



**ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(AZPDES)**

FACT SHEET

**Multi-Sector General Permit (MSGP) for
Stormwater Discharges
Associated with Industrial Activity
from Industrial Facilities**

**Modified on September 29, 2021
Effective on January 1, 2020
Issued on May 15, 2019**

Fact Sheet: Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activities

Table of Contents

I. Introduction 1

II. Organization of the Final Permit and Summary of Changes from the 2019 MSGP 2

 II.A. Structure and Terminology of the 2019 MSGP 2

 II.B. Summary of Changes from the 2010 MSGP 2

III. Categories of Facilities Covered by 2019 MSGP 5

Detailed Part-by-Part Discussion of the Permit 6

IV. Coverage under the 2019 MSGP (Part 1) 6

 IV.A. Eligibility (Part 1.1) 6

 IV.A.1. Allowable Stormwater Discharges (Part 1.1.2)e 6

 IV.A.2. Allowable Non-Stormwater Discharges (Part 1.1.3) 6

 IV.A.3. Limitations on Coverage (Part 1.1.4) 7

 IV.B. Permit Compliance (Part 1.2) 9

 IV.C. Authorization under the 2019 MSGP (Part 1.3) 9

 IV.D. Coverage under Alternative Permits (Part 1.4) 11

 IV.E. Terminating Coverage (Part 1.5) 12

 IV.F. Conditional Exclusion for No Exposure (Part 1.6) 12

V. Effluent Limitations and Control Measures (Part 2) 12

 V.A. Water Quality Based Effluent Limitations and Control Measures (Part 2.1) 12

 V.A.1. Introduction to CWA Requirements to Control Pollutants in Discharges 13

 V.A.2. Numeric and Water Quality-Based Effluent Limitations 13

 V.A.3. Water Quality-Based Standards (Part 2.1) 13

 V.B. Explanation of the Use of Control Measures to Meet the Permit Limits 14

 V.B.1. Control Measure Selection and Design Considerations (Part 2.2.1) 15

 V.B.2. Numeric Effluent Limitations Based on Effluent Limitations Guidelines (Part 2.2.2) 16

VI. Corrective Actions (Part 3) 16

VII. Inspections (Part 4) 17

 VII.A. Routine Site Inspections (Part 4.1) 18

 VII.A.1. Routine Site Inspection Documentation (Part 4.1.1) 18

 VII.A.2. Exceptions to Routine Site Inspections (Part 4.1.2) 18

 VII.B. Visual Assessment of Stormwater Discharges (Part 4.2) 18

VIII. Stormwater Pollution Prevention Plan (SWPPP) (Part 5) 19

 VIII.A. Contents of the Site’s SWPPP (Part 5.1) 19

 VIII.A.1. Stormwater Pollution Prevention Team 20

 VIII.A.2. Site Description 20

 VIII.A.3. Summary of Potential Pollutant Sources 20

 VIII.A.4. Description of Control Measures to Meet Numeric and Non-Numeric Effluent Limitations 21

 VIII.A.5. Schedules, Practices and Procedures – Control Measures 21

 VIII.A.6. Schedules and Procedures – Inspection and Visual Monitoring 22

 VIII.A.7. Monitoring and Sampling Procedures 22

 VIII.B. Signature Requirements (Part 5.2) 22

 VIII.C. Required SWPPP Modifications (Part 5.3) 22

 VIII.D. SWPPP Availability (Part 5.4) 22

 VIII.E. SWPPP Submittal (Part 5.5) 23

 VIII.F. Additional Documentation Requirements (Part 5.6) 23

IX. Analytical Monitoring Program (Part 6) 23

 IX.A. Analytical Monitoring Procedures (Part 6.1) 24

 IX.A.1. Analytical Monitoring Types (6.1.1) 24

 IX.A.2. When to collect a sample (Part 6.1.2) 25

 IX.A.3. How to Collect a Sample (Part 6.1.3) 26

IX.A.4.	Where to Sample (Part 6.1.4)	26
IX.A.5.	Sampling and Analysis Plan (SAP) (Part 6.1.5)	27
IX.B.	Required Monitoring (Part 6.2)	27
IX.B.1.	Routine Analytical Monitoring (Part 6.2.1)	31
IX.B.2.	Effluent Limitations Monitoring (Parts 6.2.2)	34
IX.B.3.	Monitoring Discharges to Impaired Waters (Part 6.2.3)	34
IX.B.4.	Outstanding Arizona Water Monitoring (Part 6.2.4)	35
IX.B.5.	Additional Monitoring Required by ADEQ (Part 6.2.5)	35
IX.C.	Accelerated Monitoring (Part 6.3)	36
IX.D.	Exemptions or Exceptions to Analytical Monitoring (Part 6.4)	36
X	Reporting and Recordkeeping (Part 7)	37
X.A.	Reporting Monitoring Data to ADEQ	38
X.A.1	Electronic Discharge Monitoring Report (DMR) Form (Part 7.1)	38
X.B.	Control Measure Assessment Report (Part 7.2)	38
X.C.	Removal of Annual Report Requirement in 2019 MSGP	38
X.D.	Removal of the Exceedance Report in 2019 MSGP	38
X.E.	Other Reporting Requirements (Part 7.3)	39
X.F.	Recordkeeping (Part 7.4)	39
X.G.	Address for Reports to ADEQ (Part 7.6)	39
XI.	Sector-Specific Requirements for Discharges Associated with Industrial Activity (Part 8)	39
XI.A.	Sector A – Timber Products	39
XI.B.	Sector L –Landfills, Land Application Sites and Open Dumps	40
XI.C.	Sector O – Steam Electric Generating Facilities	40
XI.D.	Sector S – Air Transportation Facilities	40
XII.	Appendices	40
XII.A.	Appendix A	40
XII.B.	Appendix B	40
XII.C.	Appendix C	41
XII.D.	Appendix D	41

