

**Appendix A**  
**Definitions, Abbreviations and Acronyms**

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

**Action Levels for Routine Analytical Monitoring** - (formerly called benchmark monitoring in 2010 MSGP)- A pollutant concentration that is an indicator which helps determine the effectiveness of stormwater control measures and assesses potential impacts to human health and the environment. This type of monitoring differs from “compliance monitoring” in that exceedances of the routine analytical monitoring action levels are not necessarily permit violations, but rather indicators that can help identify problems at the site with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness needs to be re-considered, or who needs to be supplemented with additional control measures.

**Accelerated Monitoring** - monitoring that is required after one stormwater sampling event result exceeds a numeric limit (e.g., surface water quality standard for discharges to special waters; action level; effluent limitation guideline; waste load allocation).

**Approved Total Maximum Daily Loads (TMDLs)** –Approved TMDLs are those that are developed by the ADEQ and approved by EPA.

**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 site is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Appendix 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.

**Corrective Action** – any action taken, or required to be taken, to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other residues found on the site; and (3) remedy a permit violation.

**Designated Use** - A use of a surface water specified in Arizona’s surface water quality standards rules, including those uses specified in R18-11-104. Designated uses include domestic water source, full-body contact recreation, partial body contact recreation, fish consumption, aquatic and wildlife (cold water), aquatic and wildlife (warm water), aquatic and wildlife (ephemeral), aquatic and wildlife (effluent dependent waters), agricultural irrigation, and agricultural livestock watering.

**Director** – 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.

**Discharge Point** – the location where collected stormwater flows are discharged from the site through a point source such that the first receiving waterbody into which the discharge flows, either directly or through a separate storm sewer system, is a water of the U.S.

**Effluent Limitations Guideline (ELG)** – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

**Ephemeral Water** - A surface water that has a channel that is at all times above the water table and that flows only in direct response to precipitation.

**Existing Discharger** – an operator applying for coverage under this permit for discharges authorized previously under an AZPDES general or individual permit.

**Facility or Activity** – any AZPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the AZPDES program. See 40 CFR 122.2.

**Feasible** – means technologically possible and economically practicable and achievable in light of best industry practices.

**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.

**Hardness** - the sum of dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO<sub>3</sub>) in milligrams per liter.

**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 §303(d) List 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.

**Infeasible** – means not technologically possible or not economically practicable and achievable in light of best industry practices.

**Intermittent Surface Water** - A stream or reach of a stream that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.

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

**Measureable Storm Event** - a storm event that results in a stormwater discharge from one or more discharge points at the site. Measurable storm events must be separated by a minimum of 72-hours between stormwater discharges.

**Minimize** – reduce and/or eliminate to the extent achievable using control measures (including best

management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer** – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7) & A.A.C R18-9-A901(22).

**Natural Background Levels** - means surface water quality that was present before any human-caused pollution. Natural background pollutants include those substances that are naturally occurring in native soils, vegetation, or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring (such as run-off from other industrial sites or roadways).

**New Discharger** – a site from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective AZPDES permit for discharges at that site. See 40 CFR 122.2 & A.A.C. R18-9-A901(24).

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

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2 & R18-9-A901(25).

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

**Non-structural Controls** – Pollution prevention methods that are not physically constructed, including procedures, schedules, training and other practices to prevent or reduce the discharge of pollutants.

**No Exposure** – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

**No Exposure Certification (NEC)** - A submission to the Director from an applicant notifying that they intend to obtain a conditional exclusion from permit requirements by certifying that there is no exposure of industrial materials or activities to rain, snow, snowmelt, and/ or stormwater runoff and all industrial materials or activities are protected by a storm-resistant shelter. See 40 CFR 122.-26 (g).

**Non-Stormwater Discharges** – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, pavement wash water, external building washdown, irrigation water, or uncontaminated ground water or spring water. See Part 1.1.3.

**Not-attaining Water-** [R18-11-601(11)] a surface water is assessed as impaired, but is not placed on the 303(d) List because:

- a. A TMDL is prepared and implemented for the surface water;
- b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission;
- c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.

**Notice of Intent (NOI)** – the form (electronic or paper) required for authorization of coverage under the Multi-Sector General Permit.

**Notice of Intent (NOI) Certificate-** the certificate of authorization for permit coverage that issued immediately by ADEQ after a complete and accurate NOI, along with the applicants payment, is received by the Department.

