or uncontaminated groundwater
- Discharges of water associated with drilling, rehabilitation, and maintenance of potable or non-potable water wells and piezometers, or water supply or water-quality evaluations including:
 - a. Discharges from any borehole not fully developed
 - b. Well purging
 - c. Well/aquifer pump tests not associated with groundwater remediation activities
 - d. Back-flushing of injection wells provided the discharge meets applicable water-quality standards
- Non-stormwater discharges subject to an effluent limitation guideline listed in Table 2.2 of the MSGP:
 - For airports where a single permittee, or a combination of permitted sites use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis, the airport must monitor biochemical oxygen demand (BOD₅), chemical oxygen demand (COD), ammonia, and pH in those outfalls that collect runoff from areas where deicing activities occur (see MSGP Table 8.S-1 in Attachment C).

Efforts shall be made to control these flows to the maximum extent practicable. The discharge of aircraft, ground vehicle, runway, vehicle, and equipment wash water, including tank cleaning operations, is not authorized by the MSGP.

Wash water may be generated at the car rental service area. Wash water is collected in an oil/water separator in the service area, which is inspected and cleaned out as needed, collected in waste containers, hauled, and properly disposed of off-site by Taylor Waste.

Discharges from water trucks used to control dust for on-site construction activities shall be covered under the Construction General Permit for that activity. Effluent or other wastewaters shall not be used.

4.5 Unauthorized Non-Stormwater Discharges Documentation

(see Attachment C, MSGP Part 5.1.1)

The discharge of aircraft, ground vehicle, and equipment wash water, including tank cleaning operations, is not authorized by the MSGP. No unauthorized non-stormwater discharges were identified from Outfalls 1 through 4 during the site visit on August 17, 2020. No records of significant spills or leaks have been identified for the Airport in the past 3 years. Any unauthorized stormwater discharges will be documented using the appropriate form and reported to ADEQ via the ADEQ's website: myDEQ at <https://azdeq.gov/mydeq>.

5 STORMWATER CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

(see Attachment C, MSGP Parts 2.2 and 8.S.4)

The purpose of stormwater control measures and BMPs is to prevent or minimize the discharge of pollutants. The following sections describe measures and BMPs in place at the Airport that shall be followed by industrial tenants, as applicable.

5.1 Minimize Exposure

(see Attachment C, MSGP Parts 2.2.1.2.1 and 8.S.4)

Where practicable, exposure of industrial materials and activities to rain, snow, snowmelt, or runoff shall be minimized by implementing measures such as the following:

- Use of materials that may contribute to stormwater pollutant sources shall be reduced whenever possible.
- Regulated and hazardous materials and waste shall be stored in enclosed areas whenever practicable (e.g., the equipment storage hut, private aircraft storage hangars), covered areas (e.g., waste oil storage area), or secondary containment structures. All of the tank farm ASTs are constructed on engineered compacted fill with a gravel surface. Each AST shall have an interstitial lining and an emergency alarm system in accordance with ADEQ specifications.
- Aircraft maintenance, mechanical repairs, and dry washing shall occur indoors only within the enclosed private aircraft storage hangars. Wet washing of aircraft and hosing down the hangar floor or apron is prohibited. Associated regulated and hazardous materials shall be kept inside the storage/hangar enclosure to prevent exposure to stormwater. Waste materials shall be properly disposed of at the waste oil storage area.
- Grading, berming, or curbing shall be used when practicable to prevent runoff of contaminated flows and divert run-on away from industrial activity areas (e.g., soil stockpile area).
- Materials, equipment, and activities shall be located so that potential leaks or spills are contained or able to be contained or diverted before discharging off-site (e.g., at the tank farm, mobile ASTs, waste oil storage area).
- Spill/overflow protection shall be used where needed (e.g., at the tank farm, mobile ASTs, waste oil storage area).
- Aircraft fueling and preflight fluid sampling shall be conducted on paved areas (e.g., aprons), and waste fluids shall be properly disposed of (e.g., in the waste oil storage area).
- Spill kits shall be made available at locations of potential leaks (e.g., tank farm, waste oil storage area) so that cleaning up spills and leaks can be done promptly using dry methods (e.g., absorbents).
- To minimize the discharge of pollutants in stormwater from runway deicing operations, 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/or product substitution shall be implemented whenever practicable.

- To minimize the discharge of pollutants in stormwater from aircraft deicing operations, 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 shall be implemented whenever practicable.
- Stormwater shall be directed through swales and culverts that direct flows away from the tank farm and other fueling areas.
- Leaky vehicles and equipment shall be stored indoors, or if stored outdoors, drip pans and absorbents shall be used as needed.
- Fluids shall be drained from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that will remain unused for extended periods of time.
- Equipment cleaning (dry washing), routine maintenance, and minor mechanical repairs shall be conducted within the equipment storage hut using drip pans and absorbents as needed.
- Rental car washing and routine maintenance shall be conducted on a paved surface that drains to an oil/water separator. The oil/water separator shall be regularly inspected and cleaned out as needed, collected in waste containers, hauled, and properly disposed of off-site.
- All wash water not meeting the requirements in Part 1.1.3.1. of the MSGP (see Attachment C and Section 4.4), shall drain to a proper collection system (i.e., not the stormwater drainage system).
- Waste shall be minimized, properly disposed of, and recycled where possible.
- Dumpster lids shall be kept closed when not in use.

5.2 Good Housekeeping

(see Attachment C, MSGP Parts 2.2.1.2.2 and 8.S.4)

The following general “good housekeeping” measures shall be used at exposed areas to minimize the contamination of stormwater runoff:

- Clearly demarcate aircraft, ground vehicle, and equipment cleaning areas using signage or other appropriate means.
- Where possible, collect pollutants and stormwater runoff from all areas used for aircraft, ground vehicle, and equipment maintenance, cleaning areas, and storage areas and properly treat and recycle (e.g., use of filters, drip pans, absorbents, silt socks, catch basins).
- Sweep or vacuum at regular intervals.
- Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible.
- Visually inspect fuel handling trucks and equipment for leaks.
- Test equipment valves and connections according to the manufacturer’s recommendations.
- Keep stored materials in appropriate, well-maintained, and clearly labeled containers.
- Keep dumpster lids closed when not in use, where feasible. For dumpsters and roll-off boxes that do not have lids and may leak, ensure that discharges have a control (e.g., secondary containment, treatment) when needed.

- Store waste materials in a centralized location. Install berms/dikes around storage areas.
- Minimize the discharge of fuel into stormwaters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Implement spill and overflow practices and collect stormwater runoff for treatment.
- Minimize contamination of stormwater runoff from runway and aircraft deicing operations.
- Maintain an organized inventory of material used in the maintenance areas.

The Airport grounds are inspected daily during routine operational activities and good housekeeping practices are implemented as needed. Additional inspections are conducted when unusual conditions occur (e.g., storm events, accidents) and as required by the MSGP (i.e., quarterly routine inspections and bi-annual visual assessments). Inspection requirements to verify good housekeeping/preventative maintenance activities and BMP adherence, as well as associated documentation requirements, are discussed in Section 7. The MSGP Requirements at a Glance (i.e., Compliance Tracker) includes the required cadence of inspections, monitoring, and reporting (Attachment F).

5.3 Maintenance

(see Attachment C, MSGP Part 2.2.1.2.3)

The following preventative maintenance measures shall be used at exposed areas to minimize the contamination of stormwater runoff:

- Maintenance and cleaning of stormwater discharge points, particularly at pedestrian and vehicular crossing points
- Repair of leaking or broken drainage pipes and other hydraulic structures and associated ponding of water
- Collection and proper disposal of accumulated debris (e.g., trash and vegetative matter) in appropriate waste containers
- Removal of non-engineered deposits of sand, silt, and sediment as needed
- Maintain all containment structures and tanks in proper working condition
- Properly contain and dispose of all waste materials, especially regulated and hazardous waste, on a regular basis

Preventive maintenance shall be conducted throughout the site. Inspections of Airport facilities and completion of preventative maintenance activities shall be conducted on an ongoing basis.

5.4 Spill Prevention and Response Procedures

(see Attachment C, MSGP Part 2.2.1.2.4)

Spills that may impact stormwater quality would primarily involve aircraft fueling and preflight fluid sampling, aircraft maintenance and mechanical repairs, deicing, ground vehicle fueling (FBO fuel trucks only), ground vehicle washing (rental vehicles only), ground vehicle/equipment maintenance and mechanical repairs, and regulated and hazardous materials and waste storage (see Table 6 and Attachment B, Figure B-1 for details and locations of these activities). Incidental leaks and spills of vehicle and equipment oils/fluids occasionally occur throughout the Airport. The spills are covered with

absorbent materials and, if warranted, the Sedona Fire Department is contacted. No known significant spills or leaks or unauthorized non-stormwater discharges have occurred at the Airport in the past 3 years. If a significant spill were to occur due to these Airport activities, it would travel through the Airport drainage system and likely ultimately discharge at Outfall 2 located on the southwest end of the site. Discharges of spills from these Airport activities may also occur at the other outfalls and/or down Airport Road to the City of Sedona MS4, depending on the location of the spill. However, stormwater flows from the Airport primarily discharge through Outfall 2, which discharges to an unnamed tributary to Oak Creek.

Tenants are responsible for their activities and associated remediation/collection. Spill remediation is conducted by the tenants/responsible party in accordance with industry standards. If in the unlikely event that a spill or leak were to occur on the Airport site, the following procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases will be followed.

- Shut off the flow of fuel if possible.
- Turn off vehicle engine if applicable.
- Shut off electrical power if applicable.
- Contact “911” (Sedona Fire District) for spills over 5 gallons.
 - a. Advise the operator of your name, job title, and location.
 - b. Inform operator of the fuel spill, type of fuel, and approximate gallons spilled.
- Contact the On-Site Environmental Coordinator (for spills over 1 gallon).
- If possible, contain the spill to keep the contaminated area from enlarging, utilizing a spill kit.
- Inspect downstream storm drainage structures to determine if contamination has taken place. If contamination is found, inspection will continue progressively downstream until no further evidence of contamination is found.
- Restrict access by unauthorized personnel; use barricades, ribbon, or cones to create a perimeter.
- Remove and properly dispose of contaminated materials.
- Provide documentation of the spill in writing (via email or letter) to the On-Site Environmental Coordinator (see the Contact List on page i of this SWPPP).
- Plainly label all containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) to encourage proper handling and facilitate rapid response if spills or leaks occur.
- Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas.
- Develop procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases.
- Keep spill kits on-site and located near areas where spills may occur or a rapid response can be made.
- Implement procedures for notification of appropriate site personnel and emergency response. Where a leak, spill, or other release occurs that contains hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 Code of Federal Regulations (CFR) Part 110, 40 CFR Part 117, or 40 CFR Part 302, the permittee shall notify ADEQ Emergency Response at (602) 771-2330 or at (800) 234-5677. Contact information must

be in locations that are readily accessible and available. Reportable quantities are provided at the following Internet websites:

- Determination of Reportable Quantities: <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol24/xml/CFR-2019-title40-vol24-sec117-3.xml>
- Discharge of oil in such quantities as “may be harmful”: <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol24/xml/CFR-2019-title40-vol24-sec110-3.xml>
- Designation of hazardous substances: <https://www.govinfo.gov/content/pkg/CFR-2019-title40-vol30/xml/CFR-2019-title40-vol30-sec302-4.xml>

NOTE: If fire is imminent, the area is to be vacated immediately. Call “911” to provide them with an update that a fuel fire has started.

5.5 Erosion and Sediment Controls

(see Attachment C, MSGP Part 2.2.1.2.5)

During minor site work and pavement repairs, silt socks and/or silt fencing is used in swales and drainage channels. If construction activities involve 1 or more acres of land disturbance, an NOI will be filed for coverage under the AZPDES General Permit for stormwater associated with construction activities.

5.6 Management of Stormwater Runoff

(see Attachment C, MSGP Parts 2.2.1.2.6 and 8.S.4.1.7)

Standing water is a hazard to flight airport operations because of the avian wildlife it attracts. To eliminate this, an on-site drainage system with human-made unlined and lined swales and drainage channels, culverts, a retention basin (northwest of the main terminal building), grated catch basins, storm drainpipes, and outfalls have been constructed. Stormwater from the Airport leaves the site through one of four outfalls (see Section 2.2 for outfall locations).

Drainage at the Airport is separated into two categories—Airport infield drainage and non-Airport facility drainage. The following sections detail on-site flows and stormwater management control measures to prevent potential pollutants from comingling with stormwater discharge for each of the drainage categories.

5.6.1 Airport Infield Drainage

Activities that may contribute pollutants to stormwater within the Airport infield include aircraft fueling and preflight fluid sampling; aircraft maintenance and mechanical repairs; aircraft washing (dry washing only); deicing; ground vehicle fueling (FBO fuel trucks only); ground vehicle washing (rental vehicles only); ground vehicle/equipment maintenance and mechanical repairs; regulated and hazardous materials and waste storage; runway, taxiway, and apron maintenance; soil storage; and solid waste management (see Table 6).

Industrial activities that contribute to Airport infield drainage occur on the following portions of the site: taxiways, runways, private aircraft storage/hangars, aprons, helipads, main terminal building, car rental area, associated ground vehicle parking areas, equipment storage shed, waste oil storage area, tank farm, and soil stockpile area (see Attachment B, Figure B-1). Stormwater runoff from these areas primarily flows southwest through a series of unlined swales and culverts located between, and to the north of, the

taxiways and runways; these swales and culverts ultimately discharge to Outfall 2. However, a small portion of the private aircraft storage/hangars and adjacent apron on the north end of the site discharges flows northward across the apron and through the culverts at Outfall 1. Additionally, the area southeast of the runway discharges as sheetflow at Outfall 4.

The following control measures and BMPs are used to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff from the Airport infield:

- To avoid contact with stormwater flows by diverting flows, the 10,000-gallon ASTs at the tank farm shall be on raised mounds constructed from engineered compacted fill with a gravel surface and the smaller ASTs at the tank farm shall be within secondary containment berms. Each AST shall have an interstitial lining and an emergency alarm system in accordance with ADEQ specifications.
- The 55-gallon waste oil storage drums shall be located on a raised platform to avoid contact with stormwater.
- Wherever practicable, berms and/or dikes shall be installed around storage areas to divert stormwater and prevent run-on.
- To contain pollutants, spill kits shall be available within the tank farm area and the adjacent waste oil storage area.
- All operators fuel their aircraft outdoors. To reduce contact with stormwater, fuel trucks and mobile ASTs shall be parked on paved areas outside of drainage channels. Each AST shall have an interstitial lining and an emergency alarm system in accordance with ADEQ specifications.
- The retention basin north of the main terminal building shall be maintained to allow for infiltration of stormwater before it flows off-site.
- A series of catch basins shall be maintained on the aprons to contain stormwater before it flows off-site.
- The oil/water separator shall be maintained to allow collection of wash water from the rental car area before it flows downstream. The oil/water separator shall be inspected and cleaned out as needed, collected in waste containers, hauled, and properly disposed of off-site.
- Deicing activities are seldom conducted and are conducted only for the runways (no deicing of aircraft occurs). If needed during the winter season, deicing of runways shall be done by qualified Airport or tenant personnel and Airport-approved spill kits shall be readily available during deicing activities to minimize any deicing fluid runoff that may occur. Approximately 110 gallons of potassium acetate are used per year. Less than 100 tons of urea are used on an average annual basis; glycol-based deicing/anti-icing chemicals are not used. A record of the types of deicing chemicals used by both the Airport and the tenants shall be maintained by the Airport, along with Safety Data Sheets (SDS) and monthly quantity usage. Urea for deicing shall be stored in the covered equipment storage area.
- To minimize discharges of pollutants in stormwater from aircraft deicing, runoff management control measures, such as the following, shall be implemented where practicable:
 - a. Installing a centralized deicing pad to recover deicing fluid following application; plug-and-pump (PnP)
 - b. Using vacuum/collection trucks
 - c. Storing contaminated stormwater/deicing fluids in tanks
 - d. Recycling collected deicing fluid where feasible

- e. Releasing controlled amounts to a publicly owned treatment works
- f. Separation of contaminated snow; conveying contaminated runoff into a stormwater impoundment for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations)
- g. Directing runoff into vegetative swales or other infiltration measures
- To minimize discharges of pollutants in stormwater from runway deicing, runoff management control measures, such as the following, shall be implemented where practicable:
 - a. Mechanical systems (snow plows, brushes)
 - b. Conveying contaminated runoff into swales and/or a stormwater impoundment
 - c. 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”), control measures shall be implemented to prevent unauthorized discharge of pollutants (dry-weather discharges of pollutants would need coverage under an AZPDES wastewater permit). To minimize the discharge of pollutants from deicing fluids in later stormwater discharges, control measures such as the following, shall be implemented where practicable:
 - a. Recovering deicing fluids
 - b. 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)
 - c. Releasing controlled amounts to a publicly owned treatment works
 - d. Used deicing fluid should be recycled whenever practicable

5.6.2 Non-Airport Facility Drainage

Activities that may contribute pollutants to stormwater from non-airport facilities include ground vehicle/equipment maintenance and mechanical repairs; regulated and hazardous materials and waste storage; and solid waste management (see Table 6). Non-airport facilities include Sky Ranch Lodge, Mesa Grill restaurant, souvenir/ticket offices, scenic overlook, Masonic Lodge, communication towers, and water tanks (see Attachment B, Figure B-1). Stormwater runoff from the Sky Ranch Lodge, Mesa Grill restaurant, souvenir/ticket offices, and water tank near Sky Ranch Lodge flows generally south and southwest through a series of unlined swales and culverts located north of the aprons; these swales and culverts ultimately discharge to Outfall 2. Stormwater runoff from the scenic overlook, Masonic Lodge, communication towers, and water tanks near the communication towers flows generally north or northwest as sheetflow and discharges to Outfall 3. Surface water from the scenic overlook parking lot and Airport Road also may flow alongside Airport Road past the cattle guard at the Airport site entrance, travel down the mesa near Outfall 3, and discharge into an existing City of Sedona concrete-lined surface water channel.

The following control measures and BMPs are used to divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff from the non-airport facilities:

- All outdoor waste containers should be positioned on platforms, covered, or otherwise maintained to discourage contact with and ponding of stormwater around waste.
- Unpaved parking areas (e.g., at Sky Ranch Lodge and the scenic overlook) and maintaining natural vegetation where possible allows for on-site infiltration of stormwater.

5.7 Salt Storage Piles or Piles Containing Salt

(see Attachment C, MSGP Part 2.2.1.2.7)

The Airport does not currently store salt piles or piles containing salt. Piles of salt or piles containing salt, if present, shall be enclosed or covered and appropriate control measures to minimize exposure (e.g., good housekeeping, diversions, containment) shall be used as applicable.

5.8 Employee and Tenant Training

(see Attachment C, MSGP Part 2.2.1.2.8)

All Airport employees and tenants 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 the permit, will be trained. Specifically, this includes

- All members of the Stormwater Pollution Prevention Team
- Personnel who are responsible for the design, installation, maintenance, and/or repair of control measures
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges
- Personnel who are responsible for conducting monitoring and inspection activities and associated documentation and recordkeeping
- Personnel who are responsible for implanting and documenting corrective actions

The training will be conducted on an annual basis and for new hires; documentation of employee training including training dates will be kept with this SWPPP (Attachment G). Training will ensure that personnel understand the requirements of this SWPPP and their specific responsibilities. Specific topics covered in the training shall include the following:

- An overview of the purpose and content of the SWPPP
- Locations of stormwater discharge points (i.e., outfalls) and receiving waters
- Identification of the On-Site Environmental Coordinator and members of the Stormwater Pollution Prevention Team
- Potential sources of pollution, including processes and activities that potentially could be exposed to stormwater
- Locations of all control measures implemented on the site and procedures for how they are to be maintained
- Procedures for good housekeeping, proper site maintenance, material management, and spill response
- Locations of emergency response equipment (e.g., spill kits)
- The proper procedures to follow with respect to the pollution prevention requirements and recordkeeping
- When and how to conduct required inspections and monitoring, record applicable findings, take corrective actions if needed, and maintain proper records

5.9 Unauthorized Non-Stormwater Discharges

(see Attachment C, MSGP Part 2.2.1.2.9)

Airport personnel shall evaluate the site for the presence of non-stormwater discharges. If found, the unauthorized discharge shall be eliminated and the appropriate control measures and BMPs shall be added to this SWPPP, modified, and/or implemented to prevent additional unauthorized discharges. Any amendments to the SWPPP shall be documented in Attachment H.

The discharge of aircraft, ground vehicle, and equipment wash water, including tank cleaning operations, is not authorized by the MSGP. These wastewaters must be covered under a separate AZPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

5.10 Dust Generation and Vehicle Tracking of Industrial Materials

(see Attachment C, MSGP Part 2.2.1.2.10)

The permittee shall minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutant discharges. To reduce dust, vehicles will travel at low speeds on unpaved access roads and water trucks shall be used as needed during excavation, stockpiling, and movement activities. If off-site tracking of sediment or other materials is observed, the affected area shall be properly cleaned to eliminate the debris/discharge. The appropriate control measures and BMPs shall be added to this SWPPP, modified, and/or implemented to prevent additional unauthorized discharges. Any amendments to the SWPPP shall be documented in Attachment H.

6 MONITORING AND SAMPLING PROCEDURES

(see Attachment C, MSGP Part 6.0)

The MSGP includes the following four types of required analytical monitoring:

- Routine analytical monitoring (formerly called benchmark monitoring)
- Effluent limitation guidelines (ELG) monitoring
- Impaired and not-attaining waters monitoring
- Outstanding Arizona Water (OAW) monitoring
- Additional monitoring required by ADEQ

Monitoring requirements begin within 90 calendar days of receiving the authorization to discharge. Required monitoring shall be conducted one time per wet season for the duration of permit coverage for all applicable types of monitoring except ELG monitoring (if applicable), which shall be conducted once per year. Monitoring must be performed on a storm event that results in a discharge from the site that follows the preceding measurable storm event by at least 72 hours (3 calendar days), or the permittee can document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site.

The Airport is subject to impaired waters monitoring and additional monitoring required by ADEQ, as described in the sections below. The On-Site Environmental Coordinator will be responsible for ensuring that monitoring and sampling is conducted according to the required cadences. The MSGP Requirements at a Glance (i.e., Compliance Tracker) includes the required cadence of monitoring and reporting (see Attachment F). Specific monitoring and sampling requirements for the Airport are summarized in Table 7 and described further in the sections below.

Table 7. Airport Monitoring Requirements

Pollutant	Outfalls Subject to Monitoring and Sampling	Required Minimum Frequency	Water Quality Standards		
			Annual / Geometric* Mean	90th Percentile	Single Sample Maximum
<i>Escherichia coliform (E. coli)</i>	2 and 4	Twice annually (1x per wet season) [†]	126 cfu/100ml	–	235 cfu/100ml
Total phosphorus	2 and 4	Twice annually (1x per wet season) [†]	0.1 mg/L	0.25 mg/L	0.30 mg/L
Total nitrogen	2 and 4	Twice annually (1x per wet season) [†]	1.00 mg/L	1.50 mg/L	2.50 mg/L

* Geometric mean is calculated based on an average of samples collected over a 30-day period, with a four-sample minimum.

[†] Summer wet season: June 1–October 31

Winter wet season: November 1–May 31

Note: cfu/100ml = colony forming units per 100 milliliters; mg/L = milligrams per liter

Sources: AAC R18-11-109(F)(8), ADEQ (2010).

6.1 Routine Analytical Monitoring

(see Attachment C, MSGP Parts 6.2.1 and 8.S.7)

Required routine analytical monitoring parameters are based on the applicable industry sector. For Sector S (Air Transportation), the MSGP includes the following deicing-related parameters: Biochemical Oxygen Demand, Chemical Oxygen Demand, Ammonia, and pH. Monitoring of these parameters is required for facilities that use more than 100,000 gallons of glycol-based deicing chemicals and/or 100 tons or more of urea on an average annual basis. If a Routine Analytical Monitoring sample value is above an Action Level listed in the permit, a Control Measure Assessment Report form must be submitted within 30 days of receiving the laboratory analytical data (Attachment I).

The Airport does not currently use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis. Therefore, routine analytical monitoring of the Sector S parameters is not required at this time. The need for routine analytical monitoring should be reevaluated if the quantity of glycol-based deicing chemicals and/or urea used at the Airport increases. Any amendments to the SWPPP shall be documented in Attachment H.

6.2 Effluent Limitation Guidelines Monitoring

(see Attachment C, MSGP Parts 6.2.2 and 8.S.9)

Airports with 1,000 or more annual non-propeller aircraft departures are required to monitor for Ammonia as Nitrogen in runoff containing urea from airfield pavement deicing. The Airport currently has fewer than 1,000 annual non-propeller aircraft departures. The need for ELG monitoring should be reevaluated if the quantity of annual non-propeller aircraft departures increases. Any amendments to the SWPPP shall be documented in Attachment H.

6.3 Impaired and Not-Attaining Waters Monitoring

(see Attachment C, MSGP Parts 2.1.1.1 and 6.2.3)

The Airport is located within 2.5 miles of Oak Creek, which is impaired in the vicinity of the Airport (i.e., the segment from Slide Rock State Park to Dry Creek; EPA ID: AZ15060202-018C) for *E. coli*. Therefore, analytical monitoring is required for the pollutant of concern (i.e., *E. coli*). An Improvement Plan (Oak Creek Watershed Council 2012) and Total Maximum Daily Loads (TMDLs) (ADEQ 2010) have been established for Oak Creek. The discharge of a pollutant above the TMDL requires corrective action (Table 8; see Section 8 of this SWPPP).

Table 8. Water Quality Standards for Oak Creek from Dry Creek to Spring Creek

Pollutant	Geometric Mean*	Single Sample Maximum
<i>Escherichia coliform (E. coli)</i>	126 cfu/100ml	235 cfu/100ml

* Geometric mean is calculated based on an average of samples collected over a 30-day period, with a four-sample minimum.

Note: cfu/100ml = colony forming units per 100 milliliters

Source: ADEQ (2010).

6.4 Outstanding Arizona Water Monitoring

(see Attachment C, MSGP Part 6.2.4)

The Airport is located within 2.5 miles of Oak Creek, which is designated as an Outstanding Arizona Water (AAC R18-11-112[G]). Therefore, the ADEQ may require analytical monitoring of additional parameters. If required, specific parameters will be dependent on the site’s industrial activities and location relative to the OAW. If the discharge of a pollutant has been determined by ADEQ to be degrading exiting water quality in the OAW, corrective action would be required (see Section 8 of this SWPPP). The substantially identical outfall and the inactive and unstaffed monitoring exemptions do not apply to OAW monitoring.

Currently, the ADEQ has identified *E. coli*, total phosphorus, and total nitrogen as required monitoring parameters due to Oak Creek’s impaired status and applicable state regulations; no additional parameters have been required by ADEQ due to Oak Creek’s OAW status.

6.5 Additional Monitoring Required by ADEQ

(see Attachment C, MSGP Part 6.2.5)

Per AAC R18-11-109.F.8, Oak Creek is subject to numeric standards for total phosphorus and nitrogen (Table 9). Therefore, analytical monitoring for those parameters is required for the Airport.

Table 9. Numeric Standards for Oak Creek

Pollutant	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.1 mg/L	0.25 mg/L	0.30 mg/L
Total nitrogen	1.00 mg/L	1.50 mg/L	2.50 mg/L

Note: mg/L = milligrams per liter
 Source: AAC R18-11-109(F)(8).

Additional discharge monitoring may be required by ADEQ to ensure protection of receiving water quality in cases where there is evidence that a discharge may be causing or contributing to exceedances of a surface water quality standard in the receiving water. ADEQ will notify the permittee of any additional required monitoring in writing and will provide an explanation of the reasons for the monitoring, locations, and parameters to be monitored, frequency, and reporting requirements.

6.6 Sampling Procedures

(see Attachment C, MSGP Part 6.1 and Appendix B Subsection 11.D)

In preparation for monitoring and sampling, the following BMPs should be followed:

- A qualified team of monitors shall be identified by the On-site Environmental Coordinator. Qualified monitors must be familiar with this SWPPP and airport operations, have completed training in sample collection, and be available on short notice to sample discharges due to storm events (e.g., within 30 minutes travel from the airport).

- An eligible and reliable laboratory for analyzing samples shall be identified. The laboratory must be licensed the Arizona Department of Health Services office of Laboratory Licensure and Certification. A copy of the laboratory’s certification shall be maintained with the SWPPP so that it is available for review by representatives of the EPA or the ADEQ.
- A written description of the procedures for stormwater sample collection and submittal/transport to the analytical laboratory shall be kept with this SWPPP. Monitors shall have a working knowledge of and training for the applicable sampling procedures required at the Airport. Note: samples are subject to varying holding times (e.g., 28 days for total phosphorus and total nitrogen; approximately 8 hours for *E. coli*). Specific holding times shall be requested from the identified analytical laboratory prior to sampling and samples shall be returned to the laboratory within an adequate timeframe to conduct analysis prior to expiration of the parameter-specific holding time.
- Personnel sampling stormwater should contact the analytical laboratory prior to sampling activities to coordinate analytical procedures and obtain sample containers required. If sampling is required due to a release, specific chemicals of concern should be identified and appropriate methods employed in accordance with analytical parameters and sample holding times established by the EPA in 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
- A complete sampling kit shall be assembled, including labeled sample bottles (supplied by the analytical laboratory) for the applicable sampling parameters (i.e., *E. coli*, total phosphorus, and total nitrogen), preservation agents (as necessary), Chain of Custody form (supplied by the analytical laboratory), and a waterproof notebook for note taking. Note: Extra samples known as field blanks are required for quality assurance/quality control purposes and extra sample bottles and preservation agents should be included in the sampling kit. Field blanks are prepared in the field, after cleaning the sampling equipment but before the collection of water quality samples.
- Monitoring staff must understand the types of storm events that qualify for monitoring (i.e., measurable storm events) and be aware of past monitoring events. At least 72 hours must have elapsed since the previous measurable storm event.

During collection of stormwater samples, the On-Site Environmental Coordinator or other qualified personnel shall employ the following protocol to ensure an accurate sample:

- Collect stormwater samples according to the locations, frequency, methods, and parameters summarized in Table 10. When more than one type of monitoring for the same parameter at the same outfall applies (as is the case at all required sampling locations at Airport), a single sample may be used to satisfy both monitoring requirements.
- Conduct sampling when there is sufficient stormwater discharge to allow for the collection of a representative sample using sampling methods described in this section and in the EPA’s Industrial Stormwater Monitoring and Sampling Guide (EPA 2009) (Attachment J).
- Samples collected for the purpose of the MSGP shall be discrete (grab) samples. The *E. coli* parameter requires discrete (not composite) samples. Samples may be collected using an automatic sampler, manually by qualified personnel, or by using a passive sampler (if appropriate).
- All outfalls subject to monitoring (i.e., Outfalls 2 and 4) must be sampled individually. The substantially identical outfall and the inactive and unstaffed monitoring exemptions do not apply to OAW monitoring.

- If discharges authorized by the MSGP commingle with discharges not authorized under the MSGP, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable.
- Collect grab/manual samples by filling up the appropriate laboratory-supplied container, either by hand or attached to a pole.
- Collect samples within the first 30 minutes of a measurable storm event that resulted in a discharge. If it is not possible to collect the sample within the first 30 minutes of a stormwater discharge, the sample must be collected as soon as practicable. Documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes.
- Wear powder-free gloves during sampling. Never touch the inside of the sample bottle or lid.
- Only sample stormwater that is discharging from the Airport (not puddles, ponds, or basins).
- Collect the sample from a turbulent section in the central part of the flow. Avoid touching the bottom or sides of the stormwater conveyance.
- Fill the sample bottle nearly to the top (meniscus almost at the rim) by holding the opening into the flow of water. Do not rinse or overfill the bottles.
- Place samples in a sturdy cooler partially filled with ice. Samples are to be kept at approximately 39 degrees Fahrenheit (4 degrees Celsius) until the delivered to the analytical laboratory.
- Complete the Chain of Custody Form (supplied by the analytical laboratory) and enclose it in a resealable bag inside the cooler.
- Submit samples to the analytical laboratory as soon as possible, with consideration of the applicable holding times for each parameter sampled. Samples may be delivered by the monitor, picked up by the laboratory, or express shipped overnight as allowed by the specific sampling parameter holding times.
- Document the following information for each sample: sample identifier, outfall number, date and duration of the storm event sampled, the end date of the previous storm event that resulted in a stormwater discharge, rainfall measurement or estimate (in inches), and estimate of the total volume of the discharge sampled from the outfall.
- Report monitoring and sampling results via the ADEQ's website myDEQ using an online Discharge Monitoring Report (e-DMR).
- Keep a copy of sampling results records in this SWPPP (Attachment K).

Table 10. Sampling and Analysis Summary

Sampling Location	Latitude (decimal degrees)	Longitude (decimal degrees)	Type of Analytical Monitoring*	Type of Sampling	Required Minimum Frequency	Sampling Parameters	Water Quality Standards		
							Annual / Geometric [†] Mean	90th Percentile	Single Sample Maximum
Outfall 1	34.854144	-111.784827	No monitoring required; outfall is greater than 2.5 stream miles from Oak Creek	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Outfall 2	34.845496	-111.793866	Impaired Waters; Additional Numeric Standards	Active grab sampling	Twice annually (1x per wet season) [‡]	<i>E. coli</i>	126 cfu/100ml	–	235 cfu/100ml
						Total phosphorus	0.1 mg/L	0.25 mg/L	0.30 mg/L
						Total nitrogen	1.00 mg/L	1.50 mg/L	2.50 mg/L
Outfall 3	34.853506	-111.789758	No monitoring required; outfall is greater than 2.5 stream miles from Oak Creek	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
Outfall 4	34.845618	-111.788887	Impaired Waters; Additional Numeric Standards	Active grab sampling	Twice annually (1x per wet season) [‡]	<i>E. coli</i>	126 cfu/100ml	–	235 cfu/100ml
						Total phosphorus	0.1 mg/L	0.25 mg/L	0.30 mg/L
						Total nitrogen	1.00 mg/L	1.50 mg/L	2.50 mg/L

* See Sections 6.3 and 6.5 above for details

[†] Geometric mean is calculated based on an average of samples collected over a 30-day period, with a four-sample minimum.

[‡] Summer wet season: June 1–October 31
 Winter wet season: November 1–May 31

Note: cfu/100ml = colony forming units per 100 milliliters; mg/L = milligrams per liter

Sources: AAC R18-11-109(F)(8), ADEQ (2010).

7 INSPECTIONS

(see Attachment C, MSGP Part 4.0)

Two levels of inspection must occur at the site: routine inspection and visual assessment of stormwater discharges. All inspections are to be performed by qualified personnel, as defined in the MSGP as those employees or outside consultants “who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures.” Inspections shall include those areas where activities are exposed to stormwater with the potential to discharge from the facility, as well as all stormwater control measures used to comply with the MSGP. A member of the stormwater pollution prevention team (see Section 3.3) shall conduct or participate in the inspections.

Each tenant is required to obtain their own permit coverage and conduct inspections and assessments of their own permitted facilities. Tenants shall provide the On-Site Environmental Coordinator with copies of all their inspection reports. The On-Site Environmental Coordinator is responsible for maintaining qualified inspection and maintenance personnel. The Coordinator receives all inspection and maintenance reports and manages a log of all follow-up activities.

7.1 Routine Inspections

(see Attachment C, MSGP Part 4.1)

Routine inspections shall occur during normal site operating hours a minimum of once each calendar quarter, beginning with the first full calendar quarter after the site becomes covered under the permit (Table 11). During all months where deicing chemicals are being used, inspections are to occur at least monthly. At least one of the routine site inspections each calendar year shall be conducted while a stormwater discharge is occurring at an outfall, no later than 24 hours or the first business day (whichever comes later) following the end of the measurable storm event. If there is no measurable storm event(s) or discharge during a calendar year, the permittee shall document the inability to perform a routine inspection when a discharge is occurring. In this case, the permittee must still complete four routine quarterly inspections per calendar year.

During routine inspections, the following areas should be examined:

- Areas where industrial materials or activities are exposed to stormwater with the potential to discharge and areas that are identified as potential pollutant sources (see Table 6)
- All stormwater control measures used to comply with the effluent limits contained in the MSGP (see Section 5 of this SWPPP)
- Locations where spills and leaks from industrial equipment, drums, tanks, and other containers have the potential to occur or have occurred in the past 3 years (see Section 4.3 of this SWPPP)
- Areas where tracking or blowing of sediment, trash, raw, final, or waste materials from areas of no exposure to exposed areas have the potential to or have occurred, including locations where vehicles enter or exit the site (see Section 5.10 of this SWPPP)
- Discharge points (i.e., Outfalls 1–4) (see Table 1)

Inspectors shall look for signs of pollutant discharges, new discharge points, maintenance needs for control measures, changes in industrial materials and/or activities exposed to stormwater, and instances of non-compliance.

Since discharge at Airport outfalls contain combined stormwater from multiple co-permitted facilities, routine site inspections will be conducted by the On-Site Environmental Coordinator (see the Contact List on page i of this SWPPP for contact information). If needed, the On-Site Environmental Coordinator may assign another qualified person or persons⁴ to conduct routine site inspections. At least one member of the SWPPT shall either conduct or participate in the routine site inspection. The inspector shall document his/her findings on the conditions of the routine inspection. Completed inspection documents/forms must be maintained as a part of the SWPPP. All required information for the routine inspection documentation is included in the example routine inspection form (Attachment L). The MSGP Requirements at a Glance (i.e., Compliance Tracker) includes the required cadence of inspections, monitoring, and reporting (see Attachment F).

The requirement for a routine inspection does not apply at a site that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. However, the inactive and unstaffed monitoring exemption does not apply to OAW monitoring.

7.2 Visual Assessment of Stormwater Discharge

(see Attachment C, MSGP Part 4.2)

The inspector/operator shall perform a minimum of four visual assessments: two during the summer wet season, and two during the winter wet season when the site is discharging (see Table 11). The summer wet season is defined as June 1 through October 31, and the winter wet season is defined as November 1 through May 31. Visual assessment monitoring requirements begin immediately after the site becomes covered under the MSGP, unless authorization is received 90 calendar days or more after a wet season has begun, in which case visual assessment monitoring shall commence with the start of the next wet season.

Visual assessment requires the collection of a sample according to Part 4.2.1 of the MSGP from each outfall (see Table 1 for outfall sample locations). Samples should be collected in a clean, colorless glass or plastic container, and examined in a well-lit area. Samples are required to be collected within the first 30 minutes of actual discharge from a storm event, and on discharges that occur at least 72 hours (3 days) after a previous discharge sample. If it is not possible to collect a sample within the first 30 minutes, the sample must be collected as soon as practicable, and the inspector must document on the form why the sample was not collected within the first 30 minutes. Required water quality characteristics that shall be assessed (e.g., color, odor, and clarity; presence of solids, foam, and/or oil sheen) and other required details are included in the example visual assessment form provided in Attachment M. The completed forms do not need to be submitted to ADEQ but must be kept with the SWPPP.

Since discharge at Airport outfalls contain combined stormwater from multiple co-permitted facilities, visual assessments will be conducted by the On-Site Environmental Coordinator (see the Contact List on page i of this SWPPP for contact information). If needed, the On-Site Environmental Coordinator may assign another qualified person or persons⁵ to conduct visual assessments. At least one member of the SWPPT shall either conduct or participate in the visual assessments. The inspector shall document his/her findings on the conditions of the visual assessments on the Visual Assessment Form, which must be maintained as a part of the SWPPP. All required information for the routine inspection documentation is

⁴ Qualified personnel are those (either the permittee's employees or outside consultants) who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures.

⁵ Qualified personnel are those (either the permittee's employees or outside consultants) who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures.

included in the example routine inspection form (see Attachment L). The MSGP Requirements at a Glance (i.e., Compliance Tracker) includes the required cadence of inspections, monitoring, and reporting (see Attachment F).

7.2.1 Exceptions to Visual Assessments

(see Attachment C, MSGP Part 4.2.3)

Exceptions to visual assessments include the following: absence of discharge, adverse weather conditions, substantially identical outfalls, and inactive and unstaffed sites. The exceptions are described briefly below.

Absence of Discharge—If no storm event results in a discharge from the Airport during a given wet season, the Airport is excused from visual assessment for that wet season provided that the reason why a sample could not be collected is documented and records are kept with the SWPPP.

Adverse Conditions—Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling unsafe. When adverse conditions prevent the collection of a visual assessment sample during a given wet season, the Airport is excused from visual assessment for that wet season provided that the reason why a sample could not be collected is documented and records are kept with the SWPPP.

Substantially Identical Outfalls—If the site has two or more outfalls that discharge substantially identical pollutants, the permittee may conduct visual assessments of the discharge at just one of the identical outfalls. If possible, visual assessments at substantially identical outfalls shall be performed on a rotating basis throughout the period of permit coverage. When invoking the substantially identical outfall provision, the permittee shall identify the identical outfalls in the monitoring record and retain those records with the SWPPP. The substantially identical outfall monitoring exemption does not apply to OAW monitoring.

Inactive and Unstaffed Sites—The requirement for a routine visual assessment does not apply at a site that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. The inactive and unstaffed monitoring exemption does not apply to OAW monitoring.

Table 11. Inspection Requirements Summary

Inspection Type	Inspector	Required Minimum Frequency	Notes	Reporting Requirements
Routine Inspections	On-Site Environmental Coordinator*	4x each year (1x each calendar quarter) [†] , and Monthly during all months where deicing chemicals are being used	Conduct one of the four inspections during a rain event, if possible	Completed routine inspection documentation/forms must be maintained as a part of the SWPPP
Visual Assessment	On-Site Environmental Coordinator*	4x each year (2x per wet season) [‡]	Conduct during a storm event; Record "No Discharge" if no stormwater discharges were observed leaving the facility during the rain event.	Completed visual assessment forms must be maintained as part of the SWPPP

Note: See Attachment F for the MSGP Requirements at a Glance (i.e., Compliance Tracker), which includes the required cadence of inspections, monitoring, and reporting.

* If needed, the On-Site Environmental Coordinator may assign another qualified person or persons to conduct routine site inspections.

[†] Quarter 1: June 1–August 31, Quarter 2: September 1–November 30, Quarter 3: December 1–February 28, Quarter 4: March 1–May 31

[‡] Summer wet season: June 1–October 31
Winter wet season: November 1–May 31

7.3 Tenant Inspection Requirements

Under the 2019 MSGP, routine inspections and visual assessments are required at each permitted tenant facility. Options available to the airport authority and its tenants for implementation of MSGP requirements include:

- a. The airport authority performs certain activities on behalf of itself and its tenants and reports on those activities;
- b. 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;
- c. Tenants independently perform, document, and submit required information on their activities; or
- d. 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.

To avoid redundancy and duplication of efforts, and because discharge at Airport outfalls contain combined stormwater from multiple co-permitted facilities, routine inspections and visual assessments will be conducted by the SOCAA On-Site Environmental Coordinator (see the Contact List on page i of this SWPPP for contact information) on behalf of all tenants. Tenants are encouraged to participate in routine inspections and visual assessment activities to foster awareness and involvement in the stormwater program.

8 CORRECTIVE ACTIONS

8.1 Corrective Action Triggers

(see Attachment C, MSGP Part 3.1)

The following conditions require corrective action:

- An unauthorized discharge (see Section 4.5 of this SWPPP)
- The permittee becomes aware, or ADEQ determines, that a discharge from the site causes or contributes to an exceedance of applicable surface water quality standard(s) (see Table 7)
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to water listed as not-attaining exceeds an adopted waste load allocation for the pollutant(s) causing the impairment (see Section 6.3)
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to an Outstanding Arizona Water is degrading the existing water quality (see Section 6.4)
- A discharge from the site violates a numeric effluent limitation guideline (see Section 6.2)

If any of these conditions occur, the SOCAA and/or applicable tenant(s) shall review the selection, design, installation, and implementation of a site's control measures and revise as necessary to ensure compliance with the MSGP.

A routine analytical monitoring exceedance (i.e., above an action level) is not considered a permit violation and does not require a corrective action, if the permittee evaluates and revises the controls measures as necessary and submits the necessary reporting (see Section 10).

