



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 FROM NON-MINING FACILITIES
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.C.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 February 1, 2011.

This general permit and the authorization to discharge expire at midnight, January 31, 2016.

Signed this 20th day of December, 2010.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

A handwritten signature in black ink, appearing to read "M. A. Fulton", is written over a horizontal line.

Michael A Fulton, Director
Water Quality Division

**AZPDES MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM NON-MINING FACILITIES**

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1.0 Coverage under this Permit

1.1 Eligibility

1.1.1 Facilities Covered

This general permit authorizes stormwater discharges associated with “industrial activities” as defined in Appendix A from facilities having primary industrial activities included in Appendix C. This permit also authorizes discharges from facilities that are notified by ADEQ that they are regulated under Sector AD and eligible for coverage under this permit. This permit is not authorized for use by facilities with stormwater discharges associated with industrial activities on any Indian Country lands in Arizona. USEPA Region 9 is the permitting authority for Indian lands in Arizona.

1.1.2 Allowable Stormwater Discharges.

Unless otherwise ineligible under Part 1.1.4, the following are eligible for discharge 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;
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 effluent limitations guidelines listed in Table 1-1.

Table 1-1. Stormwater Specific Effluent Limitations Guidelines		
Regulated Discharge	40 CFR Section	MSGP Sector
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	A
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
Runoff from asphalt emulsion facilities	Part 443, Subpart A	D
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	E
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B	K, L
Runoff from coal storage piles at steam electric generating facilities	Part 423	O

1.1.3 Allowable Non-Stormwater Discharges.

Discharges from emergency fire-fighting activities are an allowable non-stormwater discharge activity without regard to the receiving water. The following non-stormwater discharges are allowed under this permit provided they are ancillary to the permitted use:

1. Fire fighting system testing and maintenance, including hydrant flushings;
2. 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;
3. Uncontaminated condensate from air conditioners, evaporative coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
4. Irrigation drainage and irrigation line flushing;
5. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
6. Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
7. Routine external building washdown that does not use detergents;
8. Water used to control dust, provided effluent or other wastewaters are not used;
9. Uncontaminated groundwater or spring water;
10. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
11. 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);
12. Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater;
13. Discharges of water associated with drilling, rehabilitation and maintenance of potable or non-potable water wells and peizometers, 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 provided the discharge meets applicable water quality standards; and
14. Non-stormwater discharges subject to an effluent limitation guideline listed in Table 1-1.

1.1.4 Limitations on Coverage

1.1.4.1 Discharges Mixed with Non-Stormwater. Stormwater discharges that are mixed with non-stormwater, other than 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 are not eligible for coverage under this 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:

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 1-1 are eligible for coverage under this permit.

1.1.4.5 New Dischargers to Water Quality Impaired Waters. A new discharger 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 data and other technical information onsite with the stormwater pollution prevention plan (SWPPP):
 - a. That the facility 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 facility 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 water quality standard. The applicant shall demonstrate either:
 - i. The discharges are subject to stormwater control measures such that the discharges meet the applicable water quality standard, for the parameter causing the impairment, at the point of discharge into the waterbody; or
 - ii. The discharges are consistent with the provisions of the TMDL, including established TMDL allocations and implementation plans.

Note: Pursuant to A.A.C. R18-11-109(D)(2), if a receiving water is impaired for suspended solids, turbidity or sediment/ sedimentation, a operator seeking authorization to discharge under this permit may satisfy the requirement of Part 1.1.4.5(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 1.1.4.5(1)(c)(i).

2. The applicant shall submit:
 - a. The NOI in accordance with Part 1.3.1;
 - b. A copy of the SWPPP. The SWPPP shall describe how the permittee will monitor for pollutants of concern in the discharge in accordance with Part 6.2.3; and
 - c. The necessary information or documentation related to the demonstration selected above.
3. If the proposed discharge is to an upstream tributary within 2.5 miles of a water or portion thereof classified as impaired, the applicant shall submit a copy of the SWPPP.
4. Within 32 business days of receipt of information required in Part 1.1.4.5 (2) or (3), ADEQ will notify the applicant in writing that:
 - a. It is acceptable to proceed under the general permit;
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit to ADEQ for review the revised SWPPP 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 1.6.

5. A new discharger to an upstream tributary within 2.5 miles of an impaired water is not required to meet the eligibility requirements set forth above, unless notified by ADEQ, but must submit a copy of the SWPPP with the NOI and is subject to the additional evaluation requirements set forth in Part 1.3.1(2)(c).

1.1.4.6 Discharges to Outstanding Arizona Waters.

1. No new or expanded discharges 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:
 - a. Submit the NOI in accordance with Part 1.3.1;
 - b. Prepare a SWPPP 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: (1) the distance between the discharge and the water or portion thereof that is OAW; (2) the estimated size (volume) and duration of the discharge; (3) the expected frequency of the discharge; (4) the expected characteristics of the discharge; and (5) the known or expected water quality of the water or portion thereof that is the OAW during storm events; and
 - c. If the proposed discharge is to an upstream tributary within 2.5 miles of a water or portion thereof classified as an OAW, submit a copy of the SWPPP that includes a sampling and analysis plan to collect data appropriate to verify the demonstration in subsection b, above.
3. Within 32 business 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;
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit to ADEQ for review the revised SWPPP, including any additional parameter identified in accordance with Part 6.2.4, 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 1.6.

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. Ensure the facility is located in Arizona on land that is outside of Indian Country;
 - b. Ensure that the facility meets the Part 1.1 eligibility requirements;
 - c. Select, design, install, and implement control measures in accordance with Part 2.1;
 - d. Develop a SWPPP according to the requirements in Part 5 of this permit. An applicant seeking authorization for a new discharge to or within 2.5 miles of an impaired water (see Part 1.1.4.5) or for a new or expanded discharge within 2.5 miles of an Outstanding

Arizona Water (see Part 1.1.4.6) is required to submit a copy of the SWPPP, to the Department for review, along with the NOI in subsection (e);

- e. Submit to the Department a complete and accurate Notice of Intent (NOI) Form (either an original, or a photocopy/reproduction) in accordance with A.A.C. R18-9-C901(D) to the address listed in Part 7.6. Other NOI options (i.e., electronic submission) may also be used if ADEQ makes the information available on the Internet or by public notice.

If the facility has the potential to discharge to a regulated municipal separate storm sewer system (MS4), the applicant must provide:

- o The name of the MS4 operator in Section E of the NOI; and
- o Name of closest surface water receiving the discharge.

The NOI form is available at <http://www.azdeq.gov/enviro/water/permits/stormwater.html>

2. Authorization to Discharge

a. Routine Authorizations

Unless otherwise notified, the applicant is authorized to discharge stormwater from an eligible facility upon either: receipt of the Authorization to Discharge; or 7 calendar days after a complete and accurate NOI is received by the Department, whichever is earlier. However, in order to rely on this 7 calendar day provision, the operator must submit the NOI in a manner that documents the date of ADEQ's receipt (i.e., certified mail, hand delivery, fax, etc.).

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 1.1.4.5 or 1.1.4.6 is authorized to discharge stormwater from an eligible facility upon receipt of the Authorization to Discharge or 32 business days after a complete and accurate NOI is received by the Department, whichever is earlier.

c. NOIs Requiring Additional Evaluation.

ADEQ may inform an applicant that authorization to discharge will not occur for up to 32 business days in the event that screening of the NOI provides information requiring further evaluation. ADEQ's notification may be made either in writing, electronically, by fax or phone. The notification typically will be made within 7 calendar days after receipt of the NOI. Applicants who receive notice of a delay in coverage may discharge 32 business days after the date the NOI is received unless further notice is received from ADEQ during this timeframe. Such notice may confirm authorization to discharge, or request additional information to comply with the requirements of this permit.

d. Requirement to Obtain Alternate Coverage.

ADEQ may require the operator to submit an application for an individual AZPDES permit, as detailed in Part 1.6.1. In these instances, ADEQ will notify the operator in writing of: 1) the delay; or 2) the request for submission of an individual AZPDES permit application.

e. Discharges to a regulated MS4.

Permittees with discharges to a regulated MS4 shall submit to the MS4 operator a copy of the Department's Authorization to Discharge.

3. Incomplete NOI Submitted. If ADEQ notifies the applicant that an NOI is incomplete or incorrect, the applicant must resubmit an amended NOI if the applicant still intends to obtain (or retain) coverage under this permit.

4. 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
Existing Dischargers – authorized for coverage under MSGP 2000.	The operator shall revise SWPPP documents to conform with this permit and apply for coverage no later than <i>May 31, 2011</i> .	Coverage under the MSGP 2000 is administratively continued until ADEQ: <ul style="list-style-type: none"> • Grants the applicant coverage under this permit (in accordance with Part 1.3.1(2)); or • Issues or denies an alternative permit in accordance with Part 1.6.1.
Other Eligible Dischargers – in operation prior to the effective date of this permit, but did not obtain coverage under the MSGP 2000 or another AZPDES permit.	The operator shall develop SWPPP documents to conform with this permit and apply for coverage no later than <i>May 31, 2011</i> .	Coverage will begin upon ADEQ issuance of an Authorization to Discharge (in accordance with Part 1.3.1(2)).
New Dischargers – will commence discharging after the effective date of this permit	As soon as possible, and at least 32 business days before discharge is anticipated.	Coverage begins upon ADEQ’s issuance of an Authorization to Discharge (in accordance with Part 1.3.1(2)).
Change of ownership and/ or operation to a new owner/operator of an existing facility (discharger) whose discharge is authorized under this permit.	Permitted owner/operator shall submit a NOT to ADEQ within 30 calendar days after the new owner/operator assumes responsibility for the facility. New owner/ operator shall submit a NOI to ADEQ 7 calendar days before taking over operational control or initiating activities at the facility.	New owner/ operator obtains coverage.

1.3.2 Continuation of this Permit

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. If the operator is authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

1. 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
2. The operator submits a Notice of Termination; or
3. ADEQ denies coverage under this general permit or denies or issues coverage under an individual permit or other alternative permit for the facility’s discharges; or
4. 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 Terminating Coverage

To terminate permit coverage, the permittee shall submit a complete and accurate Notice of Termination (NOT) form to the address listed in Part 7.6. Other NOT options (i.e., electronic submission) may also be used if ADEQ makes the information available on the Internet or by public notice. The facility's authorization to discharge under this permit terminates at midnight of the day that a complete NOT form is received by the department. The permittee shall submit an NOT within 30 calendar days after a new owner or operator assumes ownership of or has taken over responsibility for the facility.

The permittee shall also submit an NOT when there are not or no longer will be discharges of stormwater associated with industrial activity from the facility, and the permittee has already implemented necessary sediment and erosion controls as required by Part 2.1.1.5.

The permittee is responsible for meeting the terms and conditions of this permit until the facility's authorization is terminated.

1.5 No Exposure Exclusion

Operators may claim relief from the requirement to obtain a permit under the "no exposure" provision by submitting a No Exposure Certification to ADEQ at the address listed in Part 7.6. The No Exposure Certification incorporates the conditions of 40 CFR 122.26(g)(4)(iii) and must be submitted once every five years.

[Note: See A.A.C. R18-9-A902(H) and the Guidance Manual for Conditional Exclusion from Stormwater Permitting Based on "No Exposure" of Industrial Activities to Stormwater found at www.epa.gov/npdes/stormwater .]

In addition to submitting a No Exposure Certification, the operator shall allow ADEQ and/or the representatives of a regulated MS4 (where there is a stormwater discharge to the MS4) to inspect the facility and to make such inspection reports publicly available upon request. The facility must also submit a copy of the No Exposure Certification to the operator the regulated MS4 into which the facility discharges (if applicable). All No Exposure Certifications must be signed in accordance with the signatory requirements of Appendix B, Subsection 9. The No Exposure Certification is nontransferable.

Permittees operating under a 'no exposure exclusion' that has been accepted by ADEQ are not required to submit an NOT. However, if at any time the facility can no longer satisfy the conditions of no exposure, renewed permit coverage is required and the owner / operator must submit an NOI requesting coverage and comply with the permit. 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 water quality standard, including designated uses.

1.6 Alternative Permits

1.6.1 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 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 facility fails to submit an individual AZPDES permit application by the specified deadline. ADEQ may take appropriate enforcement action for any unpermitted discharge.

1.6.2 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 at the address listed in Part 7.6 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 this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

2.0 Control Measures, Numeric Effluent Limitations and Water Quality Standards.

In Part 2.1 (Control Measures) and in Part 8 (Sector-Specific Requirements for Industrial Activity), the term “minimize” means reduce and/or eliminate to the extent achievable using control measures that are technologically available, economically practicable and achievable in consideration of best industry practice to meet any applicable numeric effluent limitations in Part 2.2.1 and the water-quality based requirements in Parts 2.2.2 and 2.2.3.

The requirement to implement control measures in accordance with Part 2.1 applies to all facilities. Part 8 contains additional control measures imposed on a sector-specific basis. In some cases, sector-specific provisions in Part 8 modify the terms of the general control measures set forth in Part 2.1.

2.1 Control Measures

The permittee shall select, design, install, and implement control measures (including best management practices), as appropriate, to ensure the discharge meets the requirements of Part 2.2. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer’s specifications. If construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater, or significantly increases the quantity of pollutants discharged, the permittee shall review the selection, design, installation, and implementation of the facility’s control measures to determine if modifications are necessary to meet the requirements of this permit. If the facility’s control measures are not achieving their intended effect of minimizing pollutant discharges, the permittee shall modify these and/or add additional control measures to meet requirements of this permit. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility.

The permittee shall consider all of the control measures listed below for implementation at the facility and select those that the permittee determines are appropriate, given the nature of the site, to meet the requirements set forth in Parts 2.1.1 and 2.2. The control measures listed below are not intended to be an exclusive list of acceptable 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 facility.

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 facility when designing and implementing control measures. The permittee shall select and design control measures incorporating one or more of the following principles:

- Preventing stormwater from coming into contact with polluting materials 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 facility’s stormwater discharge;
- Minimizing impervious areas at the facility 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 ground water contamination;

- Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- 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.

2.1.1.1 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 by implementing measures such as the following:

- Locating industrial materials and activities inside or protect them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended)
- Covering fueling area(s) or minimize stormwater run-on/runoff to fueling area(s);
- 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 leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- Using spill/overflow protection and cleanup equipment;
- Draining fluids from equipment and vehicles prior to on-site storage or disposal;
- Performing all 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 drains to a proper collection system (i.e., not the stormwater drainage system).

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.