**Notice of Termination (NOT)** – the form (electronic or paper) required for terminating coverage under the Multi-Sector General Permit.

**Notice of Termination Summary-** the termination summary is issued immediately after a complete and accurate NOT is received by the Department, confirming that permit coverage was terminated.

**Numeric limit** - a measurable permit limit expressed as a quantity, that includes actions levels, effluent limitation guidelines, surface water quality standards, TMDL, and or Wasteload Allocation (WLA).

**Operator** – any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

- (i) The entity has operational control over industrial activities, including the ability to modify those activities; or
- (ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

**Outfall** – For the purpose of this permit, *outfall* means the location(s) where stormwater and allowable non-stormwater discharges from the facility, including (but not limited to) a pipe, channel, ditch, or other conveyance, overland flow from land that has been altered or contoured resulting in the stormwater discharges.

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

**Perennial Surface Water** - A surface water that flows continuously throughout the year.

**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** – A partial listing from this definition includes: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat,

wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2 & A.A.C. R18-9-A901 (27).

**Pollutant of concern** – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

**Primary industrial activity** – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(ii), (iii), (vi), or (viii); or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), (vii), or (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

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

**Receiving Waters** – Means waters of the United States.

**Reportable Quantity Release** – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 and A.R.S. § 49-284 for complete definitions and reportable quantities for which notification is required.

**Runoff coefficient** – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

**Run-On** – sources of stormwater that drain from land located upslope or upstream from the regulated site.

**Significant spills and leaks** – are those that have the potential to have an adverse impact on the quality of stormwater discharges from the site. Such spills and leaks may include but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602 and A.R.S. §49-284 . This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

**Site** – means the land or water where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

**Special Waters** - for the purposes of this general permit, reference to special waters include waters identified by the State as impaired, not-attaining or classified as an Outstanding Arizona Water.

**Spill** – the release of a hazardous or toxic substance from its container or containment.

**Stormwater** – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13) & A.A.C. R18-9-A901(36).

**Storm Resistant Shelter** - A building or structure that is completely roofed and walled, or a structure with only a top cover but no side coverings, provided that any material or industrial activity located under or within the structure is not subject to any run-on and subsequent runoff of stormwater, or mobilization by wind.

**Stormwater Discharges Associated with Construction Activity** – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

**Stormwater Discharges Associated with Industrial Activity** – the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the AZPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located at industrial sites that are separate from the facility's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

**Storm Event** – a precipitation event that results in a measurable amount of precipitation.

**Stormwater Pollution Prevention Team** – the group of individuals, identified by name, title or role, that are responsible for the development and modifications of the SWPPP and oversight of compliance with the permit requirements. The Stormwater Team is also responsible for maintaining control measures and taking corrective actions where required. The team may include members who are not employed by the site (such as third party consultants). The individuals on the “Stormwater Pollution Prevention Team” shall be identified in the SWPPP.

**Structural Controls**- Physical or constructed features, such as silt fencing, sediment traps, and detention/retention ponds that minimize the discharge of pollutants.

**Substantially Identical Outfalls** – outfalls located at the facility that have comparable industrial activities, control measures, exposed materials that may significantly contribute pollutants to stormwater, and similar runoff coefficients of their drainage areas. Monitoring exceptions apply to substantially identical outfalls for visual assessment, routine analytical, and impaired waters monitoring. Substantially identical outfall exceptions, does not apply to ELG or OAW monitoring.

**Total Maximum Daily Loads (TMDLs)** – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and

130.7).

**Total nitrogen-** the sum of the nitrogen component from ammonia (NH<sub>3</sub>), ammonium ion (NH<sub>4</sub><sup>+</sup>), nitrite (NO<sub>2</sub>), nitrate (NO<sub>3</sub>), and dissolved and particulate organic nitrogen expressed as elemental nitrogen.

**Upset** – 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. See 40 CFR 122.41(n)(1).

**Water Quality Standards** – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. Arizona’s surface water quality standards are set forth in A.A.C. Title 18, Chapter 11, Article 1.