8.2 Corrective Action Deadlines, Documentation, and Reporting

(see Attachment C, MSGP Parts 3.2 and 8.S.5)

Within 30 days of a discovery of any condition in Section 8.1 above, the permittee shall submit a Corrective Action Report form (Attachment N) to ADEQ. The SOCAA and/or applicable tenant(s) shall take immediate actions to mitigate any triggering conditions identified. The Corrective Action Report form requires specific information to be recorded within 72 hours and within 14 days of discovery of the triggering condition. All required information is provided in the blank Corrective Action Report form in Attachment N. The permittee holder (whoever applies for the NOI) is responsible for signing and certifying the Corrective Action Report, regardless if a tenant has jointly prepared the SWPPP with the SOCAA. Any corrective documentation shall be kept with the SWPPP.

9 SWPPP MODIFICATIONS

(see Attachment C, MSGP Part 5.3)

This SWPPP shall be amended whenever there is a change in design, operation, or maintenance that has a significant effect on the potential for the discharge of pollutants to waters of the U.S., and that has not otherwise been addressed in the plan or during inspections, monitoring, or investigations. Any amendments to the SWPPP shall be documented in Attachment H.

10 REPORTING AND RECORDKEEPING

(see Attachment C, MSGP Part 7.0)

10.1 Electronic Discharge Monitoring Report (e-DMR)

(see Attachment C, MSGP Part 7.1)

The MSGP electronic Discharge Monitoring Report (e-DMR) must be prepared and submitted to ADEQ using the myDEQ website by permittees who are subject to routine analytical monitoring, numeric effluent limitation guideline, impaired waters (with or without a TMDL), OAW, and/or ADEQ requested monitoring. If there was “no discharge” for the monitoring period, the permittee must still submit an e-DMR indicating there was no discharge of stormwater for the reporting period using the No Data e-DMR or NODI (No Data Code Indicated) code of No Discharge. Additionally, if the site is inactive/unstaffed, or other sampling exemptions apply, an e-DMR is still required to be submitted; however, the No Data e-DMR or NODI code must be used to explain why sampling was not completed for that reporting period. The e-DMR must be completed and submitted to ADEQ within 30 days of receiving laboratory analytical data. If there are no sampling data due to lack of discharge or other exemption, a “No Data to Report” DMR must be submitted no later than November 30 for the summer wet season and/or June 30 for the winter wet season.

10.2 Required Reporting

(see Attachment C, MSGP Parts 7.2 and 7.3 and Appendix B Subsection 12)

Table 12 provides a summary of all reporting and recordkeeping requirements.

Any required analytical monitoring results, corrective actions taken, and control measure assessment reports must be submitted to ADEQ within 30 days of receiving the laboratory analytical data.

The permittee must also submit the following reports via the ADEQ’s myDEQ website (<https://azdeq.gov/mydeq>), or to the appropriate ADEQ Office (see Section 10.2.1 of this SWPPP), as applicable:

- **24-hour Reporting:** The permittee must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances.
- **5-day Follow-up Reporting to the 24-hour reporting:** A written submission must also be provided within 5 days of the time the permittee becomes aware of the circumstances (Attachment O).
- **Reportable Quantity Spills Reporting (verbal report only):** The permittee must provide notification to ADEQ as soon as the permittee has 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.
- **Planned Changes Report:** The permittee must give notice to ADEQ promptly, no fewer than 30 days prior to making any planned physical alterations or additions to the permitted site that qualify the site as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged.

- **Anticipated Noncompliance Report:** The permittee must give advance notice to ADEQ of any planned changes in the permitted site or activity which the permittee anticipates will result in noncompliance with permit requirements.
- **Transfer of Ownership and/or Operation Report:** The permitted owner/operator shall submit a Notice of Termination (NOT) to ADEQ within 30 calendar days after the new owner/operator assumes responsibility for the site. The new owner/operator shall then develop the SWPPP and submit an NOI to ADEQ 30 calendar days before taking over operational control or initiating activities at the site.
- **Other Noncompliance Report:** The permittee shall report all instances of noncompliance annually using the ADEQ Non-Compliance Report Form (Attachment P).
- **Missing or Incorrect Information Report:** The permittee must promptly submit facts or information once the permittee becomes aware that relevant facts were not submitted in the NOI, or that incorrect information was submitted in the NOI or in any report.
- **MS4 Notification:** If the discharge enters an MS4, the permittee shall also submit reports to the MS4 operator.

10.2.1 Submitting Reports

(see Attachment C, MSGP Part 7.0)

NOIs, NOTs, any copies of reports requested to be submitted, including visual assessments, and all written correspondence concerning discharges covered under the MSGP shall be uploaded to ADEQ's website: myDEQ at <https://azdeq.gov/mydeq>. If electronic reporting is not available, paper documents shall be submitted to the following address until such time as electronic submissions become available:

Arizona Department of Environmental Quality
Surface Water Permits Unit, Mail Code 5415A-1
1110 W. Washington Street
Phoenix, Arizona 85007

10.3 Recordkeeping

(see Attachment C, MSGP Part 7.4)

A copy of this SWPPP, all reports and records required by the MSGP, and all data used to complete the NOI shall be retained for a period of at least 3 years from the date that the facility's coverage under the MSGP expires or is terminated.

A copy of this SWPPP, including any modifications made, documentation related to corrective actions, and all monitoring data and reports shall be retained at the Airport during the term of the MSGP.

Table 12. Reporting and Recordkeeping Requirements Summary

Report/Record Type	Responsible Party	Required Minimum Frequency	Reporting Requirements	Submit to ADEQ	Keep Records*
Analytical Monitoring	On-Site Environmental Coordinator [†]	Twice annually (1x per wet season) [‡] during storm events	Submit results via myDEQ using an online Discharge Monitoring Report (e-DMR) within 30 days of receiving lab data, OR submit “No Data to Report” DMRs by November 30th (for summer wet season) and June 30th (for winter wet season).	Yes	In SWPPP, Attachment K
Routine Inspections	On-Site Environmental Coordinator [†]	4x each year (1x each calendar quarter) [‡] , including 1x during a rain event, if possible and Monthly during all months where deicing chemicals are being used	Completed routine inspection documentation/forms must be maintained as a part of the SWPPP	No	In SWPPP, Attachment L
Visual Assessment	On-Site Environmental Coordinator [†]	4x each year during storm events (2x per wet season) [§]	Completed visual assessment documentation/forms must be maintained as a part of the SWPPP	No	In SWPPP, Attachment M
Corrective Action Report	On-Site Environmental Coordinator [†] and applicable tenant(s)	Whenever a corrective action triggering condition occurs (see Section 8.1)	Submit completed form within 30 days of a discovery of any triggering condition; documentation requirements apply within 72 hours and within 14 days of discovery of the triggering condition	Yes	In SWPPP, Attachment N
Control Measure Assessment Report	On-Site Environmental Coordinator [†]	Whenever a Routine Analytical Monitoring value is above an Action Level listed in the permit	Submit completed form within 30 days of receiving the laboratory analytical data that indicates the monitoring sample value is above the Action Level	Yes	In SWPPP, Attachment I
SWPPP Amendments	On-Site Environmental Coordinator [†]	Whenever there is a change in design, operation, or maintenance that significantly effects the potential for pollutant discharge and that has not otherwise been addressed	SWPPP amendments must be documented and maintained as a part of the SWPPP	No	In SWPPP, Attachment H
Training	All SOCAA and tenant stormwater employees	Upon hire and annually thereafter	Training for stormwater employees must be documented and maintained as a part of the SWPPP	No	In SWPPP, Attachment G
24-Hour Reporting	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when noncompliance occurs that may endanger health or the environment	Oral notification of noncompliance within 24 hours from the time the permittee becomes aware of the circumstances	Yes (verbal report)	N/A (verbal report)
5-Day Follow-Up to the 24-Hour Reporting	On-Site Environmental Coordinator [†] and applicable tenant(s)	Whenever 24-hour reporting is needed	A written submission must be provided within five days of the time the permittee becomes aware of the circumstances.	Yes	In SWPPP, Attachment O
Reportable Quantity Spills Reporting	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when a leak, spill, or other release containing a hazardous substance or oil occurs in an amount equal to, or in excess of a reportable quantity	Oral notification as soon as the permittee has knowledge of the leak, spill, or release	Yes (verbal report only)	N/A (verbal report)

Report/ Record Type	Responsible Party	Required Minimum Frequency	Reporting Requirements	Submit to ADEQ	Keep Records*
Planned Changes	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when any planned physical alterations or additions to the permitted site that qualify the site as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged	Notify ADEQ promptly, no fewer than 30 days prior to making any planned physical alterations or additions to the permitted site	Yes	In SWPPP, Attachment H
Anticipated Noncompliance Report	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when any planned changes in the permitted site or activity will occur that the permittee anticipates will result in noncompliance with permit requirements	Notify ADEQ in advance of making any planned changes	Yes	In SWPPP, Attachment H
Other Noncompliance Report	On-Site Environmental Coordinator [†] and applicable tenant(s)	Annually	The permittee shall report all instances of noncompliance annually using the ADEQ Non-Compliance Report Form	Yes	In SWPPP, Attachment P
Transfer of Ownership and/or Operation Report	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when transfer of ownership and/or operation occurs for SOCAA or any tenant(s)	The original owner/operator shall submit a Notice of Termination (NOT) to ADEQ within 30 calendar days after the new owner/operator assumes responsibility for the site. The new owner/operator shall then develop a SWPPP and submit an NOI to ADEQ 30 calendar days before taking over operational control or initiating activities at the site.	Yes	N/A
Missing or Incorrect Information Report	On-Site Environmental Coordinator [†] and applicable tenant(s)	As needed, when the permittee becomes aware that relevant facts were omitted in the NOI, or incorrect information was submitted in the NOI or in any report	Missing and/or incorrect information shall be submitted as soon as the permitted becomes aware of the omitted or incorrect information	Yes	Incorporate information in SWPPP where applicable
MS4 Notification	On-Site Environmental Coordinator [†]	As needed, if a discharge enters an MS4	If the discharge enters an MS4, the permittee shall also submit required reports to the MS4 operator (i.e., City of Sedona)	No	N/A

Note: See Attachment F for the MSGP Requirements at a Glance (i.e., Compliance Tracker), which includes the required cadence of inspections, monitoring, and reporting.

* All reports and records must be kept and made available, upon request, for a period of at least 3 years from the date the facility's MSGP coverage expires or is terminated.

[†] If needed, the On-Site Environmental Coordinator may assign another qualified person or persons to conduct routine site inspections.

[‡] Quarter 1: June 1–August 31, Quarter 2: September 1–November 30, Quarter 3: December 1–February 28, Quarter 4: March 1–May 31

[§] Summer wet season: June 1–October 31
Winter wet season: November 1–May 31

11 SWPPP CERTIFICATION

(see Attachment C, MSGP Part 5.2)

This SWPPP was prepared in accordance with the requirements of the AZMSG2019-001 for stormwater discharges associated with industrial activity (non-mining), specifically air transportation facilities.

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

Name: Mr. Edward Rose

Title: Sedona–Oak Creek Airport General Manager

Signature: _____

Date: _____

12 TERMINATION OF COVERAGE

Within 30 days after a new owner or operator assumes ownership of the facility, or when there will no longer be discharges of stormwater from the facility, a Notice of Termination may be filed online via the myDEQ website to terminate coverage under the permit.

13 ATTACHMENTS

Table 13. Attachments Included with this SWPPP

Attachment	Title	Description
A	General Location Maps	Includes the following maps: <ul style="list-style-type: none"> • Figure A-1. General location of the project area • Figure A-2. Site location map • Figure A-3. Surface water drainage flow path map
B	Detailed Site Map	Figure B-1 shows locations of all Airport activities.
C	Copy of AZPDES Multi-sector General Permit (AZMSG2019-001)	It is recommended that a printed copy of the MSGP be kept with the printed copy of the SWPPP on-site so that it is accessible to operators for easy reference. However, the entire MSGP does not need to be formally incorporated into the SWPPP. As an alternative, a reference to the permit and where it is kept at the site may be included.
D	ADEQ User Guide: AZPDES Stormwater Get New NOI	Each tenant must submit their own separate NOI and a copy of this SWPPP (or a tenant-specific SWPPP) online at myDEQ to begin permit coverage. This attachment provides guidance on how to get an NOI.
E	Acknowledgment of SWPPP	Upon receipt of SWPPP, tenant acknowledgment will be recorded on this form and kept as part of this SWPPP.
F	ADEQ 2019 Multi-Sector General Permit Requirements at a Glance (Compliance Tracker)	This checklist can be used to ensure all steps are being conducted for SWPPP compliance.
G	Training Log	This log is to be used for maintaining a record of the training for each stormwater employee.
H	SWPPP Amendment Log	All amendments to the SWPPP must be recorded on this form. All completed SWPPP amendment forms must be added to the SWPPP as part of this attachment.
I	Control Measure Assessment Report Forms	This form must be submitted when a Routine Analytical Monitoring value is above an Action Level listed in the permit. The report is due within 30 days of receiving the laboratory analytical data that indicates the monitoring sample value is above the Action Level. All completed Control Measure Assessment Report forms must be added to the SWPPP as part of this attachment.
J	U.S. Environmental Protection Agency's Industrial Stormwater Monitoring and Sampling Guide, March 2009	This attachment provides detailed protocol for required sampling.
K	Monitoring and Sampling Results	All monitoring and sampling results from Routine Analytical, ELG, Impaired Waters, or other analytical monitoring, as applicable, must be added to the SWPPP as part of this attachment.
L	Routine Inspection Forms	This form must be completed for each of the four quarterly routine inspections. Routine inspection dates and observations will be recorded on these forms. All completed routine inspection forms must be added to the SWPPP as part of this attachment.
M	Visual Assessment Forms	This form must be completed for each of the four visual inspections. Visual inspection dates and observations will be recorded on these forms. A separate form is needed for each assessed outfall. All completed visual assessment forms must be added to the SWPPP as part of this attachment.
N	Corrective Action Report Forms	This form must be completed within 30 days of a discovery of any condition(s) listed in the MSGP Part 3.1.1. All completed Corrective Action Report forms must be added to the SWPPP as part of this attachment.
O	5-Day Written Report	This form must be completed within 5 days of non-compliance that may endanger health or the environment.
P	Non-Compliance Report Form	This form must be completed annually to report any instances of non-compliance

14 LITERATURE CITED

- Arizona Department of Environmental Quality (ADEQ). 2010. Oak Creek and Spring Creek, Verde River Watershed, Total Maximum Daily Loads for *Escherichia coliform*. Available at: <https://azdeq.gov/verde-watershed>. Accessed August 2020.
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ATTACHMENT A
General Location Maps

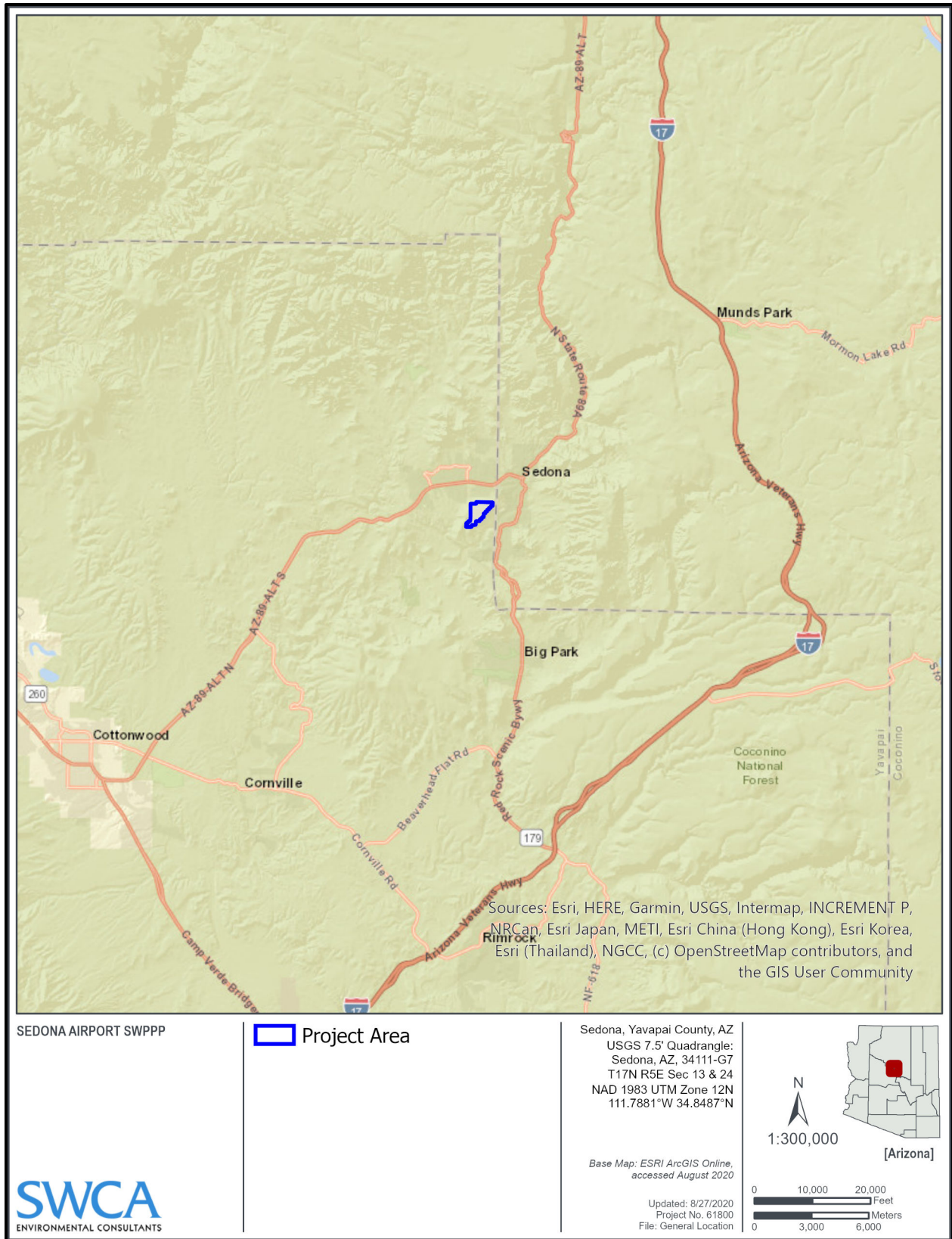


Figure A-1. General location of the project area.

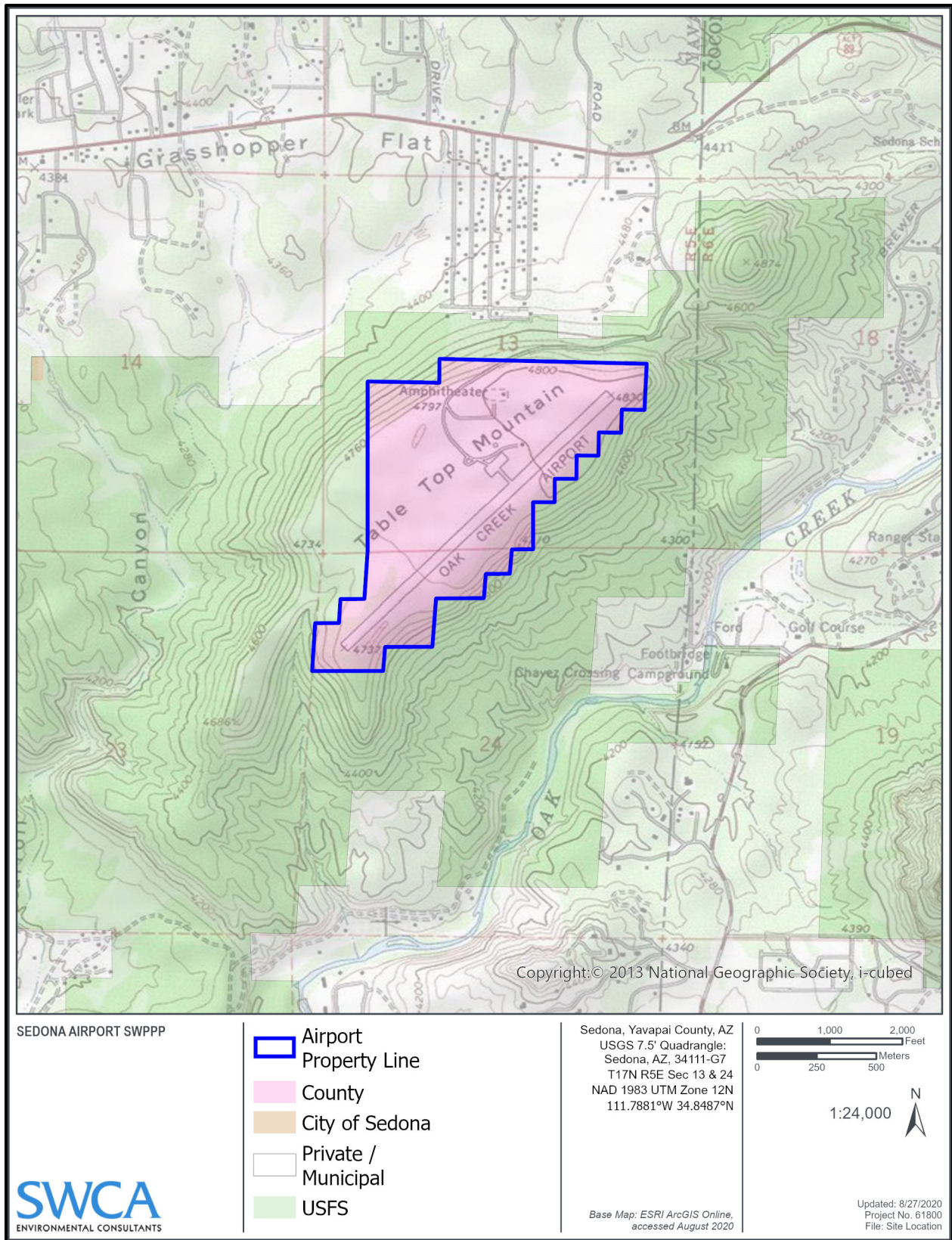


Figure A-2. Site location map.

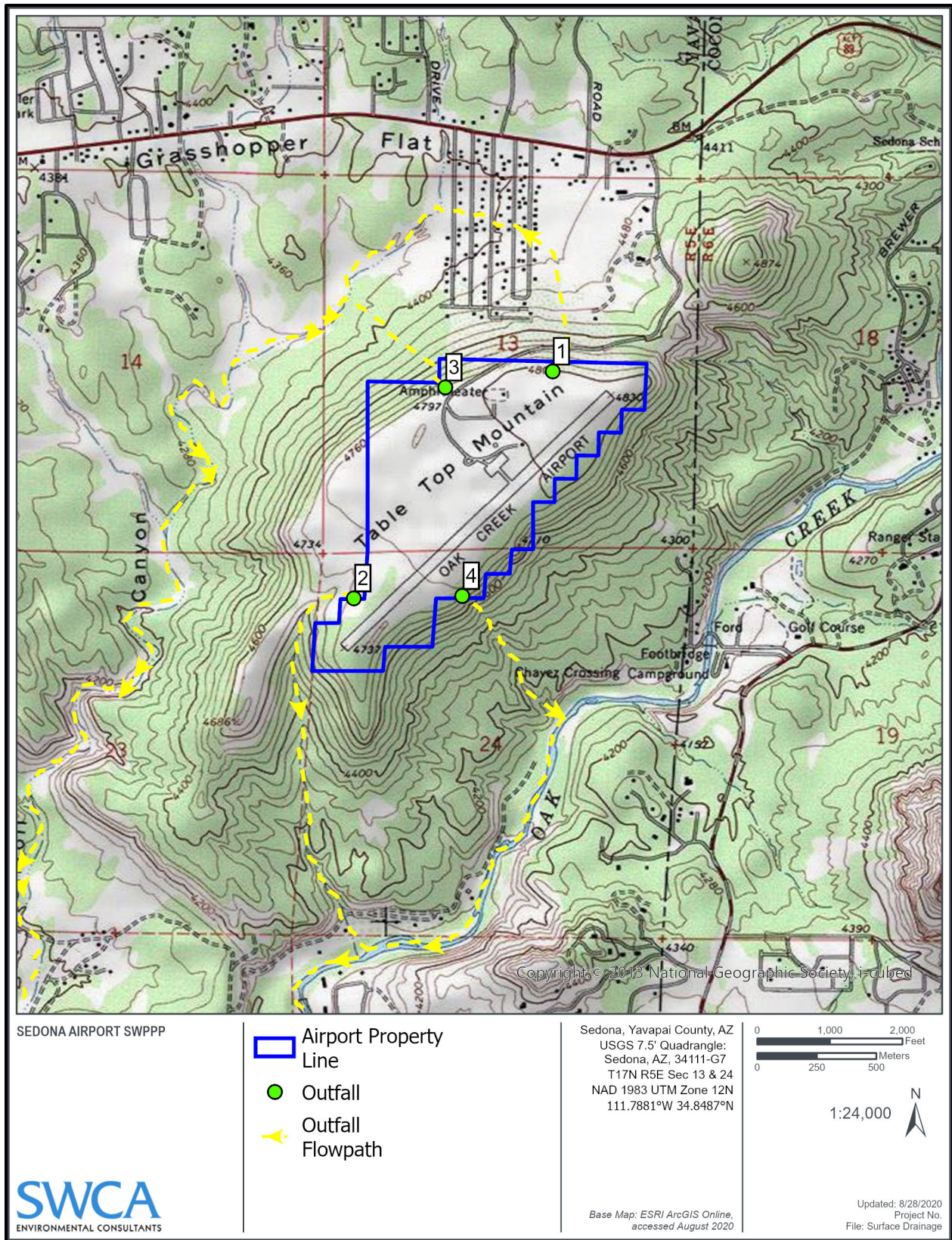


Figure A-3. Surface water drainage flow path map.

ATTACHMENT B

Detailed Site Map

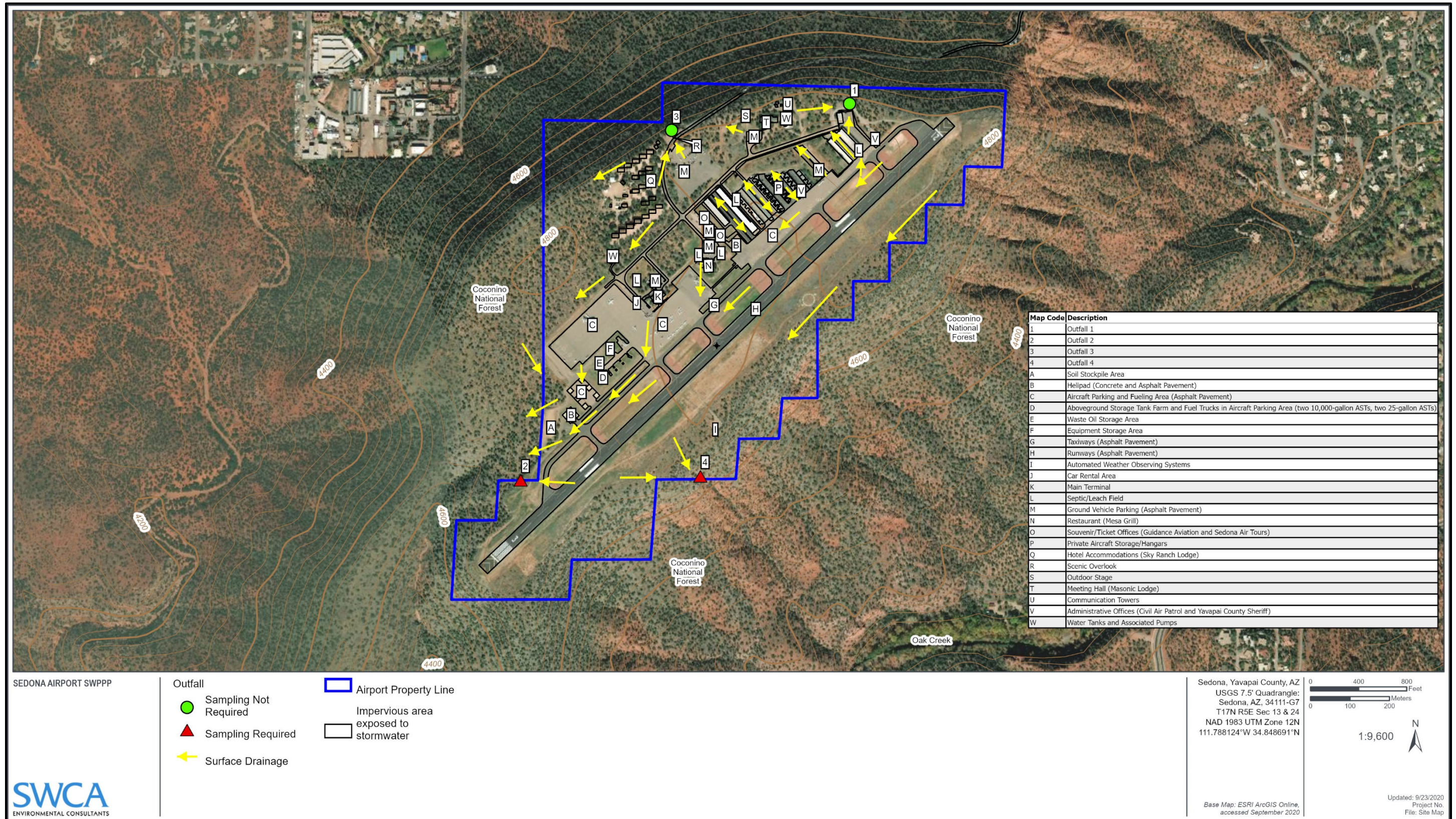


Figure B-1. Detailed site map.

ATTACHMENT C

Copy of AZPDES Multi-Sector General Permit (AZMSG2019-001)

Permit No. AZMSG2019-001



**STATE OF ARIZONA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PHOENIX, ARIZONA 85007**

**ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITY
TO WATERS OF THE UNITED STATES**

This permit provides authorization to discharge under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of the Arizona Revised Statutes, Title 49, Chapter 2, Article 3.1, the Arizona Administrative Code (A.A.C.), Title 18, Chapter 9, Articles 9 and Chapter 11, Article 1, and the Clean Water Act as amended (33 U.S.C. 1251 et seq.).

This general permit specifically authorizes stormwater discharges associated with categories i, ii, iv through ix and xi, pursuant to 40CFR 122.26(b)(14) (non-mining industrial activities) in Arizona. All discharges authorized by this general permit shall be consistent with the terms and conditions of this general permit.

This general permit becomes effective on January 1, 2020.

This general permit and the authorization to discharge expire at midnight, December 31, 2024.

Issued this 15th day of May, 2019.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY


Trevor Baggione, Director
Water Quality Division

**AZPDES MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITIES**

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Appendices

Appendix A. Definitions, Abbreviations, and Acronyms (for the purposes of this permit)
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Appendix C. Facilities and Activities Covered
Appendix D. Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness
Dependent Metals

1.0 Coverage Under this Permit

1.1 Permit Eligibility

To be eligible for authorization under this permit, the site must discharge stormwater associated with industrial activity (as defined in Arizona Administrative Code, R18-9-A902(B)(8)(a)) to a Water of the U.S., either directly or by means of a conveyance.

Industrial stormwater discharge associated with mining activities must seek coverage under a separate permit.

If a site is not eligible for authorization under this permit because stormwater is not discharged to a Water of U.S., the operator may elect to apply for a No Discharge Certification through the electronic permitting process in myDEQ, if available.

1.1.1 Industrial Activities and Facilities Covered

This general permit authorizes stormwater discharges or allowable non-stormwater discharges, associated with “industrial activities” as defined in Appendix A, provided the site’s primary industrial activity is included in Appendix C, Table C-1, or otherwise designated by the director in accordance with A.A.C. R18-9-A902(B)(8)(d).

This permit does not authorize industrial stormwater discharges from sites on any Indian Country lands in Arizona. U.S. EPA Region 9 is the permitting authority for Indian Country lands in Arizona.

1.1.2 Allowable Stormwater Discharges

The following discharges are eligible for coverage under this permit:

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 specifically prohibited in Part 8;
2. Discharges designated by ADEQ as needing a stormwater permit as provided in Sector AD;
3. Discharges that are not otherwise required to obtain AZPDES permit authorization but are commingled with discharges that are authorized under this permit; and
4. Discharges subject to any of the national stormwater specific effluent limitations guidelines listed in Table 2.2.

1.1.3 Allowable Non-Stormwater Discharges for all Sectors of Industrial Activity

Part 1.1.3.1 identifies the non-stormwater discharges allowed under this permit provided appropriate control measures are designed, implemented, and maintained to reduce the discharge of pollutants, including erosion and sedimentation, and do not cause or contribute to the instream exceedance of an applicable surface water quality standard.

Allowable non-stormwater discharges can be mixed with a discharge authorized by a different AZPDES permit and/or a discharge that does not require AZPDES permit authorization.

1.1.3.1 Allowable Non-Stormwater Discharges for all Sectors of Industrial Activity

When conducted in accordance with part 1.1.3, the following non-stormwater discharge activities or sources are allowed:

1. Emergency/unplanned fire-fighting activities;
2. Fire-fighting system testing and maintenance, including hydrant flushings;
3. Installation and maintenance of potable water supply systems, including disinfection and water line flushing activities, discharges resulting from pressure releases or overflows, and discharges from wells approved by ADEQ for drinking water use;
4. Uncontaminated condensate from air conditioners, evaporative coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
5. Irrigation drainage and irrigation line flushing;
6. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
7. Pavement wash waters where no detergents or cleaning agents are used, and measures are first taken to remove/pickup solids and liquids, and properly disposed;
8. Routine external building washdown / power wash water that does not use detergents or hazardous cleaning agents (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols);
9. Water used to control dust, provided effluent or other wastewaters are not used;
10. Uncontaminated groundwater or spring water;
11. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
12. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the site, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains);
13. Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater;
14. Discharges of water associated with drilling, rehabilitation and maintenance of potable or non-potable water wells and piezometers, or water supply or water quality evaluations including:
 - a. Discharges from any borehole not fully developed;
 - b. Well purging;
 - c. Well/aquifer pump tests not associated with groundwater remediation activities;
 - d. Backflushing of injection wells; and
15. Non-stormwater discharges subject to an effluent limitation guideline listed in Table 2.2.

1.1.4 Limitations on Coverage

1.1.4.1 Stormwater Discharges Mixed with Non-Stormwater

Stormwater discharges that are mixed with non-stormwater (other than the allowable non-stormwater discharges listed in Part 1.1.3) are not eligible for coverage under this permit.

1.1.4.2 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, are not eligible for coverage under this permit (unless in conjunction with mining activities specified in the Arizona Mining MSGP Sectors G and J). Stormwater discharges associated with construction activity that require coverage shall obtain authorization under the Arizona's Stormwater Construction General Permit.

1.1.4.3 Discharges Currently or Previously Covered by Another Permit

Unless the permittee receives written notification from ADEQ specifically allowing these discharges to be covered under this permit, the following are not eligible for coverage under this general permit for any of the following:

1. Stormwater or non-stormwater discharges associated with industrial activity that is currently covered under an individual AZPDES permit or an alternative AZPDES general permit and has established numeric water quality-based limitations developed for the stormwater component of the discharge; or
2. Discharges for which any AZPDES permit has been or is in the process of being denied, terminated, or revoked by ADEQ (this does not apply to the routine reissuance of permits every five years).

1.1.4.4 Stormwater Discharges Subject to Effluent Limitations Guidelines

For stormwater discharges subject to effluent limitation guidelines under 40 CFR, Subchapter N only those discharges identified in Table 2.2 are eligible for coverage under this permit.

1.1.4.5 New Dischargers and New Sources Based on Surface Water Quality Standards

A new discharger or a new source (as defined in Appendix A) is ineligible for coverage under this permit if ADEQ determines, that the discharge will cause or contribute to an exceedance of a surface water quality standard. In such case, ADEQ may notify the applicant that an individual permit is necessary per Part 1.4, or alternatively ADEQ may authorize coverage under this permit when the applicant implements additional control measures, so that discharges from the site will meet the surface water quality standards.

1.1.4.6 New Dischargers and New Sources to Impaired Waters

A new discharger or a new source to an impaired water (as defined in Appendix A) is not automatically eligible for coverage under this permit.

1. To receive authorization under this permit, the applicant shall make one of the following demonstrations and retain such documentation with the stormwater pollution prevention plan (SWPPP):

- a. That the site will employ measures to prevent all exposure to stormwater of the pollutant(s) for which the waterbody is impaired; or
- b. That the discharge from the site has no potential to contain the pollutants causing impairment; or
- c. That the discharge is not expected to cause or contribute to an exceedance of an applicable surface water quality standard. The applicant shall demonstrate with data or other technical documentation that either:
 - i. For discharges to waters without an approved or established TMDL, that the discharge of the pollutant for which water is impaired will meet the applicable surface water quality standards, at the point of discharge to the waterbody; or
 - ii. For discharges to waters with an approved or established TMDL, that the discharges are consistent with the provision in the TMDL, including established TMDL and implementation plans.

Pursuant to A.A.C. R18-11-109(D)(2), if a receiving water is impaired for suspended solids, an operator seeking authorization to discharge under this permit may satisfy the requirement of Part 1.1.4.6(1)(c)(i) either by discharging only within the first 48 hours after a local storm event, or by demonstrating that any discharge after that time satisfies the requirements of Part 1.1.4.6(1)(c)(i) or (ii).

2. The applicant shall submit:
 - a. The Notice of Intent (NOI) in accordance with Part 1.3.1;
 - b. An electronic copy of the SWPPP for ADEQ review. The SWPPP shall describe how the permittee will:
 - i. Monitor for pollutants of concern in the discharge in accordance with Part 6.2.3; and
 - ii. Provide the necessary information or documentation related to the demonstration selected in Part 1.1.4.6(1).
3. If the proposed discharge is to tributary within 2.5 miles upstream of a water or portion thereof classified as impaired and /or not-attaining, the applicant shall submit a copy of the SWPPP electronically with the NOI.
4. Within 30 calendar days of receipt of information required in Part 1.1.4.6 (2), ADEQ will notify the applicant in writing that:
 - a. It is acceptable to proceed under the general permit and the permit authorization has been issued; or
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit the revised electronic SWPPP to ADEQ for review that addresses the deficiencies as identified in the ADEQ notification; or
 - c. It is not eligible for coverage under this permit and must apply for an individual permit under Part 1.4.

1.1.4.7 New or Expanded Discharges to Outstanding Arizona Waters

1. No new or expanded discharges or a new source directly to a water or portion thereof classified as an Outstanding Arizona Water (OAW) (see A.A.C. R18-11-112) are authorized under this permit.
2. New or expanded discharges to tributaries upstream of a water or portion thereof classified as an OAW are not automatically eligible for coverage under this permit. To receive authorization for a new or expanded discharge to a tributary upstream of a water or portion thereof classified as an OAW, the applicant shall submit:
 - a. The NOI in accordance with Part 1.3.1;
 - b. An electronic copy of the SWPPP for ADEQ review that demonstrates the discharge will not degrade existing water quality in the downstream OAW and retain documentation supporting this demonstration onsite with the SWPPP.

Information relevant to this demonstration may include, but is not limited to, some or all of the following:

- i. The distance between the discharge and the water or portion thereof that is the OAW;
 - ii. The estimated size (volume) and duration of the discharge;
 - iii. The expected frequency of the discharge;
 - iv. The expected chemical characteristics of the discharge;
 - v. The known or expected water quality of the water or portion thereof that is the OAW during storm events.
3. If the proposed discharge is to a tributary within 2.5 miles of a water upstream or portion thereof classified as an OAW the applicant shall, submit an electronic copy of the SWPPP that includes a sampling and analysis plan to collect data appropriate to verify the demonstration in subsection b, above.
 4. Within 30 calendar days of receipt of information required in Part 1.1.4.7 (2), ADEQ will notify the applicant in writing that:
 - a. It is acceptable to proceed under the general permit and the permit authorization has been issued; or
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit the revised SWPPP to ADEQ for review that addresses the deficiencies as identified in the notification; or
 - c. It is not eligible for coverage under this permit and must apply for an individual permit under Part 1.4.

1.2 Permit Compliance

Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act and A.R.S. Title 49, Chapter 2, Article 3.1.

1.3 Authorization Under this Permit

1.3.1 Obtaining Authorization to Discharge

1. Before obtaining authorization under this permit, the applicant shall:
 - a. Meet the eligibility requirements in Part 1.1;
 - b. Select and design control measures in accordance with Part 2.2 (such control measure shall be installed and implemented prior to discharge);
 - c. Develop or update a SWPPP according to the requirements in Part 5 of this permit. An applicant seeking authorization, for a new discharge to an impaired water or to a tributary within 2.5 miles upstream of an impaired water (see Part 1.1.4.6) or for a new or expanded discharge to a tributary within 2.5 miles upstream of an Outstanding Arizona Water (see Part 1.1.4.7) is required to submit a copy of the SWPPP electronically to the Department for review. The corresponding review fee (A.A.C. Title 18, Chapter 14, Article 1) must also be submitted electronically using myDEQ at the time the SWPPP is submitted; and
 - d. Submit to the Department a complete and accurate Notice of Intent (NOI).
 - e. If the site will discharge to a regulated municipal separate sewer system (MS4), the applicant must provide:
 - The name of the MS4 operator; and
 - The surface water that receives the discharge.
2. If ADEQ notifies the applicant that a new or modified NOI is inaccurate, a new NOI will have to be submitted along with the initial application fee(s).
3. Submitting the Notice of Intent (NOI):

The NOI must be submitted electronically using ADEQ's on-line permitting portal myDEQ, by the deadline applicable to your site, listed in Table 1-2.

4. Authorization to Discharge Timeframes
 - a. Routine Authorizations

Unless otherwise notified, the applicant is authorized to discharge stormwater from an eligible site when the Notice of Intent is submitted through the on-line permitting system, myDEQ, and the NOI Certificate is issued to the applicant. The NOI Certificate is issued immediately after the submission of a complete and accurate NOI and the receipt of the applicant's payment. The NOI Certificate will include a unique authorization number (LTF number) and the effective date of permit coverage issued to the applicant.
 - b. Authorizations to Discharge for New Dischargers to Impaired Waters and New or Expanded Discharges to Tributaries of OAWs.

Unless otherwise notified, an applicant subject to Part 1.1.4.6 or 1.1.4.7 is authorized to discharge stormwater from an eligible site upon receipt of the Notice of Intent Certificate or 30 calendar days after a complete and accurate SWPPP is received by the Department, whichever is earlier. When the SWPPP is approved by ADEQ, the applicant will receive the Notice of Intent Certificate.
 - c. NOIs Requiring Additional Evaluation

Authorization to discharge will not occur for up to 30 calendar days in the event that a SWPPP review is required. The permittee is authorized to discharge stormwater from an eligible site upon receipt of the Notice of Intent Certificate or 30 calendar days after a complete and accurate SWPPP is received by the Department, whichever is earlier. When requesting a voluntary SWPPP review, coverage is granted when ADEQ deems the SWPPP complete and accurate. When the SWPPP is approved by ADEQ, the applicant will receive the Notice of Intent Certificate.
 - d. Requirement to Obtain Alternate Coverage.

ADEQ may require the operator to submit an application for an individual AZPDES permit, as detailed in Part 1.4. In these instances, ADEQ will notify the operator in writing of the request for submission of an individual AZPDES permit application.
5. The time frames for discharge authorization are presented in Table 1-2, below.