2.1.1.2 Good Housekeeping. The permittee shall implement good housekeeping measures for all exposed areas that are potential sources of pollutants. Such measures may include:

- Sweeping 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.

2.1.1.3 Maintenance. The permittee shall regularly inspect, test, maintain, and repair all industrial equipment and systems that have the potential for exposure to stormwater to avoid situations that may result in leaks, spills, and other releases of pollutants to stormwater discharged from the site. The permittee shall maintain all control measures and equipment in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If the permittee discovers control measures are not achieving the intended effect of minimizing pollutant discharges (i.e., control measures need repair or replacement), the permittee shall make any necessary changes within 14 calendar days following discovery, or before the next measurable storm event (see Part 6.1.2.2), whichever is sooner, to ensure compliance with the applicable numeric effluent limitations in Part 2.2.1 and

water quality-based limitations in Parts 2.2.2 and 2.2.3 of this permit. If necessary changes cannot be implemented within the specified timeframe(s), the permittee shall document with 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 the applicable numeric effluent limitations in Part 2.2.1 and water quality-based limitations in Parts 2.2.2 and 2.2.3 of this permit should a runoff event occur while a control measure is off-line (either in part or in whole).

2.1.1.4 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 by implementing measures such as:

- Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause or detect a spill or leak should be knowledgeable in the proper reporting procedures established by their facility. Employees who are responsible for spill response and/or cleanup, must be properly trained and have necessary spill response equipment available; and
- Procedures for notification of appropriate facility 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 Duty Office at (602) 771-2330 or, toll free, at (800) 234-5677. Contact information must be in locations that are readily accessible and available.

2.1.1.5 Erosion and Sediment Controls. The permittee shall minimize on-site erosion and sedimentation, and the resulting discharge of pollutants by using methods such as:

- Stabilizing exposed areas;
- Containing runoff using structural and/or non-structural control measures;
- Placing flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants.

[*Note:* In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA’s internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific Industrial Stormwater Fact Sheet Series, (www.epa.gov/npdes/stormwater/msgp), National Menu of Stormwater BMPs (www.epa.gov/npdes/stormwater/menuofbmps), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (www.epa.gov/owow/nps/urbanmm/index.html).]

2.1.1.6 Management of Runoff. The permittee shall reduce stormwater runoff to minimize the discharge of pollutants from the facility by implementing control measures such as:

- Diverting, infiltrating, reusing, containing runoff, or
- Treating and/or recycling stormwater runoff collected.

[*Note:* In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA’s internet-based resources relating to runoff management, including the sector-specific Industrial Stormwater Fact Sheet Series, (www.epa.gov/npdes/stormwater/msgp), National Menu of Stormwater BMPs (www.epa.gov/npdes/stormwater/menuofbmps), and National Management Measures to Control

Nonpoint Source Pollution from Urban Areas (www.epa.gov/owow/nps/urbanmm/index.html].

- 2.1.1.7 Salt Storage Piles or Piles Containing Salt.** The permittee shall 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. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged or if discharges from the piles are authorized under another AZPDES permit.
- 2.1.1.8 Sector Specific Control Measures.** The permittee shall implement any additional control measures in the relevant sector-specific section(s) of Part 8, as appropriate.
- 2.1.1.9 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 facility’s stormwater pollution prevention team (see Part 5.1.1). Training must cover both the specific control measures used to achieve the requirements in Part 2.2 and (for those who will be involved in these activities) the monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Training shall be conducted at least annually (or more often if circumstances warrant, such as high employee turnover).
- 2.1.1.10 Non-Stormwater Discharges.** The permittee shall not allow any non-stormwater discharges from the facility unless they are specifically authorized in Part 1.1.3.
- 2.1.1.11 Litter, Garbage and Floatable Debris.** The permittee shall ensure that litter, garbage, and floatable debris are not discharged to surface waters by keeping exposed areas free of such materials or by intercepting them before they leave the site.
- 2.1.1.12 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.

2.2 Numeric Effluent Limitations and Water Quality Standards

2.2.1 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

Table 2-1 below identifies specific regulated activities with effluent limitations guidelines and the locations of effluent limitations guidelines in this permit. Discharges from such 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 2-1. Applicable Effluent Limitations Guidelines		
Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	See Part 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	See Part 8.C.4
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Part 8.D.4
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Part 8.E.5

Table 2-1. Applicable Effluent Limitations Guidelines		
Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Runoff from hazardous waste landfills	Part 445, Subpart A	See Part 8.K.6
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Part 8.L.10
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Part 8.O.8

2.2.2 Water Quality Standards

The permittee shall control discharge from the facility as necessary to not cause or contribute to an exceedance of an applicable water quality standard. ADEQ expects that compliance with other conditions in this permit will control discharges as necessary to not cause or contribute to an exceedance of an applicable water quality standard (A.A.C.R18-11, Article 1). However, if at any time the permittee becomes aware, or ADEQ determines, that the facility's discharge causes or contributes to an exceedance of an applicable water quality standard, the permittee shall take corrective action as required in Part 3.1, document the corrective actions as required in Parts 3.3 and 5.4, and report the corrective actions to ADEQ as required in Part 7.2.

Additionally, 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 1.6.1, 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 water quality standard.

2.2.3 Discharges to Water Quality Impaired Waters

2.2.3.1 Existing Discharges to an Impaired Water with an Approved TMDL. If the discharge is to an impaired water with, or is otherwise referenced in an approved TMDL, the Department may require, as a condition of authorization, additional limits, controls, or monitoring necessary to be consistent with the assumptions of any available wasteload allocation in the TMDL. Alternatively, ADEQ will advise the permittee if coverage under an individual permit is necessary in accordance with Part 1.6.

2.2.3.2 Existing Discharges to an Impaired Water without an Approved TMDL. If the discharge is to an impaired water without an approved TMDL, the permittee shall comply with Part 2.2.2 and the monitoring requirements of Part 6.2.3. This subsection applies to discharges directly to impaired waters as well as to situations where ADEQ determines that the facility's discharge is not controlled as necessary to meet water quality standards in a downstream water segment, even if the discharge is to a receiving water that is not specifically identified on a Section 303(d) list.

2.2.3.3 New Discharges to an Impaired Water. If the permittee's authorization to discharge under this permit relied on Part 1.1.4.5 for a discharge to an impaired water, the permittee shall implement and maintain any control measures or conditions on the facility that enabled it to become eligible under Part 1.1.4.5. 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 2.2.2 and the monitoring requirements of Part 6.2.3.

3.0 Corrective Actions

3.1 Corrective Action Triggers

3.1.1 Conditions Requiring Review and Revision of Control Measures to Eliminate a Problem

If any of the following conditions occur resulting in or from a failure of a control measure, the permittee shall review the selection, design, installation, and implementation of the facility's control measures and revise as necessary to ensure that the condition is eliminated:

- An unauthorized discharge (e.g., discharge of non-stormwater not authorized by this or another AZPDES permit) to a water of the U.S. or to a regulated MS4 occurs at the facility (Part 2.1);
- A discharge violates a numeric effluent limitation guideline (Table 1-1);
- The permittee becomes aware, or ADEQ determines, that the facility's discharge causes or contributes to an exceedance of applicable water quality standard(s) (Part 2.2.2) or an adopted waste load allocation (WLA) (Part 2.2.3); or
- ADEQ, or an operator of a regulated MS4, determines that modifications to the control measures are necessary to meet the requirements of Part 2.2.

3.1.2 Substantially Identical Outfalls

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the facility's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review.

3.2 Corrective Action Deadlines

The permittee shall document the discovery of any of the conditions listed in Part 3.1 within 72 hours of making such discovery. Within 14 calendar days of such discovery, the permittee shall document any corrective action(s) taken or to be taken to eliminate or further investigate the condition, or if no corrective action is needed, the basis for that determination. The specific documentation required within 72 hours and 14 calendar days is detailed in Part 3.3. When actions are determined necessary, the permittee shall make any necessary changes within 14 calendar days following discovery, or before the next measurable storm event (see Part 6.1.2.2), whichever is sooner, to ensure compliance with the applicable numeric effluent limitations in Part 2.2.1 and water quality-based requirements in Parts 2.2.2 and 2.2.3 of this permit. If necessary changes cannot be implemented within the specified timeframe(s), the permittee shall document with the SWPPP the reasons for the delay, a schedule for completing the necessary changes, date completed and any back-up practices in place to ensure compliance with the applicable numeric effluent limitations in Part 2.2.1 and water quality-based requirements in Parts 2.2.2 and 2.2.3 of this permit should a runoff event occur while a control measure is off-line.

3.3 Corrective Action Report

1. Within 72 hours of discovery of any condition listed in Part 3.1, the permittee shall document the following information, which shall be maintained with the SWPPP:
 - a. Identification of the condition triggering the need for corrective action review;
 - b. Description of the problem identified; and
 - c. Date the problem was identified.
2. Within 14 calendar days of discovery of any condition listed in Part 3.1, the permittee shall document and maintain with the SWPPP the following information:
 - a. Summary of corrective action taken or to be taken;
 - b. Whether SWPPP modifications are required as a result of this discovery or corrective action;
 - c. Date corrective action initiated or will be initiated; and
 - d. Date corrective action completed or expected to be completed.
3. When any condition listed in Part 3.1 occurs, a permittee that operates a facility that discharges to an impaired water or OAW shall submit this documentation in an annual report as required in Part 7.2 and retain a copy of the corrective action report onsite with the SWPPP as required in Part 5.4.

4.0 Inspections

The permittee shall conduct inspections in accordance with Parts 4.1, 4.2, and 4.3 of this permit at the facility. If, during any quarterly routine facility inspection, visual assessment, or comprehensive facility inspection, or any other time, the facility's control measures are found to be inadequate or otherwise not be properly operated and / or maintained, the permittee shall review the selection, design, installation, and implementation of the control measures to determine if maintenance and/or modifications are necessary to meet the applicable numeric effluent limitations in Part 2.2.1 and water quality-based requirements in Parts 2.2.2 and 2.2.3 of this permit, in accordance with the requirements of Part 2.1.1.3. Such modifications shall be documented in the SWPPP and implemented as expeditiously as practicable.

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

4.1 Routine Facility Inspections

4.1.1 Routine Facility Inspection Procedures

The permittee shall conduct routine inspections of all areas of the facility where industrial materials or activities are exposed to stormwater with the potential to discharge from the facility, and of all stormwater control measures used to comply with this permit. Such routine inspections shall be conducted at least once each calendar quarter beginning with the first full calendar quarter after the facility becomes covered under this permit (see Part 1.3.1(2) and Table 1-2). More frequent inspections (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to stormwater. The permittee shall specify the relevant inspection schedules in the SWPPP document as required in Part 5.1.5.

A qualified person or persons (see definition in Appendix A) shall conduct routine facility inspections. A member of the stormwater pollution prevention team (see Part 5.1.1) shall conduct or participate in the inspections. Inspections shall be performed during periods when the facility is in operation (i.e., is not inactive and unstaffed in accordance with the requirements of Part 4.1.3). The permittee shall initiate at least one of the routine facility inspections each calendar year while a stormwater discharge is occurring at one or more outfalls, but in no case 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) during a calendar year, the permittee shall document the inability to perform an inspection during a measurable storm event as described in Part 5.4. In any case, the permittee must still complete routine quarterly inspections.

4.1.2 Routine Facility Inspection Documentation.

The permittee shall document the findings of each routine facility inspection performed and maintain this documentation with the SWPPP as required in Part 5.4. Inspection findings do not need to be submitted to ADEQ, unless specifically requested. At a minimum, the documentation for each routine facility inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information and a description of any discharges occurring at the time of the inspection;
- Evidence demonstrating that previously unidentified discharges of pollutants have occurred from the site;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any other evidence of deviations from the permit or SWPPP observed; and
- Any additional control measures needed to comply with the permit requirements.

4.1.3 Exceptions to Routine Facility Inspections

Inactive and Unstaffed Sites: The requirement to conduct routine facility inspections on a quarterly basis does not apply to a facility that is inactive and unstaffed, provided that no industrial materials or activities are exposed to stormwater. Such a facility is only required to conduct an annual comprehensive facility inspection in accordance with the requirements of Part 4.3. To invoke this exception, the permittee shall do the following:

- Maintain a statement in the SWPPP pursuant to Part 5.1.5.2 indicating that the facility 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 facility becomes active and/or staffed, this exception no longer applies and the permittee shall immediately resume quarterly inspections.
- If, during the period of coverage under this permit, the facility becomes qualified for the inactive and unstaffed exception, and there are no industrial materials or activities exposed to stormwater, then the permittee shall include the same signed and certified statement as above and retain it pursuant to Part 5.4.

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 one routine inspection and one CFI each calendar year. These two inspections shall be conducted in the opposing wet seasons and at least three months apart. The SWPPP shall include documentation that the facility is unable to meet this standard and the results of the inspections. Compliance with any additional sector-specific conditions in Part 8 is still required.

4.2 Visual Assessment of Stormwater Discharges

The permittee shall perform two visual assessments during the summer wet season and two visual assessments during the winter wet season when the facility 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 monitoring 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 assessment monitoring shall commence with the start of the next wet season.

4.2.1 Visual Assessment Procedures

Visual assessment samples are not required to be collected consistent with 40 CFR Part 136 procedures.

The visual assessment shall be made:

- Of a sample in a clean, clear 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 facility (see also Part 6.1.2.3); and

- On discharges that occur at least 72 hours (3 calendar days) from a previous discharge (see also Part 6.1.2.2).

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 as required in Part 5.4. 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:

- 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.

4.2.3 Exceptions to Visual Assessments

Absence of Discharge: If no storm event results in a discharge from the facility or outfall(s) during a wet season, the permittee is excused from visual assessment for the facility or outfall(s) for that season provided the permittee documents in the monitoring records and retains with the SWPPP why a sample could not be collected.

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 either visual assessment sample in a given wet season, the permittee shall document those conditions with the SWPPP and resume visual assessment monitoring in the subsequent wet season.

Inactive and unstaffed sites: The requirement for a routine visual assessment does not apply at a facility 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 as required in Part 5.1.5.2 indicating that the facility 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 facility becomes active and/or staffed, this exception no longer applies and the permittee shall immediately resume visual assessments.
- If, during the period of coverage under this permit, the facility becomes qualified for the inactive and unstaffed exception, and there are no industrial materials or activities exposed to stormwater, then the permittee shall include the same signed and certified statement as above and retain it with the facility's records pursuant to Part 5.4.

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.

Substantially identical outfalls: If the facility has two or more outfalls that discharge substantially identical pollutants, as documented in Part 5.1.5.2, the permittee may conduct visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s). If possible, visual assessments of each substantially identical outfall shall be performed on a rotating basis throughout the period of coverage under this permit.