**Water of the United States** – as defined in 40 Code of Federal Regulation 122.2.

## **A.2. ABBREVIATIONS AND ACRONYMS**

ADHS – Arizona Department of Health Service

BMP – Best Management Practice

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR – Code of Federal Regulations

CGP- Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

DMR – Discharge Monitoring Report

ELG- Effluent Limitations Guideline

EPA – U. S. Environmental Protection Agency

MGD – Million Gallons per Day

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NEC- No Exposure Certification

NOI – Notice of Intent

NOT – Notice of Termination

OAW – Outstanding Arizona Water

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

SIC – Standard Industrial Classification



SPCC – Spill Prevention, Control, and Countermeasures

SSC – Suspended Sediment Concentration

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

WLA – Wasteload Allocation

WQS – Water Quality Standard

**Appendix B  
Standard Permit Conditions**

**Appendix B. Standard Permit Conditions.**

Standard permit conditions in Appendix B are consistent with the general permit provisions required under 40 CFR 122.41 and A.A.C. R-18-9-A905(A)(3).

1. **Duty to Comply.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(1) and A.R.S. §§ 49-261, 262, 263.01, and 263.02.]
  - a. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
  - b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.
  
2. **Duty to Reapply / Continuation of the Expired General Permit.** [A.A.C. R18-9-A905 which incorporates 40 CFR 122.41(b)]
  - a. Upon reissuance of the general permit, the permittee shall file an 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), Notices of Termination (NOT) and No Exposure Certifications (NEC), must be signed as follows:
- a. NOIs, NOTs and NECs:
    - i. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
    - ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
    - iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal (or state) agency includes: (1) The chief executive officer (or director) of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
  - b. All reports required by this permit and other information requested by ADEQ as follows:
    - i. A person described in Section 9.a or by a duly authorized representative of that person. A person is a duly authorized representative only if the authorization is made in writing by a person described in Section 9.a and contained in the SWPPP.
    - ii. The authorization must specify either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

- c. All reports, including SWPPP and changes to the SWPPP to document corrective actions taken as required by Part 3.0, and any other compliance reports including , inspection reports, annual reports, monitoring reports, reports on training, corrective action reports and other information required by this permit must be signed by a person described in Appendix B, Subsection 9.a above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - i. The authorization is made in writing by a person described in Appendix B, Part 9.a;
  - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and
  - iii. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to ADEQ, upon request.
- d. All other changes to the SWPPP, and other compliance documentation required under Part 5.6, must be signed and dated by the person preparing the change of documentation.
- e. Changes to Authorization. If the information on the 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.
- f. Certification. Any person signing documents under the terms of this permit must make the following certification:
 

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*
- g. Documents required by this permit that are submitted electronically by, or on behalf of, the regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this section. See 40 CFR 122.22(e).

**10. Inspection and Entry.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

- a. The permittee must allow ADEQ or an authorized representative to:
  - i. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records are kept under the conditions of this permit;
  - ii. Have access to and copy at reasonable times, any records that are kept under the conditions of this general permit; and
  - iii. Inspect at reasonable times any facility or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
  - iv. Sample or monitor at reasonable times any substances or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9 and 10; and
- b. If the facility discharges to an MS4, the permittee must allow representatives of the municipal operator or the separate storm sewer receiving the discharge to inspect the site and obtain copy of records pertaining to the discharge or the conditions of this permit.

**11. Monitoring and Records** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)].

- a. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- b. The permittee must retain records of all monitoring information, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for at least three (3) years from the date this permit coverage expires or the permit authorization is terminated. This period may be extended by request of the Director at any time. Permittees must submit any such records to ADEQ upon request.
- c. Records of monitoring information must include:
  - i. The date, exact place, and time of sampling or measurements;
  - ii. The individual(s) who performed the sampling or measurements;
  - iii. The date(s) analyses were performed;
  - iv. The time(s) the analyses were initiated;
  - v. The individual(s) who performed the analyses;
  - vi. References and written procedures, when available, for the analytical techniques or methods used;
  - vii. The analytical techniques or methods used; and
  - viii. The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless specific test procedures have been otherwise specified in this permit.
- e. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

**12. Reporting Requirements.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]

- a. Planned changes. The permittee shall give notice to the Director as soon as possible, but no fewer than 30 days, of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at A.A.C. R18-9-A905(A)(1)(e)); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at A.A.C. R18-9-A905(A)(3)(b)).
- b. Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.
  - i. Pursuant to Part 7.1, all monitoring results must be submitted on an electronic Discharge Monitoring Report (DMR) form using the on-line reporting system.
  - ii. If the permittee monitors the discharge of any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in in the DMR (if available), or submitted as a separate report .
  - iii. Calculations for all limitations which require averaging of measurements must use an

arithmetic mean and non-detected results must be incorporated in calculations as the limit of quantitation for the analysis.