Table 1-2. NOI Submittal Deadlines		
Category	NOI Submission Deadline	Discharge Authorization Status ^{1,2}
<p>Existing Dischargers – authorized for coverage under 2010 MSGP.</p>	<p>Submit NOI between January 1, 2020 and February 28, 2020, unless ADEQ notifies the applicant that the deadline was extended.</p> <p>The SWPPP must be updated to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p> <p>If the NOI is not submitted by the deadline, the existing coverage under the 2010 MSGP will be automatically terminated by ADEQ.</p>
<p>Other Eligible Dischargers – in operation prior to the effective date of this permit, but did not obtain coverage under the 2010 MSGP or another AZPDES permit and are not operating consistent with the No Exposure Certificate Conditional Exclusion.</p>	<p>Submit NOI as soon as possible, but no later than 60 calendar days from the permit's effective date, unless the deadline was extended.</p> <p>The SWPPP must be prepared to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p>New Dischargers – will commence discharging after the effective date of this permit.</p>	<p>Submit NOI as soon as possible, and at least 30 calendar days before discharge is anticipated.</p> <p>The SWPPP must be prepared to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p>Change of ownership and/or operation to a new owner or operator, whose discharge is authorized under this permit.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the new owner or operator assumes responsibility for the site.</p> <p>New owner /operator shall submit a NOI to ADEQ 30 calendar days before taking over operational control or initiating activities at the site.</p> <p>The new owner/ operator shall develop the SWPPP to ensure that this permit's requirements are addressed prior to submitting the NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee for the new owner/ operator in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>

Table 1-2. NOI Submittal Deadlines		
Category	NOI Submission Deadline	Discharge Authorization Status ^{1,2}
<p><u>Change in site location</u> to a new site location, whose discharge is authorized by this permit, including a change in geographic coordinates.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the site location changes.</p> <p>Owner /operator of the new site location, shall submit a NOI to ADEQ 30 calendar days before changing site locations.</p> <p>Owner/ operator shall develop the SWPPP to ensure that this permit's requirements are addressed prior to submitting the NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicants NOI fee for the new site location in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p><u>Change in site name</u> to a different site name whose discharge is authorized by this permit.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the site name changes.</p> <p>Owner/operator of the site location with a new name, shall submit a NOI to ADEQ 30 calendar days before changing site name.</p> <p>Owner/operator shall develop the SWPPP to ensure that this permit's requirements are addressed prior to submitting the NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicants NOI fee for the new site name in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p><u>Changes to the NOI³ (revised or modified NOI)</u></p>	<p>Submit a revised NOI to ADEQ within 30 calendar days of the change to NOI information.³</p> <p>The permittee shall update the SWPPP to ensure that this permit's requirements are addressed prior to submitting the revised NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicants NOI fee, if required, in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>

¹ If the NOI submission deadline is missed, any and all continued discharges from the industrial activities will be unauthorized under the CWA until they are covered by this or a different AZPDES permit. ADEQ may take enforcement action for any unpermitted discharges.

² Discharges are not authorized if the NOI is inaccurate (incorrect facility name, facility address, or facility latitude/longitude) or if you are ineligible for permit coverage. A new fee would be required if a new NOI has to be submitted if the old NOI was deemed to be inaccurate.

³ The permittee is required to submit a revised (modified) NOI for the following changes to their previous application: site contact, change in discharge to MS4, sector, subsector, co-located facilities, acreage exposed to industrial stormwater, primary industrial activity acreage exposed to stormwater, co-located industrial activities acreage exposed to stormwater, SWPPP contact, outfall name, outfall location, number of outfalls, outfalls that are inactivated, receiving water, receiving water type, sampling type, and claiming inactive and unstaffed site status (or reverting back to active and staffed). There is no fee for

modifying or revising a NOI, unless an outfall to a special water is added, which would trigger the SWPPP review fee.

1.3.2 Continuation of Coverage for Existing Permittees after this Permit Expires

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with A.A.C. R18-9-C903(A) and remain in force and effect. Discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

- The operator submits a timely, complete, and accurate NOI requesting authorization to discharge under a renewal or revision of this permit and ADEQ issues an Authorization to Discharge; or
- The operator submits a Notice of Termination (NOT); or
- ADEQ denies coverage under this general permit or denies or issues coverage under an individual permit or other alternative permit for the site's discharges; or
- A formal permit decision is made by ADEQ not to reissue this general permit, at which time ADEQ will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

1.4 Coverage under Alternative Permits

1.4.1 ADEQ Requiring Coverage under an Alternative AZPDES Permit

ADEQ may require an operator to obtain authorization to discharge under either an individual AZPDES permit or an alternative AZPDES general permit in accordance with A.A.C. R18-9-C902(A). If ADEQ requires the site to apply for an alternative permit, the Agency will notify the operator in writing that a permit application or NOI is required. This notification will include a brief statement of the reasons for this decision. If ADEQ requires an operator to apply for an individual permit, any applications shall be submitted within 120 calendar days, unless ADEQ provides an extended deadline. In addition, a discharger already authorized under this permit, will be notified of a deadline to file a permit application. Coverage under this permit will terminate immediately if the operator fails to submit an individual AZPDES permit application by the specified deadline. ADEQ may take appropriate enforcement action for any unpermitted discharge.

1.4.2 Permittee Requesting Coverage under an Alternative Permit

An applicant may elect to forego coverage under this general permit by applying for an individual permit. In such a case, the applicant must submit an individual permit application in accordance with the requirements of A.A.C. R18-9-B901(B)(2) to the Department and include reasons supporting the request.

The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit if the Department finds that the reasons are adequate to support the request.

When an individual AZPDES permit is issued to the applicant or the applicant is authorized to discharge under an alternative AZPDES general permit, the authorization to discharge under the 2019 MSGP is terminated on the effective date of the alternate permit.

1.5 Terminating Permit Coverage

1.5.1 Submitting a Notice of Termination (NOT)

To terminate permit coverage, the permittee shall submit a complete and accurate Notice of Termination (NOT). The site's authorization to discharge under this permit terminates immediately once a NOT Summary is received from the Department. Any reporting requirements shall be submitted at the time of termination.

1.5.2 How to Submit the NOT

The permittee must submit the NOT electronically using a valid myDEQ account.

1.5.3 When to Submit a NOT

The permittee shall submit a NOT within 30 calendar days after:

- A new owner or operator assumes ownership or has taken over responsibility for the site.
- The owner or operator changes the geographic location of the site.
- The owner or operator of a site changes the name of the facility.

The permittee may submit a NOT after one or more the following conditions have occurred:

- The permittee has ceased operations at the site, there are not or will no longer be discharges of stormwater associated with industrial activity from the site, and the site has implemented necessary sediment and erosion control measures; or
- The site meets the requirements for a No Exposure Certification and has obtained NEC coverage; or
- The permittee obtained coverage under an individual or alternative general permit for all discharges required to be covered by an AZPDES permit: or
- There are no longer discharges of stormwater to Waters of U.S., either directly or by way of conveyance (storm sewer, street, ditch, etc).

The permittee is responsible for meeting the terms and conditions of this permit (including annual fee(s)) until the site's authorization to discharge is terminated.

1.6 Conditional Exclusion for a No Exposure Certification (NEC)

Facilities that otherwise would be regulated under this general permit are exempt from the requirement to obtain a permit coverage if there is no exposure of industrial materials or activities from precipitation or runoff. The demonstration of "no exposure" can only be made on a site-wide basis, and is not for individual outfalls.

1.6.1 Qualifications for a No Exposure Certification

To qualify for a No Exposure Certification, the operator must provide certification that the site:

- a) Has a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snow melt, and runoff; and

- b) Demonstrate and certify that the following materials or activities are or will not be in the foreseeable future, exposed to precipitation:
- Areas that are using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater;
 - Materials or residuals on the ground or in stormwater inlets from spills/leaks;
 - Materials or products from past industrial activity;
 - Material handling equipment (except adequately maintained vehicles);
 - Materials or products during loading/unloading or transporting activities;
 - Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to stormwater does not result in the discharge of pollutants);
 - Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
 - Materials or products handled/stored on roads or railways owned or maintained by the discharger;
 - Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);
 - Application or disposal of process wastewater (unless otherwise permitted); and
 - Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated (e.g., under an air quality control permit) and evident in the stormwater outflow.

1.6.2 No Exposure Certification Additional Considerations

A storm resistant shelter is not required for the following industrial materials and activities under the No Exposure Certification:

- Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak (“Sealed” means banded or otherwise secured and without operational taps or valves);
- Adequately maintained vehicles used in material handling; and
- Final products that are designed for outdoor use, provided the final products have not deteriorated or are a source of pollutants (mobilized in stormwater or wind).

1.6.3 How to Submit the NEC

The operator of a site must apply for the NEC electronically using a valid myDEQ account by following the Notice of Intent process. If eligible, the applicant will be given the option to pursue permit coverage by submitting a NOI, or a NEC.

1.6.4 When to Submit an NEC

If the permittee for the site is covered by this permit and becomes eligible for a “no exposure” exclusion from permitting under 40 CFR 122.26(g), the operator may file a No Exposure Certification (NEC) at any time. The site is no longer required to have permit coverage upon a complete and accurate No Exposure Certification to ADEQ. Once the No Exposure Certificate is received, the permittee shall complete a Notice of Termination (NOT) for the original permit coverage. If at any time the site can no longer satisfy the conditions of no exposure, renewed permit coverage is required and the operator shall submit a new NOI.

The operator of a site covered by an NEC shall allow ADEQ and/or the representatives of a regulated MS4 (where there is a stormwater discharge to the MS4) to inspect the site.

ADEQ retains the authority to deny this exclusion (and require authorization under an

individual permit) if it determines that the discharge causes, has a reasonable potential to cause, or contributes to an exceedance of an applicable surface water quality standard in the receiving water.

1.6.5 NEC Timeframes

The NEC is nontransferable and shall be renewed with ADEQ every five years from the date the NEC is issued.

2.0 Effluent Limits and Control Measures

2.1 Water Quality-Based Standards

2.1.1 Water Quality Standards

The permittee shall control discharge from the site as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard in the receiving water. If at any time the permittee becomes aware, or ADEQ determines, that the site's discharge causes or contributes to an exceedance of an applicable surface water quality standard, the permittee shall take corrective action as required in Part 3.1, document and report the corrective actions as required in Parts 3.2.

ADEQ may impose additional water quality-based requirements on a site-specific basis, or require the operator to obtain coverage under an individual permit in accordance with Part 1.4., if information in the Notice of Intent (NOI), required reports, or from other sources indicates the discharges are not controlled as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard in the receiving water.

2.1.1.1 Discharges to Water Quality Not-Attaining and Impaired Waters

- a. **Existing Discharges to an Impaired Water with an Approved TMDL (Not-Attaining Water).** If the discharge is to an impaired water with an approved TMDL, or is otherwise referenced in an approved TMDL, the Department may require, as a condition of authorization, additional limits, controls, or analytical monitoring necessary to be consistent with the assumptions and requirements of the applicable TMDL and any available wasteload allocation (WLA). Alternatively, ADEQ will advise the permittee if coverage under an individual permit is necessary in accordance with Part 1.4.
- b. **Existing Discharges to an Impaired Water without an Approved TMDL (Impaired Water).** If the discharge is to an impaired water without an approved TMDL, the permittee shall comply with Part 2.1.1., and the monitoring requirements of Part 6.2.3. This subsection applies to discharges to impaired waters as well as to situations where ADEQ determines that the site's discharge is not controlled as necessary to meet surface water quality standards in an impaired downstream water segment, even if the discharge is to a receiving water that is not specifically identified on a Section 303(d) list.
- c. **New Dischargers or New Sources to an Impaired Water and or Not-Attaining Water.** If the permittee's authorization to discharge under this permit relied on Part 1.1.4.6 for a new discharger or a new source to an impaired and or not-attaining water, the permittee shall implement and maintain any control measures or conditions on the site that enabled it to become eligible under Part 1.1.4.6. The permittee shall modify such measures or conditions as necessary in accordance with any Part 3 corrective actions. In addition, the permittee shall comply with Part 2.1.1 and the analytical monitoring requirements of Part 6.2.3.

2.2 Control Measures and Effluent Limits

The requirement to implement control measures in accordance with Part 2.2.1 applies to all sites. Part 8 contains additional control measures imposed on a sector-specific basis.

2.2.1 Control Measures

The permittee shall select, design, install, and implement control measures in order to meet the requirements in Part 2.1 and Part 2.2.1.

The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. The permittee may deviate from such manufacturer's specifications, however the justification for the deviation shall be maintained and documented in the site SWPPP.

If the site's control measures are not effective, the permittee shall modify and/or add additional control measures to meet the requirements of this permit. Regulated stormwater discharges from the site include stormwater run-on that commingles with stormwater discharges associated with industrial activity.

At a minimum, the permittee shall consider all of the control measures listed below for implementation at the site and select those that the permittee determines are appropriate given the nature of the site and site conditions to meet the requirements set forth in Part 2.1 and Part 2.2.1.1. The control measures listed below are not intended to be an exclusive list of necessary control measures. In preparing the SWPPP in accordance with the requirements in Part 5 of this permit, the permittee shall explain the basis for the selection of the control measures to be utilized at the site.

2.2.1.1 Control Measure Selection and Design Considerations

The permittee shall assess the type and quantity of pollutants likely to discharge in stormwater or allowable non-stormwater from the site when designing and implementing control measures. The permittee shall consider the following when selecting and designing control measures:

- Preventing stormwater from coming into contact with pollutants is generally more effective, and less costly, than trying to remove pollutants from stormwater;
- Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in the site's stormwater discharge;
- Assessing the type and quantity of pollutants, including their potential to impact the receiving water(s) quality, is necessary in order to design effective control measures that achieve permit limits;
- Minimizing impervious areas at the site and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid groundwater contamination;
- Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- Using containment to intercept stormwater flows before they leave the site, such as directing flows to non-discharging areas (pits) or installing runoff containment;
- Conserving and/or restoring of riparian buffers help protect streams from stormwater runoff and improve water quality; and
- Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

2.2.1.2 Technology Based Effluent Limits

The permittee shall comply with the following non-numeric effluent limits (except where otherwise specified in Part 8) as well as any sector-specific non-numeric effluent limits in Part 8:

2.2.1.2.1 Minimize Exposure

The permittee shall 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 runoff in order to minimize pollutant discharges by implementing measures, such as the following:

- Locating industrial material and activities inside or protecting with storm resistant shelter (although significant enlargement of impervious surface area is not recommended);
- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- Locating materials, equipment, and activities so that potential leaks or spills are contained or able to be contained or diverted before discharging off-site;
- Using spill/overflow protection;
- Clean up spills and leaks promptly using dry methods (e.g. absorbent's);
- Covering fueling area(s) or minimize stormwater run-on/runoff to fueling area(s);
- Store leaky vehicles and equipment indoors, or if stored outdoors, use drip pans and absorbents;
- Draining fluids from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that will remain unused for extended periods of time;
- Performing all vehicle and /or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- Ensuring that all washwater not meeting the requirements in Part 1.1.3.1. (7) and (8), drains to a proper collection system (i.e., not the stormwater drainage system).

2.2.1.2.2 Good Housekeeping

The permittee shall implement good housekeeping measures for all exposed areas that are potential sources of pollutants. Such measures may include, but are not limited to the following:

- Sweep or vacuum at regular intervals;
- Keeping materials orderly and labeled;
- Storing materials in appropriate containers;
- Cleaning up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- Using drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- Keep dumpster lids closed when not in use, where feasible. 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) when needed.
- 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.

2.2.1.2.3 Maintenance

The permittee shall maintain all control measures that are used to achieve effluent limits in this permit in effective operating conditions, as well as all industrial equipment and systems, in order to minimize pollutants in stormwater discharge. This includes measures such as the following:

- Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, plant equipment and systems that could fail and result in contamination of stormwater.
- Maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained).
- Inspecting baghouses and removing any accumulated dust at the exterior base of the baghouse.
- Cleaning catch basins.

If control measures are in need of repair or replacement, the permittee shall make any necessary maintenance changes as soon as practicable. All reasonable steps shall be taken to minimize the discharge of pollutants until the final repair is completed. This shall include cleaning up any contaminated surfaces so that the material will not be discharged in subsequent storm events. Final repairs or replacement of stormwater controls should be completed as soon as feasible but no later than 14 calendar days following discovery, or before the next measurable storm event, whichever is sooner.

If necessary changes cannot be implemented within the specified timeframe(s), the permittee shall document within the SWPPP the reasons for the delay, a schedule for completing the necessary changes, date completed, and any back-up control measures in place to ensure compliance with permit requirements, should a runoff event occur while a control measure is off-line (either in part or in whole).

2.2.1.2.4 Spill Prevention and Response Procedures

The permittee shall minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for timely and effective clean-up of spills if, or when they occur in order to minimize pollutant discharges. The permittee shall implement spill prevention and response measures, such as:

- Plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas;
- Develop procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases;
- Keep spill kits on-site and located near areas where spills may occur or a rapid response can be made; and
- Implement procedures for notification of appropriate site personnel and emergency response. Where a leak, spill, or other release occurs that

contains 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, the permittee shall notify ADEQ Emergency Response at (602) 771-2330 or, toll free, at (800) 234-5677. Contact information must be in locations that are readily accessible and available.

2.2.1.2.5 Erosion and Sediment Controls

The permittee shall minimize on-site erosion and sedimentation in order to minimize pollutant discharges, including but not limited to measures such as the following:

- Stabilize exposed soil;
- Control and contain runoff and sediment using structural and/or non-structural control measures;
- Place flow velocity dissipation devices at discharge locations and within outfall channels where necessary, to reduce erosion and/or settle out pollutants.

In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA's internet-based resources relating to Stormwater BMPs for erosion and sedimentation.

If the permittee uses polymers and/or other chemical treatments as part of the controls, the permittee must identify the polymers and/or chemicals used and the purpose in the SWPPP.

2.2.1.2.6 Management of Stormwater Runoff

The permittee shall minimize the discharge of pollutants from the site by implementing control measures, including but not limited to measures such as the following:

- Divert clean stormwater around industrial materials and activities;
- Infiltrate, reuse, contain and reduce impacted runoff, or
- Treat and/or recycle stormwater runoff collected.

In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA's internet-based resources relating to stormwater runoff management and green stormwater infrastructure.

2.2.1.2.7 Salt Storage Piles or Piles Containing Salt

The permittee shall reduce stormwater runoff to minimize the discharge of pollutants from salt storage piles or piles containing salt by implementing control measures including, but not limited to measures, such as the following:

- 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.
- Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the salt storage pile.

Salt storage piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged off-site or if discharges from the piles are authorized under another AZPDES permit.

2.2.1.2.8 Employee Training

The permittee shall train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the site's Stormwater Pollution Prevention Team. Training must cover both the specific control measures and the monitoring, inspection, planning, reporting, and documentation requirements described in this permit. For larger sites with multiple co-permittees, employee training is required for those industrial areas and stormwater controls measures for which the co-permittee is responsible for maintaining. Training shall be conducted at least annually.

The permittee must ensure the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements, for the following:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of control measures (including pollution prevention measures);
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges;
- Personnel who are responsible for taking and documenting corrective actions as required in Part 3;
- Personnel who are responsible for conducting and documenting monitoring and inspections as required in Parts 4 and 6.

Personnel must be trained in the following areas, if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

2.2.1.2.9 Non-Stormwater Discharges

The permittee shall evaluate the presence of non-stormwater discharges at the site. Any non-stormwater discharges site not specifically authorized in Part 1.1.3 or covered by another AZPDES permit, shall be eliminated.

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate AZPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

2.2.1.2.10 Dust Generation and Vehicle Tracking of Industrial Materials

The permittee shall minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutant discharges.

2.2.2. Numeric Effluent Limitations Based on Effluent Limitations Guidelines

Table 2.2 below identifies specific regulated activities with effluent limitations guidelines and the locations of effluent limitations guidelines in this permit. Discharges from such regulated activities must meet the specified effluent limitations guidelines. Compliance with these effluent limits is to be determined based on discharges from these regulated activities, independent of commingling with any other discharges allowed under this permit.

Table 2-2 Applicable Effluent Limitations Guidelines			
Regulated Activity	40 CFR Part/Subpart	MSGP Sector	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	A	See Part 8.A.7
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	See Part 8.C.4
Runoff from asphalt emulsion facilities	Part 443, Subpart A	D	See Part 8.D.4
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	E	See Part 8.E.5
Runoff from hazardous waste landfills	Part 445, Subpart A	K	See Part 8.K.6
Runoff from non-hazardous waste landfills	Part 445, Subpart B	L	See Part 8.L.10
Runoff from coal storage piles at steam electric generating facilities	Part 423	O	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 departures	Part 449	S	Part 8.S.8

3.0 Corrective Action

3.1 Corrective Action Triggers

3.1.1 Conditions Requiring Corrective Action

The following conditions require corrective action:

- An unauthorized discharge (e.g., non-stormwater discharge not authorized by this or another AZPDES permit to a Water of the U.S or to a regulated MS4.);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site causes or contributes to an exceedance of applicable surface water quality standard(s) (Part 2.1.1);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to water listed as not-attaining exceeds an adopted wasteload allocation (WLA) for the pollutant(s) causing the impairment (Part 2.1.1.1);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to an Outstanding Arizona Water is degrading the existing water quality (Part 2.1.1.2); or
- A discharge from the site violates a numeric effluent limitation guideline in Table 2.2 and in Part 8 sector- specific requirements.

The permittee shall review the selection, design, installation, and implementation of a site's control measures and revise as necessary to ensure compliance with this permit.

A routine analytical monitoring exceedance (i.e., above an action level) is not considered a permit violation and does not require a corrective action, if the permittee evaluates and revises the controls measures as necessary (Part 6.2.1) and submits the necessary reporting (Part 7.2).

3.1.2 Substantially Identical Outfalls

If an outfall that represents other substantially identical outfalls requires corrective action, all related substantially identical outfalls shall be assessed for corrective action.

3.2 Corrective Action Deadlines, Documentation and Reporting

Within 30 days of a discovery of any condition in Part 3.1.1, the permittee shall submit a Corrective Action Report Form provided by the Department, either in paper or electronic form (if available) that includes the following information:

1. The permittee shall take immediate actions to mitigate any condition(s) identified in part 3.1.1;
2. Within 72 hours of discovery, the permittee shall document the discovery of that condition, including the following:
 - a. Identification of the condition triggering the need for corrective action review;
 - b. Description of the problem/incident including material type and amount;
 - c. Date/time the problem was identified;
 - d. The location of the incident;
 - e. The cause of the spill, leak, other release or sampling exceedance, if applicable;
 - f. The outfall name(s)/ locations effected; and
 - g. The affected receiving water and whether the receiving water is a special water (as defined in Appendix A).

3. Within 14 calendar days of discovery (or before the next measurable storm event if possible, whichever is sooner) the permittee shall complete and document the following:
 - a. A summary of corrective action taken or to be taken, including modifications to control measures, in order to minimize or prevent the reoccurrence of a discharge of a pollutant(s) or prevent further exceedance(s);
 - b. Identify and describe SWPPP modification(s) that are required as a result of this discovery and/or corrective actions;
 - c. Provide date corrective action initiated or will be initiated;
 - d. Provide date corrective action completed or expected to be completed;
 - e. Results of any analytical monitoring that prompted corrective action, including any subsequent sampling results, if available;
 - f. Describe any accelerated monitoring (see part 6.3) or other permit contingency actions that will be required;
 - g. If corrective actions cannot be implemented within the specified timeframe(s), the permittee shall document the reasons for the delay, provide an implementation schedule for completing the necessary changes, including any back-up practices in place to ensure compliance with applicable effluent limitations, should a runoff event occur while a control measure is off-line;
 - h. If no corrective action is needed, describe the basis for that determination;
 - i. Provide the date and the outcome of the last four (4) routine site inspections; and
 - j. A statement, signed and certified in accordance with Appendix B, Subsection 9.

Any corrective actions documentation taken pursuant to this section, shall be kept with the site's SWPPP.

4.0 Inspections

Additional sector-specific inspection requirements may be required pursuant to Part 8 of this permit. If a conflict exists between the two, the requirements of Part 8 shall prevail.

4.1 Routine Site Inspections

During normal site operating hours, the permittee must conduct routine inspections and examine areas of the site covered by this permit, include the following:

- Areas where industrial materials or activities are exposed to stormwater with the potential to discharge;
- Areas that are identified as potential pollutant sources in the SWPPP;
- All stormwater control measures used to comply with the effluent limits contained in this permit;
- Locations where spills and leaks from industrial equipment, drums, tanks and other containers that can occur or has occurred in the past three years;
- Areas where tracking or blowing of sediment, trash, raw, final or waste materials is or has occurred from areas of no exposure to exposed areas, including locations where vehicles enter or exit the site;
- Discharge points.

Routine inspections shall be conducted at least once each calendar quarter beginning with the first full calendar quarter after the site becomes covered under this permit (see Part 1.3.1(2) and Table1-2). The permittee shall specify the inspection schedules in the SWPPP.

A qualified person or persons (see definition in Appendix A) shall conduct routine site inspections. A member of the Stormwater Pollution Prevention Team shall conduct or participate in the routine site inspection.

The permittee shall conduct at least one of the routine site inspections each calendar year while a stormwater event or discharge is occurring at one or more outfalls, when practicable, to determine that the control measures are functioning correctly. If there is no measurable storm event(s) or discharge during a calendar year, the permittee shall document the inability to perform a routine inspection when a discharge is occurring. In this case, the permittee must still complete four routine quarterly inspections per calendar year.

4.1.1 Routine Site Inspection Documentation

The permittee shall document the findings of each routine site inspection performed and maintain this documentation with the SWPPP. Inspection findings do not need to be submitted to ADEQ, unless specifically requested. At a minimum, the documentation for each routine site inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of control measures at the site, including:
 - A description of any discharges occurring at the time of the inspection;

- Any previously unidentified discharges from and/or pollutants at the site;
- Any evidence of, or the potential for, previously unidentified pollutants entering the drainage system;
- Observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or to the receiving water;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any additional control measures needed to comply with the permit requirements;
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance; and
- Signature of person conducting the inspection.

Any corrective action required as a result of a routine site inspection must be performed consistent with Part 3 of this permit.

4.1.2 Exceptions to Routine Site Inspections

Inactive and Unstaffed Sites: The requirement to conduct routine site inspections on a quarterly basis does not apply to a site that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. Such a site is only required to conduct one routine site inspection each calendar year. To invoke this exception, the permittee shall do the following:

- Maintain a statement in the SWPPP 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 9.
- If circumstances change and industrial materials or activities become exposed to stormwater or the site becomes active and/or staffed, this exception no longer applies and the permittee shall immediately resume routine quarterly inspections.
- Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI in myDEQ to update the status of the site.

For permittees with inactive and unstaffed facilities that are unable to meet the “no industrial materials or activities exposed to stormwater” standard, the frequency of inspections is reduced to two routine inspections each calendar year. These two inspections shall be conducted in the opposing wet seasons and at least three months apart. Compliance with any additional sector-specific conditions in Part 8 is still required.

4.2 Visual Assessment of Stormwater Discharges

The permittee, during normal site operating hours, shall perform two visual assessments during the summer wet season and two visual assessments during the winter wet season when the site is discharging.

Wet seasons, for the purposes of visual assessments, are defined as follows:

- Summer wet season: June 1 – October 31
- Winter wet season: November 1 – May 31

The term ‘wet season’ applies statewide and includes areas of the state where freezing conditions exist that prevent runoff from occurring for extended periods. In areas where freezing conditions exist, the four visual assessments may be distributed during seasons when precipitation runoff occurs.

Visual assessment requirements in this permit begin immediately after authorization to discharge is received by the permittee unless authorization is received 90 calendar days or more after a wet season has begun, in which case visual assessments shall commence with the start of the next wet season.

4.2.1 Visual Assessment Procedures

Twice per wet season for the permit term, the permittee shall collect a stormwater sample from each outfall (except as noted in Part 4.2.3) and conduct a visual assessment of that sample. The visual assessment 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. The visual assessment shall be made:

- Of a sample in a clean, colorless glass, or plastic container, and examined in a well-lit area;
- On samples 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 the permittee shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from the site; and
- On discharges that occur at least 72 hours (3 calendar days) from a previous discharge.

The permittee shall visually inspect the sample for the following water quality characteristics:

- Color;
- Odor;
- Clarity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

4.2.2 Visual Assessment Documentation

The permittee shall document the results of the visual assessments and maintain this documentation with the SWPPP. The visual assessment findings need not be submitted to ADEQ, unless specifically requested by the Department. At a minimum, the documentation of the visual assessment shall include, but not be limited to:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination; and
- If applicable, why it was not possible to take samples within the first 30 minutes; and
- Signature of person conducting the visual assessments.

4.2.3 Exceptions to Visual Assessments of Stormwater Discharges

4.2.3.1 Absence of Discharge: If no storm event results in a discharge from the site or outfall(s) during a wet season, the permittee is excused from visual assessment for the site or outfall(s) for that season provided the permittee documents the absence of discharge in the visual assessment documentation record and retains that record with the SWPPP.

4.2.3.2 Adverse Weather Conditions: Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling unsafe. When adverse conditions prevent the collection of either visual assessment sample in a given wet season, the permittee shall document the adverse weather conditions in the monitoring record and retain those records with the SWPPP.

4.2.3.3 Substantially Identical Outfalls: If the site has two or more outfalls that discharge substantially identical pollutants, the permittee may conduct visual assessments of the discharge at just one of the identical outfalls. If possible, visual assessments at substantially identical outfalls shall be performed on a rotating basis throughout the period of permit coverage. When invoking the substantially identical outfall provision, the permittee shall identify the identical outfalls in the monitoring record and retain those records with the SWPPP.

If a visual assessment collected at a substantially identical outfall demonstrates that control measures are not functioning as intended, the permittee shall assess and modify the control measures as appropriate at each substantially identical outfall represented by the monitored outfall.

4.2.3.4 Inactive and Unstaffed Sites: The requirement for a routine visual assessment does not apply at a site that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. To invoke this exception, the permittee shall do the following:

- Maintain a statement in the SWPPP 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 9.
- If circumstances change and industrial materials or activities become exposed to stormwater or the site becomes active and/or staffed, this exception no longer applies and the permittee shall immediately resume visual assessments.
- Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI to update the status of the site.

Except as provided by Part 8, permittees with inactive and unstaffed facilities that include documentation with the SWPPP that they are unable to meet the “no industrial materials or activities exposed to stormwater” standard shall conduct at least one visual assessment each calendar year.

5.0 Stormwater Pollution Prevention Plan (SWPPP)

A Stormwater Pollution Prevention Plan (SWPPP) that meets the requirements of parts 5 and 8 of this permit shall be prepared by qualified personnel prior to submitting a NOI.

5.1 Contents of the Site’s SWPPP

5.1.1 SWPPP Content

The SWPPP, at a minimum, shall contain and identify the following requirements:

- Stormwater Pollution Prevention Team by name, title, or role;
- A site description, including a discussion of industrial activities that occur at the site;
- A generalized location map (e.g. a USGS quadrangle map) with all surface water(s) receiving stormwater discharges from the facility identified;
- A detailed site map (see Part 5.1.2);
- Summary of pollutant sources;
- List of significant spills and leaks of pollutants that occurred in the past three years;
- Document the occurrence of unauthorized non-stormwater discharges;
- A description of control measures that will be used to ensure compliance with the requirements in Part 2.1 and Part 2.2.1;
- The schedule, practices and procedures for the following: good housekeeping, control measure maintenance / repair measures, spill prevention/ response, erosion/ sediment controls, and type and frequency of employee training;
- The schedule and documentation procedures utilized for site inspections and visual assessment monitoring;
- A description of stormwater monitoring and sampling procedures, including outfall identification and describe any exemptions to monitoring (such as inactive/ unstaffed site and/or rationale for any substantially identical outfall determinations);
- A Sampling and Analysis Plan (see Part 6.1.5), if required, including previous sampling results for the previous permit term; and
- Signature requirements (see Part 5.2)

If the SWPPP refers to procedures in other site documents, such as other environmental permits, a Spill Prevention Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) and copies of the relevant portions of those documents must be kept with the SWPPP if they are incorporated to satisfy SWPPP requirements.

5.1.2 Site Map Requirements

Provide a legible site map (or maps) completed to scale, that identifies the following:

- Boundaries of the property;
- Designation of area(s) associated with industrial activities;
- Identification of adjacent properties;
- Directions of stormwater flow for areas of the site that generate stormwater discharges with a reasonable potential to contain pollutants (e.g. topographic map or arrows as necessary to depict stormwater flow direction);
- Locations of all stormwater conveyances including ditches, pipes, and swales;
- Locations of major structural stormwater control measures;
- Locations of surface waters receiving the site’s discharges and any special waters clearly labeled within 2.5 miles of the site (can be identified on a generalized site map);
- Locations where the site’s stormwater discharges to a regulated MS4 (where applicable);
- Locations where significant spills or leaks have occurred in the past three years;

- Locations of outfalls with a unique identification code for each feature;
- An approximate outline of the areas draining to each outfall;
- Identification of which outfalls are considered sampling points;
- Identification of which outfalls are being treated as substantially identical outfalls;
- Locations of outfalls that are inactive or no longer used as outfalls, if practicable;
- Identification of all outfalls that include allowable non-stormwater discharges under Part 1.1.3;
- Location of on-site drywell(s) and their registration number(s);
- Sources of run-on to the site from adjacent property that may contain pollutants;
- Locations of the following activities and features that are exposed to stormwater with the potential to discharge pollutants, including but not limited to:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas; locations used for the treatment, storage, or disposal of wastes;
 - liquid storage tanks;
 - processing/storage areas;
 - transfer areas for bulk materials, and;
 - access roads/rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the site.

5.2 Signature Requirements

The permittee shall sign and date the SWPPP in accordance with Appendix B, Subsection 9. If the SWPPP covers more than one site or activity, each permittee must certify the SWPPP in accordance with Appendix B, Subsection 9.

5.3 Required SWPPP Modifications

The permittee shall keep an up to date SWPPP. The permittee shall modify the SWPPP whenever necessary to address the triggering conditions for corrective action in Part 3.1. Changes to the SWPPP to reflect corrective actions shall be made in accordance with the corrective action deadlines in Part 3.2.

5.4 SWPPP Availability

The permittee shall retain a copy of the current SWPPP at the site, and it shall be made immediately available to ADEQ, EPA, or another Federal, State, or local agency having stormwater program authority, or to the operator of a regulated MS4 receiving discharges from the site, at the time of an onsite inspection or upon request.

Inactive and Unstaffed Sites: Permittees with facilities that meet the requirements for inactive and unstaffed are not required to maintain the SWPPP on-site. However, the SWPPP must be locally available (i.e., in Arizona) and must be on-site when conducting the inspections required by Part 4. For the purpose of a regulatory inspection, the SWPPP shall be made available to ADEQ, EPA, or other Federal, State, or local authority having stormwater program authority, within 48 hours of request.

5.5 SWPPP Submittal

As part of the permitting process, or upon written notification from ADEQ, the permittee shall submit a complete and up-to-date copy of the SWPPP to the Department in response to the following criteria:

- The site is located within 2.5 miles of a special water (Note: during the SWPPP review ADEQ will evaluate relevant site conditions such as location (upgradient/downgradient) of

- special waters, the potential for pollutant to be present in the discharge, and whether analytical monitoring will be required);
- ADEQ has determined stormwater discharges are (or have the potential to) causing or contributing to the exceedance of a surface water quality standard;
 - As the result of an inspection conducted by ADEQ or U.S. EPA;
 - To demonstrate compliance with permit conditions;
 - A complaint about the site or discharge activity was submitted to ADEQ; and
 - The SWPPP has been requested as part of a public records request.

All SWPPP's submitted to ADEQ shall be done so electronically using the online myDEQ portal.

Anytime a SWPPP is submitted to ADEQ for review, the applicable review fee must be included (A.A.C. R18-14-109).

Permittees who submitted their SWPPP under the previous permit are not required to automatically re-submit their SWPPP as part of the NOI process to obtain coverage under this permit.

5.6 Additional SWPPP Documentation Requirements

The permittee shall keep the following maintenance, corrective action, inspections, visual assessment results, monitoring, employee training and certification records complete and up-to-date with the site's SWPPP. The additional SWPPP documentation requirements are intended to demonstrate the site's compliance with conditions of this permit:

- A copy of the electronic NOI Summary and NOI Authorization Certificate, including any other correspondence from the Department that is related to this permit coverage;
- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable). A copy of the permit does not need to be included if permittee has to submit a SWPPP to ADEQ for review;
- Documentation of maintenance and repairs of structural control measures, including the dates of regular maintenance, date of discovery of control measures in need of repair/replacement, the date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules (see Part 2.2.1.2.3). If records of maintenance is extensive, an electronic record shall be made readily available upon request;
- Corrective action documentation (see Part 3.2);
- All inspection reports: the Routine Site Inspection Reports (see Part 4.1), and the Visual Assessment Reports (see Part 4.2);
- Description of any deviations from the regular schedule for visual assessments and/or analytical monitoring, and the reason for the deviations (e.g., adverse weather) (see Part 4.2.3);
- Monitoring results (can be a copy of the electronic DMR), including any exemptions to monitoring;
- Records of employee training, including date training received (see Part 2.2.1.2.9). If records of employee training is extensive, an electronic record shall be made readily available upon request;
- Documentation to support any determination that a routine analytical monitoring value above an action level was due to the following: natural background levels, that a site is not causing or contributing to a surface water quality standard exceedance based on in-stream monitoring, run-on from an adjacent site, a determination that no further pollutant reduction were technologically and economically practicable and achievable in light of industry practice; and
- Maintain a statement in the SWPPP indicating that the site is inactive and unstaffed. The statement must be signed and certified in accordance with Appendix B, Subsection 9.
- Facilities, including those with co-permittees, may retain copies of records and

documentation required by this permit electronically or at locations other than with the SWPPP, however, the records must be accessible and the SWPPP shall clearly identify where the information is kept.

6.0 Analytical Monitoring Program

In addition to visual assessments required in Part 4.2, permittees subject to analytical monitoring shall analyze stormwater samples, in accordance with Part 6 and any sector-specific requirements in Part 8.

6.1 Analytical Monitoring Procedures

6.1.1 Analytical Monitoring Types

This permit specifies five separate types of analytical monitoring. Depending on the industrial activity, discharge activity, site location, type of receiving water, or potential to cause or contribute to an exceedance of a surface water quality standard in the receiving water, any or all of the monitoring requirements may be applicable:

- Routine analytical;
- Effluent Limitation Guidelines (ELGs);
- Impaired Water (includes Not-attaining);
- Outstanding Arizona Water; and/or
- Other monitoring prescribed by ADEQ.

If analytical monitoring of discharges from the site is required, a summary of the monitoring requirements consistent with this permit (frequency, analytical parameters, etc.) will be included with the authorization certificate issued through myDEQ, or in a separate written notification from ADEQ.

6.1.2 When to Collect Samples

Monitoring requirements in this permit begin within 90 calendar days of receiving the authorization to discharge. Unless otherwise specified by ADEQ, analytical monitoring shall be conducted one time per wet season (two times per year) for the duration of permit coverage for all types of monitoring (see Part 6.1.1), except Effluent Limitation Guidelines (ELGs) monitoring. ELG monitoring shall be conducted once per year.

Sampling must occur when there is sufficient stormwater discharge to allow for the collection of a representative sample using sampling methods described in Part 6.1.3. Wet seasons are as follows:

Winter Wet Season:	November 1 – May 31
Summer Wet Season:	June 1 – October 31

The term 'wet season' includes areas of the state where freezing conditions exist that prevent runoff from occurring for extended periods. In areas where freezing conditions exist, the required monitoring and sample collection may be distributed during seasons when precipitation runoff, either as melting snow or rain mixed with melting snow, occurs.

Monitoring must be performed on a storm event that results in a discharge from the site that follows the preceding measurable storm event by at least 72 hours (3 calendar days), or the permittee can document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site.

6.1.3 How to Collect Samples

Samples collected for the purpose of this permit shall be either discrete (grab) samples or flow-weighted composite samples. Samples may be collected using an automatic sampler, manually by qualified personnel, a continuous sampler (for flow-weighted composite samples only), or by using a passive sampler (if appropriate).

Whenever possible, grab samples must be collected within the first 30 minutes of a stormwater discharge. If it is not possible to collect the sample within the first 30 minutes of a stormwater discharge, the sample must be collected as soon as practicable. Documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes.

Flow-weighted composite samples for a stormwater discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots (sample portions) taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. For flow-weighted samples, only one analysis of the composite of aliquots is required. Flow-weighted sampling protocol is adapted from 40 CFR 122.21 (individual permit application requirements for industrial stormwater permits).

Note – analysis of the following parameters must be from discrete (not composite) samples: pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform.

The NOI certificate will specify for each applicable action level which fraction (total or dissolved) is required. For metals analysis where the action level is in the dissolved fraction, the permittee has the option to have the sample analyzed for total or dissolved for routine analytical monitoring requirements.

6.1.4 Where to Sample

Samples shall be collected from each outfall where industrial stormwater discharges from the permitted site occur. This may be a discrete pipe, ditch, channel, overland (sheet) flow, or other location(s) so long as the stormwater is representative of the discharge of industrial activities conducted at the site.

In the event there are two or more outfalls that are composed of the same, or substantially similar, stormwater discharge characteristics (substantially identical outfalls), the number of sampling locations can be reduced. The permittee may monitor the discharge at one outfall and report the sampling results for the other substantially identical outfalls. Substantially identical outfalls are based on:

- Similarities of general industrial activities and control measures;
- Exposed material that may significantly contribute pollutants to stormwater; and
- Similar runoff coefficient of their drainage area.

The SWPPP must identify each outfall authorized by this permit and describe the rationale for the substantially identical outfall determination. The substantially identical outfall provision cannot be applied to outfalls with numeric effluent limit guidelines or outfalls that discharge to Outstanding Arizona Waters.

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable.

6.1.5 Sampling and Analysis Plan (SAP)

Any permittee subject to monitoring shall develop a written SAP covering all analytical monitoring required by this permit. The SAP shall be included with the site's SWPPP. The SAP shall include the following:

- Sample Collection, Preservation, Tracking, and Handling Information;
- Calibration and Maintenance of Monitoring Equipment; and
- Analytical Methods and Laboratories.

Other than parameters required to be sampled at the time of sample collection (e.g., field parameters), all samples shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Service (ADHS) Office of Laboratory Licensure and Certification. The samples shall be analyzed using analytical methods with a limit of quantitation (LOQ) that is at or below the prescribed permit limits. All laboratory analyses shall be conducted according to test procedures specified in 40 CFR 136, unless other test procedures have been specified in this general permit.

6.2 Required Monitoring

When more than one type of monitoring for the same parameter at the same outfall applies, a single sample may be used to satisfy both monitoring requirements. All required monitoring shall be conducted in accordance with the procedures described in Appendix B, Subsection 11.D.

6.2.1 Routine Analytical Monitoring

The permittee shall monitor stormwater discharges for all routine analytical monitoring parameters specified for the primary industrial activity and any co-located industrial activities. Routine analytical monitoring requirements for specific sectors are described in Part 8 and the parameters for monitoring will be included on the final permit authorization certificate.

Routine analytical monitoring data is primarily for the site to use in order to determine the overall effectiveness of the control measures and to assist the permittee in determining when additional corrective action(s), if necessary, may be needed to comply with the effluent limitations in Part 2.

Action levels for each parameter will be included on the Discharge Monitoring Report form. The action levels are based on the lowest applicable acute surface water quality standards for the receiving water (with the exception of TSS that is typically set at an action level that is sector specific) if no acute standard exists, the lowest chronic standard will apply.

Some routine analytical monitoring action levels for certain metals are dependent on water hardness (See Appendix D). For any sectors required to conduct routine analytical monitoring for a hardness dependent metal (see Section 8.0), the hardness of the receiving water (if stormwater is discharged to a perennial or intermittent water) or the hardness of the stormwater discharge (if the stormwater discharge is to an ephemeral wash) shall be analyzed in order to calculate the routine analytical monitoring action levels. The formulas used to calculate the action level for a specific metal using a hardness value, are located in individual tables at the end of A.A.C. R18-11, Appendix A, Table 2 through Table 9. The action level for that specific metal, will be the lowest formula driven (from Table 2 through 9) acute designated use that applies to that receiving water. If no acute standard exists, the lowest chronic standard will apply.

Data Exceeding an Action Level for a Routine Analytical Monitoring Sampling Event

If a sample result is above an action level for routine analytical monitoring, the permittee shall evaluate the cause of the exceedance of the action level. Within 15 days of discovery of a sample result above an action level, the permittee shall:

- Assess the existing control measures to ensure the control measures are properly maintained and appropriate for reducing pollutant discharges;
- Identify circumstances that lead to the sample value above an action level, including, but not limited to the following: changes in site practices, climatic conditions, new or expanded operations, spill, leaks, or other release of pollutants; and
- Review and update the SWPPP.

Within 30 days of discovery of a sample result above an action level, the permittee shall:

- Complete and submit a Control Measure Assessment Report on a form provided by the Department (permit Part 7.2).

6.2.2 Effluent Limitation Guidelines Monitoring

Effluent Limitation Guidelines (ELGs) are national limits established in federal rule (see 40 CFR 425 et seq.). Industrial activities that are subject to ELG monitoring are specified in Part 8 of this permit. Exceedance of an ELG constitutes a violation of this permit, requires compliance monitoring (Part 6.3) and corrective action pursuant to permit Part 3.0. Analytical monitoring for ELGs is required one time per calendar year (one sample per wet season does not apply to ELG monitoring).