I. Introduction

The Clean Water Act (“CWA”) establishes a comprehensive program “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). The CWA “also seeks to attain ‘water quality which provides for the protection and propagation of fish, shellfish and wildlife.’” P.U.D. No. 1 of Jefferson City v. Washington Dep’t of Ecology, 511 U.S. 700, 704 (1994) (quoting 33 U.S.C. § 1251(a)(2)). To achieve these goals, the CWA requires U.S. Environmental Protection Agency (EPA) to authorize discharges through issuance of National Pollutant Discharge Elimination System (“NPDES”) permits.

The purpose of this Fact Sheet is to describe the permitting requirements of the MSGP 2019 for stormwater discharges associated with industrial activity from all non-mining sectors. Furthermore, this Fact Sheet describes in detail the rationale for significant changes from the 2010 MSGP. The following categories listed in 40 CFR 122.26(b)(14) are included in this non-mining MSGP: categories i, ii, iv through ix and xi. Table 1, Section III of this Fact Sheet shows the sectors covered by the permit. Appendix C of the permit presents more specific information about each non-mining sector covered by the permit. A separate mining sector MSGP has been developed for Sector G, H, I and J.

ADEQ is issuing the 2019 MSGP to replace the expired 2010 MSGP. The permit will have a five year term. Pursuant to A.A.C. R18-9-C905 the Director may modify and reissue and revoke the permit before it expires if certain conditions, presented in 40 CFR 122.62(a) or (b), are met.

The permit contains provisions that require industrial facilities in 25 different industrial sectors to, among other things, implement control measures and develop site-specific stormwater pollution prevention plans (SWPPP) to comply with AZPDES requirements. In addition, the MSGP includes a 26th sector (Sector AD), allowing ADEQ to permit additional industrial activities which ADEQ determines require permit coverage for industrial stormwater discharges not included in the other 25 non-mining industrial sectors.

September 29, 2021 Permit Modification

ADEQ modified the January 1, 2020, MSGP to implement the State’s new Surface Water Protection Program (SWPP) in accordance with A.R.S Title 49 Chapter 2, Article 3.1, and for those permit modifications to be effective on September 29, 2021. Certain definitions have been updated or introduced to reflect the change. Notably, the terms Protected Surface Water, WOTUS and non-WOTUS protected surface waters are used throughout the permit. Protected Surface Waters means waters of the State listed on the protected surface water list under Section A.R.S. §49-221, Subsection G and all Waters of the United States (WOTUS). WOTUS means a protected surface water that are also navigable waters as defined by Section 502(7) of the Clean Water Act and are federally regulated. Non-WOTUS protected surface water means a protected surface water that is not a WOTUS, and is regulated by the State.

For discharges to a WOTUS, 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, Article 9, and is grounds for enforcement action, termination or modification of permit coverage, or denial of a permit renewal application. For discharges to non-WOTUS protected surface waters, any permit non-compliance is enforceable solely by the Arizona Department of Environmental Quality (ADEQ) pursuant to A.R.S. Title 49, Chapter 2, Article 4. The conditions of this permit that regulate discharges to non-WOTUS protected surface waters do not constitute effluent standards or limitations under 33 U.S.C. § 1365.

A new NOI will not be required for existing permittees under this permit modification that incorporates non-WOTUS protected surface waters into the January 1, 2020 MSGP, unless the addition of a non-WOTUS protected surface water results in a change of a discharge point or change in protected surface water. In that case, the NOI should be modified, and there will be no modification fee for existing permittees to incorporate those changes to the NOI, unless a SWPPP is required to be submitted as part of the modification.

On August 30, 2021, a District Judge for the District of Arizona issued an order on vacating and remanding the Navigable Waters Protection Rule (NWPR). The order will have the effect of setting Clean Water Act (CWA) regulations in Arizona to those in place prior to the 2015 WOTUS rule revision.

January 1, 2020 Permit Re-Issuance

All facilities on non-tribal lands in Arizona subject to the permit, including those previously covered by the 2010 MSGP, must apply for coverage under ADEQ's 2019 MSGP no later than February 28, 2020. To be covered by this new permit, operators must submit a complete and accurate Notice of Intent (NOI) and certify in the NOI that they meet the requisite eligibility requirements, described in Part 1 of the permit, including the requirement to select, design, and install control measures to comply with the numeric effluent limitations and water quality standards in Part 2 and to develop a SWPPP, pursuant to Part 5.