- d. 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.
- e. 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  
1110 W. Washington Street, Mail Code 5515 B-1  
Phoenix, AZ 85007  
Office: 602-771 – 2330
  - ii. A written submission shall also be provided to the office identified above within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
  - iii. The following shall be included as information which must be reported within 24 hours under this paragraph.
    - 1) Any unanticipated bypass which extends any effluent limitation in the permit.
    - 2) Any upset which exceeds any effluent limitation in the permit.
    - 3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at A.A.C. R18-9-A905(A)(3)(d)).
  - iv. ADEQ may waive the written report on a case-by-case basis for reports under this subsection if the oral report has been received within 24 hours.
- f. 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).
- g. 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-C905 which incorporates 40 CFR 122.62(a) or (b)] )  
The Department may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, which may be promulgated in the course of the current permit cycle.

**14. Other Environmental Laws.** No condition of this general permit releases the permittee from any responsibility or requirements under other environmental statutes or regulations. For example, this permit does not authorize the “taking” of endangered or threatened species as prohibited by Section 9 of the Endangered Species Act, 16 U.S.C. 1538. Information regarding the location of endangered and threatened species and guidance on what activities constitute a “taking” are available from the U.S. Fish and Wildlife Service. The permittee must also comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC).

- 15. State or Tribal Law.** [Pursuant to A.A.C. R18-9-A904(C)] Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.
- 16. Severability.** The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this general permit shall not be affected.
- 17. Requiring Coverage under an Individual Permit or an Alternative General Permit.**
- a. The Director may require a person authorized by this permit to apply for and/or obtain either an individual AZPDES permit or an alternative AZPDES general permit. Any interested person may petition the Department to take action under this section. The Department may require a permittee authorized to discharge under this permit to apply for an individual permit in any of the following cases:
    - i. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
    - ii. Effluent limitation guidelines are promulgated for point sources covered by the general permit;
    - iii. An Arizona Water Quality Management Plan containing requirements applicable to the point sources is approved;
    - iv. Circumstances change after the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
    - v. If the Director determines that the discharge is a significant contributor of pollutants. When making this determination, the Director shall consider:
      - 1) The location of the discharge with respect to waters of the United States,
      - 2) The size of the discharge,
      - 3) The quantity and nature of the pollutants discharged to waters of the U.S., and
      - 4) Any other relevant factor.
  - b. If an individual permit is required, the Director shall notify the discharger in writing of the decision. The notice shall include:
    - i. A brief statement of the reasons for the decision;
    - ii. An application form;
    - iii. A statement setting a deadline to file the application;
    - iv. A statement that on the effective date of issuance or denial of the individual permit, coverage under the general permit will automatically terminate;
    - v. The applicant's right to appeal the individual permit requirement with the Water Quality Appeals Board under A.R.S. § 49-323, the number of days the applicant has to file a protest challenging the individual permit requirement, and the name and telephone number of the Department contact person who can answer questions regarding the appeals process; and
    - vi. The applicant's right to request an informal settlement conference under A.R.S. 41-1092.03(A) and 41-1092.06.
  - c. The discharger shall apply for an individual permit within 90 days of receipt of the notice, unless the Director grants a later date. In no case shall the deadline be more than 180 days after the date of the notice.
  - d. If the discharger fails to submit the individual permit application within the time period established in Appendix B.17.c the applicability of the general permit to the discharger is



automatically terminated at the end of the day specified by the Director for application submittal.

- e. Coverage under the general permit shall continue until an individual permit is issued or denied unless the general permit coverage is terminated under Appendix B. Subsection 17.d.

**18. Request for an Individual Permit.**

- a. A permittee may request an exclusion from coverage of a general permit by applying for an individual permit.
  - i. The permittee shall submit an individual permit application under R18-9-B901(B) and include the reasons supporting the request no later than 90 days after publication of the general permit.
  - ii. The Director shall grant the request if the reasons cited by the permittee are adequate to support the request.
- b. If an individual permit is issued to a person otherwise subject to a general permit, the applicability of the general permit to the discharge is automatically terminated on the effective date of the individual permit.