If a visual assessment performed on a sample 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 for that outfall and, if necessary, other outfalls represented by the monitored outfall.

4.3 Comprehensive Facility Inspections

4.3.1 Comprehensive Facility Inspection Procedures

The permittee shall conduct annual comprehensive facility inspections while covered under this permit. Annual, as defined in this Part, means once per calendar year, but not within 6 months of the previous inspection for the facility throughout the duration of permit coverage.

If the facility's coverage is administratively continued after the expiration date of this permit, the permittee shall continue to perform inspections annually until no longer covered by this permit.

A qualified person or persons shall conduct comprehensive facility inspections (CFI). A member of the facility's stormwater pollution prevention team shall conduct or participate in the inspection. CFIs must cover all areas of the facility affected by the requirements in this permit, including areas identified in the SWPPP as potential pollutant sources (see Part 5.1.3) where industrial materials or activities are exposed to stormwater with the potential to discharge from the facility, any areas where control measures are used to comply with the permit, and areas where significant spills (or spills that would contribute to the discharge of pollutants in stormwater) and leaks have occurred in the past 3 years. CFIs must also include a review of monitoring data collected in accordance with Part 6.2.

Inspectors must evaluate the results of the past year's visual assessments and analytical monitoring when planning and conducting inspections to determine potential areas of concern for stormwater pollution. Inspectors shall look for the following:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
- Control measures needing replacement, maintenance, or repair.

Inspectors shall examine all stormwater control measures required by this permit to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations shall be inspected.

The facility's annual CFI may also be used as one of the routine inspections required by Part 4.1, provided that all components of both types of inspections are included.

4.3.2 Comprehensive Facility Inspection Documentation.

All permittees shall document the findings of each CFI and maintain this documentation with the SWPPP. At a minimum, the following information shall be included:

- The date of the inspection;
- The name(s) and title(s) of the personnel making the inspection;
- Findings from the examination of areas of the facility identified in Part 4.3.1;
- All observations relating to the implementation of the control measures including:
 - Previously unidentified discharges from the site,
 - Previously unidentified pollutants in existing discharges,
 - Evidence of, or the potential for, pollutants entering the drainage system that are not contemplated in the SWPPP;
 - Evidence of pollutants discharging to surface waters from any facility outfall(s) in a manner inconsistent with the SWPPP, and the condition of and around the outfall, including the condition of flow dissipation measures (if present) designed to prevent scouring, and
 - Additional control measures needed to address any conditions requiring corrective action identified during the inspection.
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
- A statement signed and certified in accordance with Appendix B, Subsection 9 of this permit.

In addition, permittees that operate facilities that discharge directly to an impaired water or OAW or to an upstream tributary within 2.5 miles of an impaired water or OAW shall submit the CFI findings with the annual report as required in Part 7.2.

5.0 Stormwater Pollution Prevention Plan (SWPPP)

The permittee shall prepare a SWPPP for the facility, or review and update an existing one, as appropriate, before submitting the Notice of Intent (NOI) for permit coverage. The SWPPP shall document the basis for selection, design, and installation of control measures utilized at the facility. The additional documentation requirements (see Part 5.4) are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements. Additional sector-specific SWPPP requirements may be described in Part 8 of this permit. If a conflict exists between the two, the requirements of Part 8 shall prevail.

5.1 Contents of the Facility's SWPPP

The SWPPP shall contain all of the following elements:

- Identification of the stormwater pollution prevention team (see Part 5.1.1);
- Site description (see Part 5.1.2);
- Summary of potential pollutant sources (see Part 5.1.3);
- Description of control measures (see Part 5.1.4);
- Schedules and procedures (see Part 5.1.5);
- Signature requirements (see Part 5.1.6);
- Identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations; and

- Sampling and analysis plan (SAP) (see Part 6.1.3).

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

5.1.1 Stormwater Pollution Prevention Team

The permittee shall identify the members (by name or title) that comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. The team may include members who are not employed by the facility (such as third party consultants). The stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team must have access to either an electronic or paper copy of applicable portions of this permit and the SWPPP.

5.1.2 Site Description.

The SWPPP shall include all of the following:

1. Activities at the Facility. Provide a description of the nature of the industrial activities at the facility.
2. General location map. Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and surface waters receiving stormwater discharges from the facility.
3. Site map. Provide a legible site map (or maps) completed to scale, that identifies at a minimum the:
 - Size of the property in acres;
 - Location and extent of significant structures and impervious surfaces;
 - Directions of stormwater flow (e.g., use arrows);
 - Locations of stormwater conveyances (e.g., ditches, pipes, and swales);
 - Locations of all existing structural control measures;
 - Locations of surface waters receiving the facility's discharges and any impaired waters or OAWs within 2.5 miles downstream of the facility;
 - Locations where the facility's stormwater discharges to a regulated MS4 (where applicable);
 - Locations of potential pollutant sources identified under Part 5.1.3.2;
 - Locations where significant spills or leaks identified under Part 5.1.3.3 have occurred;
 - Locations of all stormwater monitoring points;
 - Locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2, etc), indicating whether one or more outfalls are being treated as "substantially identical" under Parts 4.2.3, 5.1.5.2, and 6.1.1.1, and an approximate outline of the areas draining to each outfall;
 - Identification of all outfalls having the potential to contain allowable non-stormwater discharges under Part 1.1.3 and the corresponding type(s) of discharges;
 - Location of on-site drywell(s); include a list of the on-site drywells and their registration number(s);
 - Locations of the following activities where such activities are exposed to stormwater with potential to discharge from the facility:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;

- loading/unloading areas;
- locations used for the treatment, storage, or disposal of wastes;
- liquid storage tanks;
- processing and storage areas;
- 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;
- transfer areas for substances in bulk; and
- machinery; and
- Locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.

5.1.3 Summary of Potential Pollutant Sources

The permittee shall describe in the SWPPP areas at the facility where industrial materials or activities are exposed to stormwater with the potential to discharge and from which allowable non-stormwater discharges are released. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

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

5.1.3.2 Pollutants A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list must include all significant materials that are handled, treated, stored, or disposed, and that have been exposed to stormwater including any past activities or incidents that may impact present stormwater discharges (see Note in Part 5.1.3.3).

5.1.3.3 Spills and Leaks The permittee shall document where significant spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be impacted by stormwater in contact with such spills and leaks. The permittee shall also document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the date that the SWPPP was prepared or amended.

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

5.1.3.4 Unauthorized Non-Stormwater Discharges Unauthorized non-stormwater discharges are those not specifically allowed under Part 1.1.3. The permittee shall identify and evaluate all unauthorized non-stormwater discharges. Documentation of this evaluation shall include:

- The date of the evaluation;
- A description of the evaluation criteria used;
- A list of the outfalls and/ or upgradient drainage locations that were directly observed during the evaluation;
- The different types of unauthorized non-stormwater discharge(s) and source locations; and

- The action(s) taken, such as a list of control measures used to eliminate unauthorized non-stormwater discharge(s), if any were identified or obtaining an AZPDES permit for the discharge. For example, a floor drain was sealed, a sink drain was re-routed to the sanitary sewer, or an AZPDES permit application was submitted for an unauthorized cooling water discharge.

5.1.3.5 Salt Storage The permittee shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.

5.1.3.6 Sampling Data The permittee shall summarize all stormwater discharge sampling data collected at the facility during the previous permit term.

5.1.4 Description of Control Measures

The permittee shall describe in the SWPPP the location and type of control measures installed and implemented at the facility to comply with Parts 2 and 8 of this permit. This documentation must describe how the control measures at the facility address both the pollutant sources identified in Part 5.1.3 and any stormwater run-on that commingles with any discharges covered under this permit.

5.1.5 Schedules and Procedures

5.1.5.1 Control Measures.

The following must be described in the SWPPP:

- Good Housekeeping measures, procedures and related schedules (See Part 2.1.1.2);
- Maintenance measures, procedures and related schedules (See Part 2.1.1.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems exposed to stormwater with the potential to discharge, and associated control measures, to avoid situations that may result in leaks, spills, and other releases that affect the quality of stormwater discharges; and
- Spill Prevention and Response Procedures (See Part 2.1.1.4) – Procedures for preventing and responding to spills and leaks. The permittee may reference the existence of other plans, such as the Spill Prevention Control and Countermeasure (SPCC) plan developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an AZPDES permit or an aquifer protection permit for the facility, provided that a copy of that other plan is kept with the SWPPP consistent with Part 5.3; and
- Employee Training (Part 2.1.1.9) – A schedule for all types of necessary training in accordance with the sector-specific requirements described in Part 8.

5.1.5.2 Monitoring and Inspection

Monitoring: The permittee shall describe in the SWPPP the procedures for conducting the four types of analytical monitoring specified by this permit, when and where applicable. The four types of analytical monitoring are:

- Benchmark monitoring (see Part 6.2.1);
- Effluent limitations guidelines monitoring (see Part 6.2.2);
- Impaired waters monitoring (see Part 6.2.3); and
- Additional monitoring as required by ADEQ (see Part 6.2.4).

For the required monitoring, the SWPPP shall contain a SAP either as a separate section or as an appendix to the SWPPP. The contents of the SAP are outlined in Part 6.1.3.

Inspection: The permittee shall describe in the SWPPP the procedures for performing, as appropriate, the three types of inspections specified by this permit, including:

- Routine facility inspections (see Part 4.1);

- Visual assessment of stormwater discharges (see Part 4.2); and
- Comprehensive facility inspections (see Part 4.3).

For each type of inspection performed, the SWPPP shall identify:

- Person(s) or positions of person(s) responsible for inspection;
- Schedules for conducting inspections; and
- Specific items to be covered by the inspection.

Substantially Identical Outfalls: The permittee shall describe the following in the SWPPP when using the substantially identical outfall exception for the visual assessment requirements in Part 4.2 or the facility's benchmark monitoring requirements in Part 6.2.1:

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

5.1.5.3 Inactive and Unstaffed Sites. When the permittee invokes either of the following exceptions for inactive and unstaffed sites the SWPPP shall include the information that supports this claim as required by Parts 4.1.3, 4.2.3 and 6.2.1.4:

- Benchmark monitoring; and
- Routine facility inspections and visual assessments.

5.1.6 Signature Requirements

The permittee shall sign the SWPPP in accordance with Appendix B, Subsection 9, including the date of signature.

5.2 Required SWPPP Modifications

The permittee shall modify the SWPPP whenever necessary to address any of 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 Parts 3.2 and 3.3, and signed and dated in accordance with Appendix B, Subsection 9.

5.3 SWPPP Availability

The permittee shall retain a copy of the current SWPPP at the facility, and it shall be made immediately available to ADEQ, EPA, or another Federal, State or local agency having stormwater program authority, or the operator of a regulated MS4 receiving discharges from the facility (where applicable) at the time of an onsite inspection or upon request. If otherwise requested by ADEQ, the permittee shall submit copies of the SWPPP documents within 14 calendar days of 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. If otherwise requested by ADEQ, the permittee shall submit copies of these documents within 14 calendar days of request.

5.4 Documentation Requirements

The permittee shall keep the following inspection, monitoring, and certification records complete and up-to-date. Retaining these records with the SWPPP (unless otherwise specified below) is necessary to demonstrate compliance with the conditions of this permit.

- A copy of the NOI submitted to ADEQ, including: any correspondence exchanged between the operator and ADEQ specific to coverage under this permit and the permit authorization number assigned by ADEQ;
- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
- Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants in stormwater to a regulated MS4 or to waters of the U.S., the circumstances leading to the release and actions taken in response to the release and measures taken to prevent the recurrence of such releases (see Part 2.1.1.4 and 5.1.3.3);
- Records of employee training, including date training received. Training records need not be maintained with the SWPPP but shall be made available to ADEQ, EPA, or another Federal, State or local agency upon request (see Part 2.1.1.9);
- Documentation of repairs of structural control measures, including the date(s) of discovery of areas in need of repair/replacement, date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules (see Part 2.1.1.3). Documentation of maintenance of industrial equipment and systems in accordance with part 2.1.1.3 need not be maintained with the SWPPP but shall be made available to ADEQ, EPA, or another Federal, State or local agency upon request. The maintenance records shall include the date(s) of regular maintenance. However, the justification for any extended maintenance schedules shall be maintained with the SWPPP (see Part 2.1.1.3);
- All inspection reports, including the Routine Facility Inspection Reports (see Part 4.1), the Visual Assessment Reports (see Part 4.2), and the Comprehensive Facility Inspection Reports (see Part 4.3);
- Description of and rationale for any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 4.1.1, 4.2.1, 6.1.2.3, and 6.2.1);
- Description of any corrective action taken at the site, including triggering event and dates when problems were discovered and modifications occurred;
- Documentation of any benchmark exceedances and how they were responded to, including either (1) modifications to control measures, (2) a finding that the exceedance was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part 6.2.1.2;
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the discharge is directly to impaired waters, and that such pollutants are not detectable in the facility's discharge or were solely attributable to natural background sources (see Part 6.2.1.3); and
- Documentation to support the permittee's claim that the facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part 4.1.3), visual assessments (see Part 4.2.3), and/or benchmark monitoring (see Part 6.2.1.4).

6.0 Analytical Monitoring Program.

In addition to visual assessment required in Part 4 of this permit, the permittee shall collect and analyze stormwater samples and document monitoring activities consistent with the procedures described in Part 6 and Appendix B, Subsections 9, 11 and 12 and any sector-specific requirements in Part 8. Refer

to Part 7 for additional reporting and recordkeeping requirements.

6.1 Analytical Monitoring Procedures

6.1.1 Analytical Monitoring Locations

6.1.1.1 Monitored Outfalls

Applicable monitoring requirements apply to each outfall authorized by this permit. If the facility has two or more outfalls believed to discharge substantially identical stormwater and/or allowable non-stormwater, 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, the permittee may monitor the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s). The allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with numeric effluent limitations set forth in Part 2.2.1. The permittee is required to monitor each outfall covered by a numeric effluent limitation as identified in Part 6.2.2.

6.1.1.2 Commingled Discharges.

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 unauthorized discharges to the extent practicable.

6.1.1.3 Monitoring for Allowable Non-Stormwater Discharges

Unless otherwise specified by ADEQ, permittees are required to monitor allowable non-stormwater discharges (as delineated in Part 1.1.3) only when they are commingled with stormwater discharges associated with industrial activity.