The substantially identical outfall and the inactive and unstaffed monitoring exemptions does not apply to ELG monitoring.

6.2.3 Impaired and Not-Attaining Waters Monitoring

An industrial stormwater discharge from the site to a water listed as impaired and/or not-attaining (or to an upstream tributary within 2.5 miles) analytical monitoring may be required for the pollutant of concern (parameter(s) for which the water body is impaired), under this permit to ensure protection of the receiving water and attainment of designated use(s). If monitoring is required, the type, frequency, and analytical parameters will be included in the final permit authorization certificate.

If the waterbody is impaired for suspended solids, turbidity or sediment/sedimentation and the discharge occurs for more than 48 hours after the storm event, the permittee shall monitor for SSC. If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, the permittee shall 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 impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.

The discharge of a pollutant above an adopted Waste Load Allocation (WLA) or Total Daily Maximum Load (TMDL) for a not-attaining water, requires corrective action pursuant to permit Part 3.0.

6.2.4 Outstanding Arizona Water Monitoring

In the event any industrial stormwater discharged from the site is within 2.5 miles (upstream tributary) of a water that is listed as an Outstanding Arizona Water, analytical

monitoring will be required under this permit to ensure protection of the receiving water and attainment of designated use(s).

The parameters to be monitored will be determined by ADEQ and will be dependent on the site's industrial activities and location relative to the OAW.

The substantially identical outfall and the inactive and unstaffed monitoring exemptions do not apply to OAW monitoring.

If the discharge of a pollutant has been determined by ADEQ to be degrading exiting water quality in an OAW, the permittee shall conduct corrective action pursuant to permit Part 3.0.

6.2.5 Additional Monitoring Required by ADEQ

ADEQ may notify the permittee of additional discharge monitoring required to ensure protection of receiving water quality in cases where there is evidence that a discharge may be causing or contributing to exceedances of a surface water quality standard in the receiving water. Any such notice will be in writing and will provide an explanation of the reasons for the monitoring, locations, and parameters to be monitored, frequency and reporting requirements.

6.3 Accelerated Monitoring

In the event a sample results exceeds an effluent limitation guideline, the permittee shall implement accelerated monitoring.

The permittee shall sample each subsequent storm event that results in an industrial stormwater discharge.

Accelerated monitoring shall continue until the results for the parameters are below the respective the limit for two consecutive sampling events.

Analytical results for accelerated monitoring shall be entered electronically using myDEQ into the electronic discharge monitoring report (e-DMR) within 30 days of receiving the laboratory analytical results for reach sampling event (see permit Part 7.1).

6.4 Exemptions or Exceptions to Analytical Monitoring

6.4.1 Absence of Discharge

If no storm event results in a discharge from the site or outfall(s) during a wet season, the permittee is excused from analytical monitoring for the site or outfall(s) for that season. An absence of discharge does not exempt the permittee from the requirement to file an electronic discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.2 Adverse Weather Conditions

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 unsafe. When adverse conditions prevent the collection of an analytical sample in a given wet season, the permittee shall document those conditions in the SWPPP and resume analytical monitoring in the subsequent wet season. Adverse conditions do not exempt the permittee from the requirement to file an electronic discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.3 Substantially Identical Outfalls

The permittee may invoke the substantially identical outfalls provision for routine analytical and impaired/ not-attaining waters monitoring. The substantially identical outfall provision cannot be applied to outfalls with numeric effluent limitation guidelines or outfalls that discharge to OAWs.

The SWPPP must identify each outfall authorized by this permit and describe the rationale for the substantially identical outfall determination. Permittees invoking the substantially identical outfall provision must file an electronic discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.4 Inactive and Unstaffed Sites

The requirement for routine analytical monitoring and impaired and not-attaining waters monitoring does not apply at a site that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. The inactive and unstaffed exemption to monitoring cannot be applied to outfalls with numeric effluent limit guidelines or outfalls that discharge to OAWs.

If a permitted site will be inactive and unstaffed, the permittee can suspend analytical monitoring. To be eligible for the suspended monitoring condition, the permittee shall within 30 days of becoming inactive and unstaffed, update their NOI in myDEQ indicating the approximate time period for which the site will be inactive and unstaffed. The site status cannot retroactively be made inactive and unstaffed and, as such, all monitoring conditions apply until such time as ADEQ is notified of the inactive and unstaffed status (by modifying the NOI in myDEQ). *Note: Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI to update the status of the site.* If, after a six (6) month (or longer) period of inactive and unstaffed status, when a site becomes active and staffed, the permittee must update the NOI in myDEQ indicating the site is active and resume any monitoring requirements specified in this permit.

Sites that are subject to accelerated monitoring (6.3) are not eligible to suspend their monitoring program due to inactive and unstaffed designation.

Invoking the inactive and unstaffed monitoring provision does not exempt the permittee from the requirement to file an electronic discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.5 Exception for Stormwater Discharges to Ephemeral Waters

Facilities that discharge to ephemeral surface waters are not required to monitor for Total Suspended Solids (TSS) and turbidity as part of the routine analytical monitoring requirements specified in Part 8.6.5 Submittal of Monitoring Data.

All permittees subject to analytical monitoring, or those that invoked an exemption/exceptions to monitoring, shall report to the Department on the electronic Discharge Monitoring Report (e-DMR) using myDEQ. The permittee shall retain records of all stormwater monitoring information and reports including exemptions to monitoring with the SWPPP.

The e-DMR shall be submitted within 30 days after receiving laboratory results. In the event no samples are collected during a wet season, the e-DMR indicating "no data" using the appropriate No Discharge Information (NODI) code(s) shall be submitted no later than:

Winter Wet Season: June 30
Summer Wet Season: November 30

In the event a permittee elects to collect a flow-weighted sample in response to a stormwater discharge event, the following information must be included on the e-DMR:

- Identify it is a composite sample
- The number of aliquots that comprise the composite sample
- Time between each aliquot
- Flow rate
- Duration of discharge event

7.0 Reporting and Recordkeeping

7.1 Electronic Discharge Monitoring Report (e-DMR)

7.1.1 Who has to submit an e-DMR

Permittees who are subject to routine analytical monitoring, numeric effluent limitation guideline, impaired waters (with or without a TMDL), OAW and /or ADEQ requested monitoring data, shall prepare and submit the MSGP electronic Discharge Monitoring Report (e-DMR) that is available electronically using myDEQ. If there was “no discharge” for the monitoring period, the permittee must still submit an e-DMR indicating there was no discharge of stormwater for the reporting period using the No Data e-DMR or NODI (No Data Code Indicated) code of *No Discharge*. Additionally, if the site is inactive/ unstaffed, or other sampling exemptions apply, an e-DMR is still required to be submitted, however, the e-DMR will include no data or NODI code to explain why sampling was not completed for that reporting period.

7.1.2 How to Submit an e-DMR

The permittee shall submit the e-DMR using myDEQ electronic reporting system available through the ADEQ website.

7.1.3 When to Submit the e-DMR

The permittee shall complete and submit e-DMR within 30 days of receiving the laboratory analytical data.

If there is no sampling data for the reporting period because there was no discharge or another exemption to sampling applied, such as an inactive and unstaffed site, the e-DMR shall be submitted no later than the following:

Winter Wet Season:	June 30
Summer Wet Season:	November 30

7.2 Control Measure Assessment Report for Routine Analytical Monitoring

Within 30 days of receiving the laboratory analytical data verifying that a routine analytical monitoring value was above an action level, the permit shall complete and submit a paper, or electronic copy if available, a Control Measure Assessment Report that includes the following information:

- Date of discovery;
- Description of the exceedance (e.g., outfall ID, parameter(s), sample result, action level in permit);
- Summary of the reason(s) causing the exceedance;
- Explanation of the control measures that were evaluated and modified, if applicable, including the date of the evaluation and date of modification(s);
- Describe any other follow-up actions (e.g., more frequent inspections, additional employee training), if applicable;
- Verification that SWPPP updates were completed, were applicable; and
- A statement, signed and certified in accordance with Appendix B, Subsection 9.

7.3 Other Reporting Requirements

The permittee is subject to the reporting requirements stipulated in Part 7, in addition to the standard permit reporting provisions of Appendix B, Subsection 12.

The permittee must submit the following reports to the appropriate ADEQ Office listed in Part 7.6, as applicable.

- 7.3.1 24-hour Reporting** (see Appendix B, Subsection 12.e). The permittee must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances;
- 7.3.2 5-day Follow-up Reporting** to the 24-hour reporting (see Appendix B, Subsection 12.e.(ii)). A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances;
- 7.3.3 Reportable Quantity Spills Reporting** (verbal report only). The permittee must provide notification, as required under Part 2.2.1.2.4, as soon as the permittee has 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;
- 7.3.4 Planned Changes Report** (see Appendix B, Subsection 12.a). The permittee must give notice to ADEQ promptly, no fewer than 30 days prior to making any planned physical alterations or additions to the permitted site that qualify the site as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged;
- 7.3.5 Anticipated Noncompliance Report** (see Appendix B, Subsection 12.d). The permittee must give advance notice to ADEQ of any planned changes in the permitted site or activity which the permittee anticipates will result in noncompliance with permit requirements;
- 7.3.6 Transfer of Ownership and/or Operation Report** – (see Table 1-2);
- 7.3.7 Other Noncompliance Report** (see Appendix B, Subsection 12.f). The permittee shall report all instances of noncompliance annually using the Non-Compliance Report Form provided by the Department;
- 7.3.8 Missing or Incorrect Information Report** (see Appendix B, Subsection 12.g). The permittee must promptly submit facts or information once you become aware of the following: you failed to submit relevant facts in the NOI, or that incorrect information was submitted in the NOI or in any report; and
- 7.3.9** If the discharge enters a municipal separate storm sewer system, the permittee shall also submit reports to the MS4 operator.

7.4 Recordkeeping

The permittee shall retain copies of the SWPPP (including any modifications made to control measures during the term of this permit), additional documentation requirements pursuant to Part 5.6 (including documentation related to corrective actions taken pursuant to Part 3), 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 (3) years from the date that the site's coverage under this permit expires or is terminated.

7.5 Addresses for Reports

All documentation required by this permit shall be submitted electronically through myDEQ, if available. This includes Notices of Intent (NOI), Notices of Termination (NOT), No Exposure Certifications (NEC) and Discharge Monitoring Report (e-DMR) forms shall be submitted electronically. If electronic reporting is not available, paper documents shall be submitted to the following address until such time as electronic submissions become available:

Arizona Department of Environmental Quality
Water Quality Division - MSGP
1110 W. Washington Street, Mail Code 5415 A-1
Phoenix, AZ 85007

Part 8 – Sector-Specific Requirements for Industrial Activity

The permittee must comply with the requirements applicable to the site's industrial sector(s) in this Part, in addition to the requirements applicable to all facilities in Parts 1 through 7 and the appendices to the permit.

Subpart A – Sector A – Timber Products

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

8.A.1 Covered Stormwater Discharges

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

8.A.2 Limitation on Coverage

8.A.2.1 Prohibition of Discharges. (See also Part 1.1.4) Not covered by this permit: stormwater discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate AZPDES permit.

8.A.2.2 Allowable Non-Stormwater Discharges. (See also Part 1.1.3) The following non-stormwater discharges are allowed by this permit provided the non-stormwater component of the discharge is in compliance with the requirements in Part 2.1.1 (Control Measure Selection).

- 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.
- 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 (applicable only to Sector A facilities provided the non-stormwater component of the discharge is in compliance with the non-numeric effluent limits requirements in Part 2.2.1.2).

8.A.3 Additional Technology-Based Effluent Limits

8.A.3.1 Good Housekeeping. (See also Part 2.2.1.2.2) In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

8.A.4 Additional SWPPP Requirements

8.A.4.1 Drainage Area Site Map. (See also Part 5.1.2) Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

8.A.4.2 Inventory of Exposed Materials. (See also Part 5.1.3.2) Where such information exists, if the site has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in the site's SWPPP the following: areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with stormwater runoff.

8.A.4.3 Description of Stormwater Management Controls. (See also Part 5.1.4) Document measures implemented to address the following activities and sources: log, lumber and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If the site performs wood surface protection and preservation activities, address the specific control measures for these activities.

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

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

8.A.6 Sector-Specific Routine Analytical Monitoring

Table 8.A-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector A. These parameters and action levels apply to both the site’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

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

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

8.A.7 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

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

Table 8.A-21		
Industrial Activity	Parameter	Effluent Limitation
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	pH	6.0 – 9.0 s.u.
	Debris (woody material such as bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54-cm (1-in.) diameter round opening

1 Monitor annually.

8.A.8 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, the permittee may be eligible for a credit to the extent necessary to meet the limitation. To obtain this credit, the permittee must show that the site’s discharge would meet the limitation in the absence of the pollutant(s) in the intake water by demonstrating that the control measures the site uses to meet the limitation would, if properly installed and operated, meet the limitations for the pollutant (i.e., the pollutant level in the discharge is in exceedance of the limitation due to the pollutant concentration in the source or intake water). The site must consult the ADEQ for guidance in seeking a pollutant credit under this Part. ADEQ will notify the permittee whether the site is 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

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

8.B.1 Covered Stormwater Discharges.

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

8.B.2 Sector-Specific Routine Analytical Monitoring Values. (See also Part 6.)

Table 8.B-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector B. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.B-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector B1. Paperboard Mills (SIC Code 2631)	TSS	100 mg/L
	Chlorine (total residual)	Receiving Water Dependent (RWD) ²

² RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.C.1 Covered Stormwater Discharges

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

8.C.2 Limitations on Coverage

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

The following discharges are not authorized by this permit: non-stormwater discharges containing inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank, or container rinsing and cleaning.

8.C.3 Sector-Specific Routine Analytical Monitoring Values

Table 8.C-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector C. These parameters and action levels apply to both the site's primary industrial activity and any co-located industrial activities.

Table 8.C-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector C1. Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	RWD ²
	Total Lead ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
	Phosphorus	RWD ²
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	pH	6.0 – 9.0 s.u.
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	RWD ²
Subsector C3. Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	RWD ²
	Phosphorus	RWD ²
	Total Zinc ¹	Hardness Dependent
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Zinc ¹	Hardness Dependent
	Vinyl chloride	RWD ²

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

² RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article 1, Appendix A and Appendix B.

8.C.4 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

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

Table 8.C-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Total Phosphorus (as P)	105 mg/L, daily maximum
		35 mg/L, 30-day avg.
	Fluoride	75.0 mg/L, daily maximum
		25.0 mg/L, 30-day avg.

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.D.1 Covered Stormwater Discharges

The requirements in Subpart D apply to stormwater discharges associated with industrial activity from Asphalt Paving and Roofing Materials and Lubricant Manufacturing facilities, as identified by the SIC Codes specified under Sector D in Table C-1 of Appendix C of the permit.

8.D.2 Limitations on Coverage

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

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

8.D.2.2 Discharges from oil recycling facilities which are covered under Sector N (see Part 8.N); and;

8.D.2.3 Discharges associated with fats and oils rendering, which are covered under Sector U (see Part 8.U).

8.D.3 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements

Permit holders of inactive and unstaffed asphalt batch / bituminous concrete plants (SIC 2951) may qualify for reduced inspections and monitoring provisions of the no exposure provisions of Parts 4.1.3, 4.2.3 and 6.3.1.4, without certifying “there are no industrial materials or activities exposed to stormwater”. This exemption is conditioned on the following:

- At a minimum, the permittee shall implement the following control measures to meet the no exposure requirements:
 - Materials used in the production of asphalt (i.e., asphaltic concrete oil, diesel fuel, burner fuel, etc.) will be kept in appropriate containers and within containment if applicable;
 - Ensure valves are closed and secured;
 - Good housekeeping measures as outlined in the site’s SWPPP, and in accordance with Part 2.2.1.2.2, such as: ensure materials are properly labeled, clean up trash, debris and other materials;
 - Ensure the site is secured, such as locking entrance gates; and
 - Material stockpiles shall be protected from erosion.
- If circumstances change and the site becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with the applicable routine analytical monitoring requirements as if the site were in the first year of permit coverage, including the wet season visual assessment requirements.
- ADEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or

contributes to an exceedance of an applicable surface water quality standard, including designated uses.

Subject to the two conditions above, if the site is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and routine analytical monitoring. The quarterly routine site inspections are reduced to two routine site inspections each calendar year. These inspections shall be conducted in the opposing wet seasons and at least three months apart. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or natural disasters may have damaged control measures or increased discharges.

8.D.4 Sector-Specific Routine Analytical Monitoring Values

Table 8.D-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector D. These parameters apply to both the site’s primary industrial activity and any co-located industrial activities.

Table 8.D-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	Reserved
	Total Copper ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent
	Naphthalene	RWD ²

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

² RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

8.D.5 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2)

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

Table 8.D-2 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 mg/L, daily maximum
		10 mg/L, 30-day avg.

¹Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.E.1 Covered Stormwater Discharges

The requirements in Subpart E apply to stormwater discharges associated with industrial activity from Glass, Clay, Cement, Concrete, and Gypsum Products facilities, as identified by the SIC Codes specified under Sector E in Table C-1 of Appendix C of the permit.

8.E.2 Additional Technology-Based Effluent Limits

8.E.2.1 Good Housekeeping Measures (See also Part 2.2.1.2.2)

With good housekeeping, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Where applicable, the permittee shall minimize the presence of these materials, by using measures such as sweeping or vacuuming regularly or other equivalent measures (e.g., wash down the area and collect and/or treat and properly dispose of the washdown water). Indicate in the site’s SWPPP the frequency of sweeping, vacuuming or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed and may be discharged in stormwater. The permittee shall also prevent the exposure of fine granular material (cement, fly ash, kiln dust, etc.) to stormwater by storing these materials in an appropriate manner, such as in enclosed silos, hoppers, or buildings, or under other covering.

8.E.3 Additional SWPPP Requirements

8.E.3.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the SWPPP the locations of the following, as applicable: baghouse 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 5.1.3.4)

For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with AZPDES requirements or are recycled.

8.E.4 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements

Permit holders of inactive and unstaffed ready-mixed concrete plants (SIC 3273) may qualify for reduced inspections and monitoring provisions of the no exposure provisions of Parts 4.1.3, 4.2.3 and 6.3.1.4, without certifying “there are no industrial materials or activities exposed to stormwater”. This exemption is conditioned on the following:

- At a minimum, the permittee shall implement the following control measures to meet the no exposure requirements:
 - Materials used in the production of concrete (i.e., admixtures, cement and fly ash, diesel fuel, etc.) shall be kept in appropriate containers and within containment if applicable;
 - Ensure valves are closed and secured;
 - Good housekeeping measures as outlined in the site's SWPPP, and in accordance with Part 2.2.1.2.2, such as: ensure materials are properly labeled, clean up trash, debris and other materials;
 - Ensure the site is secured, such as locking entrance gates; and
 - Material stockpiles shall be protected from erosion.
- If circumstances change and the site becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with the applicable routine analytical monitoring requirements as if the site were in the first year of permit coverage, including the wet season visual assessment requirements; and
- ADEQ retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contribute to an exceedance of an applicable surface water quality standard, including designated uses.

Subject to the two conditions above, if the site is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and routine analytical monitoring. The quarterly routine site inspections are reduced to two routine site inspections each calendar year. These inspections shall be conducted in the opposing wet seasons and at least three months apart. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or natural disasters may have damaged control measures or increased discharges.

8.E.5 Sector-Specific Routine Analytical Monitoring Values.

Table 8.E-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector E. These parameters and action levels apply to both the site's primary industrial activity and any co-located industrial activities, which describe the site's activities.

Table 8.E-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector E1. Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Suspended Solids (TSS)	Reserved mg/L
	pH	6.0 – 9.0 s.u.
	Total Lead ¹	Hardness Dependent
Subsector E2. Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	pH	6.0 – 9.0 s.u.
	Total Suspended Solids (TSS)	Reserved
	Total Iron	1.0 mg/L

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

8.E.6 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

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

Table 8.E-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from material storage piles at cement manufacturing facilities (SIC 3241)	Total Suspended Solids (TSS)	50 mg/L, daily maximum ³
	pH	6.0 – 9.0 s.u. ³

¹Monitor annually.

³ Any untreated overflow from sites designed, constructed, and operated to treat the volume of runoff 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

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

8.F.1 Covered Stormwater Discharges

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

8.F.2 Additional Technology-Based Effluent Limits

8.F.2.1 Good Housekeeping Measures (See also Part 2.2.1.2.2)

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

8.F.3 Additional SWPPP Requirements

8.F.3.1 Drainage Area Site Map (See also Part 5.1.2)

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

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

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

8.F.4 Additional Inspection Requirements (See also Part 4.1)

As part of conducting the site's quarterly routine site inspections (Part 4.1), address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Monitor air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling

equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

8.F.5 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements

Permit holders of inactive and unstaffed Sector F facilities (SIC 3312 – 3399) may qualify for reduced inspections and monitoring provisions of the no exposure provisions of Parts 4.1.3, 4.2.3 and 6.3.1.4, without certifying “there are no industrial materials or activities exposed to stormwater”. This exemption is conditioned on the following:

At a minimum, the permittee shall implement the following control measures to meet the no exposure requirements:

- Ensure that all process and material handling equipment (e.g., conveyors, cranes, and vehicles) are safeguarded against leaks, drips, or the potential loss of material; and that 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) are kept in appropriate containers and within containment if applicable to ensure against material losses due to wind or stormwater runoff;
- Ensure valves are closed and secured;
- Good housekeeping measures as outlined in the site’s SWPPP, and in accordance with Part 2.2.1.2.2, such as: ensure materials are properly labeled, clean up trash, debris and other materials;
- Ensure the site is secured, such as locking entrance gates;
- Material stockpiles shall be protected from erosion and/ or downstream catchments are installed and maintained.

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

Subject to the two conditions above, if the site is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and routine analytical monitoring. The quarterly routine site inspections are reduced to two routine site inspections each calendar year. These inspections shall be conducted in the opposing wet seasons and at least three months apart. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or natural disasters may have damaged control measures or increased discharges.

8.F.6 Sector-Specific Routine Analytical Monitoring Values. (See also Part 6.)

Table 8.F-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector F. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.F-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	pH	6.0 – 9.0 s.u.
	Total Zinc ¹	Hardness Dependent
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	pH	6.0 – 9.0 s.u.
	Total Suspended Solids (TSS)	100 mg/L
	Total and Dissolved Chromium VI	RWD ²
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Zinc ¹	Hardness Dependent
	Total Copper ¹	Hardness Dependent
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Zinc ¹	Hardness Dependent
	Total Copper ¹	Hardness Dependent

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

² RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.K.1 Covered Stormwater Discharges

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

8.K.2 Industrial Activities Covered by Sector K

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

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to stormwater are not considered to be industrial activities subject to stormwater permitting and are not required to obtain coverage under this permit, unless the director determines the site is discharging pollutants to a receiving water.

8.K.3 Limitations on Coverage

8.K.3.1 Prohibition of Non-Stormwater Discharges (See also Part 1.1.4)

The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated groundwater, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill site.

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.

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

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

8.K.4.4 Landfill wastewater - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection

condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill site.

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

8.K.4.6 Non-contaminated stormwater - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 8.K.4.4. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.K.5 Sector-Specific Routine Analytical Monitoring Values

Table 8.K-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector K. These parameters and action levels apply to both the site’s primary industrial activity and any co-located industrial activities.

Table 8.K-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector K1. ALL - Industrial Activity Code “HZ” (Note: permit coverage limited in some States). Routine analytical monitoring parameters and values only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A (see below).	Ammonia	2.14 mg/L
	pH	6.0 – 9.0 s.u.
	TSS	Reserved
	Total Arsenic	RWD ²
	Total Cadmium ¹	Hardness Dependent
	Total Cyanide	0.022 mg/ L
	Total Lead ¹	Hardness Dependent
	Total Mercury	0.0014 mg/ L
	Total Selenium	0.005 mg/L
	Polychlorinatedbiphenyls (PCBs)	RWD ²

1 The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

2. RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

8.K.6 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

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

Table 8.K-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from hazardous waste landfills subject to	Biochemical Oxygen Demand (BOD ₅)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum

Table 8.K-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
effluent limitations in 40 CFR Part 445 Subpart A (see footnote).	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
	Total Arsenic	1.1 mg/L, daily maximum
		0.54 mg/L, monthly avg. maximum
	Total Chromium	1.1 mg/L, daily maximum
		0.46 mg/L, monthly avg. maximum
	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
pH	Within the range of 6.0 – 9.0 standard units (s.u.)	

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

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.L.1 Covered Stormwater Discharges

The requirements in Subpart L apply to stormwater discharges associated with industrial activity from Landfills and Land Application Sites and Open Dumps as identified by the Activity Code specified under Sector L in Table C-1 of Appendix C of the permit.

8.L.2 Industrial Activities Covered by Sector L

This permit authorizes stormwater discharges for Sector L facilities associated with waste disposal at landfills, land application sites, and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA. This permit does not cover discharges from landfills that receive only municipal wastes.

8.L.3 Limitations on Coverage

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

The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated groundwater, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill site.

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 groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated stormwater; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill site.

8.L.4.4 Leachate

Liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

8.L.4.5 Non-contaminated stormwater

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

8.L.5 Additional Control Measures

8.L.5.1 Preventive Maintenance Program (See also Part 2.2.1.1.3)

As part of the site's preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

8.L.5.2 Erosion and Sedimentation Control

(See also Part 2.2.1.2.5) Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have installed final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

8.L.5.3 Unauthorized Discharge Test Certification

The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

8.L.6 Additional SWPPP Requirements

8.L.6.1 Drainage Area Site Map

Document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.

8.L.6.2 Summary of Potential Pollutant Sources

Document in the SWPPP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

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

8.L.7.1 Inspections of Active Sites

Inspect operating landfills, open dumps, and land application sites at least once every month. At a minimum, the inspection shall include the following: (a) areas of landfills that have not yet been finally stabilized; (b) active land application areas; (c) areas used for storage of material and wastes that are exposed to precipitation; (d) landfill (or open dump) stabilization and structural control measures; (e) leachate collection and treatment systems; and (f) locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are operating properly.

Ensure that sediment and erosion control measures are operating properly.

8.L.7.2 Inspection Schedule for Sites within 1/4 mile of Special Waters

If any discharge point from the site is within 1/4 mile of a special water, the permittee shall inspect the discharge point at least twice per month with at least 7 calendar days between inspections. In addition, the permittee shall visually observe stormwater discharges at all discharge locations within one business day of the end of each measurable storm event.

8.L.7.3 Inspections of Inactive Sites

Inspect inactive landfills, open dumps, and land application sites at least quarterly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

8.L.8 Additional Post-Authorization Documentation Requirements

8.L.8.1 Recordkeeping and Internal Reporting

Keep records with the SWPPP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

8.L.9 Sector-Specific Routine Analytical Monitoring Values

Table 8.L-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector L. These parameters and action levels apply to both the site’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

Table 8.L-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level¹
Subsector L1. All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code “LF”)	Total Suspended Solids (TSS)	Reserved
Subsector L2. All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60 (Industrial Activity Code “LF”)	Total Suspended Solids (TSS)	Reserved
	Total Iron	1.0 mg/L

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

8.L.10. Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2)

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

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD ₅)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
	Benzoic Acid	0.12 mg/L, daily maximum
		0.071 mg/L, monthly avg. maximum
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
Total Zinc	0.20 mg/L, daily maximum	
	0.11 mg/L, monthly avg. maximum	
pH	Within the range of 6.0 – 9.0 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 site that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) Landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT site commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT site is subject to this part if the CWT site 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.

8.L.11 Sector L Exemption from MSGP - Sector L Closure Certification

The Sector L Closure Certification Form is available on ADEQ's website for a closed landfill, land application site or open dump not covered under the AZPDES Multi-Sector General Permit. The Form is filled out instead of filing an NOI and NOT for a closed Sector L facilities that never received coverage under the 2000 MSGP, 2010 MSGP, or 2019 MSGP and, requires a certification statement. An inactive, closed or capped landfill, land application site or open dump ceases being an industrial activity and is no longer subject to stormwater permitting requirements when the land use has been altered such that there is no exposure of significant materials to stormwater at the site. This could be accomplished in such ways as installing a surface cover that prevents stormwater from coming into contact with waste materials and discharging to Waters of the U.S. (such as a parking lot or shopping center), or by closing and capping the landfill in accordance with RCRA Subtitle D requirements in 40 CFR Part 258.

Sector L facilities that have previously submitted the Sector L Closure Certification form are not required to resubmit under this permit term.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart M – Sector M – Automobile Salvage Yards

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

8.M.1 Covered Stormwater Discharges

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

8.M.2 Additional Technology-Based Effluent Limits

8.M.2.1 Spill and Leak Prevention Procedures (See also Part 2.2.1.2.4)

Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means (such as storage indoors until drained) to prevent spills and leaks.

8.M.2.2 Employee Training (See also Part 2.2.1.2.9)

If the site handles these materials, the employee training program shall address the proper handling (collection, storage, and disposal) of oil, used mineral spirits, antifreeze, mercury switches, and solvents.

8.M.2.3 Management of Runoff (See also Part 2.2.121.6)

The permittee shall implement effective controls to manage run-off. Consider the following or other equivalent practices: installation of berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

8.M.3 Additional SWPPP Requirements

8.M.3.1 Drainage Area Site Map

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

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

Assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

8.M.4 Additional Inspection Requirements (See also Part 4.1)

Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect quarterly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect quarterly for signs of leakage all vessels

and areas where hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

8.M.5 Sector-Specific Routine Analytical Monitoring Values (See also Part 6 of the permit.)

Table 8.M-1 identifies routine analytical monitoring parameters and action levels that apply to Sector M. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.M-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector M1. Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L
	Total Cadmium ¹	Hardness Dependent
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

²

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.N.1 Covered Stormwater Discharges

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

8.N.2 Limitation on Coverage

Separate permit requirements have been established for recycling facilities that 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 1.1.4)

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

8.N.3 Additional Control Measures

8.N.3.1 Scrap and Waste Recycling Facilities (Non-Source Separated, Non-liquid Recyclable Materials)

The requirements in this section pertain to facilities that receive, process, and conduct wholesale distribution of non-source separated non-liquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both non-recyclable and recyclable materials. This section does not apply to facilities that accept recyclables only from primarily non-industrial and residential sources.

8.N.3.1.1 Inbound Recyclable and Waste Material Control Program

Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options:

- a) Provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the site;
- b) Establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff;
- c) Establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Part 8.N.3.2.6);

- d) Provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and
- e) Establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

8.N.3.1.2 Scrap and Waste Material Stockpiles and Storage (Outdoor)

Minimize contact of stormwater runoff with stockpiled materials, processed materials, and non-recyclable wastes. Following are some control measure options:

- a) permanent or semi-permanent covers;
- b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants;
- c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas;
- d) silt fencing; and
- e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

8.N.3.1.3 Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage)

Minimize contact of surface runoff with residual cutting fluids by:

- a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or
- b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with stormwater run-on. Stormwater runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. The permittee shall regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

8.N.3.1.4 Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage)

Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options (list not exclusive):

- a) Good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; and
- b) Not allowing washwater 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 surface runoff from coming in contact with scrap processing equipment. The permittee shall determine whether operations that generate visible amounts of particulate residue (e.g., shredding) and residual fluids come in contact with runoff. Such contact shall be minimized or prevented through good housekeeping, preventive maintenance, etc. The permittee shall:

- a) Regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment;
- b) Establish a preventive maintenance program for processing equipment; and
- c) Use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches.

The permittee shall also implement one or more of the following (or other equivalent measures):

- a) On unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir;
- b) Install containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of stormwater runoff with outdoor processing equipment or stored materials;
- c) Oil and water separators or sumps;
- d) Permanent or semi-permanent covers in processing areas where there are residual fluids and grease;
- e) Retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); and
- f) Catch basin filters or sand filters.

8.N.3.1.6 Scrap Lead-Acid Battery Program

Properly handle, store, and dispose of scrap lead-acid batteries. The permittee shall implement one or more of the following control measure options (or other equivalent measures):

- a) Segregate scrap lead-acid batteries from other scrap materials;
- b) Properly handle, store, and dispose of cracked or broken batteries;
- c) Collect and dispose of leaking lead-acid battery fluid;
- d) Minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff.

Also, employee training for the management of scrap batteries shall be provided.

8.N.3.1.7 Spill Prevention and Response Procedures (See also Part 2.2.1.2.4)

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 site or will be accepted only under certain conditions.

8.N.3.2 Waste Recycling Facilities (Liquid Recyclable Materials)

8.N.3.2.1 Waste Material Storage (Indoor)

Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The site SWPPP may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC)

plans required under 40 CFR Part 112. The permittee shall implement:

- a. Procedures for safe material handling (including labeling and marking); and
- b. Cleanup of spills and leaks with dry absorbent materials, or a wet vacuum system.

The permittee shall implement one or both of the following control measure options (or other equivalent measures):

- a) Install appropriate containment structures (trenching, curbing, gutters, etc.); and
- b) A drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage shall be discharged to an appropriate treatment site or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate AZPDES wastewater permit or industrial user permit under the pretreatment program.

8.N.3.2.2 Waste Material Storage (Outdoor)

Minimize contact between stored residual liquids and precipitation or runoff. The SWPPP may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil shall be in accordance with applicable sections of 40 CFR Part 112. The permittee shall implement one or more of the following control measure options (or other equivalent measures) to minimize contaminants in stormwater: (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.

8.N.3.2.3 Trucks and Rail Car Waste Transfer Areas

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 runoff; and dry clean-up methods, wet vacuuming, roof coverings, and/or runoff controls.

8.N.3.3 Recycling Facilities (Source-Separated Materials)

The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

8.N.3.3.1 Inbound Recyclable Material Control

Minimize the chance of accepting non-recyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Implement one or more of the following control measures (or other equivalent measures):

- a) Provide information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials;
- b) Train drivers responsible for pickup of recycled material;
- c) Clearly mark public drop-off containers regarding which materials can be accepted; and
- d) Reject non-recyclable wastes or household hazardous wastes at the source.

The permittee shall also establish procedures for handling and disposal of non-recyclable

material.

8.N.3.3.2 Outdoor Storage

Implement effective control measures to minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Implement one or more of the following control measures (or other equivalent measures):

- a) Provide totally enclosed drop-off containers for the public;
- b) Install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system;
- c) Provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper);
- d) Divert surface water runoff away from outside material storage areas;
- e) Provide covers over containment bins, dumpsters, and roll-off boxes, and
- f) Storing the equivalent of one day's volume of recyclable material indoors.

8.N.3.3.3 Indoor Storage and Material Processing

Implement effective control measures to minimize the release of pollutants from indoor storage and processing areas. The permittee shall:

- a) Schedule routine good housekeeping measures for all storage and processing areas;
- b) Prohibit tipping floor washwater from draining to the surface soils or to the storm sewer system; and
- c) Provide employee training on pollution prevention practices.

8.N.3.3.4 Vehicle and Equipment Maintenance

Implement effective control measures for areas where vehicle and equipment maintenance occur outdoors. The permittee shall implement one or more of the following control measure options (or other equivalent measures):

- a) Prohibit vehicle and equipment washwater from discharging to surface soils or the storm sewer system;
- b) Minimize or eliminate outdoor maintenance areas whenever possible;
- c) Avoid topping off fuel tanks;
- d) Divert runoff from fueling areas; and
- e) Store lubricants and hydraulic fluids indoors.

The permittee shall also establish spill prevention and clean-up procedures for fueling areas, and provide employee training on proper handling and storage of hydraulic fluids and lubricants.

8.N.4 Additional SWPPP Requirements

8.N.4.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.

8.N.4.2 Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities.

For any site subject to Part 8.N.3.1.3, the SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

8.N.5 Additional Inspection Requirements

8.N.5.1 Inspections for Waste Recycling Facilities

The inspections must be performed quarterly, pursuant to Part 4.1, and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or stormwater runoff.

8.N.6 Sector-Specific Routine Analytical Monitoring Values. (See also Part 6.)

Table 8.N-1 identifies routine analytical monitoring parameters and action levels that apply to Sector N. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.N-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector N1. Scrap Recycling and Waste Recycling Facilities except those only receiving source-separate recyclable materials primarily from non-industrial and residential sources (SIC 5093)	Total Suspended Solids (TSS)	100 mg/L
	Total Cadmium ¹	Hardness Dependent
	Total Recoverable Copper ¹	Hardness Dependent
	Total Recoverable Iron	1.0 mg/L
	Total Recoverable Lead ¹	Hardness Dependent
	Total Recoverable Zinc ¹	Hardness Dependent

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities

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

8.O.1 Covered Stormwater Discharges

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

8.O.2 Industrial Activities Covered by Sector O

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

- a) 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 areas);
- b) Coal pile runoff, including effluent limitations established by 40 CFR Part 423; and
- c) 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 authorized by this permit.

8.O.3.2 Prohibition of Stormwater Discharges

Stormwater discharges from the following are not covered by this permit:

- a) Ancillary facilities (e.g., fleet centers and substations) that are not contiguous to a steam electric power generating site;
- b) Gas turbine facilities (providing the site is not a dual-fuel site that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the site is not a dual-fuel site that includes a steam boiler); and
- c) Cogeneration (combined heat and power) facilities utilizing a gas turbine.

8.O.4 Additional Control Measures (See also Part 2.2.1.)

The following good housekeeping measures are required in addition to Part 2.2.1.2.2:

8.O.4.1 Fugitive Dust Emissions

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

8.O.4.2 Delivery Vehicles

The permittee shall implement effective controls to minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site such as procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

8.O.4.3 Fuel Oil Unloading Areas

The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from fuel oil unloading areas, such as using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

8.O.4.4 Chemical Loading and Unloading

The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from chemical loading and unloading areas, such as: using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, loading and unloading in covered areas and storing chemicals indoors.

8.O.4.5 Miscellaneous Loading and Unloading Areas

The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from loading and unloading areas, such as: covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

8.O.4.6 Liquid Storage Tanks

The permittee shall implement effective controls to minimize contamination of surface runoff from above-ground liquid storage tanks, such as using protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

8.O.4.7 Large Bulk Fuel Storage Tanks

The permittee shall implement effective controls to minimize contamination of surface runoff from large bulk fuel storage tanks including the use of containment berms or other equivalent measures. The permittee shall also comply with applicable State and Federal laws, including SPCC Plan requirements.

8.O.4.8 Spill Reduction Measures

The permittee shall implement effective controls to minimize the potential for an oil or chemical spill. These shall be detailed in the SWPPP or the permittee may reference the appropriate part of the site's SPCC plan if applicable. As part of the routine site inspection the permittee shall inspect the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.

8.O.4.9 Oil-Bearing Equipment in Switchyards

The permittee shall implement effective controls to minimize contamination of surface runoff from oil-bearing equipment in switchyard areas, such as the use of level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

8.O.4.10 Residue-Hauling Vehicles

The permittee shall inspect all residue-hauling vehicles for proper load covering, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

8.O.4.11 Ash Loading Areas

The permittee shall implement effective controls to reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

8.O.4.12 Areas Adjacent to Disposal Ponds or Landfills

The permittee shall implement effective controls to minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills, reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

8.O.4.13 Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites

The permittee shall implement effective controls to minimize the potential for contamination of runoff from these areas.

8.O.5 Additional SWPPP Requirements

8.O.5.1 Drainage Area Site Map (See also Part 5.1.2)

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

8.O.5.2 Documentation of Good Housekeeping Measures

The permittee shall document in the site's SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 8.O.4.

8.O.6 Additional Inspection Requirements

8.O.6.1 Site Compliance Inspection

As part of the site's inspection, inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

8.O.7 Sector-Specific Routine Analytical Monitoring Values

Table 8.O-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector O. These parameters and action levels apply to both the site’s primary industrial activity and any co-located industrial activities, which describe the site’s activities.

Table 8.O-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector O1. Steam Electric Generating Facilities (Industrial Activity Code “SE”)	pH	6.0 – 9.0 s.u
	Total Iron	1.0 mg/L

8.O.8 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

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

Table 8.O-2¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from coal storage piles at Steam Electric Generating Facilities	TSS	50 mg/L ²
	pH	6.0 – 9.0 s.u. max

¹ Monitor annually.

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing

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

8.P.1 Covered Stormwater Discharges

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

8.P.2 Limitation on Coverage

8.P.2.1 Prohibited Discharges (see also Parts 1.1.4 and 8.P.4.4)

This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be legally disposed in a permitted site, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

8.P.3 Additional Control Measures

8.P.3.1 Good Housekeeping Measures (See also Part 2.2.1.2.2)

In addition to the Good Housekeeping requirements in Part 2.2.1.2, the permittee shall perform the following:

8.P.3.1.1 Vehicle and Equipment Storage Areas

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

8.P.3.1.2 Fueling Areas

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

8.P.3.1.3 Material Storage Areas

Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., “Used Oil,” “Spent Solvents,” etc.). Implement one or more of the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating and/or recycling collected stormwater runoff.

8.P.3.1.4 Vehicle and Equipment Cleaning Areas

Minimize contamination of stormwater runoff from all areas used for vehicle/equipment cleaning. Implement one or more of the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the stormwater drainage system); treating and/or recycling collected washwater, or other equivalent measures.

8.P.3.1.5 Vehicle and Equipment Maintenance Areas

Minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. Implement one or more of the following where it is determine to be feasible (or other equivalent measures): performing maintenance activities indoors; using drip pans; inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to maintenance areas.

8.P.3.1.6 Locomotive Sanding (Loading Sand for Traction) Areas

Implement one or more of the following (or other equivalent measures): covering sanding areas; minimizing stormwater run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

8.P.3.2 Employee Training

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

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

8.P.4.2 Potential Pollutant Sources

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

8.P.4.3 Description of Good Housekeeping Measures

The permittee shall document in the site's SWPPP the good housekeeping measures

implemented, consistent with Part 8.P.3.

8.P.4.4 Vehicle and Equipment Washwater Requirements

In accordance with Part 8.P.2.1, the permittee shall document in the SWPPP the methods of disposal of vehicle and equipment washwater (frequency and volume) generated at the site and the name of any permits required by that method. 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 4.1)

Inspect all the following areas/activities:

- a) Storage areas for vehicles/equipment awaiting maintenance;
- b) Fueling areas;
- c) Indoor and outdoor vehicle/equipment maintenance areas
- d) Material storage areas;
- e) Vehicle/equipment cleaning areas; and
- f) Loading/unloading areas.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation

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

8.Q.1 Covered Stormwater Discharges

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

8.Q.2 Limitations on Coverage

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

The following discharges are not authorized by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels. Any discharge of these pollutants from a point source to a Water of the U.S. may require coverage under an individual AZPDES permit.

8.Q.3 Additional Technology-Based Effluent Limits

8.Q.3.1 Good Housekeeping Measures

The permittee shall implement the following good housekeeping measures in addition to the requirements of Part 2.2.1.2.2:

8.Q.3.1.1 Pressure Washing Area

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

8.Q.3.1.2 Blasting and Painting Area

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

8.Q.3.1.3 Material Storage Areas

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

performed, implement control measures for the storage and disposal of spent abrasive materials generated at the site. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

8.Q.3.1.4 Engine Maintenance and Repair Areas

Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement one or more of the following control measure options (or other equivalent measures): perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor, use dry cleanup methods, and properly dispose or treat and/or recycle stormwater runoff collected from the maintenance area.

8.Q.3.1.5 Material Handling Area

Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize runoff of stormwater to material handling areas.

8.Q.3.1.6 Drydock Activities - Routinely Maintain and Clean the Drydock to Minimize Pollutants in Stormwater Runoff

Clean accessible areas of the drydock prior to flooding, and perform final cleanup following removal of the vessel and raising the dock. Implement effective procedures for cleaning up oil, grease, and fuel spills occurring on the drydock, such as: sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

8.Q.3.2 Employee Training (See also Part 2.2.1.2.9)

Include the following (as applicable) in an employee training program: used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

8.Q.3.3 Preventive Maintenance (See also Part 2.2.1.2.3)

As part of the site's preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system). The permittee shall also routinely inspect and test site equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.Q.4 Additional SWPPP Requirements

8.Q.4.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel

maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

8.Q.4.2 Summary of Potential Pollutant Sources (See also Part 5.1.3)

Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

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

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

8.Q.6 Sector-Specific Routine Analytical Monitoring Values (See also Part 6)

Table 8.Q-1 identifies routine analytical monitoring parameters and action levels that apply to Sector Q. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.Q-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Phosphorus	RWD ²
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent

1 The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

2 RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.R.1 Covered Stormwater Discharges

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

8.R.2 Limitations on Coverage

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

The following discharges are not authorized by this permit: discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

8.R.3 Additional Technology-Based Effluent Limits

8.R.3.1 Good Housekeeping Measures. (See also Part 2.1.1.2)

8.R.3.1.1 Pressure Washing Area

If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate AZPDES permit.