**19. Transfer of Coverage.** Coverage under this permit is not transferable from one person to another, is non-transferable when the business/ facility name changes, or when there is a change in facility/ site location. Pursuant to Arizona Administrative Code, R18-9-C904, the permittee shall comply with the following conditions:

- a. Transfer of coverage from one operator to a different operator (e.g., site sold to a new company): the new owner /operator must complete and file a Notice of Intent (NOI) in accordance with Part 1.3.1 at least 7 days prior to taking over operational control of the site. The old owner /operator must file a Notice of Termination (NOT) within thirty (30) days after the new owner /operator has assumed responsibility for the facility.
- b. Name changes of the permittee (e.g., Company “ABC Inc” changes name to “ABC LLC”) require the operator to file for a new Notice of Intent (NOI). The facility with the new name must complete and file a NOI in accordance with Part 1.3.1 at least 7 days of the name change. The facility under the previous name, must file a Notice of Termination (NOT) within thirty (30) days from the name change.
- c. In the event the facility or activity moves to another location, or is otherwise different than the location identified by the permittee on the original NOI, the permittee must submit a new NOI that accurately identifies the regulated facility or activity. The new NOI must include all of the information and requirements specified in Part 1.3.1 of this permit, including the corresponding initial fee and be submitted at least 7 days from the change in location. The facility under the previous location, must file a Notice of Termination (NOT) within thirty (30) days from the change of location.

**20. Bypass**

- a. Definitions.
  - 1 Bypass means the intentional diversion of waste streams from any portion of a treatment facility
  - 2 Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to

assure efficient operation. These bypasses are not subject to the provisions Appendix B, Subsections 20.c and 20.d.

- c. Notice.
  - 1 Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted at least ten days before the date of the bypass.
  - 2 Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Appendix B, Subsection 12.d.
- d. Prohibition of bypass.
  - 1. Bypass is prohibited, and ADEQ may take enforcement action against the permittee for bypass, unless:
    - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - iii. The permittee submitted notices as required under Appendix B, Subsection 20.c.
  - 2. ADEQ may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in this Appendix B, Subsection 20.d.

**21. Upset**

- a. Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix B, Subsection 21.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - 1 An upset occurred and that the permittee can identify the cause(s) of the upset;
  - 2 The permitted facility was at the time being properly operated;
  - 3 The permittee submitted notice of the upset as required in Appendix B, Subsection 12.d (iii); and
  - 4 The permittee complied with any remedial measures required under Appendix B, Subsection 4.
- d. Burden of proof. In any enforcement proceeding, the permittee, who is seeking to establish the occurrence of an upset, has the burden of proof.

**22. Retention of Records**

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years

from the date permit coverage expires or permit authorization is terminated. This period may be extended by the request of ADEQ at any time.

**23. Penalties for Violations of Permit Conditions.**

Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

- a. Civil Penalties. A.R.S. § 49-262 provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- b. Criminal Penalties. Any a person who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

**Appendix C  
Facilities and Activities Covered**

**Appendix C. Facilities and Activities Covered**

Permit eligibility is limited to discharges from facilities in the “sectors” of industrial activity summarized in Table C-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to “sectors” in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

<b>Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit</b>		
<b>Subsector (May be subject to more than one sector/subsector)</b>	<b>SIC Code or Activity Code<sup>1</sup></b>	<b>Activity Represented</b>
<b>SECTOR A: TIMBER PRODUCTS</b>		
A1	2421	General Sawmills and Planing Mills
A2	2491	Wood Preserving
A3	2411	Log Storage and Handling
A4	2426	Hardwood Dimension and Flooring Mills
	2429	Special Product Sawmills, Not Elsewhere Classified
	2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W)
	2441	Nailed and Lock Corner Wood Boxes and Shook
	2448	Wood Pallets and Skids
	2449	Wood Containers, Not Elsewhere Classified
	2451, 2452	Wood Buildings and Mobile Homes
	2493	Reconstituted Wood Products
2499	Wood Products, Not Elsewhere Classified	
<b>SECTOR B: PAPER AND ALLIED PRODUCTS</b>		
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
<b>SECTOR C: CHEMICALS AND ALLIED PRODUCTS</b>		
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