The permit references various federal regulations. These regulations are incorporated by reference into the state AZPDES rules in the Arizona Administrative Code (A.A.C.) R18-9-A905. As an aid to reviewers, however, the permit cites the federal regulations where specific regulatory language can be found.

Note: If any inadvertent conflict exists between this document and the permit, the permit language prevails.

II. Organization of the Final Permit and Summary of Changes from the 2019 MSGP

II.A Structure and Terminology of the 2019 MSGP

ADEQ has divided the permit into eight parts:

- Part 1 Permit Coverage;
- Part 2 Effluent Limitations and Control Measures;
- Part 3 Corrective Actions;
- Part 4 Inspections;
- Part 5 SWPPP Preparation;
- Part 6 Analytical Monitoring Program;
- Part 7 Reporting and Recordkeeping; and
- Part 8 Industry Sector-Specific Conditions.

Appendices include definitions, a table of sector-specific SIC codes covered by the permit, standard permit conditions and guidance for calculating hardness when monitoring for metals that have hardness-based surface water quality standards. Each of these parts is discussed in more detail in Sections IV through XI of this Fact Sheet.

Throughout this Fact Sheet certain terms are used when referring to different responsible entities. For instance, the permit holder is referred to either as the "permittee" or "operator". Typically, the term "operator" is used when discussing those actions required prior to permit authorization, while "permittee" is used where this Fact Sheet and the permit refers to provisions that affect a covered discharger.

II.B. Summary of Changes from the 2010 MSGP

The 2019 MSGP includes a number of new or modified requirements, and thus differs from the 2010 MSGP in various ways. The following list summarizes the more significant changes to the MSGP.

Change of terminology "Facility" to "Site" throughout permit

The word facility was changed to site to more adequately reflect the definition of site for permitting purposes. 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. For purposes of this permit, site applies to the industrial portion of the site.

Information Required for NOIs

The 2019 MSGP specifies the information required in NOIs to provide ADEQ with adequate information to determine eligibility, to determine whether additional water quality-based requirements are necessary, to satisfy federal electronic reporting requirements, and to enable ADEQ to inform the

operator of its specific monitoring requirements (including identifying facilities that are inactive and unstaffed that do not require monitoring). Operators now need to include location information for each stormwater outfall they discharge from. The electronic permitting tool, myDEQ, will use the outfall latitude and longitude for each location to help determine the protected surface water(s) the site discharges to, including the protected surface water(s) status (e.g. special water) and can apply the applicable surface water quality standard as action level.

No Discharge Certification

If a site does not require authorization under this permit because stormwater is not discharged to a protected surface water, the operator may elect to obtain a No Discharge Certification through the electronic permitting process in myDEQ, when available. The operator will need to certify that there will be no discharges to a protected surface water, including appropriate documentation, and will receive a “no discharge certificate” with a unique tracking number. A record of the certification will be created and available in the myDEQ account dashboard.

Electronic Reporting Requirements

Electronic reporting is required in the 2019 MSGP. Electronic reporting is necessary to create efficiencies, reduce the burden of submitting / managing paper copies, will allow for easy access and review of monitoring data, and to comply with U.S. EPA’s electronic reporting rule. Electronic reporting and record keeping (NOI, NOT, DMR, etc.) for this permit is through ADEQ’s myDEQ electronic permitting portal.

Unless otherwise prescribed in the permit, the permittee must submit all documents required by this permit electronically using ADEQ’s electronic permitting program in myDEQ. The permittee can assign subordinated user roles to pay fees and enter information, however, certifying and submitting documents and reports must be done by the permittee (Responsible Corporate Office [RCO] or Delegated Corporate Officer [DRO]), see also Appendix B, Signatory Requirements.

Effluent Limit Clarifications

Several of the effluent limits for control measures in Part 2 of the 2019 MSGP include additional clarification to assist permittees with complying with the effluent limit requirements. The effluent limits for which ADEQ has made clarifications include requirements for minimizing exposure, good housekeeping, maintenance, spill prevention and response procedures, and employee training.

Corrective Actions

Although the 2010 MSGP required corrective actions, ADEQ has more clearly identified which conditions require corrective action and clarified documentation requirements. This clarification requires permittee to more adequately capture information relevant to initiating and/or completing corrective action at the site. The 2010 MSGP had permittees submit Corrective Action information with the Annual Report (if required to be submitted). In the 2019 MSGP, the Annual Reporting preparation and submittal has been removed (see Fact Sheet Part X.B) from the permit requirements. Corrective action reports must be submitted to ADEQ on a form provided by ADEQ. When electronic reporting becomes available, corrective action reporting will then be required using an established myDEQ account. Any reporting through myDEQ shall be submitted and certified by the owner of the NOI. The submittal of all Corrective Action Reports is a new requirement in the 2019 MSGP and enables ADEQ to: 1) be notified when corrective action has been triggered; 2) assess the potential impact of the discharges on water quality; and 3) evaluate the adequacy of the permittee’s response to the violation.

Inspections

In 2019 MSGP ADEQ streamlined the site inspection schedule by eliminating the comprehensive site inspection and specifying quarterly routine site inspections, for a total of four (4) routine inspections each year. Clarification was added to the routine inspection requirements to more clearly establish what is required for site inspections and to establish one set inspection procedures for consistency.