8.R.3.1.2 Blasting and Painting Area

Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. The permittee shall contain all blasting and painting activities, or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). If deposits of abrasive blasting debris and paint chips reach stormwater conveyances, the permittee shall remove and properly dispose of all visible contaminants.

8.R.3.1.3 Material Storage Areas

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

8.R.3.1.4 Engine Maintenance and Repair Areas

Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement one or more of the following

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

8.R.3.1.5 Material Handling Area

Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize stormwater run-on to material handling areas.

8.R.3.1.6 Drydock Activities

Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and perform final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock, such as the following (or other equivalent measures): sweep rather than hose off debris and spent blasting material from accessible areas of the drydock prior to flooding; and make absorbent materials and oil containment booms readily available to clean up and contain any spills.

8.R.3.2 Employee Training (See also Part 2.2.1.2.9)

Include the following (as applicable) in an employee training program: used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

8.R.3.3 Preventive Maintenance (See also Part 2.2.1.2.3)

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

8.R.4 Additional SWPPP Requirements

8.R.4.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

8.R.4.2 Potential Pollutant Sources (See also Part 5.1.3)

Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).

8.R.4.3 Documentation of Good Housekeeping Measures

Document in the SWPPP any good housekeeping measures implemented to meet the effluent limits in Part 8.R.3.

8.R.4.3.1 Blasting and Painting Areas

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

8.R.4.3.2 Storage Areas

Specify in the SWPPP which materials are stored indoors, and implement containment or enclosure for those stored outdoors when feasible.

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart S – Sector S – Air Transportation

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

8.S.1 Covered Stormwater Discharges

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

8.S.2 Limitation on Coverage

8.S.2.1 Limitations on Coverage

This permit authorizes stormwater discharges from only those portions of the air transportation site that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Deicing implies both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

8.S.2.2 Prohibition of Non-Stormwater Discharges (See also Part 1.1.4 and Part 8.S.5.3)

This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; or the dry weather discharge of deicing chemicals. Such discharges must be covered by separate AZPDES permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge.

8.S.3 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.S.3.1 Permit Coverage/Submittal of NOIs

Where an airport transportation site has multiple industrial operators that discharge stormwater, each individual operator must obtain coverage under an AZPDES 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 1.3.1. (or, if appropriate, a No Exposure Certification (NEC) per Part 1.5).

The airport authority shall maintain a complete inventory of airport tenants covered by the SWPPP. The inventory may consist of a list or copies of the tenant's NOIs. In either case, the records shall be easily assessable and made available upon request.

8.S.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:

- a) The airport authority performs certain activities on behalf of itself and its tenants and reports on those activities;
- b) 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;
- c) Tenants independently perform, document and submit required information on their activities;
- d) 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.S.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 (co-permittee) develops a separate SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. Permittees under their own SWPPP must sign and certify their own SWPPP. Co-permittees that are under the airport authority SWPPP, shall sign and certify the comprehensive airport authority SWPPP.

All operators and their separate SWPPP contributions and compliance responsibilities must be clearly identified in the comprehensive SWPPP. As applicable, the SWPPP must clearly specify the MSGP requirements to be complied with by:

- a) The airport authority for itself;
- b) The airport authority on behalf of its tenants;
- c) The 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 permit limits. In turn, the SWPPP must describe how the tenants will also follow-up to ensure permit compliance.

8.S.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, 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 2.2.1.2.2)

8.S.4.1.1 Aircraft, Ground Vehicle, and Equipment Maintenance Areas

Minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Implement one or more of the following control measure options where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations (or other equivalent measures): perform maintenance activities indoors; maintain an organized inventory of material used in the maintenance areas; drain all parts of fluids prior to disposal; prohibit the practice of hosing down the apron or hanger floor; use dry cleanup methods; and collect the stormwater runoff from the maintenance area and properly dispose or treat and recycling.

8.S.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 runoff 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 minimize the contamination of stormwater runoff from these storage areas implementing control measures, such as the following, where determined to be feasible and that accommodate considerations of safety, space, operational constraints, and flight considerations(or other equivalent measures): store aircraft and ground vehicles indoors when feasible; use drip pans for the collection of fluid leaks; and install perimeter drains, dikes or berms around storage areas.

8.S.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," etc.). To minimize contamination of precipitation/runoff 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 (or other equivalent measure): 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; using only dry cleanup methods; and collecting stormwater runoff. If the site has implemented a Spill Prevention, Control and Countermeasure (SPCC) plan developed in accordance with the 2009 amendments to the SPCC rule, the site may cite the relevant aspects from the SPCC plan that comply with the requirements of this section in the SWPPP.

8.S.4.1.6 Source Reduction

Consistent with safety considerations, minimize, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.

8.S.4.1.6.1 Runway Deicing Operation

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.

8.S.4.1.6.2 Aircraft Deicing Operation

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 Runoff (See also Part 2.2.1.2.6)

Minimize the discharge of pollutants in stormwater from deicing chemicals in runoff. To minimize discharges of pollutants in stormwater from aircraft deicing, implement runoff management 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):

- a) Installing a centralized deicing pad to recover deicing fluid following application; plug-and-pump (PnP);
- b) Using vacuum/collection trucks (glycol recovery vehicles);
- c) Storing contaminated stormwater/deicing fluids in tanks;
- d) Recycling collected deicing fluid where feasible; releasing controlled amounts to a publicly owned treatment works;
- e) Separation of contaminated snow; conveying contaminated runoff into a stormwater impoundment for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and
- f) Directing runoff into vegetative swales or other infiltration measures.

To minimize discharges of pollutants in stormwater from runway deicing, implement runoff management 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):

- a) Mechanical systems (snow plows, brushes);
- b) Conveying contaminated runoff into swales and/or a stormwater impoundment; and
- c) 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 AZPDES 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):

- a) Recovering deicing fluids;
- b) 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);
- c) Releasing controlled amounts to a publicly owned treatment works.

Used deicing fluid should be recycled whenever practicable.

8.S.4.2 Deicing Season

The permittee shall determine the seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the site. The permittee shall implement control measures, site inspections and monitoring with particular emphasis throughout the defined deicing season. When the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea are met, the permittee shall obtain the four required routine analytical monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH. This sampling timeframe shall occur during the deicing season identified above. See also Part 8.S.7.

8.S.5 Additional Corrective Action Reporting Requirements (See also Parts 3.2)

The permittee holder (whoever applies for the NOI) is responsible for signing and certifying the Corrective Action Report (Part 3.2), regardless if a tenant has jointly prepared the SWPPP with

the airport authority. Any corrective documentation shall be kept with the applicable SWPPP (tenant SWPPP or airport authority SWPPP).

8.S.6 Additional SWPPP Requirements

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from its own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport. Tenants of the airport site include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity.

8.S.6.1 Drainage Area Site Map

Document in the SWPPP the following areas of the site and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

8.S.6.2 Potential Pollutant Sources

In the site's inventory of exposed materials, the SWPPP shall describe the potential for the following activities and site areas to contribute pollutants to stormwater discharges:

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

When deicing chemicals are used, the permittee shall maintain a record of the types (including the 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. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

8.S.6.3 Vehicle and Equipment Washwater Requirements

If wash water is handled in a manner that does not involve separate AZPDES 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 the SWPPP. Discharges of vehicle and equipment wash water are not authorized by this permit for this sector.

8.S.6.4 Documentation of Control Measures Used for Management of Runoff

Document in the SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

8.S.6 Additional Inspection Requirements

8.S.6.1 Inspections

At a minimum conduct routine site inspections at least monthly during the deicing season. If the site needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Director may specifically require an increase in inspection frequencies.

Using only qualified personnel, conduct one of the quarterly site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

8.S.7 Sector-Specific Routine Analytical Monitoring Values (See also Part 6.)

Table 8.S-1 identifies routine analytical monitoring parameters and action levels that apply to Sector S. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

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

¹ These are deicing-related parameters. Collect the two routine analytical monitoring samples, during the timeframe defined in Part 8.S.4.2 when deicing activities are occurring.

8.S.8 Visual Assessment Alternative for Sector S Facilities

The airport authority may choose to conduct visual assessments in accordance with the optional Alternative Stormwater Visual Assessment Requirements.

8.S.8.1 Requirements for Optional Alternative Stormwater Visual Assessments

The alternative for visual assessments at airports includes the following requirements:

1. Visual assessment must be conducted two (2) times per wet season at each of the main outfall(s).

If this optional visual assessment approach is selected, the airport and its co-permittees cannot make use of the substantially identical outfall provision of the 2019 MSGP permit for outfalls that receive industrial stormwater combined from two (2) or more permitted facilities. The airport retains the option to use of the substantially identical outfall provision for those outfalls that do not receive combined industrial stormwater discharges from co-permittee facilities, provided permit substantially identical outfalls provisions are met (see Appendix A).

2. The stormwater pollution prevention plan (SWPPP) must include a detailed process for identifying pollutant sources. The process shall take into consideration how the pollution

prevention team will trace a pollutant discovered in a visual assessment sample from a main outfall back to a particular tenant or source. The process must include, at a minimum, the following:

- a) Identification of personnel (by name and/or title) involved in visual assessment monitoring;
 - b) Actions to be taken to identify pollutant source(s);
 - c) Timeframes for actions to identify pollutants source(s), notifying tenant(s), and correcting control measure deficiencies; and
 - d) Documentation of actions and outcome.
- 3) For the first two years of the permit (and thereafter if requested by ADEQ), the airport authority shall submit documentation of visual assessment activities to the Department no later than June 30 of each year. The documentation must include the information specified in section 4.2.2 of the permit as well as the following:

- a) Physical indicator parameters listed in section 4.2.1; and
- b) The action step(s), source(s), and outcome for each follow up investigation.

If information becomes available to the Department that demonstrates this optional alternative approach is ineffective at evaluating control measures, the Department may withdraw the alternative approach either in whole or on a site by site basis.

8.S.9 Effluent Limitations Based on Effluent Limitations Guidelines and New Source Performance Standards (See also Part 6.2.2.)

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) keep an updated statement in the SWPPP that certifies that the permittees do not use pavement deicers containing urea, or (2) meet the effluent limitation in Table 8.S-2.

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.8.1 or 8.S.8.2 of this permit, permittees must comply with the applicable monitoring, reporting and recordkeeping requirements outlined in 40 CFR 449.20

Table 8.S-2		
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

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

8.T.1 Covered Stormwater Discharges

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

8.T.2 Industrial Activities Covered by Sector T

The requirements listed under this part apply to all existing point source stormwater discharges associated with the following activities:

8.T.2.1 Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge; that are located within the confines of a site 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 site, or areas that are in compliance with Section 405 of the CWA.

8.T.3 Limitations on Coverage

8.T.3.1 Prohibition of Non-Stormwater Discharges (See also Part 1.1.4 and Part 8.T.5.3)

Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

8.T.4 Additional Technology- Based Effluent Limits

8.T.4.1 Control Measures (See also the non-numeric effluent limits in Part 2.2.1.2.2)

In addition to the other control measures, implement the following, or other equivalent measures when feasible: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

8.T.4.2 Employee Training (See also Part 2.2.1.2.9)

Include the following (as applicable) in an employee training program: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

8.T.5 Additional SWPPP Requirements

8.T.5.1 Site Map (See also Part 5.1.2)

Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

8.T.5.2 Potential Pollutant Sources (See also Part 5.1.3)

Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

8.T.5.3 Wastewater and Washwater Requirements

If wastewater and/or vehicle and equipment wash water is not covered by another AZPDES permit but is handled in another manner (e.g., hauled offsite, retained onsite), the disposal method (in accordance with Part 8.T.3.1) must be described and all pertinent information (e.g., frequency, volume, and destination) must be included in the SWPPP. Discharges of vehicle and equipment wash water, including tank cleaning operations, are not authorized by this permit for this sector site

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products

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

8.U.1 Covered Stormwater Discharges

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

8.U.2 Limitations on Coverage

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

The following discharges are not authorized by this permit: discharges containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

8.U.3 Additional Technology Based Limitations

8.U.3.1 Employee Training (See also Part 2.2.1.2.9)

Include pest control in the site's employee training program.

8.U.4 Additional SWPPP Requirements

8.U.4.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

8.U.4.2 Potential Pollutant Sources (See also Part 5.1.3)

Document in the SWPPP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

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

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

8.U.6 Sector-Specific Routine Analytical Monitoring Values (See also Part 6.)

Table 8.U-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector U. These parameters and action levels apply to both the primary industrial

Table 8.U-1		
Subsector (Site discharges may be subject to requirements for more than one Sector / Subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector U1. Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L
Subsector U2. Fats and Oils Products (SIC 2074-2079)	pH	6.0- 9.0 s.u.
	Nitrate plus Nitrite Nitrogen	RWD ²
	Total Suspended Solids (TSS)	100 mg/L

² RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.V.1 Covered Stormwater Discharges

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

8.V.2 Limitations on Coverage

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

The following discharges are not authorized by this permit:

- a) Wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process);
- b) Reused or recycled water; and
- c) Waters used in cooling towers.

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

8.V.3 Additional Technology Based Limitations

8.V.3.1.1 Material Storage Areas

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

8.V.3.1.2 Material Handling Areas

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

8.V.3.1.3 Fueling Areas

Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): cover the fueling area, use spill and overflow protection, minimize run-on of stormwater to the fueling areas, use dry cleanup methods, and dispose, treat and/or recycling stormwater runoff collected from the fueling area.

8.V.3.1.4 Above-Ground Storage Tank Area

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

8.V.3.2 Employee Training (See also Part 2.2.1.2.9)

Include the following (as applicable) in an employee training program: use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

8.V.4 Additional SWPPP Requirements

8.V.4.1 Potential Pollutant Sources

Document in the site's SWPPP the following additional sources and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

8.V.4.2 Description of Good Housekeeping Measures for Material Storage Areas

Document in the SWPPP the site's containment area or enclosure for materials stored outdoors in connection with Part 8.V.3.1.1 above.

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart W – Sector W – Furniture and Fixtures

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

8.W.1 Covered Stormwater Discharges

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

8.W.2 Additional SWPPP Requirements

8.W.2.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed; access roads; and rail spurs.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing

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

8.X.1 Covered Stormwater Discharges

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

8.X.2 Additional Technology-Based Effluent Limits

8.X.2.1 Good Housekeeping Measures (See also Part 2.2.1.2.2)

8.X.2.1.1 Material Storage Areas

Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

8.X.2.1.2 Material Handling Area

Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Implement one or more of the following (or other equivalent measures): using spill and overflow protection, cover fueling areas, and cover or enclose areas where the transfer of materials may occur. When applicable, replace or repair leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

8.X.2.1.3 Fueling Areas

Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): cover the fueling area, use spill and overflow protection, minimize runoff of stormwater to the fueling areas, use dry cleanup methods, and properly dispose, treat and/or recycling stormwater runoff collected from the fueling area.

8.X.2.1.4 Above Ground Storage Tank Area

Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Implement one or more of the following (or other equivalent measures): regularly clean these areas, explicitly address tanks, piping and valves in the site's SPCC program, minimize stormwater runoff from adjacent areas, restrict access to the area, insert filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use dry cleanup methods, and permanently seal drains within critical areas that may discharge to a storm drain.

8.X.2.2 Employee Training (See also Part 2.2.1.2.9)

Include the following (as applicable) in an employee training program: spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

8.X.3 Additional SWPPP Requirements

In connection with Part 8.X.2.1.1, describe in the SWPPP the containment area or enclosure for materials stored outdoors.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.Y.1 Covered Stormwater Discharges

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

8.Y.2 Additional Technology-Based Effluent Limits

8.Y.2.1 Controls for Rubber Manufacturers (See also Part 2.2.1.1)

Minimize the discharge of zinc in the site’s stormwater discharges. Parts 8.Y.2.1.1 to 8.Y.2.1.5 give possible sources of zinc to be reviewed and list some specific control measures for implementation (or their equivalents). Other general control measure options to consider (list not exclusive): using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring airspace between the container and the cover to minimize “puffing” losses when the container is opened, and using automatic dispensing and weighing equipment.

8.Y.2.1.1 Zinc Bags

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

8.Y.2.1.2 Dumpsters

Minimize discharges of zinc from dumpsters. Implement the following control measures where determined feasible: cover and line dumpsters containing zinc bags or residue or move the dumpster indoors.

8.Y.2.1.3 Dust Collectors and Baghouses

Minimize contributions of zinc to stormwater from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

8.Y.2.1.4 Grinding Operations

Minimize contamination of stormwater as a result of dust generation from rubber grinding operations, where determined feasible, installing a dust collection system.

8.Y.2.1.5 Zinc Stearate Coating Operations

Minimize the potential for stormwater contamination from drips and spills of zinc stearate slurry that may be released to the storm drain, 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 the site's stormwater discharges. Implement the following control measures were determined to be feasible (list not exclusive) minimize spills, clean up spills promptly and thoroughly, sweep thoroughly, train employees on proper handling, recapture pellets when possible, and disposal precautions.

8.Y.3 Additional SWPPP Requirements

8.Y.3.1 Potential Pollutant Sources for Rubber Manufacturers (See also Part 5.1.3)

Document in the SWPPP the use of zinc at the site and the possible pathways through which zinc may be discharged in stormwater runoff.

8.Y.4 Sector-Specific Routine Analytical Monitoring Values (See also Part 6.)

Table 8.Y-1 identifies routine analytical monitoring parameters and action levels that apply to Sector Y. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.Y-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector Y1. Rubber Products Manufacturing (SIC 3011, 3021, 3052, 3053, 3061, 3069)	Total Zinc ¹	Hardness Dependent

¹ The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing

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

8.Z.1 Covered Stormwater Discharges

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

8.Z.2 Additional Technology-Based Effluent Limits

8.Z.2.3 Good Housekeeping Measures (See also Part 2.2.1.2.2)

8.Z.2.3.1 Storage Areas for Raw, Semi-processed, or Finished Tannery By-products

Minimize contamination of stormwater runoff from pallets and bales of raw, semi-processed, or finished tannery by-products (e.g., splits, trimmings, shavings). Consider indoor storage or protect outdoor storage areas with polyethylene wrapping, tarpaulins, roofed storage, etc. When feasible, place materials on an impermeable surface and enclose or install berms (or other equivalent measures) around the area to prevent stormwater run-on and runoff where practicable.

8.Z.2.3.2 Material Storage Areas

Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) and minimize contact of such materials with stormwater.

8.Z.2.3.3 Buffing and Shaving Areas

Minimize contamination of stormwater runoff with leather dust from buffing and shaving areas where determined feasible, by implementing dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.

8.Z.2.3.4 Receiving, Unloading, and Storage Areas

Minimize contamination of stormwater runoff from receiving, unloading, and storage areas. If these areas are exposed, implement the following where determined feasible (or other equivalent measures): cover all hides and chemical supplies, divert drainage to the process sewer, or place berms or curbs around the area to prevent stormwater runoff.

8.Z.2.3.5 Outdoor Storage of Contaminated Equipment

Minimize contact of stormwater with contaminated equipment. Implement the following where determined feasible (or other equivalent measures): clean thoroughly prior to storage, or cover equipment, or divert drainage to the process sewer.

8.Z.2.3.6 Waste Management

Minimize contamination of stormwater runoff from waste storage areas. Implement the following where determined feasible (or other equivalent measures): cover dumpsters or move waste management activities indoors, cover waste piles with temporary covering material such as tarpaulins or polyethylene, and minimize stormwater runoff by enclosing the area or placing berms around the area.

8.Z.3 Additional SWPPP Requirements

8.Z.3.1 Drainage Area Site Map (See also Part 5.1.2)

Identify in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

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

Document in the SWPPP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

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

8.AA.1 Covered Stormwater Discharges

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

8.AA.2 Additional Technology-Based Effluent Limits

8.AA.2.1 Good Housekeeping Measures (See also Part 2.2.1.2.2)

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 2.2.1.2.4)

The permittee shall ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas shall be addressed:

8.AA.2.2.1 Metal Fabricating Areas

Maintain clean, dry, orderly conditions in these areas. Use dry clean-up techniques where feasible.

8.AA.2.2.2 Storage Areas for Raw Metal

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

8.AA.2.2.3 Metal Working Fluid Storage Areas

Minimize the potential for stormwater contamination from storage areas for metal working fluids.

8.AA.2.2.4 Cleaners and Rinse Water

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

8.AA.2.2.5 Lubricating Oil and Hydraulic Fluid Operations

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

8.AA.2.2.6 Chemical Storage Areas

Minimize stormwater contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

8.AA.2.3 Spills and Leaks (See also Part 5.1.3.3)

In the site's spill prevention and response procedures, required by Part 2.2.1.2.4, determine whether chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes are present. If present, ensure the spill prevention and response procedures specifically address these chemicals.

8.AA.3 Additional SWPPP Requirements

8.AA.3.1 Drainage Area Site Map (See also Part 5.1.2)

Document in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

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

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

8.AA.4 Additional Inspection Requirements

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

At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas.

8.AA.4.2 Site Inspections

As part of the site's inspection, also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

8.AA.5 Sector-Specific Routine Analytical Monitoring Values (See also Part 6.)

Table 8.AA-1 identifies routine analytical monitoring parameters and action levels that apply to the specific subsectors of Sector AA. These parameters and action levels apply to both the primary industrial activity and any co-located industrial activities.

Table 8.AA-1		
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter	Routine Analytical Monitoring Action Level
Subsector AA1. Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Chromium ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	RWD ²
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Cadmium ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	RWD ²

1 The routine analytical monitoring action levels for some metals are dependent on water hardness. See Permit Part 6.2.1.

2 RWD= Receiving Water Dependent. As part of the NOI process, the permittees action level will be based on the receiving water lowest applicable designated use. See A.A.C. R18-11 Article1, Appendix A and Appendix B.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AB.1 Covered Stormwater Discharges

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

8.AB.2 Additional SWPPP Requirements

8.AB.2.1 Drainage Area Site Map (See also Part 5.1.2)

Identify in the site's SWPPP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AC.1 Covered Stormwater Discharges

The requirements in Subpart AC apply to stormwater discharges associated with industrial activity from facilities that manufacture Electronic and Electrical Equipment and Components, Photographic and Optical goods as identified by the SIC Codes specified in Table C-1 of Appendix C of the permit.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AD.1 Covered Stormwater Discharges

Sector AD is used to provide permit coverage for facilities designated by the Director as needing a stormwater permit, and any discharges of stormwater associated with industrial activity that do not meet the description of an industrial activity covered by Sectors A-AC.

8.AD.1.1 Eligibility for Permit Coverage

Because this sector is primarily intended for use by discharges designated by the Director as needing a stormwater permit (which is an atypical circumstance), and the site may or may not normally be discharging stormwater associated with industrial activity, the permittee shall obtain the Director's written permission to use this permit prior to submitting an NOI. An operator, who is authorized to use this permit, shall also be required to ensure that the site's discharges meet the basic eligibility provisions of this permit at Part 1.1.

8.AD.2 Sector-Specific Routine Analytical Monitoring Parameters and Values and Effluent Limits (See also Part 6.)

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

Appendix A
Definitions, Abbreviations, and Acronyms

Appendix A. Definitions, Abbreviations, and Acronyms (for the purposes of this permit).

Action Levels for Routine Analytical Monitoring - pollutant concentrations that are based on the designated use of the receiving water and are used to assess the overall effectiveness of stormwater control measures. An exceedance of an action level is not necessarily a permit violation.

Accelerated Monitoring - monitoring that is required after one stormwater sampling event result exceeds a numeric effluent limitation guideline.

Approved Total Maximum Daily Loads (TMDLs) – approved TMDLs are those that are developed by the ADEQ and approved by EPA.

Co-located Industrial Activities – industrial activity(ies), in addition to the primary industrial activity, located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a site is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Appendix C and / or Table C-1 in the Mining Stormwater Permit.

Control Measures – refers to any stormwater control measure or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to Waters of the United States.

Designated Use - a use of a surface water specified in Arizona's surface water quality standards rules, including those uses specified in R18-11-104. Designated uses include domestic water source, full-body contact recreation, partial body contact recreation, fish consumption, aquatic and wildlife (cold water), aquatic and wildlife (warm water), aquatic and wildlife (ephemeral), aquatic and wildlife (effluent dependent waters), agricultural irrigation, and agricultural livestock watering.

Director – means the Director of the Arizona Department of Environmental Quality or an authorized representative.

Discharge – defined in 40 CFR § 122.2 when used without qualification, discharge means the "discharge of a pollutant".

Discharge of a Pollutant – defined in 40 CFR § 122.2 as any addition of any "pollutant" or combination of pollutants to "Waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into Waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharge Point – for purposes of this permit, the location(s) where stormwater is discharged from the facility or site.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of the CWA to adopt or revise effluent limitations.

Ephemeral Water - a surface water that has a channel that is at all times above the water table and that flows only in direct response to precipitation.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an AZPDES general or individual permit.

Facility or Activity – any AZPDES “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the AZPDES program.

Feasible – means technologically possible and economically practicable and achievable in light of best industry practices.

Hardness - the sum of dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO₃) in milligrams per liter.

Impaired Water - waters that have been assessed by ADEQ, under the Clean Water Act, as not attaining a water quality standard for at least one designated use, and are listed on Arizona’s current 303(d) List or are identified on Arizona’s 305(b) Category 4 list.

Indian Country – (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe. (18 U.S.C. 1151).

Industrial Activity – the 10 categories of industrial activities included in the definition of “Stormwater discharges associated with industrial activity” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Stormwater – stormwater runoff from industrial activity.

Intermittent Water - a stream or reach of a stream that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.

Materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Measureable Storm Event - a storm event that results in a stormwater discharge from one or more discharge points at the site. Measurable storm events must be separated by a minimum of 72 hours between stormwater discharges.

Minimize – reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such

as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to Waters of the United States;

- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7) & A.A.C R18-9-A901(22).

Natural Background Levels - means surface water quality that was present before any human-caused pollution. Natural background pollutants include those substances that are naturally occurring in native soils, vegetation, or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring (such as run-off from other industrial sites or roadways).

New Discharger – defined in 40 CFR § 122.2 as a site from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective AZPDES permit for discharges at that site. See & A.A.C. R18-9-A901(24).

New Source – defined in 40 CFR § 122.2 as any building, structure, facility, site or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See R18-9-A901(25).

New Source Performance Standards (NSPS) – technology-based standards for sites that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

Non-structural Controls – pollution prevention methods that are not physically constructed, including procedures, schedules, training and other practices to prevent or reduce the discharge of pollutants.

No Exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

No Exposure Certification (NEC) - a submission to the Director from an applicant notifying that they intend to obtain a conditional exclusion from permit requirements by certifying that there is no exposure of industrial materials or activities to rain, snow, snowmelt, and/ or stormwater runoff and all industrial materials or activities are protected by a storm-resistant shelter. See 40 CFR 122.26 (g).

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, air conditioner condensate, non-contact cooling water, pavement wash water, external building washdown, irrigation water, or uncontaminated ground water or spring water. See Part 1.1.3.

Not-attaining Water - [R18-11-601(11)] a surface water is assessed as impaired, but is not placed on the 303(d) List because:

- a. A TMDL is prepared and implemented for the surface water;
- b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission;
- c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.

Notice of Intent (NOI) – the form (electronic or paper) required for authorization of coverage under the Multi-Sector General Permit.

Notice of Intent (NOI) Certificate - the certificate of authorization for permit coverage that is issued immediately by ADEQ after a complete and accurate NOI, along with the applicant's payment, is received by the Department.

Notice of Termination (NOT) – the form (electronic or paper) required for terminating coverage under the Multi-Sector General Permit.

Notice of Termination Summary - the termination summary is issued immediately after a complete and accurate NOT is received by the Department, confirming that permit coverage was terminated.

Operator – any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

- (i) The entity has operational control over industrial activities, including the ability to modify those activities; or
- (ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Outfall – see “Discharge Point.”

Outstanding Arizona Water – a surface water that has been classified by ADEQ as an outstanding state resource under A.A.C. R18-11-112.

Perennial Water – a surface water that flows continuously throughout the year.

Person – defined in 40 CFR § 122.2 as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Point source – defined in 40 CFR § 122.2 as any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant – defined in 40 CFR § 122.2 as a partial listing from this definition includes: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See A.A.C. R18-9-A901 (27).

Pollutant of Concern – a pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as *causing an impairment in a state's 303(d) list*.

Primary industrial activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(ii), (iii), (vi), or (viii); or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), (vii), or (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that

activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites, and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Qualified Personnel – qualified personnel are those (either the permittee’s employees or outside consultants) who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures.

Receiving Waters – means Waters of the United States.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 and A.R.S. § 49-284 for complete definitions and reportable quantities for which notification is required.

Runoff Coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Run-On – sources of stormwater that drain from land located upslope or upstream from the regulated site.

Significant Spills and Leaks – are those that have the potential to have an adverse impact on the quality of stormwater discharges from the site. Such spills and leaks may 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 and A.R.S. §49-284 . This permit does not relieve the permittee 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.

Site – the land or water where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

Special Waters - for the purposes of this general permit, reference to special waters include waters identified by the State as impaired, not-attaining, or classified as an Outstanding Arizona Water.

Spill – the release of a hazardous or toxic substance from its container or containment.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13) & A.A.C. R18-9-A901(36).

Storm Resistant Shelter - a building or structure that is completely roofed and walled, or a structure with only a top cover but no side coverings, provided that any material or industrial activity located under or within the structure is not subject to any run-on and subsequent runoff of stormwater, or mobilization by wind.

Stormwater Discharges Associated with Construction Activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Stormwater Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the AZPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located at industrial sites that are separate from the facility's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

Storm Event – a precipitation event that results in a measurable amount of precipitation.

Stormwater Pollution Prevention Team – the group of individuals, identified by name, title or role, that are responsible for the development and modifications of the SWPPP and oversight of compliance with the permit requirements. The Stormwater Team is also responsible for maintaining control measures and taking corrective actions where required. The team may include members who are not employed by the site (such as third party consultants). The individuals on the “Stormwater Pollution Prevention Team” shall be identified in the SWPPP.

Structural Controls - physical or constructed features, such as silt fencing, sediment traps, and detention/retention ponds that minimize the discharge of pollutants.

Substantially Identical Outfalls – outfalls located at the facility that have comparable industrial activities, control measures, exposed materials that may significantly contribute pollutants to stormwater, and similar runoff coefficients of their drainage areas. Monitoring exceptions apply to substantially identical outfalls for visual assessment, routine analytical, and impaired waters monitoring. Substantially identical outfall exceptions, does not apply to ELG or OAW monitoring.

Surface Water Quality Standards – a water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. Arizona's surface water quality standards are set forth in A.A.C. Title 18, Chapter 11, Article 1.

Total Maximum Daily Loads (TMDLs) – a TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Total Nitrogen - the sum of the nitrogen component from ammonia (NH₃), ammonium ion (NH₄⁺), nitrite (NO₂), nitrate (NO₃), and dissolved and particulate organic nitrogen expressed as elemental nitrogen.

Upset – an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

Waters of the United States (WOTUS) – means “navigable waters” as defined in Arizona Revised Statute, Title 49, Chapter 2, Article 1.

A.2. ABBREVIATIONS AND ACRONYMS

ADHS – Arizona Department of Health Service

BMP – Best Management Practice

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR – Code of Federal Regulations

CGP- Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

DMR – Discharge Monitoring Report

ELG - Effluent Limitations Guideline

EPA – U. S. Environmental Protection Agency

MGD – Million Gallons per Day

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NEC - No Exposure Certification

NOI – Notice of Intent

NOT – Notice of Termination

OAW – Outstanding Arizona Water

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

SIC – Standard Industrial Classification

SPCC – Spill Prevention, Control, and Countermeasures

SSC – Suspended Sediment Concentration

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDf – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

WLA – Wasteload Allocation

WQS – Water Quality Standard

**Appendix B
Standard Permit Conditions**

Appendix B. Standard Permit Conditions.

Standard permit conditions in Appendix B are consistent with the general permit provisions required under 40 CFR 122.41 and A.A.C. R-18-9-A905(A)(3).

1. **Duty to Comply.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(1) and A.R.S. §§ 49-261, 262, 263.01, and 263.02.]
 - a. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
 - b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.

2. **Duty to Reapply / Continuation of the Expired General Permit.** [A.A.C. R18-9-A905 which incorporates 40 CFR 122.41(b)]
 - a. Upon reissuance of the general permit, the permittee shall file an electronic Notice of Intent (NOI) through myDEQ, within the timeframe specified in the new general permit, and shall obtain new written authorization to discharge from the Director.
 - b. If the Director does not reissue the general permit before the expiration date, the current general permit will be administratively continued and remain in force and effect until the general permit is reissued.
 - c. Any permittee granted authorization to discharge under the general permit before the expiration date automatically remains covered by the continued general permit until the earlier of:
 - i. Reissuance or replacement of the general permit, at which time the permittee shall comply with the NOI conditions of the new general permit to maintain authorization to discharge; or
 - ii. The date the permittee has submitted an electronic Notice of Termination; or
 - iii. The date the Director has issued an individual permit for the discharge; or
 - iv. The date the Director has issued a formal permit decision not to reissue the general permit, at which time the permittee shall seek coverage under an alternative general permit or an individual permit, or cease discharge.

3. **Need To Halt or Reduce Activity Not a Defense.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(c)]

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)]

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

5. **Proper Operation and Maintenance.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(e)]

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are

installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

- 6. Permit Actions.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(f)]
This permit may be modified, revoked and reissued, or terminated for cause. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 7. Property Rights.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)]
This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of federal, state, Indian tribe, or local laws or regulations.
- 8. Duty to Provide Information.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(h)]
The permittee must furnish to ADEQ, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to ADEQ upon request, copies of records required to be kept by this permit.
- 9. Signatory Requirements.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(k) and (l); A.A.C. R18-9-A905(A)(1)(c), which incorporates 40 CFR 122.22]
All Notices of Intent (NOI), Notices of Termination (NOT), and No Exposure Certifications (NEC) must be e-signed in the myDEQ on-line permitting system as follows:

 - a. NOIs, NOTs, and NECs:
 - i. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
 - iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal (or state) agency includes: (1) The chief executive officer (or director) of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 - b. All reports required by this permit and other information requested by ADEQ as follows:
 - i. A person described in Section 9.a or by a duly authorized representative of that person. A person is a duly authorized representative only if the authorization is made in writing by a person described in Section 9.a and contained in the SWPPP.
 - ii. The authorization must specify either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual

occupying a named position).

- c. All reports, including SWPPP and changes to the SWPPP to document corrective actions taken as required by Part 3.0, and any other compliance reports including , inspection reports, annual reports, monitoring reports, reports on training, corrective action reports and other information required by this permit must be signed by a person described in Appendix B, Subsection 9.a above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in Appendix B, Part 9.a;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and
 - iii. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to ADEQ, upon request.
- d. All other changes to the SWPPP, and other compliance documentation required under Part 5.6, must be signed and dated by the person preparing the change of documentation.
- e. Changes to Authorization. If the information on the electronic NOI filed for permit coverage is no longer accurate because a different owner / operator has responsibility for the overall operation of the facility, a new electronic NOI satisfying the requirements of Part 1.3.1 must be submitted to ADEQ prior to or together with any reports, information, or applications to be signed in accordance with Appendix B, Subsection 9.c above. The change in authorization must be submitted within the time frame specified in Table 1-2 of the permit.
- f. Certification. Any person signing documents under the terms of this permit must make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- g. Documents required by this permit that are submitted electronically by, or on behalf of, the regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this section. See 40 CFR 122.22(e).

10. Inspection and Entry. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

- a. The permittee must allow ADEQ or an authorized representative to:
 - i. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records are kept under the conditions of this permit;
 - ii. Have access to and copy at reasonable times, any records that are kept under the conditions of this general permit; and
 - iii. Inspect at reasonable times any facility or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
 - iv. Sample or monitor at reasonable times any substances or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9 and 10; and
- b. If the facility discharges to an MS4, the permittee must allow representatives of the municipal operator or the separate storm sewer receiving the discharge to inspect the site and obtain

copy of records pertaining to the discharge or the conditions of this permit.

11. Monitoring and Records [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)].

- a. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- b. The permittee must retain records of all monitoring information, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for at least three (3) years from the date this permit coverage expires or the permit authorization is terminated. This period may be extended by request of the Director at any time. Permittees must submit any such records to ADEQ upon request.
- c. Records of monitoring information must include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The time(s) the analyses were initiated;
 - v. The individual(s) who performed the analyses;
 - vi. References and written procedures, when available, for the analytical techniques or methods used;
 - vii. The analytical techniques or methods used; and
 - viii. The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless specific test procedures have been otherwise specified in this permit.
- e. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Reporting Requirements. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]

- a. Planned changes. The permittee shall give notice to the Director as soon as possible, but no fewer than 30 days, of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at A.A.C. R18-9-A905(A)(1)(e)); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at A.A.C. R18-9-A905(A)(3)(b)).
- b. Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.
 - i. Pursuant to Part 7.1, all monitoring results must be submitted electronically to the Department using the e-Discharge Monitoring Report (e-DMR) form available at www.azdeq.gov
 - ii. If the permittee monitors the discharge of any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring

shall be included in the e-DMR (if available), or submitted as a separate report.

- iii. Calculations for all limitations which require averaging of measurements must use an arithmetic mean and non-detected results must be incorporated in calculations as the limit of quantitation for the analysis.
- c. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
- d. Twenty-four hour reporting.
 - i. The permittee shall report to ADEQ any noncompliance with this permit which may endanger human health or the environment. The permittee shall orally notify the office listed below within 24 hours:

Arizona Department of Environmental Quality
Water Quality Compliance
1110 W. Washington Street, Mail Code 5415A-1
Phoenix, AZ 85007
Office: 602-771 – 2330

- ii. A written submission shall also be provided to the office identified above within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- iii. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - 1) Any unanticipated bypass which extends any effluent limitation in the permit.
 - 2) Any upset which exceeds any effluent limitation in the permit.
 - 3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at A.A.C. R18-9-A905(A)(3)(d)).
- iv. ADEQ may waive the written report on a case-by-case basis for reports under this subsection if the oral report has been received within 24 hours.
- e. Other noncompliance. The permittee shall report all instances of noncompliance not otherwise required to be reported under this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in subsection 12(d).
- f. Other information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Department, the permittee shall promptly submit the facts or information to ADEQ at:

Arizona Department of Environmental Quality
Water Quality Division - MSGP
1110 W. Washington Street, Mail Code 5415A-1
Phoenix, AZ 85007

- 13. Reopener Clause.** [A.A.C. R18-9-C905 which incorporates 40 CFR 122.62(a) or (b)])
The Department may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, which may be promulgated in the course of the current permit cycle.

- 14. Other Environmental Laws.** No condition of this general permit releases the permittee from any responsibility or requirements under other environmental statutes or regulations. For example, this permit does not authorize the “taking” of endangered or threatened species as prohibited by Section 9 of the Endangered Species Act, 16 U.S.C. 1538. Information regarding the location of endangered and threatened species and guidance on what activities constitute a “taking” are available from the U.S. Fish and Wildlife Service. The permittee must also comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC).
- 15. State or Tribal Law.** [Pursuant to A.A.C. R18-9-A904(C)] Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.
- 16. Severability.** The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this general permit shall not be affected.
- 17. Requiring Coverage under an Individual Permit or an Alternative General Permit.**
- a. The Director may require a person authorized by this permit to apply for and/or obtain either an individual AZPDES permit or an alternative AZPDES general permit. Any interested person may petition the Department to take action under this section. The Department may require a permittee authorized to discharge under this permit to apply for an individual permit in any of the following cases:
 - i. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - ii. Effluent limitation guidelines are promulgated for point sources covered by the general permit;
 - iii. An Arizona Water Quality Management Plan containing requirements applicable to the point sources is approved;
 - iv. Circumstances change after the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
 - v. If the Director determines that the discharge is a significant contributor of pollutants. When making this determination, the Director shall consider:
 - 1) The location of the discharge with respect to Waters of the United States,
 - 2) The size of the discharge,
 - 3) The quantity and nature of the pollutants discharged to Waters of the U.S., and
 - 4) Any other relevant factor.
 - b. If an individual permit is required, the Director shall notify the discharger in writing of the decision. The notice shall include:
 - i. A brief statement of the reasons for the decision;
 - ii. An application form;
 - iii. A statement setting a deadline to file the application;
 - iv. A statement that on the effective date of issuance or denial of the individual permit, coverage under the general permit will automatically terminate;
 - v. The applicant’s right to appeal the individual permit requirement with the Water Quality Appeals Board under A.R.S. § 49-323, the number of days the applicant has to file a protest challenging the individual permit requirement, and the name and telephone number of the Department contact person who can answer questions regarding the appeals process; and

- vi. The applicant's right to request an informal settlement conference under A.R.S. 41-1092.03(A) and 41-1092.06.
- c. The discharger shall apply for an individual permit within 90 days of receipt of the notice, unless the Director grants a later date. In no case shall the deadline be more than 180 days after the date of the notice.
- d. If the discharger fails to submit the individual permit application within the time period established in Appendix B.17.c the applicability of the general permit to the discharger is automatically terminated at the end of the day specified by the Director for application submittal.
- e. Coverage under the general permit shall continue until an individual permit is issued or denied unless the general permit coverage is terminated under Appendix B. Subsection 17.d.

18. Request for an Individual Permit.

- a. A permittee may request an exclusion from coverage of a general permit by applying for an individual permit.
 - i. The permittee shall submit an individual permit application under R18-9-B901(B) and include the reasons supporting the request no later than 90 days after publication of the general permit.
 - ii. The Director shall grant the request if the reasons cited by the permittee are adequate to support the request.
- b. If an individual permit is issued to a person otherwise subject to a general permit, the applicability of the general permit to the discharge is automatically terminated on the effective date of the individual permit.

19. Transfer of Coverage. Coverage under this permit is not transferable from one person to another, is non-transferable when the business/ facility name changes, or when there is a change in facility/ site location. Pursuant to Arizona Administrative Code, R18-9-C904, the permittee shall comply with the following conditions:

- a. Transfer of coverage from one operator to a different operator (e.g., site sold to a new company): the new owner /operator must complete and file an electronic Notice of Intent (NOI) in accordance with Part 1.3.1 thirty (30) calendar days prior to taking over operational control of the site. The former owner /operator must file an electronic Notice of Termination (NOT) within thirty (30) days after the new owner /operator has assumed responsibility for the facility.
- b. Name changes of the permittee (e.g., Company "ABC Inc" changes name to "ABC LLC") require the operator to file for a new electronic Notice of Intent (NOI). The facility with the new name must complete and file an electronic NOI in accordance with Part 1.3.1 thirty (30) calendar days before the name change. The facility under the previous name, must file an electronic Notice of Termination (NOT) within thirty (30) days of the name change.
- c. In the event the facility or activity moves to another location, or is otherwise different than the location identified by the permittee on the original NOI, the permittee must submit a new electronic NOI that accurately identifies the regulated facility or activity. The new e-NOI must include all of the information and requirements specified in Part 1.3.1 of this permit, including the corresponding initial fee and be submitted thirty (30) calendar days before the change in location. The facility under the previous location, must file an electronic Notice of Termination (NOT) within thirty (30) days from the change of location.

20. Bypass

- a. Definitions.
 - 1. Bypass means the intentional diversion of waste streams from any portion of a treatment

facility

2. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions Appendix B, Subsections 20.c and 20.d.
 - c. Notice.
 1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted at least ten days before the date of the bypass.
 2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Appendix B, Subsection 12.d.
 - d. Prohibition of bypass.
 1. Bypass is prohibited, and ADEQ may take enforcement action against the permittee for bypass, unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - iii. The permittee submitted notices as required under Appendix B, Subsection 20.c.
 2. ADEQ may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in this Appendix B, Subsection 20.d.

21. Upset

- a. Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix B, Subsection 21.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 1. An upset occurred and that the permittee can identify the cause(s) of the upset;
 2. The permitted facility was at the time being properly operated;
 3. The permittee submitted notice of the upset as required in Appendix B, Subsection 12.d (iii); and

4. The permittee complied with any remedial measures required under Appendix B, Subsection 4.
- d. Burden of proof. In any enforcement proceeding, the permittee, who is seeking to establish the occurrence of an upset, has the burden of proof.