<b>Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit</b>		
<b>Subsector (May be subject to more than one sector/subsector)</b>	<b>SIC Code or Activity Code<sup>1</sup></b>	<b>Activity Represented</b>
	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
<b>SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS</b>		
D1	2951, 2952	Asphalt Paving and Roofing Materials
D2	2992, 2999	Miscellaneous Products of Petroleum and Coal
<b>SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS</b>		
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
<b>SECTOR F: PRIMARY METALS</b>		
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
<b>SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES</b>		
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
<b>SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS</b>		
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
<b>SECTOR M: AUTOMOBILE SALVAGE YARDS</b>		
M1	5015	Automobile Salvage Yards

<b>Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit</b>		
<b>Subsector (May be subject to more than one sector/subsector)</b>	<b>SIC Code or Activity Code<sup>1</sup></b>	<b>Activity Represented</b>
<b>SECTOR N: SCRAP RECYCLING FACILITIES</b>		
N1	5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
N2	5093	Source-separated Recycling Facility
<b>SECTOR O: STEAM ELECTRIC GENERATING FACILITIES</b>		
O1	SE	Steam Electric Generating Facilities, including coal handling sites
<b>SECTOR P: LAND TRANSPORTATION AND WAREHOUSING</b>		
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
<b>SECTOR Q: WATER TRANSPORTATION</b>		
Q1	4412-4499	Water Transportation Facilities
<b>SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS</b>		
R1	3731, 3732	Ship and Boat Building or Repairing Yards
<b>SECTOR S: AIR TRANSPORTATION FACILITIES</b>		
S1	4512-4581	Air Transportation Facilities
<b>SECTOR T: TREATMENT WORKS</b>		
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.
<b>SECTOR U: FOOD AND KINDRED PRODUCTS</b>		
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

<b>Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit</b>		
<b>Subsector (May be subject to more than one sector/subsector)</b>	<b>SIC Code or Activity Code<sup>1</sup></b>	<b>Activity Represented</b>
	2061-2068	Sugar and Confectionery Products
	2082-2087	Beverages
	2091-2099	Miscellaneous Food Preparations and Kindred Products
	2111-2141	Tobacco Products
<b>SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS</b>		
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)
<b>SECTOR W: FURNITURE AND FIXTURES</b>		
W1	2434	Wood Kitchen Cabinets
	2511-2599	Furniture and Fixtures
<b>SECTOR X: PRINTING AND PUBLISHING</b>		
X1	2711-2796	Printing, Publishing, and Allied Industries
<b>SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES</b>		
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
<b>SECTOR Z: LEATHER TANNING AND FINISHING</b>		
Z1	3111	Leather Tanning and Finishing



<b>Table C-1. Non-Mining Sectors of Industrial Activity Covered by This Permit</b>		
<b>Subsector (May be subject to more than one sector/subsector)</b>	<b>SIC Code or Activity Code<sup>1</sup></b>	<b>Activity Represented</b>
<b>SECTOR AA: FABRICATED METAL PRODUCTS</b>		
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
<b>SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY</b>		
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)
<b>SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS</b>		
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
<b>SECTOR AD: NON-CLASSIFIED FACILITIES</b>		
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>	

<sup>1</sup> A complete list of SIC Codes (and conversions from the newer North American Industry Classification System” (NAICS) can be obtained from the Internet at <http://www.census.gov/epcd/www/naics.html> or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

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

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

**Overview**

Routine analytical monitoring action levels have been adjusted for the hardness-dependent metals (i.e. cadmium, chromium III, copper, lead, nickel, silver and zinc) to further ensure compliance with water quality standards and provide additional protection of endangered species and their critical habitat. For any sectors required to conduct sampling for a hardness dependent metal, the hardness of the receiving water (if stormwater is discharged to a perennial or intermittent stream) or the hardness of the stormwater discharge (if the stormwater discharge is to an ephemeral wash) shall be analyzed in order to calculate the routine analytical monitoring action levels. The action level (i.e. surface water quality standard) is calculated through the use of a mathematical formula summarized in Table 1. The action level will be compared to the lowest designated use for that receiving water, for the specific metal.