6.1.2 Monitoring Events

6.1.2.1 Monitoring Periods.

Monitoring requirements in this permit begin within 90 calendar days of receiving the Department's authorization to discharge. The required monitoring events may be distributed during seasons when precipitation occurs, or when snowmelt results in a measurable discharge from the site.

Wet seasons, for the purposes of analytical monitoring, apply statewide and are defined as follows:

Summer wet season: June 1 – October 31

Winter wet season: November 1 – May 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.

6.1.2.2 Measurable Storm Events.

All required monitoring must be performed on a storm event that results in a discharge from the facility ("measurable storm event") that follows the preceding measurable storm event by at least 72 hours (3 calendar days). The 72 hour (3 day) storm interval does not apply if the permittee is able to 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.

For each monitoring event, except snowmelt monitoring, the permittee shall identify the person performing the monitoring, the date and estimated duration (in hours) of the rainfall event, estimated rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm

event. For snowmelt monitoring, the permittee shall identify the sample as 'snowmelt' and the date of the sampling event.

6.1.2.3 Sample Type.

The permittee shall take a minimum of one grab sample from a discharge resulting from a measurable storm event that produces a sufficient volume to allow collection of a sample. With the exception of samples to be analyzed for Suspended Sediment Concentration (SSC), samples must be collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. Samples for SSC shall be collected 48 hours after the storm event that resulted in a measureable discharge. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

6.1.2.4 Adverse Conditions.

When adverse conditions as described in Part 4.2.3 prevent the collection of either analytical sample in a given wet season, the permittee shall document those conditions with the SWPPP and resume analytical monitoring in the subsequent wet season. Adverse conditions do not exempt the permittee from the requirement to file a discharge monitoring report (DMR) in accordance with the facility's sampling schedule. The permittee shall report any failure to monitor as specified in Part 7.1 indicating the basis for not sampling during the usual reporting period.

6.1.3 Sampling and Analysis Plan.

The permittee shall develop a written SAP covering all analytical monitoring required by this permit. The SAP shall be a part of the SWPPP as either an appendix or a separate SWPPP section. The SAP shall include the following:

6.1.3.1 Sample Collection, Preservation, Tracking, and Handling Information

- Designate and train personnel to collect, maintain, and handle samples in accordance with the appropriate sample protocols.
- Identify water quality parameters/pollutants to be sampled including any pollutant(s) of concern in accordance with Parts 6.2.3 and 6.2.4;
- Identify the required sample analyses and associated analytical methods (analytical laboratory and field analyses).
- Written procedures for:
 - Sample collection (equipment and containers, calibration procedures, document site conditions during sampling, field notes and conditions under which the sample was taken),
 - Preservation (sample preparation to meet holding times),
 - Tracking (including chain-of-custody procedures), and
 - Handling (packing, transporting and shipping procedures to maximize sample integrity).

6.1.3.2 Calibration and Maintenance of Monitoring Equipment.

All monitoring instruments and equipment (including permittee's field instruments for measuring pH and turbidity) shall be calibrated and maintained in accordance with manufacturer's recommendations.

6.1.3.3 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. Identification of the analytical

methods and related limits of detection (if applicable) for each parameter is required. The samples shall be analyzed using analytical methods with a limit of quantitation (LOQ) that is at or below the benchmark concentrations, ELGs or other criteria specified in this permit. If all methods have LOQs higher than the specific criteria, the samples shall be analyzed using the analytical method with the lowest LOQ.

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. This requirement does not apply to parameters that require analysis at the time of sample collection as long as the testing methods used are approved by ADHS. The permittee may conduct field analysis of turbidity if the permittee has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to properly perform the field analysis.

6.1.3.4 Records.

The permittee shall retain records of all stormwater monitoring information and reports as part of the SWPPP in accordance with Part 7.5 and any additional requirements in Appendix B, Subsection 11 of this permit.

6.2 Required Monitoring.

This permit includes four types of required analytical monitoring, one or more of which may apply to the facility's discharge:

- Benchmark monitoring (see Part 6.2.1)
- Effluent limitations monitoring (see Part 6.2.2);
- Impaired waters monitoring (see Part 6.2.3); and
- Additional monitoring as required by ADEQ (see Part 6.2.4).

When more than one type of monitoring for the same parameter at the same outfall applies (e.g., total suspended solids once per year for an effluent limitation and twice per wet season for benchmark monitoring at a given outfall), 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 Benchmark Monitoring.

This permit stipulates pollutant benchmark concentrations for certain industry sectors. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily to determine the overall effectiveness of the control measures and assist the permittee in knowing when to apply additional corrective action(s) to comply with the effluent limitations in Part 2.

Additional sector-specific benchmark monitoring requirements may be described in Part 8 of this permit.

6.2.1.1 Applicability of Benchmark Monitoring.

The permittee shall monitor stormwater discharges for all benchmark parameters specified for the primary industrial activity and any co-located industrial activities, applicable to the facility's discharge. The industry-specific benchmark concentrations are listed in the sector-specific sections of Part 8. If the facility is in one of the industrial sectors subject to benchmark concentrations that are hardness-dependent, the permittee must characterize for hardness established per Appendix D procedures and submit results to ADEQ with the benchmark report. For discharges to:

- Perennial or intermittent waters, the hardness shall be of the surface water receiving the discharge;

- Ephemeral waters, the hardness shall be of the discharge leaving the facility.

Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all benchmark parameters for which sampling is required (see Part 6.1.3.3).

6.2.1.2 Benchmark Monitoring Schedule.

Benchmark monitoring must be conducted four times annually, two times each wet season, as identified in Part 6.1.2.1, for the facility's first full year of permit coverage. If four samples are not collected during this period, the permittee must continue collecting samples until 4 samples are obtained from all outfalls subject to benchmark monitoring. For facilities that discharge to ephemeral waters, see Part 6.2.1.5.

6.2.1.3 Data Evaluation

Data not exceeding benchmarks: After collection of 4 samples (or in the case of discharge to ephemeral waters, two samples, in accordance with Part 6.2.1.5), if the average of the monitoring values for any parameter does not exceed the benchmark, the permittee's monitoring requirements are fulfilled for that parameter for the permit term. For averaging purposes, a value of zero shall be used for any individual sample parameter, analyzed using procedures consistent with Part 6.2.1.1, which is determined to be less than the method detection limit. For sample values that fall between the method detection limit and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit.

Data exceeding benchmarks: After collection of 4 samples (or in the case of discharge to ephemeral waters, two samples, in accordance with Part 6.2.1.5), if the average of the monitoring values for any parameter exceeds the benchmark (see Part 8), the permittee shall review the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the effluent limitations in this permit, and either:

- Make the necessary modifications and continue monitoring four times annually, until 4 additional samples (or in the case of discharge to ephemeral waters, two samples) are collected that show the average does not exceed the benchmark; or
- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limitations or are necessary to meet the water-quality-based requirements in Part 2 of this permit. In this case the permittee shall continue monitoring once per wet season. The permittee shall also document the rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with the SWPPP. The permittee shall also notify ADEQ of this determination in the next benchmark monitoring report, which is recorded on the discharge monitoring report (DMR) sent to the Department. See Part 7.1.3.

If less than 4 benchmark samples have been taken, but the results are such that an exceedance of the 4 sample average is mathematically certain (i.e., if the sum of sample results to date is more than 4 times the benchmark level), this is considered a benchmark exceedance. In such cases, the permittee shall review the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the water quality based requirements in this permit. The permittee shall document these changes in the SWPPP. If the permittee determines no changes to existing control measures is required, the permittee shall document in the SWPPP. If after modifying the control measures and conducting the required additional rounds of monitoring, the average still exceeds the benchmark (or if an exceedance of the benchmark is mathematically certain prior to conducting the required additional rounds of monitoring), the permittee shall again review the control measures and take one of the two actions above.

Natural background pollutant levels: Following the first 4 rounds of benchmark monitoring (or sooner if the exceedance is triggered by less than 4 samples, see above), if the average concentration of a pollutant exceeds a benchmark value, and the exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective actions and additional benchmark monitoring are not required, provided that:

- The average concentration of the benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background;
- Documentation of the permittee's supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. This documentation must be maintained with the SWPPP, as required in Part 5.4. The permittee's supporting rationale shall include any data previously collected by anyone (including data reported in the literature) that describe the levels of natural background pollutants in the facility's stormwater discharge; and
- Notify ADEQ on the final benchmark monitoring report that the benchmark exceedances are attributable solely to natural background pollutant levels.

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring.

6.2.1.4 Exception for Inactive and Unstaffed Sites.

The requirement for benchmark monitoring does not apply at a facility 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 onsite with the SWPPP stating that the facility is inactive and unstaffed, and that there are no industrial materials or activities exposed to stormwater in accordance with the substantive requirements in 40 CFR 122.26(g) and sign and certify the statement in accordance with Appendix B, Subsection 9; and
- If circumstances change and industrial materials or activities become exposed to stormwater or the facility becomes active and/or staffed, this exception no longer applies and the permittee shall immediately begin complying with the applicable benchmark monitoring requirements under Part 6.2.1 as if it were the permittee's first year of permit coverage. The permittee shall indicate in the first benchmark monitoring report that the facility has materials or activities exposed to stormwater or has become active and/or staffed.
- If, during the period of coverage under this permit, the facility becomes qualified for the inactive and unstaffed exception and there are no industrial materials or activities exposed to stormwater, the permittee shall notify ADEQ of this change in the facility's next benchmark monitoring report. Benchmark monitoring may be discontinued once ADEQ is notified, and the permittee signs the certification statement in Appendix B, Subsection 9 concerning the facility's qualification for this special exception is prepared and signed.

6.2.1.5 Exception to Monitoring Requirements for Ephemeral Waters.

Facilities authorized for coverage under this permit that discharge to ephemeral waters are not required to monitor for Total Suspended Solids (TSS) and turbidity as part of the benchmark monitoring requirements when the parameters specify TSS and turbidity in the sector-specific section of Part 8. Monitoring for any remaining parameters in Part 8 may be performed once each wet season, for a total of twice per year. The permittee is required to collect at least two samples in a permit term, even if it extends beyond this one year period. Once the two samples have been collected, the permittee shall evaluate the data in accordance with Part 6.2.1.3.

6.2.2 Effluent Limitations Monitoring.

6.2.2.1 Monitoring Based on Effluent Limitations Guidelines.

Table 6-1 identifies the stormwater discharges subject to effluent limitation guidelines that are authorized for coverage under this permit. Commencing with the first wet season of permit coverage (in accordance with Section 6.1.2.1), the permittee shall monitor once per year at each outfall containing the discharges identified in Table 6-1 for the parameters specified in the sector-specific section of Part 8.

Table 6-1. Required Monitoring for Effluent Limitations Based on Effluent Limitations Guidelines			
Regulated Activity	Effluent Limit	Monitoring Frequency	Sample Type
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	See Part 8.A.7	1/year	Grab
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	See Part 8.C.4	1/year	Grab
Runoff from asphalt emulsion facilities	See Part 8.D.4	1/year	Grab
Runoff from material storage piles at cement manufacturing facilities	See Part 8.E.5	1/year	Grab
Runoff from hazardous waste landfills	See Part 8.K.6	1/year	Grab
Runoff from non-hazardous waste landfills	See Part 8.L.10	1/year	Grab
Runoff from coal storage piles at steam electric generating facilities	See Part 8.O.8	1/year	Grab

6.2.2.2 Substantially Identical Outfalls.

The permittee shall monitor each outfall discharging runoff from any regulated activity identified in Table 6-1. The substantially identical outfall monitoring provisions are not available for numeric effluent limitations monitoring.

6.2.3 Impaired Waters Monitoring.

6.2.3.1 Permittees Required to Monitor Discharges to Impaired Waters.

If a facility discharges to an impaired water, the permittee shall develop a monitoring program in accordance with Part 6.1.3 and monitor for all pollutants for which the waterbody is impaired (except as provided in Part 6.2.3.2) and for which a standard analytical method exists (see 40 CFR Part 136).

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.

6.2.3.2 Impaired Waters Monitoring Schedule.

Discharges to impaired waters without an approved TMDL.

Beginning in the first wet season following the permittee's discharge authorization, the permittee shall monitor twice per wet season at each outfall discharging stormwater to an impaired water without an approved TMDL. Once the four (4) samples have been collected, if the pollutant for which the water is impaired is not detected above applicable water quality standards, the permittee may discontinue further monitoring for that pollutant, under this section. The permittee shall keep records of this finding with the SWPPP. If the pollutant for which the water is impaired is found in the discharge above applicable water quality standards for any of the samples collected in the first year of sampling, the permittee shall continue monitoring twice during each wet season.

Further, this monitoring requirement does not apply after one year if the pollutant for which the waterbody is impaired is not detected above natural background levels in the discharge, and the permittee documents, as required in Part 5.4, that this pollutant is not expected to be present above natural background levels in the discharge.

If the pollutant for which the water is impaired is not present and not expected to be present in the facility's discharge, or it is present but it has been determined that the presence is caused solely by natural background sources, the permittee shall include a notification to this effect in the first monitoring report, after which annual monitoring may be discontinued. To support this determination, the following documentation must be submitted with the first monitoring report and kept with the SWPPP records:

- An explanation of why the presence of the pollutant causing the impairment in your discharge is not related to the activities at the facility; and
- Data and/or studies that tie the presence of the pollutant causing the impairment in the discharge to natural background sources in the watershed.

Discharges to impaired waters with an ADEQ approved TMDL.

For stormwater discharges assigned a WLA in an approved TMDL, the facility shall monitor for the pollutant for which the TMDL was written. Beginning in the first wet season following the facility's date of discharge authorization, the permittee shall monitor twice per wet season at each outfall discharging stormwater to the impaired water with an approved TMDL. ADEQ's authorization to discharge will include specifications on any additional pollutant(s) to monitor.

If the pollutant for which the water is impaired is not detected above the applicable WLA in the TMDL after the four samples have been collected, the permittee may discontinue further monitoring, under this section. The permittee shall keep records of this finding onsite with the SWPPP.

If the pollutant for which the water is impaired is found above the applicable WLA in the TMDL in the discharge for any of the samples collected in the first year of sampling, the permittee shall continue monitoring twice during each wet season. Attainment of the WLA for SSC will be based on the median of four samples collected from four different measureable storm events.