22. Retention of Records

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date permit coverage expires or permit authorization is terminated. This period may be extended by the request of ADEQ at any time.

23. Penalties for Violations of Permit Conditions.

Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

- a. Civil Penalties. A.R.S. § 49-262 provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- b. Criminal Penalties. Any a person who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

Appendix C
Facilities and Activities Covered

Appendix C. Facilities and Activities Covered

Permit eligibility is limited to discharges from facilities in the “sectors” of industrial activity summarized in Table C-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to “sectors” in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
SECTOR A: TIMBER PRODUCTS		
A1	2421	General Sawmills and Planing Mills
A2	2491	Wood Preserving
A3	2411	Log Storage and Handling
A4	2426	Hardwood Dimension and Flooring Mills
	2429	Special Product Sawmills, Not Elsewhere Classified
	2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W)
	2441	Nailed and Lock Corner Wood Boxes and Shook
	2448	Wood Pallets and Skids
	2449	Wood Containers, Not Elsewhere Classified
	2451, 2452	Wood Buildings and Mobile Homes
	2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified	
SECTOR B: PAPER AND ALLIED PRODUCTS		
B1	2631	Paperboard Mills
B2	2611	Pulp Mills
	2621	Paper Mills
	2652-2657	Paperboard Containers and Boxes
	2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes
SECTOR C: CHEMICALS AND ALLIED PRODUCTS		
C1	2873-2879	Agricultural Chemicals
C2	2812-2819	Industrial Inorganic Chemicals
C3	2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
C4	2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
C5	2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
	2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products

Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
	2861-2869	Industrial Organic Chemicals
	2891-2899	Miscellaneous Chemical Products
	3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
	2911	Petroleum Refining
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS		
D1	2951, 2952	Asphalt Paving and Roofing Materials
D2	2992, 2999	Miscellaneous Products of Petroleum and Coal
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS		
E1	3251-3259	Structural Clay Products
	3261-3269	Pottery and Related Products
E2	3271-3275	Concrete, Gypsum, and Plaster Products
E3	3211	Flat Glass
	3221, 3229	Glass and Glassware, Pressed or Blown
	3231	Glass Products Made of Purchased Glass
	3241	Hydraulic Cement
	3281	Cut Stone and Stone Products
	3291-3299	Abrasive, Asbestos, and Miscellaneous Non-metallic Mineral Products
SECTOR F: PRIMARY METALS		
F1	3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
F2	3321-3325	Iron and Steel Foundries
F3	3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
F4	3363-3369	Nonferrous Foundries (Castings)
F5	3331-3339	Primary Smelting and Refining of Nonferrous Metals
	3341	Secondary Smelting and Refining of Nonferrous Metals
	3398, 3399	Miscellaneous Primary Metal Products
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES		
K1	HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS		
L1	LF	All Landfill, Land Application Sites and Open Dumps
L2	LF	All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
SECTOR M: AUTOMOBILE SALVAGE YARDS		

Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
M1	5015	Automobile Salvage Yards
SECTOR N: SCRAP RECYCLING FACILITIES		
N1	5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
N2	5093	Source-separated Recycling Facility
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES		
O1	SE	Steam Electric Generating Facilities, including coal handling sites
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING		
P1	4011, 4013	Railroad Transportation
	4111-4173	Local and Highway Passenger Transportation
	4212-4231	Motor Freight Transportation and Warehousing
	4311	United States Postal Service
	5171	Petroleum Bulk Stations and Terminals
SECTOR Q: WATER TRANSPORTATION		
Q1	4412-4499	Water Transportation Facilities
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS		
R1	3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES		
S1	4512-4581	Air Transportation Facilities
SECTOR T: TREATMENT WORKS		
T1	TW	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA.
SECTOR U: FOOD AND KINDRED PRODUCTS		
U1	2041-2048	Grain Mill Products
U2	2074-2079	Fats and Oils Products
U3	2011-2015	Meat Products
	2021-2026	Dairy Products
	2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties

Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
	2051-2053	Bakery Products
	2061-2068	Sugar and Confectionery Products
	2082-2087	Beverages
	2091-2099	Miscellaneous Food Preparations and Kindred Products
	2111-2141	Tobacco Products
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS		
V1	2211-2299	Textile Mill Products
	2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
	3131-3199	Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing)
SECTOR W: FURNITURE AND FIXTURES		
W1	2434	Wood Kitchen Cabinets
	2511-2599	Furniture and Fixtures
SECTOR X: PRINTING AND PUBLISHING		
X1	2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES		
Y1	3011	Tires and Inner Tubes
	3021	Rubber and Plastics Footwear
	3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
	3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
Y2	3081-3089	Miscellaneous Plastics Products
	3931	Musical Instruments
	3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
	3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
	3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
	3991-3999	Miscellaneous Manufacturing Industries
SECTOR Z: LEATHER TANNING AND FINISHING		
Z1	3111	Leather Tanning and Finishing

Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code ¹	Activity Represented
SECTOR AA: FABRICATED METAL PRODUCTS		
AA1	3411-3499 (except 3479)	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
	3911-3915	Jewelry, Silverware, and Plated Ware
AA2	3479	Fabricated Metal Coating and Engraving
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY		
AB1	3511-3599 (except 3571-3579)	Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC)
	3711-3799 (except 3731, 3732)	Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R)
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS		
AC1	3571-3579	Computer and Office Equipment
	3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks
	3612-3699	Electronic and Electrical Equipment and Components, Except Computer Equipment
SECTOR AD: NON-CLASSIFIED FACILITIES		
AD1	<p>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.</p> <p><i>NOTE: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.</i></p>	

¹ A complete list of SIC Codes (and conversions from the newer North American Industry Classification System” (NAICS) can be obtained from the Internet at <http://www.census.gov/epcd/www/naics.html> or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

Appendix D

**Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness
Dependent Metals**

Appendix D. Calculating Hardness in Surface Waters Receiving Stormwater Discharge for Hardness Dependent Metals

Overview

Routine analytical monitoring action levels have been adjusted for the hardness-dependent metals (i.e. cadmium, chromium III, copper, lead, nickel, silver, and zinc). For any sectors required to conduct sampling for a hardness dependent metal, the hardness of the receiving water (if stormwater is discharged to a perennial or intermittent stream) or the hardness of the stormwater discharge (if the stormwater discharge is to an ephemeral wash) shall be analyzed in order to calculate the routine analytical monitoring action levels. The action level is calculated through the use of a mathematical formula summarized in Table 1 (See A.A.C. R18-11, Appendix A, Table 2 through Table 9). The action level will be compared to the lowest designated use for that receiving water, for the specific metal using the acute standard. If acute standard exists, the lowest chronic standard would be applied.

Table 1. Hardness Formulas for Determining Acute Water Quality Standards for Dissolved Metals

Designated Use of the Receiving Water	Formula used to calculate action level using hardness
Acute Dissolved Cadmium	
A&W ¹ c ²	$e(1.0166 * \text{LN}(\text{Hardness}) - 3.924) * (1.136672 - \text{LN}(\text{Hardness}) * 0.041838)$
A&W w ³ , and edw ⁴	$e(1.128 * \text{LN}(\text{Hardness}) - 3.6867) * (1.136672 - \text{LN}(\text{Hardness}) * 0.041838)$
A&W ephemeral	$e(1.128 * \text{LN}(\text{Hardness}) - 0.9691) * (1.136672 - \text{LN}(\text{Hardness}) * 0.041838)$
Chronic Dissolved Cadmium	
A&W c ²	$e(0.7409 * \text{LN}(\text{Hardness}) - 4.719) * (1.101672 - \text{LN}(\text{Hardness}) * 0.041838)$
A&W w and edw	$e(0.7852 * \text{LN}(\text{Hardness}) - 2.715) * (1.101672 - \text{LN}(\text{Hardness}) * 0.041838)$
Acute Dissolved Chromium III	
A&W c, w and edw	$e(0.819 * \text{LN}(\text{Hardness}) + 3.7256) * (0.316)$
A&W ephemeral	$e(0.819 * \text{LN}(\text{Hardness}) + 4.9361) * (0.316)$
Chronic Dissolved Chromium III	
A&W c, w and edw	$e(0.819 * \text{LN}(\text{Hardness}) + 0.6848) * (0.86)$
Acute Dissolved Copper	
A&W c, w and edw	$e(0.9422 * \text{LN}(\text{Hardness}) - 1.702) * (0.96)$
A&W ephemeral	$e(0.9422 * \text{LN}(\text{Hardness}) - 1.1514) * (0.96)$
Chronic Dissolved Copper	
A&W c, w and edw	$e(0.8545 * \text{LN}(\text{Hardness}) - 1.702) * (0.96)$
Acute Dissolved Lead	
A&W c, w and edw	$e(1.273 * \text{LN}(\text{Hardness}) - 1.46) * (1.46203 - (\text{LN}(\text{Hardness})) * (0.145712))$
A&W ephemeral	$e(1.273 * (\text{LN}(\text{Hardness})) - 0.7131) * (1.46203 (\text{LN}(\text{Hardness})) * (0.145712))$
Chronic Dissolved Lead	
A&W c, w and edw	$e(1.273 * \text{LN}(\text{Hardness}) - 4.705) * (1.46203 - (\text{LN}(\text{Hardness})) * (0.145712))$

Acute Dissolved Nickel	
A&W c,w and edw	$e(0.846*LN(Hardness)+2.255)*(0.998)$
A&W ephemeral	$e(0.846*LN(Hardness)+4.4389)*(0.998)$
Chronic Dissolved Nickel	
A&W c, w and edw	$e(0.846*LN(Hardness)+0.0584)*(0.997)$
Acute Dissolved Silver	
A&W c, w, edw, and ephemeral	$e(1.72*LN(Hardness)-6.59)*(0.85)$
Acute Dissolved Zinc	
A&W c, w and edw	$e(0.8473*LN(Hardness)+0.884)*(0.978)$
A&W ephemeral	$e(0.8473*LN(Hardness)+3.1342)*(0.978)$
Chronic Dissolved Zinc	
A&W c, w and edw	$e(0.8473*LN(Hardness)+0.884)*(0.978)$

1. A&W=Aquatic and Wildlife
2. c= cold water
3. w= warm water
4. edw= effluent dependent water

What is Hardness?

Hardness means the sum of the dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO₃) in milligrams per liter (mg/L). Once a sample is analyzed for hardness, the hardness concentration is inserted into the formula in order to calculate the value for that metal. The hardness values that can be entered into the formula(s), can range from a value of "0" to a hardness value that may not exceed 400 mg/L CaCO₃. Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136.

The formulas for the specific metals using a hardness value are located in individual tables at the end of A.A.C. R18-11, Appendix A, Table 2 through Table 9. The ADEQ website also provides a calculator spreadsheet to assist in determining the various action levels for routine analytical monitoring and / or water quality standards (i.e., impaired waters) for metals that may be computed using a hardness value. The calculator spreadsheet is entitled ***Inorganic Surface Water Exceedance Calculator*** and is located on the MSGP web page.

How to Determine Hardness for Hardness Dependent Metals

For discharges to:

- Perennial or intermittent water, the hardness of the surface water receiving the discharge shall be analyzed. The hardness sample shall be collected downstream from the point of discharge and collected at the same time the metal sample is collected.
- Ephemeral waters, the hardness shall be of the stormwater discharge leaving the facility. The hardness sample shall be collected at the same time the metal sample is collected.

The permittee may select one of three methods to determine hardness of the perennial or intermittent water surface water receiving the discharge, including: individual hardness sample collected by permittee, hardness sampling by a group of operators that are discharging to the same receiving water, or using reliable and scientifically defensible third-party data (data collected under similar discharging conditions). Regardless of the method used, the permittee is responsible for documenting the procedures used to determine hardness values.

Third-Party Hardness Data

Permittees can submit receiving waterbody hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. The data may come from a local utility, previously conducted stream studies, TMDL implementation plans, peer reviewed literature, other government publications, or data previously collected by the permittee. Data must be less than five (5) years old.

Reporting of Hardness Values

The results of the hardness value(s) shall be reported on the electronic Discharge Monitoring Report (e-DMR). The e-DMR will calculate the permit limits for the hardness dependent metal(s), once the hardness value is entered onto the e-DMR.

ATTACHMENT D

ADEQ User Guide: AZPDES Stormwater Get New NOI



AZPDES Stormwater Get New NOI

USER GUIDE

WHAT IS myDEQ?

myDEQ is Arizona Department of Environmental Quality's (ADEQ's) new online web portal, designed to assist customers in meeting their environmental priorities and responsibilities. Upon creating an account, customers will be able to view their permits online and submit compliance reports as well as obtain new permits.

How do I get a myDEQ account?

Step 1: Register your Responsible Corporate Officer (RCO) online


Step 2: Sign, notarize and return the Subscriber Agreement/Signature Agreement (emailed by ADEQ upon completion of registration form)

Step 3: Set up your new myDEQ account (link emailed after ADEQ receives agreement from Step 2)

Register for an account today! | [Go to myDEQ Registration Form >](#)

HELPFUL TOOLS

myDEQ Tool Tips: Not sure what something means? Click on this icon “?” and learn more about the terminology on that screen.



AZPDES STORMWATER CONSTRUCTION GENERAL PERMIT (CGP) COVERAGE

Is your construction activity part of a greater common plan?


Select one, provide any requested information and click CONTINUE.

Yes

No

Greater Common Plan of Development or Sale: One or more acres of land that is part of a development or sale of a contiguous area where multiple separate land-disturbing activities may be taking place at different times, on different schedules, by different operators, but are under one plan.

BACK CONTINUE

 **Time Out Warning:** myDEQ does not have a “SAVE” option at this time (coming soon). After more than 20 mins of non-activity on a screen, the portal will time out and you will have to start over.

Web Browsers: myDEQ works best in Firefox and Google Chrome. Internet Explorer is not recommended due to compatibility issues.

HOW DO I APPLY FOR A NEW STORMWATER NOI IN myDEQ?

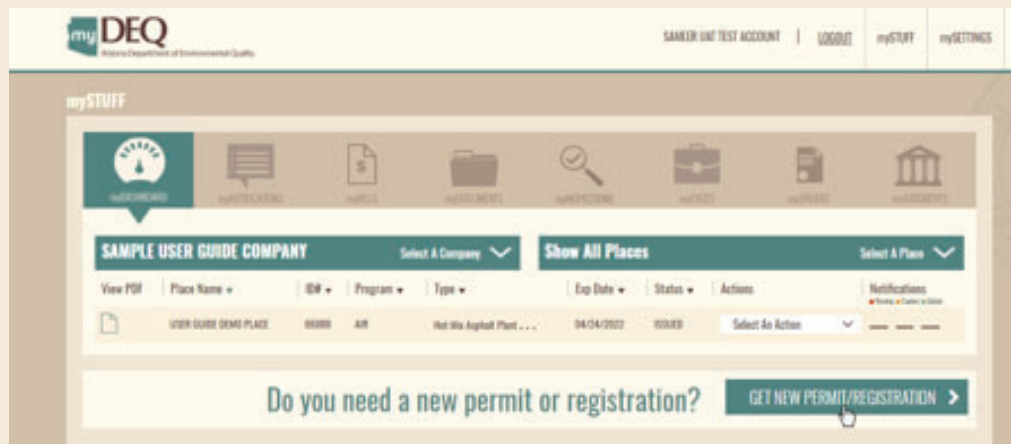
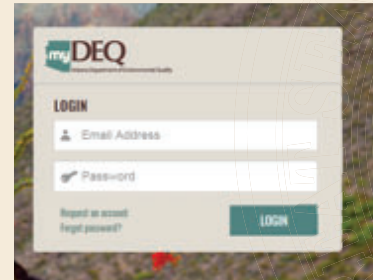
If you don't have a myDEQ account, see "How do I get a myDEQ account?" on Page 2.

Step 1: Log in to myDEQ

- Go to login page | [Go Now](#)

Step 2: Click "GET NEW PERMIT/REGISTRATION"

- Button located on the lower right of the Dashboard Screen



Step 3: Choose either AZPDES Stormwater CGP or MSG

- Click the circle to the left of text to select, and then click CONTINUE.

PERMIT/REGISTRATION

Which type of permit or registration do you need?

Select one and click CONTINUE.

- AZPDES Stormwater Construction General Permit (CGP)
- AZPDES Stormwater Multi-sector General Permit (MSGP) | Industrial
- Concrete Batch Plant General Permit
- Crushing & Screening General Permit
- EPA ID (RCRA)
- Hot Mix Asphalt Plant General Permit

[BACK](#)

[CONTINUE](#)

Step 4: Choose the company for which you want this NOI

• Click the circle to the left of the text to select, and then click CONTINUE.

PERMIT/REGISTRATION

Which of your companies/agencies is this for?
Select one and click CONTINUE.

BRIMHALL SAND, ROCK & BUILDING MATERIALS

SAMPLE USER GUIDE COMPANY

Add a Company/Agency

CONTINUE >

Note: If you do not see your company, select “Add a Company/Agency,” click CONTINUE, and follow the on-screen instructions.

Step 5: To apply for a new NOI or see if you are eligible for a wavier, select the “Yes” option

• Click the circle to the left of text to select, and then click CONTINUE.

AZPDES STORMWATER CONSTRUCTION GENERAL PERMIT (CGP) COVERAGE

Is this request for new permit coverage?
Select one, provide any requested information and click CONTINUE.

Yes, this is for new coverage. I don't have CGP coverage for this location.

No, I wish to manage existing CGP coverage in myDEQ.

BACK CONTINUE >

Step 6: On the next set of pages, follow the on-screen instructions

Answer the questions, enter any additional requested information, and then click CONTINUE for each screen.

Step 7: Review the summary

Once you have answered all questions, you will be shown a summary of your answers. Select "Edit" on the right hand side of the screen to make changes.

View Guide Home Page 2 Lat: 33.85781 / Long: -112.25943

AZPDES STORMWATER CONSTRUCTION GENERAL PERMIT (CGP) COVERAGE

Summary

Please review and click EDIT to modify. Then click CONTINUE.

Company Info	DARFLE CORP/LEIS COMPANY	EDIT
Is this request for new permit coverage?	Yes	EDIT
Will your project involve construction activity?	Yes	EDIT
What are the dates of your project?	Start Date: 05/01/2017 End Date: 05/30/2017	
Is your construction activity part of a greater common plan of development or sale?	Yes	EDIT
What is the total acreage being disturbed for the entire common plan of development or sale?	Common Plan Total disturbed Acre(s): 500	
What is the total acreage that will be disturbed by your construction activities?	0	EDIT
Plan Info	User Guide Demo Plan 2 33.85781/-112.25943	
Facility Name	User Guide Demo Plan 2	EDIT
Project Type	ACCT	EDIT
Do you discharge to a regulated WSA?	CARL THAYER V. MEDICAL CENTER USA	Yes EDIT
Point of Discharge Location:		EDIT
Point of Discharge Name	Latitude	Longitude

Step 8: Certify and submit your NOI application

View Guide Home Page 2 Lat: 33.85781 / Long: -112.25943

AZPDES STORMWATER CONSTRUCTION GENERAL PERMIT (CGP) COVERAGE

Pursuant to A.R.S. § 41-1030:

(1) ADEQ shall not base a licensing decision, in whole or in part, on a requirement or condition not specifically authorized by statute or rule. General authority in a statute does not authorize a requirement or condition unless a rule is made pursuant to it that specifically authorizes the requirement or condition.

(2) Prohibited licensing decisions may be challenged in a private civil action. Relief may be awarded to the prevailing party against ADEQ, including reasonable attorney fees, damages, and all fees associated with the license application.

(3) ADEQ employees may not intentionally or knowingly violate the requirement for specific licensing authority. Violation is cause for disciplinary action or dismissal, pursuant to ADEQ's adopted personnel policy. ADEQ employees are still afforded the immunity in A.R.S. §§ 12-621.01 and 12-620.02.

Certify your submission.

By checking this box I certify under penalty of law that this submittal was prepared by me, or under my direction or supervision of personnel appropriately qualified to properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that all information submitted to ADEQ is public record unless otherwise identified by law as confidential. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Please verify your identity by answering the following security question.

*Indicates required field

Question: What is the name of your favorite childhood teacher?

Answer:

myDEQ - GET A NEW STORMWATER NOI

Step 9: Make Payment

• Payment can be made with: Visa, MasterCard or e-check.

Step 10: Save your NOI Certificate

If no SWPPP is required, you will see a PDF icon (on the right of the confirmation page) that indicates your NOI application has been approved for coverage. Click the PDF icon to download/print your NOI Certificate of permit coverage.

CONFIRMATION FOR MANAGING CGP COVERAGE IN myDEQ

Your Notice of Intent (NOI) has been approved. You can now modify and terminate your coverage online through myDEQ 24/7.



*NOI CERTIFICATE

Please click the PDF icon to the right to save/print your Notice Of Intent (NOI) Certificate.

LTF #: 66122

AZCON #: AZCN66122

* This document will also be emailed to you.

RETURN TO mySTUFF



ATTACHMENT E

Acknowledgement of SWPPP

INDUSTRIAL TENANT SWPPP ACKNOWLEDGEMENT AND ACCEPTANCE SHEET

**Sedona–OakCreek Airport
235 Air Terminal Drive
Sedona, Arizona 86336**

We, the undersigned have reviewed the Sedona–Oak Creek Airport Stormwater Pollution Prevention Plan (SWPPP) and any revisions in their entirety and to the best of our knowledge believe all information to be true and factual and will implement the SWPPP in accordance with the requirements herein.

Plan Reviewed and Accepted by:

Airport Rent a Car of Sedona

Contact Name: Adam Deibel

Contact Signature: _____ Date: _____

Civil Air Patrol – Unit 205

Contact Name: John Rosenthal

Contact Signature: _____ Date: _____

Guidance Aviation

Contact Name: Jamaica Bergstrom

Contact Signature: _____ Date: _____

Red Rock Aviation

Contact Name: Michael Baisden

Contact Signature: _____ Date: _____

Red Rock Balloons

Contact Name: Phil Harvey

Contact Signature: _____ Date: _____

Sedona Air Tours, Sky Safari, Red Rock Biplane and Helicopter Tours, Dakota Air Tours

Contact Name: Eric Brunner

Contact Signature: _____ Date: _____

NON-INDUSTRIAL TENANT SWPPP ACKNOWLEDGEMENT SHEET

Sedona–OakCreek Airport
235 Air Terminal Drive
Sedona, Arizona 86336

We, the undersigned have reviewed the Sedona–Oak Creek Airport Stormwater Pollution Prevention Plan (SWPPP) and any revisions in their entirety and to the best of our knowledge believe all information to be true and factual and will implement good housekeeping practices with regards to our actions.

Plan Reviewed and Accepted by:

Masonic Lodge

Contact Name: _____

Contact Signature: _____ Date: _____

Mesa Grill

Contact Name: _____ Mithat Evirgen _____

Contact Signature: _____ Date: _____

Scenic Overlook

Contact Name: _____

Contact Signature: _____ Date: _____

Sedona Fire Department

Contact Name: _____

Contact Signature: _____ Date: _____

Sky Ranch Lodge

Contact Name: _____ Victoria Naylor _____

Contact Signature: _____ Date: _____

Yavapai County

Contact Name: _____ Jack Fields _____

Contact Signature: _____ Date: _____

ATTACHMENT F

**ADEQ 2019 Multi-Sector General Permit
Requirements at a Glance (Compliance Tracker)**



2019 Multi-Sector General Permit Requirements at a Glance

Year 20__ - 20__

Permit Requirement	Quarter 1 June 1-Aug 31	Quarter 2 Sept 1-Nov 30	Quarter 3 Dec 1-Feb 28	Quarter 4 Mar 1-May 31
Routine Site Inspections (Part 4.1)	Conduct Routine Inspection of the Site. <input type="checkbox"/> Complete 1 of 4	Conduct Routine Inspection of the Site. <input type="checkbox"/> Complete 2 of 4	Conduct Routine Inspection of the Site. <input type="checkbox"/> Complete 3 of 4	Conduct Routine Inspection of the Site. <input type="checkbox"/> Complete 4 of 4
	<i>Conduct one quarterly Routine Inspection during a rain event.</i> The intent of this requirement is to inspect outfalls for discharges and to observe control measures for proper operation and efficacy. <input type="checkbox"/> Completed with Inspection # __ of 4 <input type="checkbox"/> There was no rain / discharge during any inspection			
SWPPP Documentation and Revision (Part 5.4)	Record explanations for missed inspections, visual assessments or monitoring. <input type="checkbox"/> Complete <input type="checkbox"/> N/A	Record explanations for missed inspections, visual assessments or monitoring. <input type="checkbox"/> Complete <input type="checkbox"/> N/A	Record explanations for missed inspections, visual assessments or monitoring. <input type="checkbox"/> Complete <input type="checkbox"/> N/A	Record explanations for missed inspections, visual assessments or monitoring. <input type="checkbox"/> Complete <input type="checkbox"/> N/A
	Revise SWPPP as necessary following changes to control measures, corrective actions or other tasks to keep the Stormwater Program up-to-date. Track changes and updates on the SWPPP Revision Log. <input type="checkbox"/> SWPPP Changes Complete this year <input type="checkbox"/> SWPPP Changes Not required this year			
Training (Part 2.1.1.8)	Conduct training (at least annually) for all members of the stormwater team and all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the permit. Include specific control measures and monitoring and inspection procedures. <i>Have every attendee sign a training log and include copy of the log in the SWPPP.</i> Provide annual training for each stormwater employee and maintain a record of the training in the SWPPP. <input type="checkbox"/> Completed training <input type="checkbox"/> Recorded training in SWPPP			
CMAR Reporting (Part 7.2)	Control Measure Assessment Report (CMAR) due within 30 days of receiving laboratory analytical data verifying a routine analytical monitoring concentration above an action level. <input type="checkbox"/> CMAR Not Required <input type="checkbox"/> Completed CMAR Date Submitted:			
Corrective Action Report (Part 3.0)	Submit Corrective Action Report (CAR) Report within 30 days discovery of an incident in Part 3.1.1., if required. <input type="checkbox"/> CAR Not Required <input type="checkbox"/> Completed CAR Date Submitted:			
Other Reporting (Part 7.3)	Other reporting submitted may consist of 5-Day, Reportable Quantity Spill Report, Planned Changes, Non-Compliance. <input type="checkbox"/> Other Reporting Not Required <input type="checkbox"/> Completed Other Reporting Date Submitted:			

Permit Requirement	Summer Wet Season June 1-Oct 31		Winter Wet Season Nov 1-May 31	
Visual Assessments (Part 4.2)	Perform Visual Assessment of stormwater discharge from the facility.	Perform Visual Assessment of stormwater discharge from the facility.	Perform Visual Assessment of stormwater discharge from the facility.	Perform Visual Assessment of stormwater discharge from the facility.
	Record “No Discharge” if no stormwater discharges were observed leaving the facility <i>during the rain event.</i> <input type="checkbox"/> Complete 1 of 4	Record “No Discharge” if no stormwater discharges were observed leaving the facility <i>during the rain event.</i> <input type="checkbox"/> Complete 2 of 4	Record “No Discharge” if no stormwater discharges were observed leaving the facility <i>during the rain event.</i> <input type="checkbox"/> Complete 3 of 4	Record “No Discharge” if no stormwater discharges were observed leaving the facility <i>during the rain event.</i> <input type="checkbox"/> Complete 4 of 4
Analytical Monitoring (Part 6.0)	If required: Routine Analytical, Effluent Limitation Guideline (ELG), Impaired Waters or other analytical monitoring. <input type="checkbox"/> Complete Summer Wet Sample <input type="checkbox"/> No data to report		If required: Routine Analytical, Effluent Limitation Guideline (ELG), Impaired Waters or other analytical monitoring. <input type="checkbox"/> Complete Winter Wet Sample <input type="checkbox"/> No data to report	
DMR Reporting (Part 7.1)	Submit Discharge Monitoring Reports (DMR) for all outfalls within 30 days of receiving lab data OR submit “No Data to Report” DMRs by November 30th. <input type="checkbox"/> Complete Summer Wet Reporting		Submit Discharge Monitoring Reports (DMR) for all outfalls within 30 days of receiving lab data OR submit “No Data” DMRs by June 30th. <input type="checkbox"/> Complete Winter Wet Reporting	

Note: This form is not required to be used. This form is not to be considered comprehensive of all possible permit requirements to be complied with by each permitted facility.

ATTACHMENT G

Training Log

SWPPP TRAINING LOG

Facility Name: _____

Facility Location: _____

Instructor's Name(s): _____

Instructor's Title(s): _____

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- | | |
|--|---|
| <input type="checkbox"/> SWPPP Overview | <input type="checkbox"/> Management of Stormwater Flows |
| <input type="checkbox"/> Pollutant Sources | <input type="checkbox"/> Implementation and Maintenance of Control Measures |
| <input type="checkbox"/> Good Housekeeping BMPs | <input type="checkbox"/> Erosion and Sediment Control BMPs |
| <input type="checkbox"/> Non-Stormwater BMPs | <input type="checkbox"/> Spill Prevention and Emergency Response Procedures |
| <input type="checkbox"/> Monitoring and Sampling | <input type="checkbox"/> Routine Inspections and Visual Assessments |
| <input type="checkbox"/> Reporting and Recordkeeping | <input type="checkbox"/> Other |

Specific Training Objective: _____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

ATTACHMENT H
SWPPP Amendment Log

SWPPP AMENDMENT LOG

Facility Name: _____ Facility Location: _____

SWPPP Contact Name(s): _____

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

ATTACHMENT I

Control Measure Assessment Report Forms



Multi-Sector General Permit (MSGP)

Control Measure Assessment Report (CMAR)

Submit the completed form to stormwatercompliance@azdeq.gov or mail to:
 ADEQ
 Surface Water Permits, MC 5415A-1
 1110 W. Washington Street
 Phoenix, AZ 85007

1. Facility Information

Name of Permittee:	AZPDES Permit ID#:
--------------------	--------------------

2. Control Measure Assessment Information

Date of Discovery:

3. Outfall Information

Outfall Name	Sample Date	Parameter	Parameter Value	Units	Action Level

Enter the previous sample result for this parameter

--	--	--	--	--	--

Reason sample value was above action level:

Control measures that were evaluated, including the date of the evaluation:

Date control measure modified, if applicable:

Describe any follow-up actions (more frequent inspections, additional training, etc.) if any:



Multi-Sector General Permit (MSGP)

Was the Stormwater Pollution Prevention Plan (SWPPP) updated? Yes No

Certification: I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision, and under a system designed to ensure that qualified personnel properly gathered and evaluated the information used to determine whether the applicable requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature:

Date:

Title:

Print and place a copy of this form in your SWPPP.

ATTACHMENT J

**U.S. Environmental Protection Agency's Industrial Stormwater Monitoring and
Sampling Guide, March 2009**



EPA 832-B-09-003



Industrial Stormwater Monitoring and Sampling Guide

March 2009

Final Draft



Acknowledgements

All photos are courtesy of Tetra Tech, Inc. Sampling illustrations in Section 2 are courtesy of Washington Department of Ecology's guide on *How To Do Stormwater Sampling: A guide for industrial facilities* (available at <http://www.ecy.wa.gov/pubs/0210071.pdf>)

Final Draft Prepublication Copy

A formatted version of this guide will be available in April, 2009.

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Industrial Stormwater Monitoring and Sampling Guide

The Industrial Stormwater Monitoring and Sampling Guide (“guide”) is a how-to primer for industrial facility operators on how to conduct visual and analytical monitoring of stormwater discharges. The target audience is operators of facilities subject to the U.S. Environmental Protection Agency’s (EPA) 2008 Multi-Sector General Permit (2008 MSGP) or a similar State-issued industrial stormwater permit. The information presented will also be useful to anyone interested in industrial stormwater monitoring. The procedures presented in this guide, specifically related to monitoring methodology and quality assurance, will help ensure that stormwater samples yield usable information.

The 2008 MSGP covers specific industrial activities (see Appendix D of the 2008 MSGP, available at www.epa.gov/npdes/msgp) in States, territories, and Indian Country lands where EPA is the National Pollutant Discharge Elimination System (NPDES) permitting authority (i.e., in those States or territories not authorized to issue NPDES permits themselves – see Appendix C of the 2008 MSGP).

This guide does not impose any new legally binding requirements on EPA, States, or the regulated community, and does not confer legal rights or impose legal obligations upon any member of the public. In the event of a conflict between the discussion in this document and any statute, regulation, or permit, this document would not be controlling.

***Monitoring vs. Sampling.* In this guide, “sampling” refers to the actual, physical collection and analysis of stormwater samples. The term “monitoring” refers to both sampling and visual observations of stormwater discharges, including the related preparation and documentation tasks.**

Interested parties are free to raise questions and objections about the substance of this guide and the appropriateness of the application of this guide to a particular situation. EPA and other decision makers retain the discretion to adopt approaches on a case-by-case basis that differ from those described in this guide where appropriate.

1. Introduction to Stormwater Monitoring and Sampling

Most industrial stormwater permits require installation and implementation of control measures to minimize or eliminate pollutants in stormwater runoff from your facility. The control measures you choose for your facility must be documented in your facility-specific Stormwater Pollution Prevention Plan (SWPPP). The results of your stormwater monitoring will help you determine the effectiveness of your control measures, and overall stormwater management program. Evaluation of your stormwater management program will include inspections, visual assessments, and monitoring (i.e., sampling) of specified stormwater discharges. Regular stormwater inspections and visual assessments provide qualitative information on whether there are unaddressed potential pollutant sources at your site, and whether existing control measures are effective or need to be reevaluated. Stormwater sampling provides quantitative (i.e., numeric) data to determine pollutant concentrations in runoff and, in turn, the degree to which your control measures are effectively minimizing contact between stormwater and pollutant sources, and the success of your stormwater control approach in meeting applicable discharge requirements or effluent limits.

The following are the types of industrial stormwater monitoring requirements typically included in industrial general permits:

Industrial Stormwater Monitoring and Sampling Guide

- Visual Assessments of Discharges.** Permittees are required to regularly and frequently (e.g., quarterly under the 2008 MSGP) take a grab sample during a rain event and assess key visual indicators of stormwater pollution – color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other qualitative markers of pollution. The findings of these assessments are used to trigger further facility inspections and corrective actions to modify problems found at the site.
- Indicator or Benchmark Sampling.** Stormwater samples are collected from a site’s discharge points (or outfalls) for laboratory analysis and the results are compared with benchmark pollutant concentrations as an indicator of the performance of stormwater control measures. A benchmark pollutant concentration is a level above which a stormwater discharge could adversely affect receiving water quality (and control measures must be evaluated) and, if below, the facility is not expected to have an impact on receiving water quality. This type of monitoring differs from “compliance monitoring” (see below) in that exceedances of the indicator or benchmark levels are not considered violations, but rather “red flags” that could point to a problem at the site with exposed pollutant sources or control measures that are not working correctly. For instance, the 2008 MSGP includes “benchmarks” that are based to a large degree on EPA’s aquatic life criteria. Where the average of samples taken over four consecutive quarters exceed the applicable benchmark concentration of a particular pollutant, the permittee is required to investigate whether the higher pollutant levels can be attributed to some pollutant source or faulty control measure(s), and to address such problems through corrective action and possibly further monitoring.
- Compliance Sampling.** Where a facility is subject to one of the Federal effluent limitation guidelines (ELGs) addressing limits on stormwater runoff, sampling is required to determine compliance with those limits. Table 1 provides a list of the current applicable effluent limitation guidelines.

Table 1. Applicable Effluent Limitations Guidelines (2008 MSGP Part 2.1.3)	
Regulated Activity	40 CFR Part/Subpart
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I
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
Runoff from asphalt emulsion facilities	Part 443, Subpart A
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D
Runoff from hazardous waste landfills	Part 445, Subpart A
Runoff from non-hazardous waste landfills	Part 445, Subpart B
Runoff from coal storage piles at steam electric generating facilities	Part 423

These limits are required to be included in all general industrial permits. Typically, permits require corrective action and further sampling when an effluent limitation is exceeded. An exceedance of an applicable effluent limitation guideline constitutes a violation of the permit.

- **Monitoring Requirements for Discharges to Impaired Waters** - General industrial permits may have special monitoring requirements for facilities that discharge pollutants of concern into impaired waters.

For an explanation of these monitoring requirements in the 2008 MSGP see Part 6.2. Part 8 of the 2008 MSGP includes the benchmark and effluent limitation guideline monitoring requirements for each of the industrial sectors affected by such requirements.

2. Preparation for Monitoring

This section describes the information you will need before monitoring. While this guide is meant to be a general primer for anyone interested in industrial stormwater monitoring, Section 2 follows the organization of the 2008 MSGP. Many State general permits are very similar to the 2008 MSGP. It is EPA's hope that this format will be of use to permittees in most states. However, if you are subject to a State industrial general permit, you should compare your permit's monitoring requirements to the requirements reflected in this guide to ensure that you are following all applicable State requirements.

In general, preparation is critical to make sure that industrial stormwater monitoring is conducted properly and in a timely manner. Most of this information should have been collected previously for the purposes of submitting your permit application or Notice of Intent (NOI), and in developing the monitoring procedures section of your stormwater pollution prevention plan (SWPPP). However, this guide reviews some of the steps necessary to develop this information, such as the site map component of the SWPPP, in case facilities have not already done so. If you have already completed any of these steps in this section, you can skip to the next application section or subsection in this guide. For more information on how to develop a SWPPP, refer to EPA's guide *Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators*, available on EPA's website at www.epa.gov/npdes/stormwater/msgp.

If you have already submitted your NOI, the following documents will serve as good resources for information that you will need prior to monitoring:

- A copy of your NOI or application submitted to EPA or a State, and your assigned permit registration number.
- A copy of the EPA/State response to your NOI/permit application submission if it includes specific details pertaining to your monitoring (e.g., pollutants required to be monitored, frequency of monitoring, benchmark or compliance sampling requirements, etc.).
- A copy of your applicable permit, including the accompanying fact sheet.
- A complete copy of your SWPPP, which must include a detailed site map of your facility with locations of all stormwater monitoring points, and a description of the procedures you or your

stormwater pollution prevention team will follow when conducting monitoring and visual assessments.

2.1 Determine Where Stormwater Is Discharged From Your Property

If you have not already done so, walk the grounds and perimeter of your facility during a storm event to identify where runoff discharges from the site (known as “outfalls”). Outfalls are locations where stormwater exits the facility property, including pipes, ditches, swales, and other structures that transport stormwater. If possible, walk outside the boundary of your facility to identify outfalls that may not be apparent from within your site.



Stormwater discharges to the slot drain and is conveyed offsite through a valved pipe.

You should note where:

- Concentrated stormwater exits your facility (e.g., through a pipe, ditch or similar conveyance). These outlets are usually good sampling points.
- Dispersed runoff (i.e. sheet flow) flows offsite (e.g., through a grassy area or across a parking lot). Note whether concentrated flows commingle with the sheet flow.
- Storm drain inlets or catch basins are located. Try to determine where the storm drains send your runoff (e.g., to your municipal separate storm sewer system [MS4], to a combined sewer system, to the separated sanitary sewer, or directly to a nearby waterbody).

- Authorized non-stormwater discharges commingle with stormwater prior to discharge (such commingled discharges may be covered under your permit).
- Areas where stormwater might enter your facility from neighboring facilities and commingle with your stormwater discharges.

Terms to Know:

Combined Sewer System: Combined sewer systems are sewers that are designed to collect rainwater runoff, domestic sewage, and industrial wastewater in the same pipe. Most of the time, combined sewer systems transport all of their wastewater to a sewage treatment plant, where it is treated and then discharged to a water body. During periods of heavy rainfall or snowmelt, however, the wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. For this reason, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, or other water bodies.

MS4: A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) which are owned and operated by a ... public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes ... that discharges to waters of the United States; designed or used for collecting or conveying stormwater; which is not a combined sewer; and which is not part of a publicly owned treatment works (POTW). [40 CFR 122.26(b)(8)].

Mark these locations on your facility site map, which will be included as part of your SWPPP, and label each outfall location with unique identifiers to differentiate them. For example, you may decide to name the different outfalls according to where the stormwater is being discharged, such as MS4-1, MS4-2, etc. for outfalls discharging to the MS4 or ST-1, ST-2, etc. for outfalls discharging directly to an adjacent stream. Using unique identifiers will help you to coordinate monitoring requirements.

In addition to marking the outfalls on the map, you will need to determine the drainage area for each discharge point. If your facility is large and has significant changes in elevation, a topographic map may be necessary. However, if your facility is small and relatively flat, the best way to define the drainage area for each outfall is an on-the-ground visual assessment, preferably during a rain event. Sketch the basic drainage areas on the map for each outfall. Knowing the drainage area for each outfall is helpful when your sampling indicates problems at that outfall. You can focus your efforts on the industrial materials and activities in that drainage area, instead of the entire site, to identify what may be causing the problem.

2.2 Determine Where You Will Collect Samples

Now that you have determined the different points of discharge from your site, you will need to select the exact locations from which you will be collecting your stormwater samples. Note that Part 5.1.5.2 of the 2008 MSGP requires industrial operators to document in their SWPPPs the location where samples will be collected. Generally, industrial stormwater permits require that you sample stormwater discharges prior to the stormwater leaving your facility, and at a location downstream from all of your industrial materials and activities. The reason behind requiring such a location is so that the sample is

Industrial Stormwater Monitoring and Sampling Guide

representative of your facility's discharge, taking into account the types of pollutants that may be contained in runoff from the property.

Appropriate sample locations include:

- Underground pipes that collect stormwater from drop inlets and convey stormwater to an offsite location (e.g., street, curb or MS4). Be sure you collect only the stormwater discharging from your facility and not the baseflow in the pipes that is being discharged from facilities upstream. Do not enter underground locations to collect samples. Use a pole with a sampling container attached at the end to collect the sample.



- Open ditches, gutters or swales that carry stormwater from your facility to an offsite location. If these conveyances contain runoff from another facility, it is important to note that in your SWPPP;



- Facility driveways and other street access points; and



- Outlets discharging offsite from onsite stormwater detention ponds or other types of structural control measures. It is important to sample at the OUTLET of your structural control measures, as opposed to the INLET of such structures, in order to determine the quality of the water after treatment.



Where to Sample When There Are Multiple Discharge Points

You are required to monitor all outfalls that receive stormwater discharges from your industrial activity. See Part 6.1.1 of the 2008 MSGP. If you have multiple stormwater discharge points at your facility, you need to identify which outfalls are associated with industrial materials and activities, and monitor those outfalls. Understanding the hydrologic connection between your outfalls and the parts of your facility that drain to those points, and the pollutants associated with the industrial activities in these areas, will assist you in designing a monitoring program that is representative of the pollutants being discharged from your site. Developing such an understanding will also help later on when you begin to assess your sampling results and determine where improvements could be made to your stormwater control measures. The site map you prepare (see Part 5.1.2 of the 2008 MSGP) will help you understand the correlation between your areas of potential pollutant sources, the direction of stormwater flow from those areas, and the discharge points.

Note that you are not required to monitor at outfall locations that receive stormwater flow only from unregulated areas of your site (i.e., there are no industrial materials or activities in the drainage area). For instance, a hypothetical facility may have two outfalls, one that receives discharges from an area where industrial materials are handled and stored, and a second outfall that receives discharges from an unregulated parking lot used by employees. In this scenario, the industrial permittee would only collect samples from the first outfall because it discharges stormwater associated with industrial activity. Alternatively, if the site's second outfall (e.g., the outfall receiving runoff from the parking lot) also drains areas of the facility with regulated industrial activities, then this outfall would also need to be sampled. In this situation, sampling for this outfall should be done at a location prior to where the two flows commingle so that you are capturing the industrial portion of the flow. See Part 6.1.2 of the 2008 MSGP.

Where to Sample if Outfalls Are Substantially Identical

If your facility has two or more outfalls whose discharges are “substantially identical,” some industrial stormwater permits, including the 2008 MSGP, allow you to monitor the discharge at just one representative outfall and apply the results to the other substantially identical outfalls. EPA defines “substantially identical” in the 2008 MSGP as follows:

“... two or more outfalls that you believe discharge substantially identical 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” See Part 6.1.1 of the 2008 MSGP.

The flexibility provided to permittees to sample at just one location, which is considered representative of all substantially identical outfalls, is an exception to the rule stated above that samples must be taken from all outfalls at a facility. Note that this exception does not apply to compliance monitoring (effluent limitation guideline monitoring), which must be conducted at each outfall to which the effluent guideline applies.