Monitoring

A number of changes were made to the monitoring provisions as compared to the 2010 MSGP. Several of these changes are listed below. For a more detailed discussion of each of these changes, see Section IX.B.1 of the Fact Sheet.

- Benchmark monitoring is now called Routine Analytical Monitoring. The name change was to more adequately address the type of monitoring.
- Routine analytical monitoring will continue to serve as an indicator of the performance of the measures taken to meet effluent limitations in the permit. An exceedance of a routine analytical monitoring action level is not a violation of the permit.
- Routine analytical monitoring is no longer an average of two to four storm events to compare to an action level. Routine analytical monitoring will consist of a discrete grab sample or a flow-weighted composite sample that will be compared to Arizona surface water quality standard derived action level (with the exception of TSS which has no water quality standard and whose action level is sector specific). The averaging of sample results over different storm events, does not address the acute nature of stormwater impacts. Additionally, the averaging of sample values over time does not consider Arizona's semi-arid climate, where it could be months, possibly even a year between measurable storm events, and the evaluation of control measures.
- ADEQ replaced the benchmark levels for routine analytical monitoring which were adapted from EPA's industrial stormwater permit and are based on EPA's water quality criterion. Arizona surface water quality standard derived action levels to represent and protect Arizona's surface waters. The resulting action level concentrations are based on the lowest acute SWQS designated use of the protected surface water and the most protective standard is applied where the protected surface water has more than one (1) designated use. In the event an acute standard does not exist, then the chronic standard is used. ADEQ's approach of using acute then chronic standards mirrors approach in U.S. EPA's 2015 MSGP. The action levels are automatically determined in myDEQ at the time of NOI submission based on data input by the applicant.
- ADEQ assessed the pollutant parameters on a sector-by-sector basis and added, removed, or substituted action levels to be better representative of the industrial activity and expected pollutants. For example, parameters such as BOD and COD were generally removed / substituted for a parameter that has a Arizona surface water quality standard, as the results of those parameters (BOD and COD) are often difficult to apply in a meaningful manner to industrial stormwater runoff;
- Follow-up monitoring requirements (accelerated monitoring) have been added when one sample result indicates a permittee's discharge exceeds a numeric effluent limitation guideline (ELG). , Accelerated monitoring consists of sampling each subsequent qualifying storm event. Accelerated monitoring will continue until two consecutive sampling events are below the corresponding numeric limit. Accelerated monitoring is required after one event above a numeric limit in order to confirm or dispel the exceedance in a timely manner and to demonstrate that control measures are continuing to operate effectively.
- Monitoring required by the permit (routine analytical, impaired water(s), and OAW (does not apply for discharges to non-WOTUS protected surface waters) must be sampled two times per year (once per wet season) for the duration of the permit. The monitoring twice per year will assess stormwater quality that may change over time for various flows and durations. The frequency and duration of the sampling will provide continued assessment of the control measures and provide environmental protection for those varied storm events. ELG monitoring is established at a frequency of once per year for the duration of the permit. ADEQ may request additional monitoring which communicated to the permittee in writing, including frequency, duration, method, parameter(s), and the rationale for the additional monitoring.
- Permittees are required to enter sampling results onto an electronic DMR within 30 days of receiving the laboratory analytical data and submit the e-DMR using myDEQ. If there is no data or discharge to report or other sampling exemptions apply during the applicable wet season, the e-DMR must be submitted June 30 (winter wet) and November 30 (summer wet).

Inactive and Unstaffed Sites

For those sites that invoke the inactive and unstaffed provision under the 2019 MSGP. A notification to ADEQ is required by modifying the NOI through myDEQ, within 30 days of the site

changing to inactive and unstaffed status. When the site reverts back to an active and staffed status, a notification through myDEQ is also required. This is to provide ADEQ with timely notification of site status as it relates to permit requirements that may be put on hold or reactivated based on the inactive and unstaffed provision.

Inactive and unstaffed sites are required to submit electronic DMRs. The e-DMR is required to be submitted to identify the specific exemption from monitoring requirements.

Annual Report

The Annual Report preparation and submittal permit requirement has been removed from the 2019 MSGP. No Annual Report is required. Information regarding compliance with permit conditions will be more adequately captured in e-DMRs (if required to submit), the Control Measure Assessment Report and the Corrective Action Report, all of which are required to be submitted directly to ADEQ, notifying ADEQ of issues regarding potential non-compliance.

Industry Sector-specific Requirements

The following changes were made to Part 8 of the MSGP, which describes requirements specific to particular industry sectors:

- Sector A, Timber Products- Discharges resulting from uncontaminated spray down or intentional wetting of logs at wet deck storage areas is an allowed non-stormwater discharge, providing the effluent limitation in Part 8.A.7 is met. To accommodate situations where facilities use water from a protected surface water that operators intend to return to the protected surface water following spraying/wetting, the permit contains an allowance for credit for pollutants originally in the protected surface water prior to use and discharge.
- Sector S, Air Transportation – Requirements have been added based on the final 2012 ELG for jet and airport deicing operations. Also, the 2019 MSGP clarifies airport operators’ responsibilities and permit requirements that airport authorities may conduct on behalf of airport tenants.