6.2.4 Additional Monitoring Required by ADEQ.

ADEQ may notify the permittee, in writing, of additional discharge monitoring required to ensure protection of receiving water quality in cases where there is evidence that a pollutant is being discharged that is not being monitored for by the permittee and that the pollutant may be causing or contributing to exceedances of a water quality standard. Any such notice will provide an explanation of the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

6.3 Follow-up Actions if Discharge Exceeds Numeric Effluent Limit or a Water Quality Standard.

The permittee shall conduct follow-up monitoring within 30 calendar days (or during the next qualifying runoff event, should none occur within the 30 days) of implementing corrective action(s) taken in accordance with Part 3 in response to an exceedance of a numeric effluent limit or water quality standard contained in this permit as described in Parts 2.2.1 and 2.2.2. Monitoring must be performed for any pollutant(s) that exceeds the effluent limit or water quality standard. If this follow-up monitoring exceeds the applicable effluent limit or water quality standard, the permittee shall comply with both Parts 6.3.1 and 6.3.2.

6.3.1 Submit an Exceedance Report.

The permittee shall submit an Exceedance Report consistent with Part 7.3.

6.3.2 Continue to Monitor.

The permittee shall continue to monitor, at least twice per wet season, until the discharge is in compliance with the effluent limit or water quality standard or until ADEQ waives the requirement for additional monitoring.

7.0 Reporting and Recordkeeping

7.1 Reporting Monitoring Data to ADEQ

7.1.1 The permittee shall submit monitoring data collected in accordance with Parts 4.2, 6.2, 6.3, and 6.4 to ADEQ at the address in Part 7.6.

7.1.2 Permittees shall use the MSGP discharge monitoring report (DMR) form available at <http://www.azdeq.gov/environ/water/permits/stormwater.html>

7.1.3 The permittee shall compile all sampling results for the previous two wet seasons onto DMR form(s). Except as provided in Part 7.2 below, the permittee shall submit the DMRs to ADEQ not later than July 15 of each year of permit coverage.

7.2 Annual Report

All facilities shall prepare an Annual Report on a form provided by the Department and retain a copy of the report with the SWPPP. The Annual Report for the reporting period June 1 to May 31 shall be completed by July 15 and include, at a minimum:

- The findings from the facility's Part 4.3 comprehensive facility inspection;
- Any corrective action documentation as required in Part 3.3;
- The DMR form(s) as required in Part 7.1 for the preceding two wet seasons; and
- The results of any monitoring required in Part 6.2 for those facilities that discharge to a water (or within 2.5 miles of a water if required by ADEQ) or portion thereof, classified as an OAW or an impaired water, or
- The results of any monitoring required in Part 6.2 if notified by the Department in accordance with Part 1.3.1(2)(c).

Permittees with facilities that discharge to a water (or within 2.5 miles of a water if required by ADEQ, or is otherwise referenced in an approved TMDL) or portion thereof, classified as an OAW or an impaired water shall submit the annual report to ADEQ on or before July 15 (postmark date).

7.3 Exceedance Report for Numeric Effluent Limitations or Water Quality Standards

If follow-up monitoring pursuant to Part 6.3 exceeds a numeric effluent limit or water quality standard, the permittee shall submit an Exceedance Report to ADEQ no later than 30 calendar days after receiving the facility's lab results. The facility's Exceedance Report shall include the following:

- Facility name, physical address and location;

- AZPDES permit tracking number;
- Name of receiving water;
- Monitoring data from this and the preceding monitoring event(s);
- An explanation of the situation; including what actions the permittee has completed or intends to complete (if corrective actions are not yet complete) to correct the violation; and
- Contact person name, title, and phone number.

7.4 Other Reporting

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.

- 24-hour reporting (see Appendix B, Subsection 12.d);
- 5-day follow-up reporting to the 24 hour reporting (see Appendix B, Subsection 12.d.(ii));
- Reportable quantity spills (verbal report only; see Part 2.1.1.4).
- Planned changes (see Appendix B, Subsection 12.a);
- Anticipated noncompliance (see Appendix B, Subsection 12.c);
- Transfer of ownership and/or operation – (see Table 1-2);
- Other noncompliance (see Appendix B, Subsection 12.e); and
- Other information (see Appendix B, Subsection 12.f).

Where a written report is required, the permittee shall submit these reports to the Department's address listed in Part 7.6. If the facility discharges to a regulated MS4, the permittee shall also submit these reports to the MS4 operator (in accordance with Part 5.1.2).

7.5 Recordkeeping

The permittee shall retain copies of the SWPPP (including any modifications made during the term of this permit), additional documentation requirements pursuant to Part 5.4 (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 3 years from the date that the facility's coverage under this permit expires or is terminated.

7.6 Addresses for Reports

Signed copies of monitoring data and any other reports required, shall be submitted to the address below. Other options (i.e., electronic submission) may also be used if ADEQ makes the information available on the Internet or by public notice. Notices of Intent and Notices of Termination (or a photocopy/reproduction) shall be signed and dated in accordance with Appendix B, Subsection 9 of this permit and submitted to ADEQ at the address below. DMR forms and paper copies of any reports required in Parts 6 and 7 shall be sent to the address below. All other written correspondence concerning discharges covered under this permit shall likewise be sent to the address listed below:

Arizona Department of Environmental Quality
Surface Water Section, Stormwater Permits Unit—MSGP Monitoring
1110 W. Washington Street, Mail Code 5415 A-1
Phoenix, AZ 85007
Fax: 602/ 771 – 4528

Reports of non-compliance shall be reported to:

Arizona Department of Environmental Quality
Water Quality Compliance Section
1110 W. Washington Street, Mail Code 5515 B-1
Phoenix, AZ 85007
Office: 602-771 – 2330; Fax 602/ 771 – 4505

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart A – Sector A – Timber Products.

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

8.A.1 Covered Stormwater Discharges.

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

8.A.2 Limitation on Coverage

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

8.A.2.2 *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.

8.A.3 Additional Control Measures.

8.A.3.1 *Good Housekeeping.* (See also Part 2.1.1.2) In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to limit the discharge of wood debris, minimize the leachate generated from decaying wood materials, and minimize the generation of dust.

8.A.4 Additional SWPPP Requirements.

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

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

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

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

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

8.A.6 Sector-Specific Benchmarks

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

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

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

Benchmark values based on hardness and receiving waterbody				
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies		For discharges to ephemeral waterbodies	
	Copper (mg/L)	Zinc (mg/L)	Copper (mg/L)	Zinc (mg/L)
0-25	0.0036	0.0362	0.0063	0.344
25-50	0.0070	0.0651	0.0121	0.618
50-75	0.0102	0.0918	0.0177	0.871
75-100	0.0134	0.1170	0.0233	1.112
100-125	0.0170	0.1417	0.0283	1.343
125-150	0.0197	0.1652	0.0341	1.568
150-175	0.0221	0.1883	0.0394	1.787
175-200	0.0228	0.2108	0.0447	2.001
200-225	0.0289	0.2329	0.0500	2.211
225-250	0.0316	0.2547	0.0552	2.417
250-275	0.0349	0.2761	0.0601	2.620
275-300	0.0378	0.2972	0.0655	2.821
300-325	0.0408	0.3181	0.0706	3.019
325-350	0.0438	0.3387	0.0757	3.214
350-375	0.0467	0.3591	0.0800	3.408
375-400	0.0496	0.3793	0.0859	3.599

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

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

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

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart B – Sector B – Paper and Allied Products.

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

8.B.1 Covered Stormwater Discharges.

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

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.C.1 Covered Stormwater Discharges.

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

8.C.2 Limitations on Coverage.

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

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

Table 8.C-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector C1. Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	Reserved
	Total Lead ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
	Phosphorus	2.0 mg/L
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	Total Aluminum	0.75 mg/ L
	Total Iron	1.0 mg/L
	Nitrate plus Nitrite Nitrogen	Reserved
Subsector C3. Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	Reserved
	Total Zinc ¹	Hardness Dependent
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Zinc ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody				
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies		For discharges to ephemeral waterbodies	
	Lead (mg/L)	Zinc (mg/L)	Lead (mg/L)	Zinc (mg/L)
0-25	0.014	0.0362	0.0293	0.344
25-50	0.030	0.0651	0.0636	0.618
50-75	0.047	0.0918	0.0995	0.871
75-100	0.065	0.1170	0.1363	1.112
100-125	0.082	0.1417	0.1736	1.343
125-150	0.100	0.1652	0.2113	1.568
150-175	0.118	0.1883	0.2492	1.787
175-200	0.136	0.2108	0.2873	2.001
200-225	0.154	0.2329	0.3255	2.211
225-250	0.172	0.2547	0.3637	2.417
250-275	0.190	0.2761	0.4020	2.620
275-300	0.209	0.2972	0.4402	2.821

Benchmark values based on hardness and receiving waterbody				
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies		For discharges to ephemeral waterbodies	
	Lead (mg/L)	Zinc (mg/L)	Lead (mg/L)	Zinc (mg/L)
300-325	0.227	0.3181	0.4784	3.019
325-350	0.245	0.3387	0.5166	3.214
350-375	0.263	0.3591	0.5547	3.408
375-400	0.281	0.3793	0.5927	3.599

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

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

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

8.D.1 Covered Stormwater Discharges.

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

8.D.2 Limitations on Coverage.

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

- 8.D.2.1 Discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products, that are subject to nationally established effluent limitation guidelines found in 40 CFR Part 419 (Petroleum Refining); or
- 8.D.2.2 Discharges from oil recycling facilities; or
- 8.D.2.3 Discharges associated with fats and oils rendering.

8.D.3 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 6.2.1.4, 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 facility's SWPPP, and in accordance with Part 2.1.1.2, 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.
- If circumstances change and the facility becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with the applicable benchmark monitoring requirements as if the facility were in the first year of permit coverage, including the 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 water quality standard, including designated uses.

Subject to the two conditions above, if the facility is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and benchmark

monitoring. The quarterly routine facility inspections are reduced to one routine facility inspection and one CFI 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 Benchmarks.

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

Table 8.D-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	Reserved

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

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

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

8.E.1 Covered Stormwater Discharges.

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

8.E.2 Additional Control Measures.

8.E.2.1 *Good Housekeeping Measures.* (See also Part 2.1.1.2) 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 regularly or other equivalent measures. Indicate in the facility's SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. The permittee shall also prevent the exposure of fine granular 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: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

8.E.3.2 *Certification.* (See also Part 5.1.3.4) For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-stormwater discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with AZPDES requirements or are recycled.

8.E.4 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 6.2.1.4, 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 facility’s SWPPP, and in accordance with Part 2.1.1.2, 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 facility becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with the applicable benchmark monitoring requirements as if the facility were in the first year of permit coverage, including the 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 water quality standard, including designated uses.

Subject to the two conditions above, if the facility is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and benchmark monitoring. The quarterly routine facility inspections are reduced to one routine facility inspection and one CFI 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 Benchmarks.

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

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

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

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

Table 8.E-2¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from material storage piles at cement manufacturing facilities: any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement.	Total Suspended Solids (TSS)	50 mg/L, daily maximum
	pH	6.0 – 9.0 s.u.

¹Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart F – Sector F – Primary Metals.

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

8.F.1 Covered Stormwater Discharges.

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

8.F.2 Additional Control Measures

8.F.2.1 *Good Housekeeping Measures.* (See also Part 2.1.1.2) As part of the facility's good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a 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 facility's quarterly routine facility inspections (Part 4.1), address all potential sources of pollutants, including (if applicable) air pollution control equipment (e.g., baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g., leaks, corrosion, or improper operation) that could limit their efficiency and lead to excessive emissions. Monitor air flow at inlets and outlets (or use equivalent measures) to check for leaks (e.g., particulate deposition) or blockage in ducts. Also inspect all process and material handling equipment (e.g., conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g., piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

8.F.5 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 6.2.1.4, 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 facility’s SWPPP, and in accordance with Part 2.1.1.2, 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 facility becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with the applicable benchmark monitoring requirements as if the facility were in the first year of permit coverage, including the 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 water quality standard, including designated uses.

Subject to the two conditions above, if the facility is inactive and unstaffed, the permittee is waived from the requirement to conduct wet season visual assessments and benchmark monitoring. The quarterly routine facility inspections are reduced to one routine facility inspection and one CFI 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 Benchmarks. (See also Part 6.)

Table 8.F-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Aluminum	0.75 mg/L
	Total Zinc ¹	Hardness Dependent
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	Total Aluminum	0.75 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Copper ¹	Hardness Dependent
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent

Table 8.F-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Copper ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Copper ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody				
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies		For discharges to ephemeral waterbodies	
	Copper (mg/L)	Zinc (mg/L)	Copper (mg/L)	Zinc (mg/L)
0-25	0.0036	0.0362	0.0063	0.344
25-50	0.0070	0.0651	0.0121	0.618
50-75	0.0102	0.0918	0.0177	0.871
75-100	0.0134	0.1170	0.0233	1.112
100-125	0.0170	0.1417	0.0283	1.343
125-150	0.0197	0.1652	0.0341	1.568
150-175	0.0221	0.1883	0.0394	1.787
175-200	0.0228	0.2108	0.0447	2.001
200-225	0.0289	0.2329	0.0500	2.211
225-250	0.0316	0.2547	0.0552	2.417
250-275	0.0349	0.2761	0.0601	2.620
275-300	0.0378	0.2972	0.0655	2.821
300-325	0.0408	0.3181	0.0706	3.019
325-350	0.0438	0.3387	0.0757	3.214
350-375	0.0467	0.3591	0.0800	3.408
375-400	0.0496	0.3793	0.0859	3.599

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.K.1 Covered Stormwater Discharges.

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

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

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

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

8.K.3 Limitations on Coverage.

8.K.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

8.K.4 Definitions.

- 8.K.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 8.K.4.5. Some specific areas of a landfill that may produce contaminated stormwater include (but are not limited to): the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.
- 8.K.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.
- 8.K.4.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.
- 8.K.4.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas collection condensate, drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

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

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

8.K.5 Sector-Specific Benchmarks

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

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

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

Benchmark values based on hardness and receiving waterbody						
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies			For discharges to ephemeral waterbodies		
	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)
0-25	0.0020	0.014	0.0003	0.0059	0.0293	0.0003
25-50	0.0040	0.030	0.0010	0.0116	0.0636	0.0010
50-75	0.0060	0.047	0.0020	0.0172	0.0995	0.0020
75-100	0.0079	0.065	0.0032	0.0228	0.1363	0.0032
100-125	0.0096	0.082	0.0047	0.0286	0.1736	0.0047

Benchmark values based on hardness and receiving waterbody						
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies			For discharges to ephemeral waterbodies		
	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)
125-150	0.0117	0.100	0.0065	0.0338	0.2113	0.0065
150-175	0.0136	0.118	0.0084	0.0393	0.2492	0.0084
175-200	0.0154	0.136	0.0106	0.0447	0.2873	0.0106
200-225	0.0173	0.154	0.0130	0.0501	0.3255	0.0130
225-250	0.0192	0.172	0.0156	0.0555	0.3637	0.0156
250-275	0.0173	0.190	0.0183	0.0609	0.4020	0.0183
275-300	0.0210	0.209	0.0213	0.0663	0.4402	0.0213
300-325	0.0246	0.227	0.0244	0.0714	0.4784	0.0244
325-350	0.0266	0.245	0.0278	0.0770	0.5166	0.0278
350-375	0.0284	0.263	0.0312	0.0823	0.5547	0.0312
375-400	0.0302	0.281	0.0349	0.0876	0.5927	0.0349

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

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

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

Table 8.K-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
	Total Arsenic	1.1 mg/L, daily maximum
		0.54 mg/L, monthly avg. maximum
	Total Chromium	1.1 mg/L, daily maximum
		0.46 mg/L, monthly avg. maximum
	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
	pH	6.0 – 9.0 s.u.