In choosing which of the substantially identical outfalls from which to sample, you should select the outfall that has been observed to have the most consistent flow. To use the substantially identical outfall exception, you must document in your SWPPP how the two or more outfalls are substantially identical, based on the above definition. You will need to document the following information:

- The locations of the outfalls;
- Estimated size of the drainage area (in square feet) for each outfall;
- General industrial activities conducted in the drainage area of each outfall;
- Control measures being implemented in the drainage area of each outfall;
- Why the outfalls are expected to discharge similar stormwater; and
- An estimate of the runoff coefficient of the drainage areas (0.0 no runoff potential to 1.0 all precipitation runs off).

The runoff coefficient is the ratio of excess runoff to the amount of precipitation for a given time over a given area, with a 0 (zero) runoff coefficient meaning no runoff potential and 1.0 (one) meaning a completely impervious surface and all stormwater runs off. The runoff coefficient is related to the amount of impervious surfaces (buildings, pavement, sidewalks, etc.) versus pervious surfaces (grass,

graveled areas, etc.) at the site. The more impervious surface a facility has, the larger the runoff coefficient. Light industrial facilities typically have a runoff coefficient between 0.50 and 0.80 and heavy industrial facilities typically have a runoff coefficient between 0.60 and 0.90.

Here is an example where a facility could take advantage of the “substantially identical outfalls” exception: a metal recycling facility with a large scrap metal pile has three separate outfalls that are each connected by their own drainage ditch to different portions of the same pile, and the runoff that is discharged is managed using the same type of control measure in each drainage area. In this scenario, the facility’s operator can use the “substantially identical outfall” exception because the industrial activities at the site are all the same, the runoff flows through exposed areas that presumably contribute the same type of pollutants, and the drainage area has the same or similar runoff coefficients. Note that the substantially identical outfall exception could not be used if there were in fact differences in any of the required components defined above.

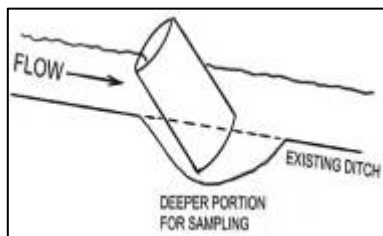
If your permit does allow you to use a substantially identical outfall exception, make sure you carefully review the type of monitoring for which this exception applies. For instance, while the 2008 MSGP allows permittees to use the substantially identical outfall exception for benchmark and visual assessment samples, the permit prohibits use of this exception for compliance monitoring (e.g., for use in showing compliance with numeric effluent limitation guidelines). Therefore, if a facility permitted under the 2008 MSGP is subject to a numeric limit based on an EPA effluent limitation guideline, it would have to monitor all outfalls at the site receiving flows from the applicable industrial activities. See Part 6.2.2.2 of the 2008 MSGP.

Where to collect a sample

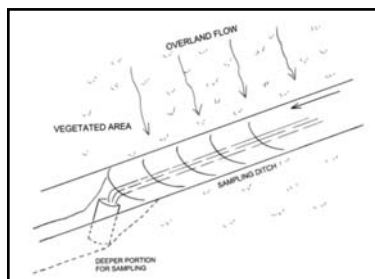
Sampling Sheet Flow

In some areas of your facility it may be difficult to obtain a sample because the runoff drains as sheet flow before it becomes concentrated enough for sampling. If the flow is too shallow to directly fill a collection bottle, you can overcome this by:

- Concentrating the sheet flow by excavating a small depression in an existing ditch or other location where stormwater runoff flows.

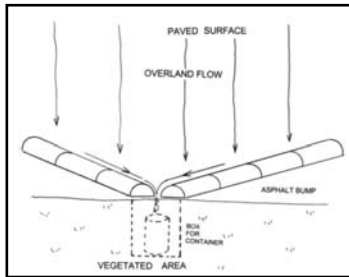


- Installing a trough, gutter or ditch to intercept and concentrate stormwater flow.



Industrial Stormwater Monitoring and Sampling Guide

- Installing “speed” bumps to convey and concentrate a large area of sheet flow.



Collecting a sheet flow stormwater sample.

You should make these modifications during a period when rain is not forecast so any pollutants generated can be cleaned up before a storm hits. Also, if you dig a ditch or disturb the earth in some way, line the disturbance with concrete or plastic so that you do not contaminate your stormwater samples with sediment or other pollutants.

Sampling from a Pipe

For runoff flowing through a pipe into a ditch or receiving water, you should sample the outflow directly from the pipe. For hard-to-reach pipes, it may be necessary to fasten a collection bottle to a pole (see Sampling from a Manhole in Table 2 below).

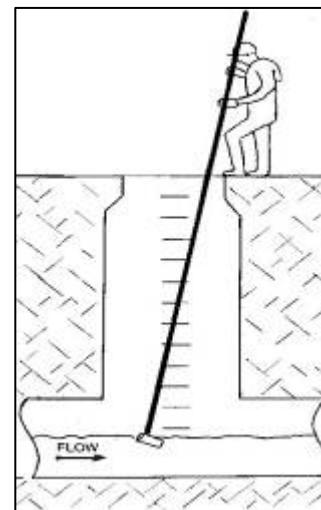
When collecting any type of stormwater sample it is imperative that the sample is collected before the stormwater reaches the receiving water.

Sampling From a Drainage Ditch or Swale

If your stormwater is discharged via a drainage ditch or vegetated swale, take a grab sample from a consistently flowing part of the ditch / swale. If the ditch / swale is too small or shallow, install a barrier device in the channel or deepen a small area so you are able to sample directly into the bottles. Allow sufficient time to pass after disturbing the bottom so that any solids stirred up do not contaminate your sample.

Sampling From a Stormwater Detention / Retention Basin or Other Treatment Device

If it is necessary for you to sample from a detention or retention basin, do so at the outfall of the structure. Collecting samples from stagnant or slowly moving water inside a pond will not yield a representative sample as the pollutants might not be adequately mixed. Stormwater basins may hold stormwater for long periods of time. Collect your sample within 30 minutes from when the pond begins to discharge.



Potential Sampling Issues

Depending on the location of your monitoring points, you may encounter additional challenges beyond deciding which sampling technique to employ at each site. Table 2 identifies some stormwater sampling problems common to industrial facilities and guidance for how EPA suggests you address them if they occur at your site.

Table 2. Solutions to Typical Stormwater Sampling Problems

Problem	Solution
Run-on from Neighboring Properties	Ideally, your stormwater samples will contain only runoff from your site. However, stormwater from a neighboring facility can “run on” and commingle with your own regulated discharge, possibly adding contaminants not found at your facility. You are responsible for any and all pollutants discharged from your site irrespective of the pollutants’ origin and whether the other facility has permit coverage. This responsibility includes run-on discharges from neighboring properties if this discharge commingles with your own regulated discharge. To accommodate stormwater run-on, EPA requires as part of the SWPPP site description that you document the locations and sources of run-on. As part of this documentation, if you collect and analyze samples of the run-on, you will need to report all such findings in your SWPPP.
Stormwater from industrial areas commingles with stormwater discharges from non-industrial areas or areas not regulated under the MSGP before it reaches the surface water body or MS4.	Attempt to sample the industrial stormwater discharge before it mixes with stormwater from non-industrial areas.
Adverse Weather Conditions	High tides and high flow or flood conditions can cause stormwater conveyances to reach maximum capacity, pipes to become clogged or submerged, and other unrepresentative flow situations. High flows could also be dangerous, so you should use your best professional judgment when selecting sampling locations. In some cases you may need to sample at a point before the intended outfall location.
There are numerous stormwater outfalls in one area.	Construct an impound channel or join together flows by building a weir or digging a ditch to collect discharge at a low point for sampling purposes. This artificial collection point should be lined with plastic to prevent infiltration and the introduction of

Problem	Solution
	sediment. Or, alternatively, sample at several locations to represent total site runoff.
The outfall is inaccessible (examples include underwater discharges or unreachable discharges such as a pipe discharging out of a cliff).	Go upstream of the discharge until a sample can be taken (i.e., to the nearest manhole or inspection point). You may need to sample at several locations to best represent runoff from this discharge point if you cannot access an upstream location.
A facility has many sampling locations making it difficult to collect all of the samples during the first 30 minutes of discharge, as required by the 2008 MSGP.	Have a sampling crew ready when storms are forecast so that all outfalls can be sampled during the first 30 minutes. Also, automatic samplers may be used to collect samples within the first 30 minutes, triggered by the amount of rainfall, the depth of flow, flow volume or time.
A stormwater sample location is beneath a manhole.	For accessibility and safety, use a sampling pole to collect samples from a manhole. Before a person can enter a manhole to collect a sample, they must be trained in confined space entry.
Stormwater from more than one industry type is commingled.	You must comply with monitoring requirements for all applicable sectors and SIC codes.

2.3 Determine Which Types of Monitoring Requirements Apply At Each Outfall

The next step in preparing for monitoring at your site is to determine the type of monitoring requirements that correspond to each outfall. The type of monitoring requirements to which you are subject will differ according to your permit. Different monitoring requirements may also apply to individual outfalls on your property based on the type of industrial activity discharging to that point, and even the receiving water to which you are discharging. Using your permit, determine the type of monitoring requirements to which your specific facility is subject, and document in your SWPPP the specific monitoring requirements that applies to each outfall, including the frequency of monitoring and the specific parameters that must be monitored.

Recall that it is not necessary to monitor an outfall if it does not have any industrial activity associated with it (e.g., discharge from an employee parking lot that does not commingle with stormwater runoff from an area of industrial activity) or if the outfall does not drain to a surface water (i.e. the outfall drains to a sanitary sewer or combined sewer system).

The following applies to the types of monitoring required under the 2008 MSGP. If you are not subject to the 2008 MSGP, consult your State permit to determine your monitoring requirements.

- **Visual Assessments** (Part 4.2 of the 2008 MSGP) – All 2008 MSGP permittees are required to collect samples of their stormwater discharge for visual inspection. The following qualitative characteristics must be assessed:
 - color;
 - odor;
 - clarity;
 - floating solids;
 - settled solids;
 - suspended solids;
 - foam;
 - oil sheen; and

- other obvious indicators of stormwater pollution.

Visual assessments must be conducted at all outfalls, although if several outfalls are “substantially identical” then only one visual assessment must be conducted on the set of outfalls. The sampling frequency for visual assessments under the 2008 MSGP is quarterly. The monitoring quarters are: January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31.

- **Benchmark Monitoring** (Part 6.2.1 of the 2008 MSGP) – This type of analytic monitoring applies to certain industrial sectors regulated under the 2008 MSGP. Permittees subject to these requirements must take periodic grab samples of their stormwater discharge to compare the concentrations of key indicator pollutants to their corresponding benchmark concentrations. The benchmark values are based in large part on EPA’s aquatic life water quality criteria and are meant to serve as indicators of how well a facility’s stormwater control efforts are working. If a particular benchmark is exceeded, this indicates to a permittee that there may be a problem at the site, such as a spill, exposed pollutant source, or a faulty control measure, and triggers a required review of the potential problem to determine what corrective actions are necessary. For example, a total suspended solids (TSS) concentration found in a benchmark sample of greater than 100 mg/L, which is the applicable benchmark concentration for TSS, would require a facility to re-evaluate and potentially revise control measures implemented to control dust, soil erosion, or other sources of suspended solids. Note that the exceedance of the benchmark is not a violation (because benchmarks are typically not enforceable limits), but the failure to conduct the follow-up investigation and applicable corrective actions would be a violation of the permit.

Be sure to update your SWPPP and site map whenever you change or add new control measures. Control measure maintenance activities must be documented (preferably in a log), and such records must be kept with your SWPPP and stormwater file.

Determine whether you are subject to any benchmark monitoring requirements based on your particular industrial sector or subsector. The benchmark monitoring requirements differ based on the sector or subsector under which a particular facility falls. Note that not all sectors are subject to this type of monitoring. Appendix D in the 2008 MSGP provides the Standard Industrial Classification (SIC) code and activity codes categorized by sectors and subsectors. Use Appendix D to link your industrial activities with their associated SIC code sectors / subsectors. Your facility will have a primary industrial activity and associated SIC or activity code (which is the major determinant of your permit requirements), and, possibly, additional secondary sectors / subsectors with additional requirements for which you must comply. Next, using Part 8 of the 2008 MSGP, under your particular sector or subsector, determine whether you are subject to any benchmark monitoring requirements, and the corresponding benchmark that applies. Consider the following example: if you operate a gold mine (subsector G2) you are subject in Part 8.G.8.2 to the following benchmark monitoring requirements:

Table 3. Subsector G-2.		
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector G2. Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099) (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) ¹	no benchmark value
	Total Antimony	0.64 mg/L
	Total Arsenic	0.15 mg/ L
	Total Beryllium	0.13 mg/L
	Total Cadmium ¹	Hardness Dependent
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent
	Total Mercury	0.0014 mg/L
	Total Nickel ¹	Hardness Dependent
	Total Selenium	0.005 mg/L
	Total Silver ¹	Hardness Dependent
Total Zinc ¹	Hardness Dependent	

Based on this table, you then know the pollutant parameter for which you must conduct benchmark monitoring, and the corresponding benchmark concentration against which you will compare each individual grab sample. Each sector or subsector subject to benchmark monitoring requirements includes a similar table in Part 8 of the 2008 MSGP.

After you have determined which (if any) benchmark sampling requirements apply, document in your SWPPP which outfalls are subject to such requirements, the frequency of monitoring, and the parameters that must be analyzed. If your facility has multiple outfalls, be aware that there may be different requirements for different outfalls depending on the type of industrial activity conducted in the drainage area of each outfall. You are only required to conduct benchmark monitoring for those outfalls with discharges from the specific sectors / subsectors that are affected by such requirements. Where an outfall includes no discharges from those sectors or subsectors for which benchmark monitoring requirements apply, then no benchmark samples need to be taken at that outfall.

The required benchmark monitoring frequency under the 2008 MSGP is quarterly. The monitoring quarters, beginning with the first quarter on April 1, 2009 are: April 1 – June 30, July 1 – September 30, October 1 – December 31 and January 1 – March 31.

Exceptions for Inactive and Unstaffed Sites (Part 6.2.1.3 of the 2008 MSG) – The requirement for benchmark monitoring does not apply to inactive and unstaffed facilities, providing there are no industrial materials or activities exposed to stormwater. This exception only applies to benchmark monitoring requirements and not to the other types of monitoring described above.

To claim this special exemption, you must note on the next quarterly benchmark monitoring report that your facility is inactive and unstaffed, and you must keep an inactive and unstaffed certification onsite (see Part 4.2.1.3). The requirement for conducting a quarterly visual assessment also does not apply inactive and unstaffed sites, as long as there are no industrial materials or activities exposed to stormwater. If you are invoking the exception for inactive and unstaffed sites, maintain a signed and certified statement onsite with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater.

Hardness-Dependent Benchmarks (Appendix J of the 2008 MSGP) – The benchmark values of some metals are dependent on the level of hardness in your receiving waters (see 2008 MSGP, Appendix J). Hardness is a characteristic of water that results from the presence of dissolved salts, especially calcium sulfate or bicarbonate, and is usually reported as carbonate, noncarbonate or calcium + magnesium (Ca + Mg). If you are required to monitor for a hardness-dependent pollutant, you must first determine the hardness of your receiving water before you can establish the corresponding benchmark concentration.

- **Effluent Limitations Monitoring** (Part 6.2.2 of the 2008 MSGP) – Eight of the 2008 MSGP’s 29 industrial sectors are required to monitor to determine if they comply with EPA-defined effluent limitation guidelines. These monitoring requirements are included in Part 8 of the 2008 MSGP. Effluent limitation guidelines are legally enforceable limitations that must not be exceeded in stormwater discharges.

Similar to the benchmark monitoring requirements, samples only need to be taken at those outfalls with discharges from the specific activities that are subject to effluent limitation guidelines; otherwise these requirements do not apply. As stated previously, permittees subject to these monitoring requirements must take samples at all applicable outfalls, and no exceptions are given for substantially identical outfalls. However, if you are required to monitor a pollutant both for benchmark and effluent limitation guideline purposes, you only need to take one sample for both requirements.

When monitoring requirements overlap, e.g., TSS once per year for an effluent limit and once per quarter for benchmark monitoring, you may use a single sample to satisfy both monitoring requirements (i.e., one of your four quarterly benchmark samples would be used for your yearly effluent limit sample).

Table 4 identifies the industrial activities that are subject to effluent limitation guideline monitoring requirements and the associated sampling parameters. Effluent limitation guideline samples must be taken once per year (see Part 8 of the 2008 MSGP for the numerical values of each effluent limit).

Table 4. Required Monitoring for Effluent Limitations Guidelines

Regulated Activity	Where in 2008 MSGP	Sector	Effluent Limit Parameters
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 8.A.7	A	debris, pH
Runoff from phosphate fertilizer manufacturing facilities	Part 8.C.4	C	total P, fluoride

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Regulated Activity	Where in 2008 MSGP	Sector	Effluent Limit Parameters
Runoff from asphalt paving and roofing emulsion facilities	Part 8.D.4	D	total suspended solids (TSS), oil and grease, pH
Runoff from material storage piles at cement manufacturing facilities	Part 8.E.5	E	TSS, pH
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 8.J.9	J	TSS, pH
Runoff from hazardous waste landfills	Part 8.K.6	K	biochemical oxygen demand (BOD ₅), TSS, ammonia, alpha terpineol, benzoic acid, p-cresol, phenol, total recoverable zinc, pH, aniline, naphthalene, pyridine, total recoverable chromium,
Runoff from non-hazardous waste landfills	Part 8.L.10	L	biochemical oxygen demand (BOD ₅), TSS, ammonia, alpha terpineol, benzoic acid, p-cresol, phenol, total recoverable zinc, pH
Discharges from coal storage piles	Part 8.O.8	O	TSS, pH

Determine whether you are subject to any effluent limitation guideline monitoring requirements. Document in your SWPPP which outfalls are subject to such requirements, the frequency of monitoring, and the parameters that must be analyzed.

- Impaired Waters Monitoring** (Part 6.2.4 of the 2008 MSGP) – The 2008 MSGP requires facilities to monitor, at least in the first year of permit coverage (and yearly thereafter depending on the sample results in the first year), for the presence of any pollutant causing an impairment to their receiving water. This requirement is triggered regardless of whether the particular pollutant is used or stored at the industrial site; however the facility may be able to discontinue monitoring after the first year if the pollutant is not present in the sample and is not expected to be present in any discharge. In advance of conducting this monitoring, you should already have a good idea of whether the pollutant will be found in your discharge. When you developed your SWPPP, you conducted a complete inventory of your site to determine what pollutants or pollutant constituents could be discharged in stormwater runoff. See Section 3.1 of EPA’s guide, *Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators*, particularly the discussion about conducting an “Inventory of Materials and Pollutants”. Using this inventory from your SWPPP, you will be able to determine if any materials stored or used at your facility could contribute to impairment of your receiving water.

The next section of this guide includes specific steps to help you determine if you are subject to impaired waters monitoring requirements. After following those steps, document in your SWPPP which outfalls are subject to impaired waters monitoring requirements, the frequency of sampling, and the parameters that must be monitored.

- State / Tribal Monitoring Requirements** (Part 6.2.3 of the 2008 MSGP) – The 2008 MSGP includes a number of additional monitoring requirements that are unique to individual States

and/or Indian Country lands. These requirements are set out in Part 9 of the permit. These requirements may include additional or more frequent benchmark monitoring requirements, alternative benchmark thresholds, or additional parameters that must be monitored to establish compliance with applicable water quality standards.

Based on the State or Indian Country land in which they are located, each 2008 MSGP permittee must consult the applicable Part 9 section to determine what, if any, additional monitoring requirements apply. If you are subject to such requirements, you must document in your SWPPP which outfalls are subject to these provisions, the frequency of applicable sampling, and the parameters that must be monitored

- **Additional Monitoring Required by EPA** – It is possible EPA may require additional monitoring (see 2008 MSGP Part 6.2.5). You will be notified by the Agency if additional monitoring is required.

2.4 Determine if Your Facility is Subject to Impaired Waters Monitoring Requirements

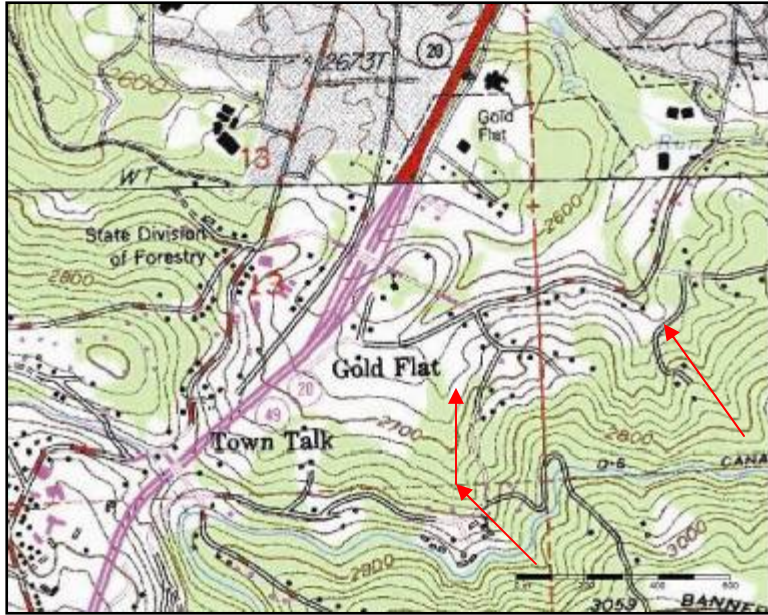
If you are required by your industrial stormwater permit to monitor for pollutants that cause impairment to your receiving water, you must first identify the receiving waters (e.g. ditch, creek, intermittent stream, lake, arroyo, etc.) into which your facility discharges stormwater and mark them on your site map. Note that you will have already identified your receiving waters if you filed an NOI to be covered by the 2008 MSGP.

A. Identify Your Receiving Water(s)

There are several ways to identify your receiving waters. Your receiving water may be a lake, stream, river, ocean, wetland or other waterbody, and may or may not be located adjacent to your facility. Your facility might discharge directly into its receiving water, or indirectly to the receiving water by discharging first through an MS4, ditch, or other conveyance.

Do these monitoring requirements apply to me if I discharge into a dry ditch?
Yes, if the ditch eventually conveys the runoff to a waters of the United States.

If the discharge from your facility does not discharge into an underground storm sewer system, you can use your site map and local topographic maps to pinpoint the closest waterways. Using the contours on the topographic map and your facility's outfall locations, determine the direction stormwater runoff flows from your facility. Once you know the direction of flow, you should be able to identify the receiving waters into which you discharge.



Sample section of a U.S.G.S. quadrangle map, with arrows showing direction of flow.

After identifying where your stormwater enters a waterbody, identify any additional interconnected waters for at least one linear mile downstream from the entrance point of your discharge (in case there are concerns about impacts to these downstream waters).

Resources to help you identify receiving waters:

- EPA's Water Locator Tool (available at www.epa.gov/npdes/stormwater/msgp) allows you to locate nearby receiving waters and impaired waterbodies within a 10 mile radius of your facility.
- EPA's Enviromapper (www.epa.gov/enviro/emef) enables you to find nearby waterbodies by entering your facility's zip code, address, facility name or identification number, EPA Region, watershed, or latitude/longitude data. Additional information on the location of impaired waterbodies can also be obtained.
- Topographic maps, which can be obtained from the U.S. Geological Survey (USGS) at http://topomaps.usgs.gov/ordering_maps.html, or through a retailer.

If your stormwater drains into an MS4, you will likely need to contact the operator of the system (e.g., the local public works department, the highway department, etc.) to identify the first receiving water your stormwater is released to after entering the MS4. Some MS4s have their storm sewer infrastructure maps available online.

Remember, the MS4 into which your facility's stormwater discharges is NOT your receiving water. The first waterbody that the MS4 discharges to after receiving your stormwater is the receiving water for your facility.

B. Determine if Your Receiving Water is Impaired and Whether a TMDL Has Been Completed

Once you have identified your receiving water(s), you will need to find out if the waterbody is impaired, and, if so, whether a total maximum daily load (TMDL) has been approved or established.

- **Water quality impairment status.** You need to determine whether your facility's receiving water is listed by your State as impaired and/or has an approved or established Total Maximum Daily Load (TMDL). EPA's Water Locator Tool (available at www.epa.gov/npdes/stormwater/msggp) will help find impaired waters within a 10 mile radius of your facility. Another place to check is EPA's website on Water Quality Assessment and TMDL information (www.epa.gov/waters/ir) or you can also contact your State water agency (cfpub2.epa.gov/npdes/contacts.cfm?program_id=6&type=STATE).

"Impaired waters" are streams, rivers, and lakes that do not currently meet their applicable designated uses and water quality standards. States, territories, and authorized tribes are required under the Clean Water Act to compile lists of known impaired waters, called 303(d) lists. Stormwater discharges to impaired waters may trigger additional control measures and monitoring requirements. For facilities subject to EPA's 2008 MSGP, see Part 2.2 for a more detailed discussion of water quality-based effluent limitations and conditions for discharging to impaired waters.

If your receiving water is impaired, use EPA's Water Locator Tool or Water Quality Assessment and TMDL website, or a State agency to help you determine:

- For what pollutant(s) is the water impaired? Make a separate list of all pollutants that have caused your waterbody to be impaired.
- Has an approved TMDL been completed for each of the pollutants? Some TMDL documents include information suggesting the type of monitoring that should be conducted to improve the understanding of the impairment or to demonstrate achievement of applicable wasteload allocations (WLAs).

C. Determine What Monitoring Requirements Apply

Having determined the pollutants that cause the impairment, you should now consult your permit to determine the type of monitoring that must be conducted, the frequency of monitoring, and whether any exceptions apply to certain pollutants. As discussed in Section 2.3 above, this must all be documented in your SWPPP so that it is clear which requirements apply to which outfall.

The 2008 MSGP lists several exceptions to and clarifications of the requirement to monitor for each impairment pollutant. In Part 6.2.4.1 of the 2008 MSGP, the permit clarifies that no monitoring is required when a waterbody's biological communities are impaired but no pollutant is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modification, impaired hydrology, or temperature. The permit also clarifies that monitoring is only required for pollutants for which a standard analytical method exists as defined in 40 CFR Part 136. In addition, certain exceptions exist that enable the permittee to be excused from sampling after the first year if it is found either that:

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- The pollutant for which the waterbody is impaired is not detected above natural background levels in the discharge, and it is documented that the pollutant is not expected to be present above natural background discharges; or
- The pollutant for which the waterbody is impaired is not present and not expected to be present in the discharge.

Both the parameters that must be sampled and the frequency of monitoring for impairment pollutants may be subject to State- or Indian Country land-specific requirements. Therefore, each 2008 MSGP permittee must also consult Part 9 of the permit when determining which impaired waters sampling requirements apply.

2.5 What Type of Storm Events Qualify for Monitoring

In addition to understanding which monitoring requirements apply and where, it is also critical to develop an understanding of what type of discharge event you will be sampling. Under the 2008 MSGP, two preconditions must be met before a storm or snowmelt event is considered adequate to be monitored (see Part 6.1.3 of the 2008 MSGP).

- The storm / snowmelt event must create an actual discharge from your site (“measurable storm event”). This storm event will vary based on numerous factors at your site, the most obvious being the actual size and duration of the storm event. However, the amount of impervious surface at your facility will impact this as well. If your facility is covered mostly by grass or another type of vegetation with only a small amount of paved surfaces or roofs, it will take a larger storm to create a discharge from your site than it would at a facility that is entirely paved. Another factor affecting whether and how frequently you have a measurable storm event will be how frequently rain occurs at your facility and the size of the most recent storms. Saturated soil will generate a stormwater discharge more quickly than dry soil; however, VERY dry soil can also become compacted and become nearly impervious to rain, thereby converting precipitation to runoff quickly as well. You will need to pay attention to your facility’s particular characteristics to develop an understanding of what type of rain events or snowmelt results in a discharge.
- At least 72 hours must have elapsed since the previous measurable storm event (unless you are able to document that less than a 72-hour interval is representative for local storm events during the sampling period, or if you are monitoring snowmelt consistent with Part 4.2.1 [quarterly visual assessments] or Part 6.2.1 [benchmark monitoring] of the 2008 MSGP).

In order to properly characterize rain events at your facility, it is a good idea to begin by documenting each event as part of your facility’s routine maintenance activities. You can purchase a simple rain gauge and keep a notebook handy in order to document the dates on which rain occurred and the amount of rain that fell. You should also consider documenting whether or not an actual discharge from your facility occurred for each rain event. Tracking rainfall amounts and discharge information will help you to better predict which storm events will be measureable and result in a discharge.

In order to be prepared to take advantage of storms that will result in a “measurable storm event”:

- Be familiar with local precipitation trends, storm patterns, and seasonal variations.

- Check weather forecasts so you can prepare to sample upcoming precipitation events.
- In addition to your local television news and the Weather Channel, you can get weather information online from <http://www.wrh.noaa.gov> (National Weather Service) and <http://www.weather.com>.

Note: You should try to collect both benchmark samples and visual monitoring samples concurrently so you can compare visual observations with the laboratory results, and reduce your field activities burden.

What To Do If You Are Unable To Sample – EPA acknowledges there may be times you are unable to complete required monitoring. The following are guidelines on how you should deal with such times.

- *Areas with Intermittent Stormwater Runoff* – If your facility experiences limited rainfall for extended periods of the year (i.e., in arid or semi-arid climates), or freezing conditions that often prevent runoff from occurring, then the quarterly monitoring events may be distributed during seasons when discharging does occur. If you are unable to collect four samples in one year because of insufficient runoff, document this fact in your SWPPP and continue quarterly monitoring until you have collected four samples.
- *Snowmelt Sampling* – If you are located where appreciable snow is common, one of your samples must include the capture of snowmelt discharge. If, however, you experience prolonged subfreezing temperatures, you may only be able to acquire a sample once over two quarters. You will then have to complete the monitoring requirements as above.
- *Adverse Weather Conditions* – When adverse weather prevents sampling per your monitoring schedule, you must sample during the next qualifying storm event. Adverse conditions are those that are dangerous or create inaccessibility for personnel, caused by such things as flooding, high winds, electrical storms or situations that otherwise make sampling impractical (e.g., drought or extended frozen conditions).

2.6 Select the Monitoring Team

Identify the members of your facility's pollution prevention team (which you identified in your SWPPP) who will collect samples and conduct visual assessments of discharges. To be considered as a member of the monitoring team, applicable staff must be familiar with the SWPPP, especially the site plan, the layout of the facility, potential pollutant sources, and the monitoring and reporting program. They also need to possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at your facility, and be able to evaluate the effectiveness of control measures.

Ideally, the pollution prevention team consists of at least one individual from each shift so that a team member is always present during normal operating hours.

to

Typically, monitoring staff are based near the site to enable them to be available on short notice to sample storm events.

It is also important that monitoring staff understand and follow all quality assurance quality control (QAQC) techniques and procedures to ensure that the data is good. You should discuss these techniques with your laboratory prior to taking samples and properly train all sampling staff.

2.7 Select a Laboratory to Analyze the Samples

Your stormwater samples will need to be analyzed for the parameters you identified in section 2.3 by a qualified laboratory. Labs must use the approved methodologies found at 40 CFR Part 136 and return a report with chemical concentrations including data quality assurance information.

EPA recommends that you select a laboratory that is a participant in the EPA's Discharge Monitoring Report - Quality Assurance (DMRQA) Program, and, if possible, be approved by the National Environmental Laboratory Accreditation Program (NELAP). NOTE: for ELG compliance monitoring, participation in DMRQA is a minimum requirement.

Things to discuss with the laboratory

- What type and size of bottle will be provided for each test?
- How full do I fill the bottle?
- Are there any safety concerns with materials provided by the lab?
- What is the best way to preserve the samples?
- What kind of labels will be supplied and how should I fill them out?
- Will the lab deliver the supplies or do I need to pick them up?
- What are the maximum holding times for each water quality parameter to be sampled?
- Will the lab provide pH paper? Samples need to be tested for pH within 15 minutes of collection to be valid, typically in the field.
- Will the lab pick up the samples from my facility or do I need to deliver them?
- Can you walk me through filling out the chain-of-custody forms?
- Is the quantitation limit for each parameter less than the benchmark or effluent limitation concentration?*

* The quantitation limit is the minimum concentration of a parameter that the lab can accurately report using a particular method.

- A comprehensive list of NELAP-approved laboratories can be found at www.nelac-institute.org/accred-labs.php
- To ensure your chosen laboratory is eligible and reliable, you may want to request documentation showing they are certified to analyze environmental samples, and evidence they participate in DMRQA or other performance evaluation testing results.

You should ask the laboratory about any additional services and products they offer. Such as:

- pre-labeled bottles and pre-printed chain-of-custody forms;
- training on sample collection, documentation and data interpretation;
- sampling and courier services; and
- complete sampling kits which include bottles, packing materials, bottle labels, coolers and chain-of-custody forms; many laboratories provide free sampling kits.

2.8 Document Monitoring Procedures in Your SWPPP

Ensure your monitoring procedures are correctly documented in your SWPPP (see 2008 MSGP Part 5.1.5.2). The required information includes:

- The monitoring requirements that specifically apply to your facility.
- Information related to the substantially identical outfall exception, if you will use it.
- Your sampling procedures.
- Your procedures for performing quarterly visual assessments of stormwater discharges. This SWPPP element includes the routine facility inspections and comprehensive site inspections required by the 2008 MSGP (see 2008 MSGP Part 4.1 and 4.3, respectively).

Figure 1 is an example of a completed MSGP Industrial Stormwater/Snowmelt Monitoring Summary Form. You should fill out this form (Appendix A) with the sampling locations and monitoring requirements that apply to your facility and include a copy in your SWPPP.

Benchmark Levels and ELGs									
Industry Sector	Pollutant	Benchmark Level	ELG						
			Daily Max	Monthly Average	Instant Min/Max				
D	TSS	100	23	15		Total Suspended Solids (SM 254-05)	pH	Oil and Grease (EPA Method 1664-A)	Iron (EPA Method 200.9)
D	Oil and Grease		15	10					
D	pH				6-9				
E2	Iron	1							
E2	TSS	100	50						
E2	pH				6-9				
Sample Summary									
Outfall Identifier	Industry Sector (SIC)	Basis	Frequency	Timing					
e.g. 001-A	Sector D (SIC 2951)	Benchmark	1/Quarter	1st wk of month	✓	✓	✓		
e.g. 001-A	Sector D (SIC 2951)	ELG	1/year	January	✓				
e.g. 001-B	Subsector E2 (SIC 3271)	Benchmark	1/Quarter	1st wk of month	✓			✓	
e.g. 001-B	Subsector E2 (SIC 3271)	ELG	1/year	January	✓	✓			

Figure 1. Example MSGP Industrial Stormwater/Snowmelt Monitoring Summary Form with monitoring requirements, sampling locations and industry sectors.

3. Conduct Monitoring

This section describes sampling preparation, choosing the right storm event to monitor, how to collect stormwater samples, how to conduct quarterly visual assessments, quality control considerations, and how to report the results.

The information contained in this section is not specific to monitoring for the 2008 MSGP or any particular general industrial permit.

3.1 What to Have In Place Prior to Collecting Stormwater Samples

Preparation is essential, especially if you are in a climate where measurable storm events are infrequent.

- ***In-Office Preparations*** – Your in-office preparations should include the following:
 - Contacting the lab well ahead of time so that you have the sample bottles before a measurable storm event.
 - Paying attention to weather forecasts so that you are tracking patterns that are likely to result in a measurable storm event.
 - Knowing who your monitoring personnel are and how to contact them when a measurable storm event is expected.
 - Having sampling gear assembled and checked for readiness.
 - Preparing sample bottle labels using waterproof ink with the following information (if not already done by the lab):
 - Facility name and address
 - Sample location identifier (e.g., Outfall 001)
 - Name or initials of sampling personnel
 - Parameter and associated analytical method (e.g., TSS, Method # 0160.2; consult with your contract laboratory for analytical method numbers)
 - Sample type (generally will be “grab” samples)
 - Sample preservation notes
 - Date and time after completing sampling event
- Having chain-of-custody forms ready for use.

The chain of custody form is a document that travels with the sample from collection through analysis. Each individual that handles the sample will place their name, date, and time on the chain-of-custody form. The form is used to maintain the integrity of the sample by providing documentation of the control, transfer, and analysis of samples (see Section 3.4 below for a more detailed discussion of chain-of-custody).

- **Sampling Supplies** – Collect the following supplies and keep them ready for quick use:
 - Clean, sterilized sample bottles, sized appropriately for the parameter to be analyzed (many labs provide the appropriate bottles or will tell you what size to get). Glass must be used for oil and grease samples; plastic containers can be used for other parameters. Use Teflon or aluminum-lined caps.

**For rinsing sample bottles,
use only distilled water**
 - If bottles are new but not pre-cleaned, they must be pre-conditioned before use by filling with water for several days (the duration can be reduced by using a dilute solution of hydrochloric acid).
 - Additional glass or clear plastic bottles suitable for visual assessments.
 - Visual monitoring forms (see example in Appendix B).
 - Clipboard and site-specific monitoring checklist.
 - If needed, a pole (sold at field supply stores) on which to attach sample bottles and attachment clips or strapping tape to secure the bottle to the pole.
 - Safety equipment, including first aid kit.
 - Hand sanitizer solution.
 - Carrying case for sampling equipment or backpack for carrying equipment to remote locations.
 - Powder-free disposable nitrile or latex gloves (sold by medical and laboratory suppliers or may be provided by your contract laboratory). Do *not* use powdered gloves as they may contaminate your samples.
 - Indelible pens / markers that can write on wet surfaces.
 - Foul-weather gear including footwear appropriate for the conditions at your sampling locations (e.g., non-slip boots).
 - Sturdy cooler and ice or ice packs for stowing and preserving your samples en route to the lab (the lab may provide an appropriate container).
 - Field notebook or field forms for your sampling records (waterproof notebooks are available at office supply stores).
 - pH paper and appropriate chemical preservatives for adding to sample bottles (obtain from your laboratory).



Preparing sampling supplies.

- **Optional or as-needed supplies:**
 - Sodium bicarbonate (for safety reasons if using acid preservative additives)
 - A graduated stick to measure water depth for determining safe / wade-able sampling access locations (if a sampling pole will be used, you can modify it with depth markings)
 - Mosquito repellent
 - Flashlight in case of sudden loss of light or darkness under storm conditions
 - Flagging tape for marking access to remote or overgrown locations
 - Camera, used for:
 - Recording evidence of potential pollutants or sampling conditions.
 - Especially useful if different people will do the sampling throughout the permit term.
 - Pictures of sample appearance along with the visual inspection records can help “normalize” visual assessments.
 - Pictures of the sampling location can help you find the same spot for subsequent sampling events.

Develop a stormwater sampling checklist to ensure consistency and continuity across sampling events. Since stormwater sampling is not a regular part of a facility's workload, a checklist of things to have prepared before sampling, sampling activities, and sampling locations will help you remember from quarter to quarter. You can make the checklist by noting the things you did for the first sampling event to remember for future sampling events. Keep the checklist updated as you gain experience with sampling.

3.2 Collect Stormwater Samples

Contact the lab prior to collecting stormwater samples so they know to expect the samples and have adequate staff available to conduct the analyses within the applicable holding times (the lab may offer courier service). Inform them of the pollutant parameters for which your samples will be analyzed.



A stormwater grab sample is collected directly into the sample container.

Follow the protocol below to obtain an accurate grab or manual sample. A grab sample is a single sample “grabbed” by filling up a container, either by hand or attached to a pole. Obtaining accurate data is vital to your ability to assess how your stormwater control measures are performing.

- Wear disposable powder-free gloves for sampling; never touch the inside of the lid or bottle.
- For oil and grease: fill the glass sample bottle directly from the discharge; never collect in a container first and then transfer to the sample bottle because oily residue will collect along the inside of the first collection bottle and make the sample inaccurate.

Remember, oil and grease must be collected directly into the glass sample bottle.

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- If you have problems accessing the stormwater discharge point (e.g., access is too far or dangerous), use a pole or other appropriate sampling apparatus.
- Sample only stormwater discharging from your facility (i.e., do not sample from puddles, ponds or retention basins).
- Sample from a turbulent section in the central part of the flow; avoid touching the bottom or sides of the stormwater conveyance.
- Fill the sample bottle nearly to the top (meniscus almost at the rim) by holding the opening into the flow of water; do not rinse or overfill the bottles.



Sample bottles labeled with location, date, time, sample collector, analysis, and preservative type.

While stormwater samples are typically grab samples, in some situations the use of an automatic sampler may be appropriate. Automatic samplers are mechanical devices that monitor site conditions and collect a sample when needed. The automatic sampler can be set up well in advance of a storm, or set up as a permanent installation, and the technician can retrieve the sample after the storm when conditions are favorable. Advantages of automatic samplers include low labor costs, convenience, and safety – personnel are not out in the storm trying to collect one or more samples. The major disadvantage is cost; automatic samplers are expensive. Secondly, the automatic sampler cannot collect visual observations, and they cannot be used for collection of certain measurements.

After the samples have been collected:

- Place the samples in a sturdy cooler partially filled with ice. As a general rule, samples should be kept at approximately 39°F (4°C) until the cooler is delivered to the lab.
- Put a completed chain-of-custody form enclosed in a re-sealable plastic bag inside the cooler. If you have several

pH has a 15 minute holding time; therefore, the sample must be analyzed within 15 minutes of collection.

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coolers complete a separate chain of custody form for each cooler.

- Deliver the samples to the lab (e.g. drive, arrange same-day pick-up by the lab, or use an express / overnight service) as soon as possible, bearing in mind the holding times for each parameter sampled.



Stormwater samples packed for delivery to the lab, note the chain of custody forms attached to the lid.

3.3 Record Information for Each Monitoring Event

For each individual sample collected, you should note the following information:

- The sample / outfall identifier.
- The duration between the storm event you sampled and the end of the previous storm event that resulted in a discharge of stormwater from your site (i.e., a “measurable storm event”).
- The date and duration of the storm event sampled.
- Rainfall measurement or estimate (in inches).
- Estimate of the total volume of the discharge sampled from the outfall.

You should record this information on a Stormwater Collection Form (see appendix C for an example).

3.4 Quality Assurance Considerations

The following actions must be followed explicitly. Quality assurance (QA) helps maintain the accuracy and integrity / legal defensibility of your monitoring results by documenting the stewardship of your samples, by minimizing biases in sampling and lab procedures, and by helping to assess the accuracy and precision of the lab's analyses.

Holding Times and Sample Preservation

Samples that cannot be delivered to the lab on the same day may need to be preserved, often by cooling to 4°C (i.e., in an ice bath) and/or with added chemical preservatives (laboratory-supplied bottles may already include preservatives). If your samples need to be analyzed for more than one parameter you may need to bottle more than one sample at an outfall using different preservatives. In addition, you should be aware of the maximum holding time allowed for a particular parameter before which the sample must be analyzed. Following is a table with typical preservation and holding requirements for benchmark parameters and additional potential pollutants of concern (the latter will not have a numeric value in parentheses). Work with your laboratory service providers to develop a list of containers to optimize “sharing” of containers across different parameters. Not all laboratories provide the same container types for the different parameters. Laboratories frequently provide pre-completed custody records and seals, and will provide pre-labeled sample bottles for ease of use in the field as part of their routine “value-added” services. Pre-completed custody records and labels require only time, date, and samplers’ initials in order to complete this critical documentation. Your laboratory may also have additional sampling, sample handling, or shipping instructions helpful to your sample collection personnel. NOTE: Whenever possible, minimize the amount of lead time sample containers / kits are outside of the laboratory. Extended storage of pre-preserved containers for some analytes may present opportunity for blank contamination, even under ideal storage conditions.