III. Categories of Facilities Covered by 2019 MSGP

Coverage under the permit is available for stormwater discharges from the following 25 specified sectors of industrial activity (excluding the mineral industry Sectors G, H, I and J). The sector descriptions are based on the four digit Standard Industrial Classification (SIC) Codes and two letter Industrial Activity Codes consistent with the definition of stormwater discharge associated with industrial activity at 40 CFR 122.26(b)(14)(i, ii, iv-ix, xi). Sector AD is reserved for any discharge not covered under the 25 sectors (Sector AD), but should be permitted due to the nature of the stormwater discharge and resulting environmental impacts. The director may use his designation authority to require a person that does not meet the eligibility requirements under Sectors A through AC to obtain coverage under the permit, pursuant to Arizona Administrative Code, Title 19, Chapter 9, Article 9.

See Appendix C in the permit for specific information on each sector. There are no changes to the categories of facilities regulated under the 2019 MSGP.

TABLE 1 – Sectors of Industrial Activity Covered by the 2010 MSGP	
Sector A – Timber Products	Sector R – Ship and Boat Building or Repairing Yards
Sector B – Paper and Allied Products Manufacturing	Sector S – Air Transportation Facilities
Sector C – Chemical and Allied Products Manufacturing	Sector T – Treatment Works
Sector D – Asphalt Paving and Roofing Materials Manufactures and Lubricant Manufacturers	Sector U – Food and Kindred Products
Sector E – Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing	Sector V – Textile Mills, Apparel, and other Fabric Products Manufacturing
Sector F – Primary Metals	Sector W – Furniture and Fixtures
Sector K – Hazardous Waste Treatment Storage or Disposal	Sector X – Printing and Publishing

Sector L – Landfills and Land Application Sites	Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
Sector M – Automobile Salvage Yards	Sector Z – Leather Tanning and Finishing
Sector N – Scrap Recycling Facilities	Sector AA – Fabricated Metal Products
Sector O – Steam Electric Generating Facilities	Sector AB – Transportation Equipment, Industrial or Commercial Machinery
Sector P – Land Transportation	Sector AC – Electronic, Electrical, Photographic and Optical Goods
Sector Q – Water Transportation	Sector AD – Reserved for Facilities Not Covered Under Other Sectors and Designated by the Director

Detailed Part-by-Part Discussion of the Permit

IV. Coverage under the 2019 MSGP (Part 1)

This part describes eligibility requirements industrial facilities must meet to be covered by the permit. Part 1 describes how to apply for coverage, types of non-stormwater discharges that are allowed under the 2019 MSGP, limitations on coverage, permit compliance, authorization under the permit, alternative permits, termination, and obtaining a conditional exclusion for no exposure.

IV.A. Eligibility (Part 1.1)

As with previous permits, to be eligible for coverage under the 2019 MSGP, the discharges from industrial facilities must meet the eligibility provisions described in Part 1.1 of the permit. If they do not meet the eligibility requirement, operators must either obtain coverage under another AZPDES permit or eliminate the discharges.

To be eligible for authorization under this permit, the site must discharge stormwater associated with industrial activity (as defined in Arizona Administrative Code, R18-9-A902(B)(8)(a)) to waters on the protected surface water list, which includes waters of the U.S. (WOTUS) and non-WOTUS protected surface waters either directly or by means of a conveyance. The requirements of discharges to non-WOTUS protected surface waters are state-only, and enforceable solely by ADEQ.

If a site does not require a permit because stormwater is not discharged to a protected surface water, the operator may apply for a No Discharge Certification, when available.

IV.A.1. Allowable Stormwater Discharges (Part 1.1.2)

Part 1.1.2 specifies which stormwater discharges are eligible for coverage under the permit. As described in Section IV.A.3 of this Fact Sheet, not all stormwater discharges associated with industrial activity are eligible for coverage under the permit (e.g., stormwater discharges regulated by certain national effluent limitations guidelines). Dischargers should use this section to determine which stormwater discharges from their site can be covered under the MSGP.

IV.A.2 Allowable Non-Stormwater Discharges (Part 1.1.3)

This provision lists the non-stormwater discharges authorized under the permit and are exceptions to the general prohibition of non-stormwater discharge. To be authorized under the permit, any sources of non-stormwater (except flows from emergency firefighting activities) must be identified in the SWPPP. These non-stormwater discharges must be ancillary to the primary permitted use. Note: an allowable non-stormwater discharge was added to Sector A for spray water.

Also specifically identified as being authorized are discharges of stormwater listed in Parts 1.1.2 or allowable non-stormwater discharges in Part 1.1.3, mixed with a discharge authorized by a different NPDES permit and/or a discharge that does not require AZPDES permit authorization. ADEQ notes that all other non-stormwater discharges requiring AZPDES permit coverage that are not listed in Part 1.1.3 or described in Part 8, are not authorized under this permit. If non-stormwater discharges requiring AZPDES

permit coverage other than those specifically authorized in Part 1.1.3 will be discharged, such non-stormwater discharges are not authorized by the permit and must either be eliminated or covered under another AZPDES permit.