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.L.1 Covered Stormwater Discharges.

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

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

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

8.L.3 Limitations on Coverage.

8.L.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

8.L.4 Definitions.

- 8.L.4.1 *Contaminated stormwater* - stormwater that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill that may produce contaminated stormwater include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.
- 8.L.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.
- 8.L.4.3 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category) all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, contaminated groundwater, and wastewater from recovery pumping wells. Landfill process wastewater includes, but is not limited to, leachate; gas collection condensate; drained free liquids; laboratory-derived wastewater; contaminated stormwater; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.
- 8.L.4.4 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.
- 8.L.4.5 *Non-contaminated stormwater* - stormwater that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated stormwater includes stormwater that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.L.5 Additional Control Measures.

- 8.L.5.1 *Preventive Maintenance Program.* (See also Part 2.1.1.3) As part of the facility's preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with stormwater; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.
- 8.L.5.2 *Erosion and Sedimentation Control.* (See also Part 2.1.1.5) Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.
- 8.L.5.3 *Unauthorized Discharge Test Certification.* (See also Part 5.1.3.4) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

8.L.6 Additional SWPPP Requirements.

- 8.L.6.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.
- 8.L.6.2 *Summary of Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

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

- 8.L.7.1 *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.
- 8.L.7.2 *Inspection Schedule for Sites within 1/4 mile of Impaired or Outstanding Arizona Waters.* If any discharge point from the facility is within 1/4 mile of an impaired or outstanding Arizona water, the permittee shall inspect the 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 Benchmarks

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

Table 8.L-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration ¹
Subsector L1. All Landfill, Land Application Sites and Open Dumps (Industrial Activity Code “LF”)	Total Suspended Solids (TSS)	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 Iron	1.0 mg/L

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

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

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

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

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
	Total Zinc	0.20 mg/L, daily maximum
		0.11 mg/L, monthly avg. maximum
	pH	6.0 – 9.0 s.u.

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity**Subpart M – Sector M – Automobile Salvage Yards.**

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

8.M.1 Covered Stormwater Discharges.

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

8.M.2 Additional Control Measures.

- 8.M.2.1 *Spill and Leak Prevention Procedures.* (See also Part 2.1.1.4) Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means (such as storage indoors until drained) to prevent spills and leaks.
- 8.M.2.2 *Employee Training.* (See also Part 2.1.1.9) If the facility handles these materials, the employee training program shall address the proper handling (collection, storage, and disposal) of oil, used mineral spirits, antifreeze, mercury switches, and solvents.
- 8.M.2.3 *Management of Runoff.* (See also Part 2.1.1.6) The permittee shall implement effective controls to manage run-off. Consider the following or other equivalent practices: installation of berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil and water separators.

8.M.3 Additional SWPPP Requirements.

- 8.M.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.
- 8.M.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Assess the potential for the following to contribute pollutants to stormwater discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

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

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

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

Table 8.M-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector M1. Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L
	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody		
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies	For discharges to ephemeral waterbodies
	Lead (mg/L)	Lead (mg/L)
0-25	0.014	0.0293
25-50	0.030	0.0636
50-75	0.047	0.0995
75-100	0.065	0.1363
100-125	0.082	0.1736
125-150	0.100	0.2113
150-175	0.118	0.2492
175-200	0.136	0.2873
200-225	0.154	0.3255
225-250	0.172	0.3637
250-275	0.190	0.4020
275-300	0.209	0.4402
300-325	0.227	0.4784
325-350	0.245	0.5166
350-375	0.263	0.5547
375-400	0.281	0.5927

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.N.1 Covered Stormwater Discharges.

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

8.N.2 Limitation on Coverage.

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

8.N.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) Non-stormwater discharges from turnings containment areas are not 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-liquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both non-recyclable and recyclable materials. This section does not apply to facilities that accept recyclables only from primarily non-industrial and residential sources.

8.N.3.1.1 *Inbound Recyclable and Waste Material Control Program.* Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to the facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Part 8.N.3.2.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

8.N.3.1.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor).* Minimize contact of stormwater runoff with stockpiled materials, processed materials, and non-recyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms,

containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

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

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

- 8.N.3.1.6 *Scrap Lead-Acid Battery Program*. Properly handle, store, and dispose of scrap lead-acid batteries. The permittee shall implement one or more of the following control measure options (or other equivalent measures): (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate exposure of scrap lead-acid batteries to precipitation or runoff. Also, employee training for the management of scrap batteries shall be provided.

- 8.N.3.1.7 *Spill Prevention and Response Procedures.* (See also Part 2.1.1.4) Install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.
- 8.N.3.1.8 *Supplier Notification Program.* As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.

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

- 8.N.3.2.1 *Waste Material Storage (Indoor).* Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The facility SWPPP may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. The permittee shall implement: (a) procedures for safe material handling (including labeling and marking); and (b) clean up of spills and leaks with dry absorbent materials, or a wet vacuum system.

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

- 8.N.3.2.2 *Waste Material Storage (Outdoor).* Minimize contact between stored residual liquids and precipitation or runoff. The SWPPP may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil shall be in accordance with applicable sections of 40 CFR Part 112. The permittee shall implement one or more of the following control measure options (or other equivalent measures) to minimize contaminants in stormwater: (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.
- 8.N.3.2.3 *Trucks and Rail Car Waste Transfer Areas.* Implement effective measures to minimize pollutants in discharges from truck and rail car loading and unloading areas. Such measures may include: (a) clean up of minor spills and leaks resulting from the transfer of liquid wastes; (b) containment and diversionary structures to minimize contact with precipitation or runoff, and (c) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.
- 8.N.3.3 *Recycling Facilities (Source-Separated Materials).* The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.
 - 8.N.3.3.1 *Inbound Recyclable Material Control.* Minimize the chance of accepting non-recyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Implement one or more of the following control measures (or other equivalent measures): (a) provide information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials; (b) train drivers responsible for pickup of recycled material;

(c) clearly mark public drop-off containers regarding which materials can be accepted; and (d) reject non-recyclable wastes or household hazardous wastes at the source. The permittee shall also establish procedures for handling and disposal of non-recyclable material.

- 8.N.3.3.2 *Outdoor Storage*. Implement effective control measures to minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Implement one or more of the following control measures (or other equivalent measures): (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; and (e) provide covers over containment bins, dumpsters, and roll-off boxes.
- 8.N.3.3.3 *Indoor Storage and Material Processing*. Implement effective control measures to minimize the release of pollutants from indoor storage and processing areas. The permittee shall: (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the surface soils or to the storm sewer system, and (c) provide employee training on pollution prevention practices.
- 8.N.3.3.4 *Vehicle and Equipment Maintenance*. Implement effective control measures for areas where vehicle and equipment maintenance occur outdoors. The permittee shall implement one or more of the following control measure options (or other equivalent measures): (a) prohibit vehicle and equipment washwater from discharging to surface soils or the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) avoid topping off fuel tanks, (d) divert runoff from fueling areas, and (e) store lubricants and hydraulic fluids indoors. The permittee shall also establish spill prevention and clean-up procedures for fueling areas, and provide employee training on proper handling and storage of hydraulic fluids and lubricants.

8.N.4 Additional SWPPP Requirements.

- 8.N.4.1 *Drainage Area Site Map*. (See also Part 5.1.2) Document in the facility's SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.
- 8.N.4.2 *Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities*. For any facility subject to Part 8.N.3.1.3, the SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

8.N.5 Additional Inspection Requirements.

- 8.N.5.1 *Inspections for Waste Recycling Facilities*. The inspections must be performed quarterly, pursuant to Part 4.1, and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or stormwater runoff.

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

Table 8.N-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector N1. Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Recoverable Aluminum	0.75 mg/L
	Total Recoverable Copper ¹	Hardness Dependent
	Total Recoverable Iron	1.0 mg/L
	Total Recoverable Lead ¹	Hardness Dependent
	Total Recoverable Zinc ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody						
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies			For discharges to ephemeral waterbodies		
	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)
0-25	0.0036	0.014	0.0362	0.0063	0.0293	0.344
25-50	0.0070	0.030	0.0651	0.0121	0.0636	0.618
50-75	0.0102	0.047	0.0918	0.0177	0.0995	0.871
75-100	0.0134	0.065	0.1170	0.0233	0.1363	1.112
100-125	0.0170	0.082	0.1417	0.0283	0.1736	1.343
125-150	0.0197	0.100	0.1652	0.0341	0.2113	1.568
150-175	0.0221	0.118	0.1883	0.0394	0.2492	1.787
175-200	0.0228	0.136	0.2108	0.0447	0.2873	2.001
200-225	0.0289	0.154	0.2329	0.0500	0.3255	2.211
225-250	0.0316	0.172	0.2547	0.0552	0.3637	2.417
250-275	0.0349	0.190	0.2761	0.0601	0.4020	2.620
275-300	0.0378	0.209	0.2972	0.0655	0.4402	2.821
300-325	0.0408	0.227	0.3181	0.0706	0.4784	3.019
325-350	0.0438	0.245	0.3387	0.0757	0.5166	3.214
350-375	0.0467	0.263	0.3591	0.0800	0.5547	3.408
375-400	0.0496	0.281	0.3793	0.0859	0.5927	3.599

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities.

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

8.O.1 Covered Stormwater Discharges.

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

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

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

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

8.O.3 Limitations on Coverage.

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

8.O.3.2 *Prohibition of Stormwater Discharges.* Stormwater discharges from the following are not covered by this permit:

- 8.O.3.2.1 Ancillary facilities (e.g., fleet centers and substations) that are not contiguous to a steam electric power generating facility;
- 8.O.3.2.2 Gas turbine facilities (providing the facility is not a dual-fuel facility that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the facility is not a dual-fuel facility that includes a steam boiler); and
- 8.O.3.2.3 Cogeneration (combined heat and power) facilities utilizing a gas turbine.

8.O.4 Additional Control Measures. (See also Part 2.1.1.2)

The following good housekeeping measures are required in addition to Part 2.1.1.2:

- 8.O.4.1 *Fugitive Dust Emissions.* Minimize fugitive dust emissions from coal handling areas. The permittee shall implement effective controls to minimize the tracking of coal dust offsite, such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.
- 8.O.4.2 *Delivery Vehicles.* The permittee shall implement effective controls to minimize contamination of stormwater runoff from delivery vehicles arriving at the plant site such as procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.
- 8.O.4.3 *Fuel Oil Unloading Areas.* The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from fuel oil unloading areas, such as using containment curbs in unloading areas, having personnel familiar with spill prevention and

response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

- 8.O.4.4 *Chemical Loading and Unloading.* The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from chemical loading and unloading areas, such as: using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, loading and unloading in covered areas and storing chemicals indoors.
- 8.O.4.5 *Miscellaneous Loading and Unloading Areas.* The permittee shall implement effective controls to minimize contamination of precipitation or surface runoff from loading and unloading areas, such as: covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.
- 8.O.4.6 *Liquid Storage Tanks.* The permittee shall implement effective controls to minimize contamination of surface runoff from above-ground liquid storage tanks, such as using protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.
- 8.O.4.7 *Large Bulk Fuel Storage Tanks.* The permittee shall implement effective controls to minimize contamination of surface runoff from large bulk fuel storage tanks including the use of containment berms or other equivalent measures. The permittee shall also comply with applicable State and Federal laws, including SPCC Plan requirements.
- 8.O.4.8 *Spill Reduction Measures.* The permittee shall implement effective controls to minimize the potential for an oil or chemical spill. These shall be detailed in the SWPPP or the permittee may reference the appropriate part of the facility's SPCC plan if applicable. As part of the routine facility inspection the permittee shall inspect the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to stormwater, and make any necessary repairs immediately.
- 8.O.4.9 *Oil-Bearing Equipment in Switchyards.* The permittee shall implement effective controls to minimize contamination of surface runoff from oil-bearing equipment in switchyard areas, such as the use of level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.
- 8.O.4.10 *Residue-Hauling Vehicles.* The permittee shall inspect all residue-hauling vehicles for proper load covering, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.
- 8.O.4.11 *Ash Loading Areas.* The permittee shall implement effective controls to reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.
- 8.O.4.12 *Areas Adjacent to Disposal Ponds or Landfills.* The permittee shall implement effective controls to minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills, reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.
- 8.O.4.13 *Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites.* The permittee shall implement effective controls to minimize the potential for contamination of runoff from these areas.

8.O.5 Additional SWPPP Requirements.

- 8.O.5.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).
- 8.O.5.2 *Documentation of Good Housekeeping Measures.* The permittee shall document in the facility's SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 8.O.4.

8.O.6 Additional Inspection Requirements.

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

8.O.7 Sector-Specific Benchmarks

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

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

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

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

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

¹ Monitor annually.

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing.

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

8.P.1 Covered Stormwater Discharges.

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

8.P.2 Limitation on Coverage

8.P.2.1 *Prohibited Discharges* (see also Parts 1.1.4 and 8.P.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 facility, 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 2.1.1.2) In addition to the Good Housekeeping requirements in Part 2.1.1.2, 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 (or other equivalent measures): performing maintenance

activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating and/or recycling collected stormwater runoff, minimizing run on/runoff of stormwater to maintenance areas.

8.P.3.1.6 *Locomotive Sanding (Loading Sand for Traction) Areas.* Implement one or more of the following (or other equivalent measures): covering sanding areas; minimizing stormwater run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by stormwater.

8.P.3.2 *Employee Training.* (See also Part 2.1.1.9) Train personnel at least once a year and address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

8.P.4 Additional SWPPP Requirements.