**Table 1. Hardness Formulas for Determining Acute Water Quality Standards for Dissolved Metals**

Designated Use of the Receiving Water	Formula used to calculate benchmark value using hardness
<b>Dissolved Cadmium</b>	
A&W <sup>1</sup> c <sup>2</sup>	$e(1.0166 \cdot \text{LN}(\text{Hardness}) - 3.924) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
A&W w <sup>3</sup> , and edw <sup>4</sup>	$e(1.128 \cdot \text{LN}(\text{Hardness}) - 3.6867) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
A&W ephemeral	$e(1.128 \cdot \text{LN}(\text{Hardness}) - 0.9691) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
<b>Dissolved Chromium III</b>	
A&W c, w and edw	$e(0.819 \cdot \text{LN}(\text{Hardness}) + 3.7256) \cdot (0.316)$
A&W ephemeral	$e(0.819 \cdot \text{LN}(\text{Hardness}) + 4.9361) \cdot (0.316)$
<b>Dissolved Copper</b>	
A&W c, w and edw	$e(0.9422 \cdot \text{LN}(\text{Hardness}) - 1.702) \cdot (0.96)$
A&W ephemeral	$e(0.9422 \cdot \text{LN}(\text{Hardness}) - 1.1514) \cdot (0.96)$
<b>Dissolved Lead</b>	
A&W c, w and edw	$e(1.273 \cdot \text{LN}(\text{Hardness}) - 1.46) \cdot (1.46203 - (\text{LN}(\text{Hardness})) \cdot (0.145712))$
A&W ephemeral	$e(1.273 \cdot (\text{LN}(\text{Hardness})) - 0.7131) \cdot (1.46203 - (\text{LN}(\text{Hardness})) \cdot (0.145712))$
<b>Dissolved Nickel</b>	
A&W c, w and edw	$e(0.846 \cdot \text{LN}(\text{Hardness}) + 2.255) \cdot (0.998)$
A&W ephemeral	$e(0.846 \cdot \text{LN}(\text{Hardness}) + 4.4389) \cdot (0.998)$
<b>Dissolved Silver</b>	
A&W c, w, edw, and ephemeral	$e(1.72 \cdot \text{LN}(\text{Hardness}) - 6.59) \cdot (0.85)$
<b>Dissolved Zinc</b>	
A&W c, w and edw	$e(0.8473 \cdot \text{LN}(\text{Hardness}) + 0.884) \cdot (0.978)$
A&W ephemeral	$e(0.8473 \cdot \text{LN}(\text{Hardness}) + 3.1342) \cdot (0.978)$

1. A&W=Aquatic and Wildlife  
 2. c= cold water  
 3. w= warm water  
 4. edw= effluent dependent water

### **What is Hardness?**

Hardness means the sum of the dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO<sub>3</sub>) in milligrams per liter (mg/L). Once a sample is analyzed for hardness, the hardness concentration is inserted into the formula in order to calculate the value for that metal. The hardness values that can be entered into the formula(s), can range from a value of "0" to a hardness value that may not exceed 400 mg/L CaCO<sub>3</sub>. Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136.

The water quality standards for the specific metals using a hardness value is located in individual tables at the end of A.A.C. R18-11, Appendix A, Table 2 through Table 9. The ADEQ website also provides a calculator spreadsheet to assist in determining the various water quality standards for metals that may be computed using a hardness value. The calculator spreadsheet is entitled ***Inorganic Surface Water Exceedance Calculator*** and is located on the MSGP web page.

### **How to Determine Hardness for Hardness Dependent Metals**

For discharges to:

- Perennial or intermittent water, the hardness of the surface water receiving the discharge shall be analyzed. The hardness sample shall be collected downstream from the point of discharge and collected at the same time the metal sample is collected.
- Ephemeral waters, the hardness shall be of the stormwater discharge leaving the facility. The hardness sample shall be collected at the same time the metal sample is collected.

The permittee may select one of three methods to determine hardness of the perennial or intermittent water surface water receiving the discharge, including: individual hardness sample collected by permittee, hardness sampling by a group of operators that are discharging to the same receiving water, or using reliable and scientifically defensible third-party data (data collected under similar discharging conditions). Regardless of the method used, the permittee is responsible for documenting the procedures used to determine hardness values.

### **Third-Party Hardness Data**

Permittees can submit receiving waterbody hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. The data may come from a local utility, previously conducted stream studies, TMDL implementation plans, peer reviewed literature, other government publications, or data previously collected by the permittee. Data must be less than 5 years old.

### **Reporting of Hardness Values**

The results of the hardness value(s) shall be reported on the electronic Discharge Monitoring Report (eDMR). The eDMR will calculate the permit limits for the hardness dependent metal(s), once the hardness value is entered onto the DMR.