This permit requires pavement wash waters to be treated with appropriate control measures to minimize discharges of mobilized solids and other pollutants. Other control measures must be considered when doing such cleaning including vacuuming, using the least amount of water in pressure washing to reduce the quantity of discharge, and running the wash water through a filter to remove pollutants prior to discharge. Other options are to direct the wash water flow through a green infrastructure feature(s) (or some similar treatment), or to capture and infiltrate the flow so there is no discharge. If there are doubts regarding the presence of contaminants in the washwater, even after treatment, operators should not discharge it.

Uncontaminated groundwater or spring water is allowed as a non-stormwater discharge, provided the source is naturally occurring or required for the industrial activity to proceed and includes aquifer testing and well development.

The use of reclaimed wastewater for dust control, although not an allowable non-stormwater discharge, may be conducted by permittees provided the reclaimed water is not used in such amounts as to constitute disposal and is not applied during heavy storm events, such that it is mixed with stormwater that discharges offsite. The 2019 MSGP does not prohibit the use of reuse/reclaimed or potable waters on-site for dust control or for landscape irrigation that is consistent with the reclaimed water rules (A.A.C. R18-9-704(G)(3)(c)), provided such uses are managed in a way that there is no discharge of reclaimed water off site or to a protected surface water..

Permittees should be aware that many of the allowable non-stormwater discharges in Part 1.1.3 may still require permit coverage under the Department's aquifer protection program (APP).

IV.A.3 Limitations on Coverage (Part 1.1.4)

Part 1.1.4 describes the limitations on what is covered under this permit. Any discharges not expressly authorized under the 2019 MSGP cannot become authorized or shielded from liability under CWA Section 402(k) by disclosure to ADEQ, EPA, or local authorities after issuance of the MSGP by any means, including the NOI to be covered by the permit, the SWPPP, or during an inspection.

Discharges Mixed with Non-Stormwater (Part 1.1.4.1).

The MSGP does not authorize stormwater discharges that are mixed with non-stormwater other than those non-stormwater discharges listed in Part 1.1.3. and/or those mixed with a discharge authorized by a different AZPDES permit and / or a discharge that does not require AZPDES authorization. Where a stormwater discharge is commingled with non-stormwater that is not authorized by the MSGP, the operator must obtain authorization under another AZPDES permit to discharge the commingled discharge.

Stormwater Discharges Associated with Construction Activity (Part 1.1.4.2)

Stormwater discharges associated with construction activity, defined in 40 CFR 122.26(b)(14)(x) and (b)(15) are not covered by the 2019 MSGP. The two exceptions to this provision are: 1) discharges from land disturbances less than one (1) acre in size are covered by the permit consistent with Part 1.1.2, item 3 of the permit; and 2) the construction activities of Sectors G, H, I, and J are covered in a separate MSGP for the mineral industry (category iii of 40 CFR 122.26(b)(14)).

Discharges Currently or Previously Covered by another Permit (Part 1.1.4.3)

This section describes cases where an operator is ineligible for coverage under the MSGP because of coverage under another permit. The objective is to avoid conflict with the anti-backsliding provisions of the CWA. The cases this applies to include operators currently covered under an individual permit or an alternative AZPDES general permit; operators covered by a permit within the past five years prior to the effective date of the 2019 MSGP, which established site-specific numeric water quality-based limitations developed for the stormwater component of the discharge; or operators with discharges from facilities where the associated AZPDES permit has been or is in the process of being denied, terminated

(permit termination does not refer to the routine expiration and reissuance of permits every five years), or revoked by ADEQ.

Discharges Subject to Effluent Limitations Guidelines (Part 1.1.4.4) (Applicable only to discharges to WOTUS)

Discharges subject to stormwater-specific federal effluent limitations guidelines that are eligible for coverage under the permit are listed in Table 2-2 of the permit. All other stormwater and non-stormwater discharges subject to effluent limitation guidelines must be covered under an individual permit or any applicable alternate general permit. The effluent limitation for airports was updated to incorporate the 2012 ELG for jet and airport deicing operations. Discharges subject to effluent limitations guidelines are discussed in greater detail in Section IX.B.2. ELGs do not apply for discharges to non-WOTUS protected surface waters. See A.R.S 49-255.04(B)(2).

New Dischargers and New Sources: Based on Water Quality Standards (Part 1.1.4.5) (Applicable only to discharges to WOTUS)

This is a new section in 2019 MSGP that describes permit eligibility for the facilities classified as new sources and/or new dischargers (as defined in Appendix A), pursuant to A.A.C. R18-9-A903. Facilities classified as “new source” or “new discharger” are not eligible for coverage under the 2019 MSGP for any discharges to a WOTUS that ADEQ determines will cause or contribute to a violation of a surface water quality standard. ADEQ may notify such operators that an individual permit application is necessary in accordance with Part 1.4, or, alternatively, ADEQ may authorize coverage under the MSGP after the operators have implemented measures designed to ensure the discharge does not cause or contribute to a violation of an applicable surface water quality standard. ADEQ notes other water quality-based requirements apply to new and existing dischargers. Part 2.1 of the permit includes water quality-based effluent limits applicable to all dischargers, which are designed to ensure that discharges from both new and existing permittees are controlled as necessary to not cause or contribute to a violation of a surface water quality standard. This section does not apply to discharges to non-WOTUS protected surface waters. See A.R.S 49-255.04(B)(1).