8.P.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

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

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

8.P.4.4 *Vehicle and Equipment Washwater Requirements.* In accordance with Part 8.P.2.1, the permittee shall document in the SWPPP the methods of disposal of vehicle and equipment washwater generated at the facility and the name of any permits required by that method.

8.P.5 Additional Inspection Requirements. (See also Part 4.1) Inspect all the following areas/activities:

- Storage areas for vehicles/equipment awaiting maintenance;
- Fueling areas;
- Indoor and outdoor vehicle/equipment maintenance areas
- Material storage areas
- Vehicle/equipment cleaning areas; and
- Loading/unloading areas.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation.

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

8.Q.1 Covered Stormwater Discharges.

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

8.Q.2 Limitations on Coverage.

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

8.Q.3 Additional Control Measures.

8.Q.3.1 *Good Housekeeping Measures.* The permittee shall implement the following good housekeeping measures in addition to the requirements of Part 2.1.1.2:

- 8.Q.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate AZPDES permit. Collect or contain the discharges from the pressure washing area so that they are not co-mingled with stormwater discharges authorized by this permit.
- 8.Q.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips.
- 8.Q.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and install containment or enclosure for those stored outdoors when feasible. If abrasive blasting is performed, implement control measures for the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.
- 8.Q.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Implement one or more of the following control measure options (or other equivalent measures): perform all maintenance activities indoors, maintain an organized inventory of materials used in the shop, drain all parts of fluid prior to disposal, prohibit the practice of hosing down the shop floor, use dry cleanup methods, and properly dispose or treat and/or recycle stormwater runoff collected from the maintenance area.

- 8.Q.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area (preferably indoors or under a shed), and minimize runoff of stormwater to material handling areas.
- 8.Q.3.1.6 *Drydock Activities.* Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding, and perform final cleanup following removal of the vessel and raising the dock. Implement effective procedures for cleaning up oil, grease, and fuel spills occurring on the drydock, such as: sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.
- 8.Q.3.2 *Employee Training.* (See also Part 2.1.1.9) Include the following (as applicable) in an employee training program: used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.
- 8.Q.3.3 *Preventive Maintenance.* (See also Part 2.1.1.3) As part of the facility's preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system). The permittee shall also routinely inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.
- 8.Q.4 Additional SWPPP Requirements.**
- 8.Q.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).
- 8.Q.4.2 *Summary of Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

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

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

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

Table 8.Q-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Lead ¹	Hardness Dependent
	Total Zinc ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody				
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies		For discharges to ephemeral waterbodies	
	Lead (mg/L)	Zinc (mg/L)	Lead (mg/L)	Zinc (mg/L)
0-25	0.014	0.0362	0.0293	0.344
25-50	0.030	0.0651	0.0636	0.618
50-75	0.047	0.0918	0.0995	0.871
75-100	0.065	0.1170	0.1363	1.112
100-125	0.082	0.1417	0.1736	1.343
125-150	0.100	0.1652	0.2113	1.568
150-175	0.118	0.1883	0.2492	1.787
175-200	0.136	0.2108	0.2873	2.001
200-225	0.154	0.2329	0.3255	2.211
225-250	0.172	0.2547	0.3637	2.417
250-275	0.190	0.2761	0.4020	2.620
275-300	0.209	0.2972	0.4402	2.821
300-325	0.227	0.3181	0.4784	3.019
325-350	0.245	0.3387	0.5166	3.214
350-375	0.263	0.3591	0.5547	3.408
375-400	0.281	0.3793	0.5927	3.599

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.R.1 Covered Stormwater Discharges.

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

8.R.2 Limitations on Coverage.

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

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 facility. Implement an inventory control plan to limit the presence of potentially hazardous materials onsite.

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

8.R.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Implement one or more of the following control measure options (or other equivalent measures): cover fueling areas, use spill and overflow protection, mix paints and solvents in a designated area

(preferably indoors or under a shed), and minimize stormwater run-on to material handling areas.

- 8.R.3.1.6 *Drydock Activities*. Routinely maintain and clean the drydock to minimize pollutants in stormwater runoff. Clean accessible areas of the drydock prior to flooding and perform final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock, such as the following (or other equivalent measures): sweep rather than hose off debris and spent blasting material from accessible areas of the drydock prior to flooding; and make absorbent materials and oil containment booms readily available to clean up and contain any spills.
- 8.R.3.2 *Employee Training*. (See also Part 2.1.1.9) Include the following (as applicable) in an employee training program: used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.
- 8.R.3.4 *Preventive Maintenance*. (See also Part 2.1.1.3) As part of the facility's preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspect and test facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.R.4 Additional SWPPP Requirements.

- 8.R.4.1 *Drainage Area Site Map*. (See also Part 5.1.2) Document in the facility's SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).
- 8.R.4.2 *Potential Pollutant Sources*. (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).
- 8.R.4.3 *Documentation of Good Housekeeping Measures*. Document in the SWPPP any good housekeeping measures implemented to meet the effluent limits in Part 8.R.3.
- 8.R.4.3.1 *Blasting and Painting Areas*. Document in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibit uncontained blasting and painting over open water and prohibit blasting and painting during windy conditions, which can render containment ineffective).
- 8.R.4.3.2 *Storage Areas*. Specify in the SWPPP which materials are stored indoors, and implement containment or enclosure for those stored outdoors when feasible.

8.R.5 Additional Inspection Requirements.

(See also Part 4.1) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart S – Sector S – Air Transportation.

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

8.S.1 Covered Stormwater Discharges.

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

8.S.2 Limitation on Coverage

8.S.2.1 *Limitations on Coverage.* This permit authorizes stormwater discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: "deicing" will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

8.S.2.2 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4 and Part 8.S.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 Additional Control Measures.

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

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

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

8.S.3.1.3 *Aircraft, Ground Vehicle and Equipment Storage Areas.* Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of stormwater runoff from these storage areas. Implement one or more of the following control measure options, including any BMPs (or other equivalent measures): store aircraft and ground vehicles indoors when feasible; use drip pans for the collection of fluid leaks; and install perimeter drains, dikes or berms around storage areas.

- 8.S.3.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Minimize contamination of precipitation/runoff from these areas. Implement one or more of the following control measure options (or other equivalent measures): store materials indoors when feasible; store waste materials in a centralized location; and install berms/dikes around storage areas.
- 8.S.3.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Implement one or more of the following control measure options (or other equivalent measures): spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); use only dry cleanup methods; and collect stormwater runoff for disposal or on-site retention.
- 8.S.3.1.6 Source Reduction. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.
- 8.S.3.1.6.1 Runway Deicing Operation: Minimize contamination of stormwater runoff from runways as a result of deicing operations. Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. The permittee shall also evaluate whether the following control measures (or other equivalent measures) are feasible: metered application of chemicals; pre-wetting dry chemical constituents prior to application; install a runway ice detection system; implement anti-icing operations as a preventive measure against ice buildup.
- 8.S.3.1.6.2 Aircraft Deicing Operations. Minimize contamination of stormwater runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority).
- Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these control measure options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.
- 8.S.3.1.7 Management of Runoff. (See also Part 2.1.1.6) Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Implement one or more of the following control measure options (or other equivalent measures): use a dedicated deicing facility with a runoff collection/ recovery system; use vacuum/collection trucks; store contaminated stormwater/deicing fluids in tanks and release controlled amounts to a publicly owned treatment works; or direct contaminated runoff into lined

impoundments for evaporation (be aware of attracting wildlife that may prove hazardous to flight operations). Recover deicing materials when they are applied during non-precipitation events (e.g., cover storm sewer inlets, use booms, install absorptive interceptors in the drains, etc.) to prevent these from later becoming a source of stormwater contamination. Recycle used deicing fluid whenever possible.

8.S.3.2 *Deicing Season.* The permittee shall determine the seasonal timeframe (e.g., December-February, October - March, etc.) during which deicing activities typically occur at the facility. The permittee shall implement control measures, including any BMPs, facility inspections and monitoring with particular emphasis throughout the defined deicing season. When the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea are met, the permittee shall obtain the four required benchmark monitoring event results for deicing-related parameters, i.e., BOD, COD, ammonia and pH. This sampling timeframe shall occur during the deicing season identified above. See also Part 8.S.7.

8.S.4 Additional Corrective Action Deadline Requirements. (See also Parts 3.2 and 3.3)

An airport authority that has jointly prepared a SWPPP with its tenants (see Part 8.S.5) shall document the discovery of any of the conditions listed in Part 3.1 within 72 hours of making such discovery. Within 30 days of such discovery, the permittee (airport authority) shall notify affected tenants and document any corrective action(s) taken or to be taken (either by the tenant or the airport authority) to eliminate or further investigate the condition, or if no corrective action is needed, the basis for that determination. This timeline applies only to airports with co-permittees that jointly prepare SWPPPs and file separate NOIs. Individual airport tenants that both separately prepare a SWPPP and file an NOI shall comply with the timelines required in Part 3.2.

8.S.5 Additional SWPPP Requirements.

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from its own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity.

8.S.5.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

8.S.5.2 *Potential Pollutant Sources.* (See also Part 5.1.3) In the facility's inventory of exposed materials, the SWPPP shall describe the potential for the following activities and facility areas to contribute pollutants to stormwater discharges:

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

When deicing chemicals are used, the permittee shall maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of the permittee's knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the

above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

8.S.5.3 *Vehicle and Equipment Washwater Requirements.* In accordance with Part 8.S.2.2, the permittee shall document in the SWPPP the methods of disposal of vehicle and equipment washwater generated at the facility and the name of any permits required by that method.

8.S.5.4 *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.* (See also Part 4.1) At a minimum conduct routine facility inspections at least monthly during the deicing season. If the facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Director may specifically require an increase in inspection frequencies.

8.S.6.2 *Comprehensive Site Inspections.* (See also Part 4.3) Using only qualified personnel, conduct the annual site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

8.S.7 Sector-Specific Benchmarks. (See also Part 6.)

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

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

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart T – Sector T – Treatment Works.

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

8.T.1 Covered Stormwater Discharges.

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

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

The requirements listed under this part apply to all existing point source stormwater discharges associated with the following activities:

- 8.T.2.1 Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge; that are located within the confines of a facility with a design flow of 1.0 million gallons per day (MGD) or more; or are required to have an approved pretreatment program under 40 CFR Part 403.
- 8.T.2.2 The following are not required to have permit coverage: farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility, or areas that are in compliance with Section 405 of the CWA.

8.T.3 Limitations on Coverage.

- 8.T.3.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4 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 Control Measures.

- 8.T.4.1 *Control Measures.* (See also the non-numeric effluent limits in Part 2.1.1) In addition to the other control measures, implement the following, or other equivalent measures when feasible: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).
- 8.T.4.2 *Employee Training.* (See also Part 2.1.1.9) Include the following (as applicable) in an employee training program: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

8.T.5 Additional SWPPP Requirements.

- 8.T.5.1 *Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.
- 8.T.5.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them, as

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

8.T.5.3 *Wastewater and Washwater Requirements.* In accordance with Part 8.T.3.1, the permittee shall document in the SWPPP the methods of disposal of vehicle and equipment washwater generated at the facility and the name of any permits required by that method.

8.T.6 Additional Inspection Requirements.

(See also Part 4.1) Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products.

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

8.U.1 Covered Stormwater Discharges.

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

8.U.2 Limitations on Coverage.

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

8.U.3 Additional Control Measures.

8.U.3.1 *Employee Training.* (See also Part 2.1.1.9) Include pest control in the facility's employee training program.

8.U.4 Additional SWPPP Requirements.

8.U.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

8.U.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

8.U.5 Additional Inspection Requirements.

(See also Part 4.1) Inspect on a quarterly basis, at a minimum, the following areas where the potential for exposure to stormwater exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

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

Table 8.U-1		
Subsector (Facility discharges may be subject to requirements for more than one Sector / Subsector)	Parameter	Benchmark Monitoring Concentration
Subsector U1. Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L
Subsector U2. Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD ₅)	30 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Nitrate plus Nitrite Nitrogen	Reserved
	Total Suspended Solids (TSS)	100 mg/L

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.V.1 Covered Stormwater Discharges.

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

8.V.2 Limitations on Coverage.

8.V.2.1 *Prohibition of Non-Stormwater Discharges.* (See also Part 1.1.4) The following discharges are not authorized by this permit:

- Wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process);
- Reused or recycled water; and
- Waters used in cooling towers.

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

8.V.3 Additional Control Measures.

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

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

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

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

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

methods; and permanently seal drains within critical areas that may discharge to a storm drain.

8.V.3.2 *Employee Training.* (See also Part 2.1.1.9) Include the following (as applicable) in an employee training program: use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

8.V.4 Additional SWPPP Requirements.

8.V.4.1 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the facility's SWPPP the following additional sources and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

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

8.V.5 Additional Inspection Requirements.

(See also Part 4.1) Inspect, at least monthly, the following activities and areas: transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural stormwater management practices.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart W – Sector W – Furniture and Fixtures.

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

8.W.1 Covered Stormwater Discharges.

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

8.W.2 Additional SWPPP Requirements.

8.W.2.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility's SWPPP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed; access roads; and rail spurs.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing.

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

8.X.1 Covered Stormwater Discharges.

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

8.X.2 Additional Control Measures.

8.X.2.1 *Good Housekeeping Measures.* (See also Part 2.1.1.2)

8.X.2.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the stormwater runoff from such storage areas. Implement an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

8.X.2.1.2 *Material Handling Area.* Minimize contamination of stormwater runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Implement one or more of the following (or other equivalent measures): using spill and overflow protection, cover fueling areas, and cover or enclose areas where the transfer of materials may occur. When applicable, replace or repair leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

8.X.2.1.3 *Fueling Areas.* Minimize contamination of stormwater runoff from fueling areas. Implement one or more of the following (or other equivalent measures): cover the fueling area, use spill and overflow protection, minimize runoff of stormwater to the fueling areas, use dry cleanup methods, and properly dispose, treat and/or recycling stormwater runoff collected from the fueling area.

8.X.2.1.4 *Above Ground Storage Tank Area.* Minimize contamination of the stormwater runoff from above-ground storage tank areas, including the associated piping and valves. Implement one or more of the following (or other equivalent measures): regularly clean these areas, explicitly address tanks, piping and valves in the facility's SPCC program, minimize stormwater runoff from adjacent areas, restrict access to the area, insert filters in adjacent catch basins, provide absorbent booms in unbermed fueling areas, use dry cleanup methods, and permanently seal drains within critical areas that may discharge to a storm drain.