Table 5. Sample Preservation and Hold Times

Parameter (Benchmark Level, mg/l or as specified)	Preservation		Maximum Holding Time	Sample Container
	Cool to 4° C?	Additional		
Aluminum, Total Recoverable (0.75)	N	HNO ₃ (nitric acid) to pH <2	6 months	500 mL HDPE
Ammonia (2.14)	Y	H ₂ SO ₄ (sulfuric acid) to pH <2	28 days	500 mL HDPE
Antimony, Total Recoverable (0.64)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Arsenic, Total Recoverable (0.15)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Beryllium, Total Recoverable (0.13)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Biological Oxygen Demand, BOD ₅ (30)	Y	None	48 hours	1L HDPE or glass
Cadmium, Total Recoverable (0.0005 – 0.0053)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Chemical Oxygen Demand, COD (120.0)	Y	H ₂ SO ₄ to pH <2	28 days	100 mL HDPE or glass
Chromium (0.58 – 3.82)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE

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Parameter (Benchmark Level, mg/l or as specified)	Preservation		Maximum Holding Time	Sample Container
	Cool to 4° C?	Additional		
Copper, Total Recoverable (0.0038 – 0.0332)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Cyanide, Total (0.022)	Y	NaOH (sodium hydroxide) to pH >12, refrigerate in dark	14 days; 24 hours if sulfide present	1 L HDPE
Fluoride		None	28 days	100 mL HDPE
Hardness (as CaCO ₃)		HNO ₃ or H ₂ SO ₄ to pH <2 (method dependent)	6 months	100 mL HDPE
Iron, Total Recoverable (1.0)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Lead, Total Recoverable (0.014 – 0.262)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Magnesium, Total Recoverable (0.064)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Mercury, Total Recoverable (0.0014)	N	HNO ₃ to pH <2	28 days	500 mL HDPE
Nickel, Total Recoverable (0.15 – 1.02)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Nitrate + Nitrite Nitrogen (0.68)	Y	H ₂ SO ₄ to pH <2	28 days	200 mL HDPE
Oil and Grease	Y	HCl or H ₂ SO ₄ to pH <2	28 days	1L Boston round glass
pH (6.0 – 9.0 s.u.)	N	None	15 min (Field test)	50 mL
Phenols, Total Recoverable	Y	H ₂ SO ₄ to pH <2	28 days	500 mL HDPE
Phosphorous, Total (2.0)	Y	H ₂ SO ₄ to pH <2	28 days	500 mL HDPE
Radium, Total Recoverable		HNO ₃ to pH <2	6 months	1L HDPE
Radium, dissolved		Field-filtered HNO ₃ to pH <2; if not field filtered - none	Field filtered, preserved 6months; if not field filtered, filter on receipt, preserve to pH <2 6 months	1L HDPE
Selenium, Total Recoverable (0.005)	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Silver, Total Recoverable (0.0007 – 0.0183)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Total Suspended Solids, TSS (100)	Y	None	7 days	200 mL HDPE
Turbidity (50 NTU)	Y	store in the dark	48 hrs	100 mL HDPE
Uranium		HNO ₃ to pH <2	6 months	500mL HDPE
Zinc, Total Recoverable (0.04 – 0.26)*	N	HNO ₃ to pH <2	6 months	500 mL HDPE
Landfill Parameters				
Alpha Terpineol	Y	NA	7 days to extraction 40 days to analysis	1L Amber glass
Aniline	Y	NA	7 days to extraction 40 days to analysis	1L Amber glass
Benzoic Acid	Y	NA	7 days to extraction 40 days to analysis	1L Amber glass
Napthalene	Y	NA	7 days to extraction	1L Amber glass

Parameter (Benchmark Level, mg/l or as specified)	Preservation		Maximum Holding Time	Sample Container
	Cool to 4° C?	Additional		
			40 days to analysis	
p-Cresol	Y	NA	7 days to extraction 40 days to analysis	1L Amber glass
Pyridine	Y	NA	7 days to extraction 40 days to analysis	1L Amber glass

*These values are hardness dependent.

Field Blanks

Field blanks are distilled or de-ionized water samples prepared when you are collecting stormwater samples. Field blanks are prepared, in the field, after cleaning the sampling equipment but before collection of water quality samples. Blanks are prepared by pouring distilled de-ionized water into each scoop, dipper, etc. used for sample collection and then into sample bottles as if they were actual field samples. The field blanks are processed and analyzed in an identical manner as the stormwater samples. If the lab detects any contamination in the blanks, your sampling results could be considered tainted (either from contamination or errors in sampling or analysis). Collection and analysis of field blanks is not required by the 2008 MSGP; however, field blanks are used for quality control to assess whether contamination was introduced during sampling, and may prove useful in interpretation of results.

Chain of Custody Forms and Procedures

Samples must be traceable from the point of collection until the sampling results are reported. To do this, document who is in possession of the samples using the chain of custody procedures below. One person should be responsible for the care and custody of the samples, and for generating the chain of custody record until the samples are properly transferred or relinquished to the laboratory. Chain of custody tasks include:

- Ensure that the sample labels are properly filled in.
- Complete the chain of custody form with the date, time, parameter and sample locations for each sample, and sign the form.
- During the transfer of custody of the samples, both the persons relinquishing and receiving the cooler (including lab personnel) must record the date and time on the chain of custody form and sign it.
- Record the shipping method, courier name(s), and other pertinent information as remarks on the chain of custody form.
- The original chain of custody form remains with the samples and a copy must be provided to the facility for inclusion in project records.

Chain of custody records are critical to ensure that no tampering occurs between sample collection and analysis. Your analytical service provider may provide training or written instructions to assist in your completion of accurate custody records. This is another key area where many laboratories invite the opportunity to work with their clients as part of their value-added services.

3.5 Conducting Visual Assessments of Stormwater Discharges

All facilities covered by the 2008 MSGP must perform quarterly visual assessments, irrespective of benchmark monitoring.

Visually inspecting stormwater samples from a measurable discharge at your sampling outfalls is an inexpensive way of assessing the performance of your control measures. The sample should be collected and analyzed in a colorless glass or plastic bottle. It is recommended that you take photographs of the discharges at the time of observation in case more than one person is doing the assessments and because photos can be helpful in determining the effectiveness of your control measures and any need to make changes to control measures.

Assess the general appearance, as an indicator of contaminants, of your discharges for these characteristics:

- **Color** – If the discharge has an unusual color, such as reddish, brown, or yellow hue, this may indicate pollutants or suspended sediment.
- **Odor** – If the discharge has a noticeable odor, for instance if it smells like gasoline fumes, rotten eggs, raw sewage, or solvents odor, or has a sour smell, this could be indicative of pollutants in the discharge.
- **Clarity** – If the discharge is not clear, but is instead cloudy or opaque, this could indicate elevated levels of pollutants in the discharge.
- **Floating solids** – If you observe materials floating at or near the top of the bottle, take note of what the materials appear to be.
- **Settled solids** – You should wait about a half hour after collection, then note the type and size of materials that are settled at the bottom of the bottle.
- **Suspended solids** – Particles suspended in the water will affect its clarity, and color and could be attributable to pollutant sources at your facility.
- **Oil sheen** – You should check the surface of the water for a rainbow color or sheen; this would indicate the presence of oil or other hydrocarbons in the discharge.
- **Foam** – You should gently shake the bottle and note whether there is any foam.
- **Other obvious indicators of stormwater pollution.**

To record your visual monitoring results you can use the optional “Quarterly Visual Monitoring Form” in Appendix B (or a comparable one of your own).

4. Evaluate Monitoring Results

The primary purpose of any industrial stormwater monitoring program, consisting of analytic chemical monitoring and visual assessments, is to provide feedback on the performance of your selection and implementation of control measures. Visual evidence of pollution in a stormwater sample, a spike in the concentration of a benchmark pollutant, or the exceedance of a numeric effluent limitation provides an indicator that modifications or additions to the site's control measures need to be considered to improve the effectiveness of your stormwater program.

The following will aid you in interpreting your monitoring results and revising your control measures, if necessary.

4.1 Evaluating Quarterly Visual Assessment Results

For anything but colorless and odorless stormwater in your discharge, you should investigate what area of your site or what specific pollutant sources are contributing to the contamination of your site's runoff. To search for the source of pollutants, you should move upstream from the discharge point. You should scrutinize your exposed industrial materials and activities (material handling equipment, industrial machinery, raw materials, finished product, wastes, or products that are stored, used or created onsite, etc.). Examine where material handling activities occur, such as: storage, loading and unloading, and material transporting. Be aware, the source could be from an ongoing activity or the result of a spill or other infrequent occurrence. In looking at your samples, consider the following:



- When there is a distinct color or odor, are the abnormalities associated with any raw materials, chemicals or other materials used at the site?
- Muddiness or sediment may have been picked up from areas where there is disturbed earth or other unpaved areas lacking adequate control measures.
- Foam or oil sheen may be the result of a leak or spill of materials.
- Cloudiness indicates suspended solids such as dust, ash, powdered chemicals, and ground up materials. Determine whether you use any of these materials and whether they are exposed to stormwater.

Clean up all sources of potential contamination, make changes to your control measures, and update your SWPPP, as necessary.

4.2 Evaluating Benchmark Monitoring Results

The analysis of your benchmark monitoring results can yield valuable information about the characteristics of your runoff and how well your control measures are working. Once you have received your lab results for your benchmark samples, compare these concentrations to the benchmark values that apply to your facility. The 2008 MSGP requires that you conduct four benchmark samples in your first year, and then compare the average value to the applicable benchmark. If the average concentration of your samples exceeds the benchmark, then you are required under the permit to evaluate whether changes to your control measures are necessary. See Parts 6.2.1.2 and 3.2. However, prior to the completion of the four samples, if one or more sample results makes an exceedance of the benchmark mathematically certain, you are required to conduct this evaluation without waiting for the results of the remaining benchmark samples.

Table 6 will help you decide a course of action depending on the results of your benchmark samples.

Table 6. Evaluation of Benchmark Monitoring Results

Does the average of your four quarterly benchmark samples for any pollutant exceed the applicable benchmark concentration? OR <u>If you have not yet completed your four quarterly benchmark samples, does the total value of your samples already make an exceedance of the benchmark mathematically certain (e.g., the sum of the concentration of your samples exceeds four times (4X) the benchmark concentration)?</u>	
YES	NO
<p>You must evaluate whether modifications to the stormwater control measures used at your site are necessary. You will need to consider whether there is a problem in the selection, design, installation, and/or operation of applicable control measures. Follow the evaluation and corrective action process in Parts 3.2, 3.3, and 3.4.</p> <p>An exceedance of a benchmark does not necessarily mean that your control measures are insufficient. Continue reading below for additional items to consider as you proceed.</p>	<p>Sample results below benchmark limits provide an indication that your control measures are working as intended to minimize the discharge of pollutants.</p> <p>Although your samples indicate properly functioning control measures, you should continue to note changes to your site that may affect the quality of stormwater runoff, and to link such changes to your future monitoring results.</p> <p>You are still required to meet all requirements in the permit affecting the implementation and maintenance of your control measures, despite the good results of your benchmark monitoring.</p>

If benchmarks were exceeded:

- Did you sample correctly?
 - Did you start with clean sample collection jars and were the samples preserved and submitted to the lab within the allotted time frame?
 - Did you properly sample the discharge flowing from the site or did you collect the sample from a low spot or stagnant pool?

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- Was anything atypical going on at the site prior to or during the storm? Atypical activities could include:
 - A leak or spill that was not adequately cleaned up.
 - Construction, painting and paving activities.
 - Having a large amount of material (raw materials, wastes or products) recently delivered or being prepared for shipment.
- Did you observe anything during visual inspections that may have indicated that stormwater runoff would have been exposed to pollutants? If so, are control measures in place to address the pollutant sources?



The more the benchmark was exceeded, the greater your facility's problems may be, necessitating a more robust response. For example, if your results for TSS were over the benchmark value by a relatively small amount (e.g., TSS values of 110 to 150 mg/L, compared to the 100 mg/l benchmark level assigned to TSS), then simply performing additional housekeeping measures (e.g., frequent sweeping) may reduce the values below the benchmark of 100 mg/l by the next storm. However, an exceedance above 150 mg/l may warrant new or supplementary control measures (assuming your control measures are performing as designed) that more effectively reduce the potential for sediment in discharges (e.g., installing storm inlet filters, seeding / stabilizing disturbed areas, implementing dust and debris controlling procedures). TSS values exceeding benchmarks by orders of magnitude indicate a serious problem, and may require structural control measures (e.g., paving, installing berms around piles of loose material, placing operations under cover, placing grassy swales or basins in the discharge flow path to trap sediment).

Until your visual observations and sampling results show that pollutants are not found in your discharges or are present in concentrations below benchmark values, the pollution prevention team should engage in an iterative process in which control measures are selected, implemented, evaluated and modified until determined to be completely effective.

There may be circumstances where benchmark values cannot be reasonably achieved because of local natural background concentrations (see 2008 MSGP Part 6.2.1.2). In such cases, EPA allows for benchmark exceedances. For example, high natural background levels of iron in soils or groundwater could cause exceedances of a benchmark value. This provision exempts facilities from further control measure evaluation and benchmark monitoring when natural background levels are solely responsible for the exceedance of a benchmark value.

To make this determination, natural background pollutant concentrations must be greater than the corresponding benchmark value, and there is *no* net facility contribution of the pollutant (i.e., average concentration detected in runoff from all monitored outfalls over four separate events minus the average natural concentration of the parameter for four separate events does not exceed zero).

For example, if the natural background concentration of TSS from an undisturbed watershed is 200 mg/L, an exemption from further benchmark monitoring / control measure evaluation is available if the average of your four benchmark samples is equal to or lower than 200 mg/L. There are additional requisites for claiming a natural background level exemption, including documentation. Details of these are contained in the 2008 MSGP in Part 6.2.1.2 and the Fact Sheet.

4.3 Effluent Limitation Guideline Monitoring Results

What happens if your facility is subject to numeric effluent limits (for ELG compliance monitoring) and your stormwater sample exceeds the effluent limits for one or more parameters? Within 24 hours of receiving the lab report you must prepare a corrective action report, including:

- Identification of the condition triggering the need for corrective action review;
- Description of the problem identified; and
- Date the problem was identified.

Within 14 days of receiving the lab report, you must document the following information:

- Summary of corrective action(s) taken or to be taken;
- Notice of whether any modifications to your control measures and any related changes to your SWPPP are necessary as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

You must submit these reports with your annual report and retain a copy onsite with your SWPPP

The 2008 MSGP requires that you conduct follow-up monitoring within 30 calendar days of implementing corrective actions (or during the next qualifying runoff event, should none occur within 30 days, see Part 3 of the 2008 MSGP). Monitoring must be performed for any pollutant(s) that exceeded the effluent limit. If the results from the follow-up monitoring exceed the effluent limit(s), you are required to submit an Exceedance Report to EPA no later than 30 after receipt of your lab results. The exceedance report must include:

- NPDES permit tracking number;
- Facility name, physical address, and location;
- Name of receiving water;
- Monitoring data from this and the preceding monitoring event(s)

- An explanation of the situation; what you have done and intend to do (should your corrective actions not yet be complete) to correct the violation; and
- An appropriate contact name and phone number.

In addition to preparing the Exceedance Report, you must continue to monitor, at least quarterly, until your stormwater discharge is in compliance with the effluent limits or until EPA waives the requirement for additional monitoring.

4.4 Specific Pollutants and Control Measure Options

All facilities need to gear their control measures toward their specific pollutants of concern, as determined by the materials and activities onsite. Below is a brief discussion of some of the most common pollutants and control measure options.

- **Total Suspended Solids (TSS).** Small sediment particles are easily suspended and carried by surface water flows. These particles may be blown onto the site from unpaved areas within or adjacent to your facility as well as being tracked in on the tires of vehicles. Excess particles may be self-generated, particularly in the concrete, asphalt, scrap recycling, automobile salvage, and mining sectors. See the discussion above for control measure options for controlling TSS.



- **Oil and Grease.** Often, oil and grease may be observed as a film, sheen or discoloration on the top of a discharge or receiving water. But such a surface anomaly may not be obvious, in which case detection by a lab would be the only way. This could be a pollutant of concern for any facility, especially if there are exposed vehicles or equipment. Therefore, it is vital that due diligence regarding “reportable quantity” (RQ) spills or leaks be observed. Basically, an RQ for oil is any quantity of oil that causes a film, sheen or discoloration on a receiving water surface (and for which there are separate reporting requirements to regulatory agencies). If detected you must find the source and mitigate it. Start with the vehicle / equipment maintenance and storage areas or where shipping / receiving and the like are done. Above ground storage tanks and waste storage are other likely sources.

Available control measures range from regularly monitoring these areas and applying an absorbent material (choose a bio-based absorbent like Nature’s Broom, not a clay-based material) as soon as an oil leak or spill is observed. Consider coverage of and secondary containment for storage areas where oil or grease are stored, transferred or disposed of. An oil water separator downstream of the area(s) most likely to contain oil or grease could provide enough treatment to reduce oil and grease to acceptable levels in the discharge.

- **pH.** pH values below benchmark range indicate that acidic substances are exposed to stormwater. In this case you need to determine whether any of your industrial processes use acids and if so, where. Does your facility do plating, or are lead-acid batteries used or stored on-site? If acids are being used to clean parts, for example, where are the parts stored after being treated with the acid? Where are waste acids stored and how are they disposed? Which operations could expose acids to stormwater? Coal piles are also a source of acidified runoff.



High pH values indicate that a base or alkaline material (such as lye) is exposed to stormwater. Cement and some cleansers can produce high pH values.

Control measures applicable to controlling pH include housekeeping (sweeping and cleaning areas where materials that affect pH could be exposed to stormwater); overhead coverage and disposal of waste materials in covered receptacles. Low or high pH runoff can be collected and neutralized by adding an appropriate agent to neutralize pH values to the 6.0 – 9.0 range. Alternatively, flow can be directed to come in contact with a neutralizing substance (e.g., acidic coal pile runoff directed to flow through a limestone channel).

- **Chemical Oxygen Demand (COD).** COD is the amount of dissolved oxygen in water consumed by the chemical breakdown of organic and inorganic matter (i.e., COD is not a specific component in the discharge). Therefore, a high COD value indicates elevated quantities of pollutants in runoff, especially carbon. Examples of facilities that handle materials which could cause high COD levels include the wood and paper product industries. Control measures applicable to controlling COD levels are the basic stormwater ones: good housekeeping and covering materials with the potential to allow carbon or other organic materials to be carried by stormwater.
- **Metals.** Metals originate from many sources and consequently a number of industries must monitor for metals, including facilities such as wood preservative and agricultural chemical makers, mines, and foundries. Depending on a facility's activities, metals can be found in a dissolved form and/or adsorbed to particles or sediment. It is because both the dissolved and particulate forms can occur at the same time is why stormwater discharges are analyzed for "total recoverable metals." After identifying those operations that could expose stormwater to metals sources, implement control measures capable of reducing metals concentrations, including good housekeeping (sweeping and disposing of metal wastes in covered containers), covering / shielding operations, and directing run-on away from any critical outdoor areas. Ion exchange techniques can also be employed to remove dissolved metals.

5. Record-Keeping and Reporting

It is important that accurate record-keeping of monitoring activities become a standard operating procedure at your facility. You need to be able to show that monitoring and sampling events not only meet all permit requirements, but are defensible and abide by all QA/QC procedures. It is always preferable to document too much as opposed to too little when dealing with any sort of permit compliance. Create easy to use log books for keeping track of rain events. Be sure that your site map is up to date and easy to understand. Develop simple instruction sheets for recording sampling, visual assessments, or other monitoring activities. The instructions should be kept in logical locations (e.g. in sample kits, in the SWPPP notebook) and updated as needed.

When possible, use standardized forms such as those provided in the appendices of this monitoring guide to record your monitoring activities. This will provide consistency in information reported. Example forms are provided in this guide in Appendix A (2008 MSGP Industrial Stormwater Monitoring Form), Appendix B (2008 MSGP Visual Monitoring Form), and Appendix C (2008 MSGP Industrial Stormwater Collection Form).

If possible, regularly transfer sampling records and sample results into databases or spreadsheets. This will provide back-up records for hard-copy logs or forms as well as providing an easy way to analyze your sampling data.

5.1 Reporting Monitoring Data

Each state industrial stormwater permit has different requirements for how monitoring data should be reported. Facilities subject to EPA's 2008 MSGP must submit to EPA all monitoring data collected no later than 30 days after receiving complete lab results for all monitored outfalls. You must submit even if your facility is reporting "no discharge" or a change in status from "active and staffed" to "inactive and unstaffed."

Facilities must use the online eNOI system (www.epa.gov/npdes/eNOI) to report results. EPA's Electronic Notice of Intent (eNOI) system is an online electronic permit application system that enables stormwater entities to submit NOI forms to EPA. eNOI also allows registered eNOI users to report discharge monitoring data and submit annual reports and other reporting information to EPA.

If you cannot access eNOI, the paper MSGP Discharge Monitoring Report (MDMR) reporting form (available at www.epa.gov/npdes/stormwater/msgp) can be submitted to the appropriate address identified in the 2008 MSGP (Part 7.6.1).

Even if you submit monitoring data via eNOI, the paper MDMR form can help ensure you have the information you need to complete all the required fields. Rather than go line by line through the MDMR, which the instructions do, this Guide will highlight the information needed to fill out the MDMR.

You will need the following information to submit monitoring data via eNOI and complete the MDMR, at a minimum:

1. Permit tracking number
2. The facility SWPPP

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3. Monitoring records
4. Lab reports
5. Corrective actions

Permit Tracking Number – The permit tracking number is a unique identifier assigned to your facility by EPA. EPA tracks report submittals using the Permit Tracking Number rather than facility name or address. Thus, if you do not include the Permit Tracking Number you may not get credit for submitting the MDMR.

Facility SWPPP – The facility SWPPP includes several pieces of information needed for the MDMR, including:

- The number of stormwater outfalls.
- Which, if any, of the outfalls discharge substantially identical effluents.
- Alternative monitoring periods, if the facility is located in an area of irregular stormwater runoff.

Monitoring Records – Detailed monitoring records will make completing the MDMR easier. As previously discussed, monitoring records must include:

- The date(s) of all monitoring events during the MDMR reporting period.
- Any stormwater outfalls that did not have a discharge during the MDMR reporting period.
- Whether the discharge resulted from rainfall or snowmelt.
- The duration of the storm event.
- The number of inches of rainfall from the monitored storm event(s).
- The number of days since the previous measurable storm event, which may or may not be the previous *monitored* measurable storm event.

Lab Reports – The lab will provide a detailed report with the results of your stormwater analyses and detailed QA/QC data to verify that the results are accurate. For each parameter the lab will typically report one of three results to be reported on the MDMR.

1. The measured concentration to be compared against the benchmark or effluent limitation guideline.
2. BQL or below quantitation limit means that the parameter is present at some amount greater than zero but less than the quantitation limit but the method used is not precise enough to give an exact concentration. Report BQL and the numeric quantitation limit on the MDMR.
3. ND or not detected means that the parameter was not detected in the sample. Report ND and the detection limit on the MDMR. Note that the ND level is typically three to five times less than the quantitation limit.

Other lab reports you may need include receiving water hardness results if any of your required parameters are hardness dependent, and data on natural background pollutant levels if you are claiming that an exceedance of a benchmark limit is due to natural background conditions.

Corrective Actions – The 2008 MSGP requires you to implement corrective actions if the lab report indicates an exceedance of one or more numeric effluent limits or if the average of four quarterly samples exceeds the applicable benchmark. You must document discovery of effluent limit(s) or

benchmark concentration(s) exceedances within 24 hours of receiving the lab report, including the condition triggering the need for corrective action review; a description of the problem; and the date the problem was identified. Within 14-days of receiving the lab report you must summarize the corrective action that was taken or will be taken, including a description of the corrective action; start and end dates; and whether the SWPPP will be modified. You can submit the corrective action report(s) via eNOI or along with the paper MDMR form.

6. Train Personnel

You must train your stormwater pollution prevention team in the proper procedures for sample collection, visual assessments, tracking and reporting. Trainings should be held regularly to update staff on any permit or SWPPP changes. New employees that become members of the stormwater pollution prevention team should be trained in general stormwater awareness as well as the following monitoring-specific topics:

- How to anticipate a measurable storm event.
- Where to monitor.
- How to collect and document the collection of stormwater samples including the assembling of “field blank” samples.
- How to perform and document visual assessments.
- How to handle and send the samples to the lab.
- How to interpret the results.
- How to keep accurate and complete records and report appropriate information to the permitting authority.

7. References

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Appendix A – 2008 MSGP Industrial Stormwater Monitoring Form

MSGP Industrial Stormwater/Snowmelt Monitoring Summary Form

Name of Facility:						Pollutants to sample (Method)										
Address:																
Permit Tracking Number:																
Benchmark Levels and ELGs																
Industry Sector	Pollutant	Benchmark Level	ELG													
			Daily Max	Monthly Average	Instant Min/Max											
Sample Summary																
Outfall Identifier	Industry Sector (SIC)	Basis	Frequency	Timing												

Appendix B – 2008 MSGP Visual Monitoring Form

MSGP Quarterly Visual Assessment Form

(Complete a separate form for each outfall you assess)

Name of Facility:		Permit No.:	
Street Address:		City:	State: Zip Code:
Outfall Number:	"Substantially Identical Outfall"? <input type="checkbox"/> No <input type="checkbox"/> Yes (identify substantially identical outfalls): _____		
Quarter/Year:	Substitute Sample?: <input type="checkbox"/> No <input type="checkbox"/> Yes (identify quarter/year when sample was originally scheduled to be collected): _____		
Person(s)/Title(s) collecting sample:			
Person(s)/Title(s) examining sample:			
Date & Time Storm or Snowmelt Began:	Date & Time Sample Collected: _____	Date & Time Sample Examined: _____	
Nature of Discharge: <input type="checkbox"/> Rainfall <input type="checkbox"/> Snowmelt			
Rainfall Amount: _____ inches	Previous Storm Ended > 72 hours Before Start of This Storm? <input type="checkbox"/> Yes <input type="checkbox"/> No* (explain): _____		
Parameter			
Color	<input type="checkbox"/> None <input type="checkbox"/> Other (describe): _____		
Odor	<input type="checkbox"/> None <input type="checkbox"/> Musty <input type="checkbox"/> Sewage <input type="checkbox"/> Sulfur <input type="checkbox"/> Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Solvents <input type="checkbox"/> Other (describe): _____		
Clarity	<input type="checkbox"/> Clear <input type="checkbox"/> Slightly Cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque <input type="checkbox"/> Other (describe): _____		
Floating Solids	<input type="checkbox"/> No <input type="checkbox"/> Yes (describe): _____		
Settled Solids**	<input type="checkbox"/> No <input type="checkbox"/> Yes (describe): _____		
Suspended Solids	<input type="checkbox"/> No <input type="checkbox"/> Yes (describe): _____		
Oil Sheen	<input type="checkbox"/> None <input type="checkbox"/> Flecks <input type="checkbox"/> Globs <input type="checkbox"/> Sheen <input type="checkbox"/> Slick <input type="checkbox"/> Other (describe): _____		
Foam (gently shake sample)	<input type="checkbox"/> No <input type="checkbox"/> Yes (describe): _____		
Other Obvious Indicators of Storm Water Pollution	<input type="checkbox"/> No <input type="checkbox"/> Yes (describe): _____		

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Sampling not performed due to adverse conditions: No Yes (explain): _____

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

No Yes (explain): _____

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

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

A. Name _____

B. Title _____

C. Signature _____

D. Date Signed _____

Appendix C – 2008 MSGP Industrial Stormwater Collection Form

MSGP Industrial Stormwater/Snowmelt Discharge Collection Form

Name of Facility: Address: Person(s)/Title(s) collecting sample: Permit Tracking Number: Outfall Numbers/Sample Locations:			Preservative (Y/N)	Number of Containers	Type of Analyses Required								Sample Collection Information	
					Date & Time Sample Collection Began:									
Discharge Information														
Nature of Discharge (circle one): Rainfall or Snowmelt														
Rainfall Amount (inches):														
Date of Discharge Sampling:														
Date & Time Storm Began:														
Date & Time Storm Ended:														
Date & Time of Previous Measurable Storm Event:														
Shaded area for laboratory use only														
Date	Time	Sample Identification/Outfall										Collection Method	Laboratory Log Number	
Sampled by: (signature)		Date/Time:	Relinquished by: (signature)			Date/Time:	Received by: (signature)			Date/Time:				
Received by: (signature)		Date/Time:	Received by: (signature)			Date/Time:	Received by: (signature)			Date/Time:				

The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

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

A. Name _____
 C. Signature _____

B. Title _____
 C. Date Signed _____

ATTACHMENT K
Monitoring and Sampling Results



Stormwater MSGP Sample Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information					
Facility Name:				AZPDES Auth. No.	
Outfall Name:	"Substantially Similar Discharge Point"?		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Person(s)/Title(s) collecting sample:					
Person(s)/Title(s) assisting with sample:					
Date & Time Discharge Began:		Date & Time Sample Collected:		If sample not taken within first 30 minutes, explain why:	
Unique Sample Identifier (Matches Identifier on COC)					
Substitute Sample?	<input type="checkbox"/> No <input type="checkbox"/> Yes				
Nature of Discharge: <input type="checkbox"/> Rainfall <input type="checkbox"/> Snowmelt					
Rainfall Amount:		Previous Storm Ended > 72 hours Before Start of This Storm?		<input type="checkbox"/> Yes <input type="checkbox"/> No*	
Field Sampling Data					
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Discrete <input type="checkbox"/> Manual <input type="checkbox"/> Auto sampler <input type="checkbox"/> Flow-weighted continuous <input type="checkbox"/> Flow-weighted combination For flow-weighted, answer questions below Duration of Storm: _____ Number of SubSamples: _____ Time between samples: _____				
Field Parameter Measurements	pH:	Temperature:	Conductivity:	Turbidity:	Flow Rate:
Field Filtration Methods					
QC Samples					
Field Instrument Calibration Data					
Indicators of Stormwater Pollution Observed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe):				
Observations of sampling procedures and conditions at the time of sampling:					
* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.					
Description of problems encountered or deviations made from the Sampling and Analysis Plan:					



Stormwater MSGP Sample Collection Form

(Complete a separate form for each outfall sampled)

Certification Statement (Refer to MSGP Appendix B, Paragraph 9, for Signatory Requirements)

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

A.
Name:

B.
Title:

C.
Signature:

D. Date
Signed:



Stormwater MSGP Sample Collection Form

(Complete a separate form for each outfall sampled)

Facility Sample Information					
Facility Name:	Name of Facility		AZPDES Auth. No.	Insert Authorization No.	
Outfall Name: Name	"Substantially Similar Discharge Point"?		<input type="checkbox"/> Yes <input type="checkbox"/> No (identify substantially identical outfalls):		
Person(s)/Title(s) collecting sample: Name/Title					
Person(s)/Title(s) assisting with sample: Name/Title					
Date & Time Discharge Began: Enter date and time		Date & Time Sample Collected: Enter date and time		If sample not taken within first 30 minutes, explain why: explanation	
Unique Sample Identifier (Matches Identifier on COC)		Sample Identifier			
Substitute Sample?	<input type="checkbox"/> No <input type="checkbox"/> Yes (identify quarter/year when sample was originally scheduled to be collected):				
Nature of Discharge: <input type="checkbox"/> Rainfall <input type="checkbox"/> Snowmelt					
Rainfall Amount: No of inches		Previous Storm Ended > 72 hours Before Start of This Storm?		<input type="checkbox"/> Yes <input type="checkbox"/> No* (explain):	
Field Sampling Data					
Type of Sample	<input type="checkbox"/> Grab <input type="checkbox"/> Discrete <input type="checkbox"/> Manual <input type="checkbox"/> Auto sampler (Date/Time Collected) <input type="checkbox"/> Flow-weighted continuous <input type="checkbox"/> Flow-weighted combination For flow-weighted, answer questions below Duration of Storm: Insert details Number of SubSamples: Insert details Time between samples: Insert details				
Field Parameter Measurements	pH: pH	Temperature: temperature	Conductivity: conductivity	Turbidity: turbidity	Flow Rate: rate
Field Filtration Methods	Insert details				
QC Samples	Insert details				
Field Instrument Calibration Data	Insert details				
Indicators of Stormwater Pollution Observed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): Insert details				
Observations of sampling procedures and conditions at the time of sampling: Insert details					
* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.					
Description of problems encountered or deviations made from the Sampling and Analysis Plan: Insert details					



Stormwater MSGP Sample Collection Form

(Complete a separate form for each outfall sampled)

Certification Statement (Refer to MSGP Appendix B, Paragraph 9, for Signatory Requirements)

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

A. Name:	name	B. Title:	title
C. Signature:		D. Date Signed:	Insert details

ATTACHMENT L
Routine Inspection Forms



Stormwater MSGP Routine Inspection Form

Inspection Information			
Facility Name	Insert Name		
AZPDES Auth. No.	Insert Tracking No.	Date of Inspection	Insert Date
Start/End Time	Insert Start/End Time	During normal operating hours? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Routine Inspection	<input type="checkbox"/> 1 of 4	<input type="checkbox"/> 2 of 4	<input type="checkbox"/> 3 of 4 <input type="checkbox"/> 4 of 4
Proposed Date of next Routine Inspection: Insert Date			
Inspector Information			
Inspector's Name(s)	Insert Name		
Inspector's Title(s)	Insert Title		
Inspector's Contact Information	Insert Contact Info		
Inspector's Qualifications	Insert qualifications or add reference to the SWPPP		

Weather Information
Weather at time of this inspection: <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snow <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____ Temperature: _____
The permit requires at least one routine site inspection occurs during a stormwater event or while a discharge is occurring at one or more outfalls. Was there a stormwater event or discharging occurring during this routine inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No

Previously Unidentified Pollutants
Have any previously unidentified discharges of pollutants occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____
Is there evidence of, or the potential for, previously unidentified pollutants entering the drainage system? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____

Discharge Points
Are there any evidence of stormwater, or allowable non-stormwater, or unauthorized discharge occurring at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____
Describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water.



Stormwater MSGP Routine Inspection Form

Control Measures

Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). To ensure all control measures are properly installed, ADEQ recommends having the SWPPP and site map available at the time of inspection.

- Identify if maintenance, repair or replacement or corrective action is needed.

	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Maintenance or Corrective Action Needed and Notes
1	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
2	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
3	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
4	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
5	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
6	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
7	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
8	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
9	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
10	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
11	Insert Control Measure Name	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed
12	Insert Control Measure Name	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Maintenance <input type="checkbox"/> Repair <input type="checkbox"/> Replacement	Describe Maintenance and/or Corrective Actions Needed

Stormwater MSGP Routine Inspection Form

Areas of Industrial Materials or Activities Exposed to Stormwater

Below are some general areas that should be assessed during routine inspections:

- *Customize this list as needed for the specific types of industrial materials or activities at your facility that are potential pollutant sources.*
- *Identify if any areas or activities need maintenance, repair or replacement or corrective action is needed.*

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective and operating)?	Maintenance or Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
2	Equipment operations and maintenance areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
3	Fueling areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
4	Outdoor vehicle and equipment washing areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
5	Waste handling and disposal areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
6	Erodible areas/construction	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
7	Non-stormwater/ illicit connections	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
8	Salt storage piles or pile containing salt	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
9	Dust generation and vehicle tracking	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
10	Processing areas	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
11	Areas where industrial activity has taken place in the past, and significant materials remain and are exposed to storm water	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
12	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	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
13	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed
14	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No	Describe Maintenance and/or Corrective Actions Needed



Stormwater MSGP Routine Inspection Form

Additional Control Measures
Describe any additional control measures needed to comply with the permit requirements:

Non-Compliance
Were any incidents of non-compliance observed during this inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:
Define the actions to be taken to bring the site back into compliance and when:
Were any modifications or changes to, or replacement of control measures made as a result of non-compliance? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:

SWPPP Revisions
Were there any required revisions to the SWPPP based on this inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:

Notes
Use this space for any additional notes or observations from the inspection:

Certification Statement (Refer to MSGP Appendix B, Paragraph 9, for Signatory Requirements)			
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."			
A. Name on Inspector:		B. Title:	
C. Inspector Signature:		D. Date Signed:	

ATTACHMENT M
Visual Assessment Forms



Stormwater MSGP Visual Assessment Form

(Complete a separate form for each assessed outfall)

Facility Assessment Information			
Name of Facility: Name of Facility	AZPDES Auth. No.	Insert Tracking No.	
Outfall Name: Name	"Substantially Identical Discharge Point"? <input type="checkbox"/> Yes <input type="checkbox"/> No (identify substantially identical outfalls):		
Person(s)/Title(s) collecting sample: Name/Title			
Person(s)/Title(s) examining sample: Name/Title			
Date & Time Discharge Began: Enter date and time	Date & Time Sample Collected: Enter date and time. If sample not taken within first 30 minutes, explain why.	Date & Time Sample Examined: Enter date and time	
Substitute Sample? <input type="checkbox"/> No <input type="checkbox"/> Yes (identify quarter/year when sample was originally scheduled to be collected):			
Nature of Discharge: <input type="checkbox"/> Rainfall <input type="checkbox"/> Snowmelt			
Rainfall Amount: No of inches	Previous Storm Ended > 72 hours Before Start of This Storm? <input type="checkbox"/> Yes <input type="checkbox"/> No* (explain):		
Pollutants Observed			
Color	<input type="checkbox"/> None <input type="checkbox"/> Other	(Describe): _____	
Odor	<input type="checkbox"/> None <input type="checkbox"/> Musty <input type="checkbox"/> Sewage <input type="checkbox"/> Sulfur <input type="checkbox"/> Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Solvents <input type="checkbox"/> Other (Describe): _____		
Clarity	<input type="checkbox"/> Clear <input type="checkbox"/> Slightly Cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Opaque <input type="checkbox"/> Other		
Floating Solids	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Settled Solids**	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Suspended Solids	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Foam (gently shake sample)	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
Oil Sheen	<input type="checkbox"/> None <input type="checkbox"/> Flecks <input type="checkbox"/> Globs <input type="checkbox"/> Sheen <input type="checkbox"/> Slick <input type="checkbox"/> Other (Describe): _____		
Other Obvious Indicators of Stormwater Pollution	<input type="checkbox"/> No <input type="checkbox"/> Yes (Describe): _____		
* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period. ** Observe for settled solids after allowing the sample to sit for approximately one-half hour.			
Identify probable sources of any observed stormwater contamination. Also, include any additional comments, descriptions of pictures taken, and any corrective actions necessary below (attach additional sheets as necessary). Insert details			
Certification Statement (Refer to MSGP Appendix B, Paragraph 9, for Signatory Requirements)			
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."			
A. Name:		B. Title:	
C. Signature:		D. Date Signed:	

ATTACHMENT N
Corrective Action Report Forms



Multi-Sector General Permit (MSGP)

Corrective Action Report (CAR)

Pursuant to Permit Part 3.2, this form must be completed within 30 days of a discovery of any condition(s) listed in Part 3.1.1

Submit the completed form to stormwatercompliance@azdeq.gov or mail to:

ADEQ
 Surface Water Permits, MC 5415A-1
 1110 W. Washington Street
 Phoenix, AZ 85007

1. Facility Information

Name of Permittee:	AZPDES Permit ID#
---------------------------	--------------------------

2. Condition Requiring Corrective Action (Part 3.1.1)

Condition triggering Corrective Action (choose all that apply):

- An unauthorized discharge (e.g., non-stormwater discharge not authorized by this or another AZPDES permit to a Water of the U.S. or to a regulated MS4);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site causes or contributes to an exceedance of applicable water quality standard(s);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to a water listed as not-attaining exceeds an adopted wasteload allocation (WLA) for the pollutant(s) causing the impairment;
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to an Outstanding Arizona Water (OAW) is degrading water quality;
- A discharge from the site violates a numeric effluent limitation guideline (ELG).

3. Within 72 Hours of Discovery of the Condition Requiring Corrective Action (Part 3.2.1)

Within 72 hours of discovery of the incident that lead to Corrective Action, describe the following action items

How was incident discovered?

Condition that triggered Corrective Action:

Provide description of problem/ incident, including material type/ amount involved:

Date/ time problem was identified:

Location of the incident:



Multi-Sector General Permit (MSGP)

The cause of the spill, leak, other release, or sampling exceedance:

List Outfall Name(s) and include corresponding locations (latitude/ longitude) :

Receiving water(s) affected:

Is receiving water (check all that apply): Impaired Not-attaining OAW None

4. Within 14 Calendar Days of Discovery of the Condition Requiring Corrective Action (Part 3.2.2)

Within 14 calendar days of discovery (or before the next measurable storm event if possible, whichever is sooner) describe the following action items taken

Summary of Corrective Actions taken or to be taken:

Modifications to control measures or preventative measures taken, in order to prevent the reoccurrence of a discharge of a pollutant(s) or prevent further exceedance(s);

Was Stormwater Pollution Prevention Plan (SWPPP) Modification required: No Yes

If "yes" describe SWPPP modification(s):

Date Corrective Action initiated or will be initiated:

Date Corrective Action completed or expected to be completed:

Was the event that prompted corrective action, related to a sampling result: No Yes

If "yes", what is the date the DMR was or will be submitted:

Describe any contingency actions to be taken, including accelerated monitoring (if required):

If Corrective Actions cannot be completed within the required timeframes, describe reasons for the delay, provide an implementation schedule, and the back-up practices in place:

If no Corrective Action was taken, describe the basis for that determination:

If any MS4 was affected, please name the MS4(s):



Multi-Sector General Permit (MSGP)

Provide Dates and Result of the Last 4 Stormwater Inspections

Date: _____ Result of Inspection: In Compliance Modified, repaired, or replaced control measures

Date: _____ Result of Inspection: In Compliance Modified, repaired, or replaced control measures

Date: _____ Result of Inspection: In Compliance Modified, repaired, or replaced control measures

Date: _____ Result of Inspection: In Compliance Modified, repaired, or replaced control measures

Certification: I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision, and under a system designed to ensure that qualified personnel properly gathered and evaluated the information used to determine whether the applicable requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature: _____

Date: _____

Title: _____

Print and place a copy of this form in your SWPPP.

ATTACHMENT O
5-Day Written Report



Multi-Sector General Permit (MSGP)

5-Day Written Report

(Non-compliance that may endanger health or the environment)

Submit the completed form to stormwatercompliance@azdeq.gov or mail to:

ADEQ
 Surface Water Permits, MC 5415A-1
 1110 W. Washington Street
 Phoenix, AZ 85007

1. Facility Information

Name of Permittee:

AZPDES Permit ID#

Provide, date, time, and contact information for the 24-hour oral notification:

2. Information

Starting date of non-compliance:

Ending date of non-compliance:

Describe the issue of non-compliance that occurred at the site and the cause (if spill, provide material and amount):

If other agencies, departments notified, please describe:

Describe the period of non-compliance (dates and time):

If non-compliance has not already been corrected, how long is it expected to continue?

Describe the steps taken or planned to reduce, eliminate, and prevent the reoccurrence of non-compliance:

Describe any modifications or changes to, or replacement of control measures that were a result of non-compliance:



Multi-Sector General Permit (MSGP)

Was the Stormwater Pollution Prevention Plan (SWPPP) modified as a result of non-compliance? If so, describe:

Date of Last Stormwater Inspection:

Date of Next Scheduled Stormwater Inspection:

Certification: I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision, and under a system designed to ensure that qualified personnel properly gathered and evaluated the information used to determine whether the applicable requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature:

Date:

Print and place a copy of this form in your SWPPP.

ATTACHMENT P
Non-Compliance Report Form



Multi-Sector General Permit (MSGP)

Non-Compliance Form – Annual Submission

Submit the completed form to stormwatercompliance@azdeq.gov or mail to:

ADEQ
 Surface Water Permits, MC 5415A-1
 1110 W. Washington Street
 Phoenix, AZ 85007

1. Facility Information

Permittee Name:	AZPDES Permit ID#:
Permit Type:	Sector/ Subsector:
Facility Address:	Mailing Address:
Contact Name:	Title:
Telephone #:	Email Address:

Choose Reporting Year (Select a Year)

- Year 1: 2019-20
 Year 2: 2020-21
 Year 3: 2021-22
 Year 4: 2022-23
 Year 5: 2023-24

2. Non-Compliance Information

Starting date of non-compliance:	Ending date of non-compliance:
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Describe the issue of non-compliance that occurred during the permit year:

Define the actions taken to bring the site back into compliance:



Multi-Sector General Permit (MSGP)

Describe any modifications or change to, or replacement of control measures that were a result of non-compliance:

Was the SWPPP modified as a result of Non-Compliance? If so, describe:

Date of Last Stormwater Inspection:

Date of Next Stormwater Inspection:

Certification: I certify, under penalty of law, that the information and descriptions have been made under my direction and supervision, and under a system designed to ensure that qualified personnel properly gathered and evaluated the information used to determine whether the applicable requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Signature:

Date:

Print and place a copy of this form in your SWPPP.