New Dischargers and New Sources to Water-Quality Impaired Waters (Part 1.1.4.6) (Applicable only to discharges to WOTUS))

This section requires any new source or new discharger to demonstrate its ability to comply with A.A.C. R18-9-A903 (i.e., prohibiting the issuance of permits to new sources and new dischargers that will cause or contribute to the violation of water quality standards) prior to coverage under the permit for discharges to a WOTUS. To satisfy the requirements of 40 CFR 122.4(i), an operator must complete one of the following: (a) the site will employ measures to prevent all exposure to stormwater of the pollutant(s) for which the protected surface water is impaired, and retain documentation with the SWPPP on how this was accomplished; (b) submit technical information or other documentation in the SWPPP along with the NOI, to support a claim that the discharge from the site has no potential to contain the pollutants causing the impairment; or (c) submit data or other technical documentation in the SWPPP along with the NOI, to support a conclusion that the discharge will not cause or contribute to an exceedance of applicable surface water quality standard (A.A.C. R18-11-107.01.F). This section does not apply to discharges to non-WOTUS protected surface waters. See A.R.S 49-255.04(B)(1).

For discharges to waters without an approved or established TMDL, the information must demonstrate that the discharge of the pollutant for which the water is impaired will meet water quality criteria at the point of discharge to the protected surface water. For discharges to waters with an approved or established TMDL, the demonstration should include that the discharges are consistent with the provision in the TMDL, including established TMDL and implementation plans. In order to be eligible under Part 1.1.4.6, the operator must demonstrate with data or other technical documentation in the SWPPP, along with the NOI submission, that the discharge will meet applicable water quality standards (A.A.C. R18-11-107.F).

If the discharge is to an upstream tributary within 2.5 miles of an impaired water, the applicant must submit their SWPPP along with the demonstration required above, with their NOI. The SWPPP must identify additional control measures needed to further minimize the discharge of pollutants to ensure that the discharge will not cause or contribute to non-attainment of standards in the impaired water.

ADEQ has 30 calendar days to review the NOI and SWPPP for discharges to impaired waters and notify the applicant in writing that: coverage is granted, modifications to the SWPPP are required, or that the discharge is ineligible for coverage under this permit. Note: a SWPPP does not have to be submitted if the discharge is to a non-WOTUS impaired or not-attaining water.

Note: In accordance with A.A.C. R18-11-109(D)(2), suspended sediment concentrations in surface waters within 48 hours of a local storm event are not used in assessing compliance with the water quality standard. Therefore, if a protected surface water is impaired for suspended solids, turbidity or sediment/ sedimentation, an operator seeking authorization to discharge under the permit may satisfy the requirement of Part 1.1.4.5(1)(c)(i) of the permit either by discharging only within the first 48 hours after a local storm event or by demonstrating that any discharge after that time satisfies the requirements of Part 1.1.4.6.

New Dischargers and New Sources to Outstanding Arizona Waters (Part 1.1.4.7) (Applicable only to discharges to WOTUS)

This section does not apply for discharges to non-WOTUS protected surface waters. See A.R.S. A.R.S. 49-221(A)(1).

Per the anti-degradation rules, coverage under the 2019 MSGP is not available for new discharges and new sources that discharge directly to waters designated as Outstanding Arizona waters (OAW). The 2010 MSGP permit and the 2019 MSGP permit specifically reflects 40 CFR 131.12(a)(3) by indicating that any new or increased discharges to OAWs are ineligible for permit coverage. Except for certain temporary changes, water quality cannot be degraded in OAWs (see 40 CFR 131.12(a)(3)).

This section also provides additional requirements for applicants seeking new or expanded discharges to tributaries upstream of an OAW. The applicant must prepare a SWPPP that demonstrates the discharge will not degrade existing water quality in the OAW and outline basic information that must be included with the SWPPP, including a sampling and analysis plan (SAP) for required water quality monitoring. If the discharge is within 2.5 miles of an OAW, the SWPPP must be submitted with the NOI. ADEQ may take up to 30 calendar days to review NOIs and SWPPPs for discharges to OAWs and notify the applicant in writing that: coverage is granted, request modifications to the SWPPP, or that the discharge is ineligible for coverage under this permit.

IV.B. Permit Compliance (Part 1.2)

Part 1.2 states that any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act (CWA) and A.R.S. Title 49, Chapter 2, Article 3.1. Non-compliance with requirements of this permit that apply to discharges to WOTUS constitute a violation of the CWA. For discharges to a WOTUS, where requirements and schedules for taking corrective actions are included, the time intervals are schedules considered reasonable for making repairs and improvements. For provisions specifying a time period to remedy noncompliance, the initial failure, such as a violation of a numeric or non-numeric effluent limitation, constitutes a violation of the CWA, and subsequent failure to remedy such deficiencies within the specified time periods constitutes an independent, additional violations of the permit and CWA.