8.X.2.2 *Employee Training.* (See also Part 2.1.1.9) Include the following (as applicable) in an employee training program: spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

8.X.3 Additional SWPPP Requirements.

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.Y.1 Covered Stormwater Discharges.

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

8.Y.2 Additional Control Measures.

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

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

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

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

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

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

8.Y.2.2 *Controls for Plastic Products Manufacturers.* Minimize the discharge of plastic resin pellets in the facility's stormwater discharges. Implement the following control measures (or other equivalent measures) minimize spills, clean up spills promptly and thoroughly, train employees on proper handling, and recapture pellets when possible.

8.Y.3 Additional SWPPP Requirements.

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

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

Table 8.Y-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Y1. Rubber Products Manufacturing (SIC 3011, 3021, 3052, 3053, 3061, 3069)	Total Zinc ¹	Hardness Dependent

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

Benchmark values based on hardness and receiving waterbody		
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies	For discharges to ephemeral waterbodies
	Zinc (mg/L)	Zinc (mg/L)
0-25	0.0362	0.344
25-50	0.0651	0.618
50-75	0.0918	0.871
75-100	0.1170	1.112
100-125	0.1417	1.343
125-150	0.1652	1.568
150-175	0.1883	1.787
175-200	0.2108	2.001
200-225	0.2329	2.211
225-250	0.2547	2.417
250-275	0.2761	2.620
275-300	0.2972	2.821
300-325	0.3181	3.019
325-350	0.3387	3.214
350-375	0.3591	3.408
375-400	0.3793	3.599

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing.

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

8.Z.1 Covered Stormwater Discharges.

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

8.Z.2 Additional Control Measures.

8.Z.2.3 Good Housekeeping Measures. (See also Part 2.1.1.2)

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

8.Z.3 Additional SWPPP Requirements.

- 8.Z.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the facility’s SWPPP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

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

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

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

8.AA.1 Covered Stormwater Discharges.

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

8.AA.2 Additional Control Measures.

8.AA.2.1 *Good Housekeeping Measures.* (See also Part 2.1.1.2)

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

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

8.AA.2.2 *Spill Prevention and Response Procedures.* (See also Part 2.1.1.4) The permittee shall ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas shall be addressed:

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

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

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

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

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

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

8.AA.2.3 *Spills and Leaks.* (See also Part 5.1.3.3) In the facility's spill prevention and response procedures, required by Part 2.1.1.4, determine whether chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes are

present. If present, ensure the spill prevention and response procedures specifically address these chemicals.

8.AA.3 Additional SWPPP Requirements.

8.AA.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the facility’s SWPPP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

8.AA.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

8.AA.4 Additional Inspection Requirements

8.AA.4.1 *Inspections.* (See also Part 4) At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas.

8.AA.4.2 *Comprehensive Site Inspections.* (See also Part 4.3) As part of the facility’s inspection, also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

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

Table 8.AA-1		
Subsector (Facility discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector AA1. Fabricated Metal Products, except Coating (SIC 3411-3499; 3911-3915)	Total Aluminum	0.75 mg/L
	Total Iron	1.0 mg/L
	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	Reserved
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Zinc ¹	Hardness Dependent
	Nitrate plus Nitrite Nitrogen	Reserved

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

Benchmark values based on hardness and receiving waterbody		
Water Hardness Range (mg/L)	For discharges to perennial and intermittent waterbodies	For discharges to ephemeral waterbodies
	Zinc (mg/L)	Zinc (mg/L)
0-25	0.0362	0.344
25-50	0.0651	0.618
50-75	0.0918	0.871
75-100	0.1170	1.112
100-125	0.1417	1.343
125-150	0.1652	1.568
150-175	0.1883	1.787
175-200	0.2108	2.001
200-225	0.2329	2.211
225-250	0.2547	2.417
250-275	0.2761	2.620
275-300	0.2972	2.821
300-325	0.3181	3.019
325-350	0.3387	3.214
350-375	0.3591	3.408
375-400	0.3793	3.599

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AB.1 Covered Stormwater Discharges.

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

8.AB.2 Additional SWPPP Requirements.

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

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AC.1 Covered Stormwater Discharges.

The requirements in Subpart AC apply to stormwater discharges associated with industrial activity from facilities that manufacture Electronic and Electrical Equipment and Components, Photographic and Optical goods as identified by the SIC Codes specified in Table C-1 of Appendix C of the permit.

8.AC.2 Additional Requirements.

No additional sector-specific requirements apply.

Part 8 – Sector-Specific Requirements for Industrial Activity

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

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

8.AD.1 Covered Stormwater Discharges.

Sector AD is used to provide permit coverage for facilities designated by the Director as needing a stormwater permit, and any discharges of stormwater associated with industrial activity that do not meet the description of an industrial activity covered by Sectors A-AC.

8.AD.1.1 *Eligibility for Permit Coverage.* Because this sector is primarily intended for use by discharges designated by the Director as needing a stormwater permit (which is an atypical circumstance), and the facility may or may not normally be discharging stormwater associated with industrial activity, the permittee shall obtain the Director's written permission to use this permit prior to submitting an NOI. An operator, who is authorized to use this permit, shall also be required to ensure that the facility's discharges meet the basic eligibility provisions of this permit at Part 1.1.

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

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

Appendix A
Definitions, Abbreviations and Acronyms

Appendix A. Definitions, Abbreviations, and Acronyms (for the purposes of this permit).

Approved Total Maximum Daily Loads (TMDLs) – Approved TMDLs are those that are developed by the Arizona Department of Environmental Quality and approved by EPA.

Best Management Practices (BMPs) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

Co-located Industrial Activities – Any industrial activities, excluding primary industrial activity(ies), located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Appendix D.

Control Measure – refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

Director – a means the Director of the Arizona Department of Environmental Quality or an authorized representative.

Discharge – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

Discharge of a pollutant – any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

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" (including land or appurtenances thereto) that is subject to regulation under the AZPDES program. See 40 CFR 122.2.

Federal Facility – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

Impaired water – waters that have been assessed by ADEQ, under the CWA, Section 303(d), as not attaining a water quality standard for at least one designated use, and are listed in Arizona's 2006 – 2008 §303(d) and Other Impaired Waters 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.

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).

New Discharger – a facility 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 40 CFR 122.2.

New Source – any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

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).

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).

Outstanding Arizona Water – a surface water that has been designated by ADEQ as an outstanding state resource under A.A.C. R18-11-112.

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

Point source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or

may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. See 40 CFR 122.2.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

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)(i), (iv), (v), or (vii), and (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.

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 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).

Significant materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

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 on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 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).

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).

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. States and EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

A.2. ABBREVIATIONS AND ACRONYMS

ADHS – Arizona Department of Health Service

BOD₅ – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

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

EPA – U. S. Environmental Protection Agency

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NOI – Notice of Intent

NOT – Notice of Termination

OAW – outstanding Arizona water

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

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 NOI, 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 a 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) and Notices of Termination (NOT), must be signed as follows:

 - a. NOIs and NOTs:
 - 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 SWPPPs, inspection reports, annual reports, monitoring reports, reports on training and other information required by this permit must be signed by a person described in Appendix B, Subsection 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 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. Changes to Authorization. If the information on the 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 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 A.3, and sent to the address specified in Part 7.6.
- e. 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.

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. Representative Samples/Measurements. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.
- b. Retention of Records. The permittee must retain records of all monitoring information,

- including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for at least three (3) years from the date this permit expires. This period may be extended by request of the Director at any time. Permittees must submit any such records to ADEQ upon request. The permittee must retain the SWPPP developed in accordance with Part 5 of this permit, for at least three (3) years after the last modification or amendment is made to the plan.
- c. Records Contents. Records of monitoring information must include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The time(s) analyses were initiated;
 - v. The initials or name(s) of 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. Approved Monitoring Methods. 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 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. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms (paper or electronic) provided or specified by ADEQ. Pursuant to Part 7.1, all monitoring data collected pursuant to Part 6.2 and 6.3 must be submitted to the Department using the MSGP Discharge Monitoring Report (MDMR) form, available at <http://www.azdeq.gov/environ/water/permits/stormwater.html> .
 - ii. If the permittee monitors 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 calculation and reporting of the data submitted in the DMR.
 - 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 5515 B-1
Phoenix, AZ 85007
Office: 602-771 – 2330; Fax 602-771 – 4505
 - 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 upset which exceeds any effluent limitation in the permit.
 - 2) 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 the address listed in Part 7.6.

13. Reopener Clause. [A.A.C. R18-9-A905(A)(3)(d) which incorporates 40 CFR 122.44(c)] 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

- a. Transfer of coverage from one operator to a different operator (*e.g.*, facility sold to a new company): the new owner/ operator must complete and file a Notice of Intent in accordance with Part 1.3.1 at least 5 days prior to taking over operational control of the facility. The old owner/ operator must file a Notice of Termination within thirty (30) days after the new owner/ operator has assumed responsibility for the facility.
- b. Simple name changes of the permittee (*e.g.*, Company “A” changes name to “ABC, Inc.”) may be done by filing an amended Notice of Intent referencing the facility’s assigned permit number and requesting a simple name change.

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 your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix B, Subsection 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.

G. 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.

1. **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.
2. **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)
	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
A5	2441	Nailed and Lock Corner Wood Boxes and Shook
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
	2861-2869	Industrial Organic Chemicals

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
	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		
M1	5015	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
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
	2051-2053	Bakery 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
	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 Code¹	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	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. <i>NOTE: Facilities may not elect to be covered under Sector AD. Only the Director may assign a facility to Sector AD.</i>	

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.osha.gov/pls/imis/sicsearch.html> or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987. Much of the information in the 1987 *Handbook* can be obtained from the Internet at http://www.osha.gov/pls/imis/sic_manual.html. Conversions from the NAICS can be obtained from the Internet at www.census.gov/epcd/www/naics.html

**Appendix D
Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness
Dependent Metals**

Appendix D. Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals

Overview

Benchmarks have been adjusted for six hardness-dependent metals (i.e., cadmium, copper, lead, nickel, silver, and zinc) to further ensure compliance with water quality standards and provide additional protection for endangered species and their critical habitat. For any sectors required to conduct benchmark samples for a hardness-dependent metal, 'hardness ranges' are included from which benchmark values are determined. To determine which hardness range to use, the permittee must collect data on the hardness of the facility's surface water(s) that receive discharges or the hardness of the discharge itself based on the type of the receiving water body. Once the site-specific hardness data have been collected, the corresponding benchmark value for each metal is determined by comparing where the hardness data fall within 25 mg/L ranges, as shown in Table 1.

Table 1. Hardness Ranges to Be Used to Determine Benchmark Values for Discharges to Perennial or Intermittent Waterbodies.

All Units mg/L	Benchmark Values (mg/L, total)					
	Cadmium	Copper	Lead	Nickel	Silver	Zinc
0-25	0.0020	0.0036	0.014	0.15	0.0007	0.0362
25-50	0.0040	0.0070	0.030	0.260	0.0007	0.0651
50-75	0.0060	0.0102	0.047	0.367	0.0017	0.0918
75-100	0.0079	0.0134	0.065	0.468	0.0030	0.1170
100-125	0.0096	0.0170	0.082	0.566	0.0046	0.1417
125-150	0.0117	0.0197	0.100	0.660	0.0065	0.1652
150-175	0.0136	0.0221	0.118	0.752	0.0087	0.1883
175-200	0.0154	0.0228	0.136	0.842	0.0112	0.2108
200-225	0.0173	0.0289	0.154	0.930	0.0138	0.2329
225-250	0.0192	0.0316	0.172	1.017	0.0168	0.2547
250-275	0.0173	0.0349	0.190	1.102	0.0183	0.2761
275-300	0.0210	0.0378	0.209	1.186	0.0213	0.2972
300-325	0.0246	0.0408	0.227	1.269	0.0244	0.3181
325-350	0.0266	0.0438	0.245	1.351	0.0278	0.3387
350-375	0.0284	0.0467	0.263	1.433	0.0312	0.3591
375-400	0.0302	0.0496	0.281	1.513	0.0349	0.3793

Table 2. Hardness Ranges to Be Used to Determine Benchmark Values for Discharges to Ephemeral Waterbodies.

All Units mg/L	Benchmark Values (mg/L, total)					
	Cadmium	Copper	Lead	Nickel	Silver	Zinc
0-25	0.0059	0.0063	0.0293	1.287	0.0003	0.344
25-50	0.0116	0.0121	0.0636	2.313	0.0010	0.618
50-75	0.0172	0.0177	0.0995	3.260	0.0020	0.871
75-100	0.0228	0.0233	0.1363	4.158	0.0032	1.112
100-125	0.0286	0.0283	0.1736	5.022	0.0047	1.343
125-150	0.0338	0.0341	0.2113	5.860	0.0065	1.568
150-175	0.0393	0.0394	0.2492	6.676	0.0084	1.787

All Units mg/L	Benchmark Values (mg/L, total)					
	Cadmium	Copper	Lead	Nickel	Silver	Zinc
175-200	0.0447	0.0447	0.2873	7.475	0.0106	2.001
200-225	0.0501	0.0500	0.3255	8.258	0.0130	2.211
225-250	0.0555	0.0552	0.3637	9.028	0.0156	2.417
250-275	0.0609	0.0601	0.4020	9.786	0.0183	2.620
275-300	0.0663	0.0655	0.4402	10.53	0.0213	2.821
300-325	0.0714	0.0706	0.4784	11.27	0.0244	3.019
325-350	0.0770	0.0757	0.5166	12.00	0.0278	3.214
350-375	0.0823	0.0800	0.5547	12.72	0.0312	3.408
375-400	0.0876	0.0859	0.5927	13.44	0.0349	3.599

How to Determine Hardness for Hardness-Dependent Parameters.

The permittee shall monitor stormwater discharges for parameters specified in Part 8 for the primary industrial activity, and any co-located industrial activities authorized under this permit. If any of the parameters are hardness-dependent, the permittee must also characterize for hardness. The results of the general analytical monitoring, including hardness, shall be submitted to ADEQ in accordance with Part 7. For discharges to:

- Perennial or intermittent waters, the hardness shall be of the surface water receiving the discharge.
- Ephemeral waters, the hardness shall be of the discharge leaving the facility.

Hardness characterization of the receiving water shall include analysis of samples from the surface water receiving the discharge or surface water data collected by a third party provided the data is credible, scientifically defensible and is representative of current conditions. The data and the methodology for determining the hardness values must be submitted to ADEQ in the first year of permit coverage to allow ADEQ to compare monitoring results with applicable water quality standards. The permittee shall retain all reports and monitoring data in accordance with Part 7.5 of the permit.