Requirements of this permit that regulate discharges to non-WOTUS protected surface waters were not adopted pursuant to the CWA and do not constitute effluent standards or limitations under 33 U.S.C. § 1365. Non-compliance with requirements of this permit that apply to discharges to non-WOTUS protected surface waters is enforceable solely by ADEQ pursuant to A.R.S. Title 49, Chapter 2, Article 4.

IV.C. Authorization Under the 2019 MSGP (Part 1.3)

Obtaining Authorization to Discharge (Part 1.3.1). To obtain authorization under the permit, dischargers must be an operator of an industrial site in a sector covered by this permit (Appendix C); be located on Arizona land (excluding Indian County); meet the Part 1.1 eligibility requirements; select, design, install, and implement control measures in accordance with Part 2.0 to meet numeric and non-numeric effluent limitations; develop a SWPPP or update the existing SWPPP prior to submitting the NOI; and submit a complete and accurate Notice of Intent (NOI) to ADEQ.

How to Submit Your NOI (Part 1.3.1). The requirements in Part 1.3.1 clarify that operators must submit their NOIs electronically, using myDEQ. The applicant is authorized to discharge stormwater from an eligible site upon receipt of the Notice of Intent Certificate that is issued immediately after the submission of a complete and accurate NOI and the receipt of the applicant's payment unless the additional review is necessary due to potential impacts to special waters.

NOI Submission Deadlines (Table 1-2). Note: Under the September 2021 permit modification, a new NOI will not be required for existing permittees under this permit modification that incorporates non-WOTUS protected surface waters into the January 1, 2020 MSGP, unless the addition of a non-WOTUS protected surface water results in a change of a discharge point or change in protected surface water. In that case, the NOI should be modified, and there will be no modification fee for existing permittees to incorporate those changes to the NOI, unless a SWPPP is required to be submitted as part of the modification. A row has been added to Table 1-2 for existing permittees covered by the January 12, 2020 MSGP. ADEQ's discharge authorization is organized according to type of discharger. The majority of dischargers must file a complete and accurate NOI for coverage under the 2019 MSGP within 60 calendar days of the permit's effective date. A discussion of the Table 1-2 information follows:

- **Existing dischargers** in operation and authorized for coverage under the 2010 MSGP must submit their NOI for coverage under the 2019 MSGP no later than February 28, 2020. The operator's authorization under the 2010 MSGP is administratively continued until coverage under this or an alternative permit is granted, or a Notice of Termination (NOT) is submitted. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate. If an existing permittee does not submit a new NOI within 60 days, coverage is automatically terminated and any subsequent discharges are subject to enforcement action.
- **Other eligible dischargers** in operation but not covered under the 2010 MSGP or another AZPDES permit must submit their NOI for coverage under this permit no later than February 28, 2020. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate;
- **New dischargers** commencing after the effective date of the 2019 MSGP, an NOI must be submitted at least 30 calendar days before discharge is anticipated. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate;
- **Change of ownership** to a new owner or operator of an existing site (discharger) whose discharge is authorized under the permit: The permitted owner/ operator must submit a NOT to ADEQ within 30 calendar days after the new owner/ operator assumes responsibility for the site. At least thirty (30) calendar days prior to taking operational control of the site, the new owner/ operator must submit a NOI to ADEQ. Coverage for the new owner / operator begins upon the applicant's receipt of the Notice of Intent Certificate.
- **Change in site location** to a new site location, whose discharge is authorized by this permit. The permitted owner or operator must submit a NOT to ADEQ within 30 calendar days after the change in site location. At least thirty (30) calendar days prior to taking operational control of the site, the site with the new site location must submit a NOI to ADEQ. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate.
- **Change of site name** to a different site name whose discharge is authorized by this permit. The permitted owner or operator must submit a NOT to ADEQ within 30 calendar days after the name change of the site. At least thirty (30) calendar days prior to taking operational control of the site, the site with the new name must submit a NOI to ADEQ. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate.
- **NOI revisions** - The permittee is required to submit a revised (modified) NOI for the following changes to their previous NOI: site contact, site discharges to MS4, sector, subsector, co-located facilities, acreage exposed to industrial stormwater, primary industrial activity acreage exposed to stormwater, co-located industrial activities acreage exposed to stormwater, SWPPP contact, outfall name, outfall location, number of outfalls, outfalls that are inactivated, protected surface water, protected surface water type, sampling type, and claiming inactive and unstaffed site status (or reverting back to active and staffed). The modification to the NOI shall take place within 30 days of the change. There is no fee for modifying or revising a NOI, unless an outfall to a special water is added, which would trigger the SWPPP review fee.

If ADEQ does not receive an accurate NOI certifying that the eligibility requirements of Part 1 of the permit have been met, ADEQ will notify the applicant/operator that the application is deficient or incomplete. In some cases, the applicant/operator may be required to implement additional controls before ADEQ will authorize stormwater discharge.

If the applicant seeks authorization for a new discharge and new source to an impaired water that is a WOTUS, or to an upstream tributary of an OAW a copy of the SWPPP, along with the NOI, must be submitted to the Department. ADEQ will review the SWPPP to determine whether the selected control measures are sufficiently protective of water quality. In some cases, the applicant/operator may be required to implement additional controls before ADEQ will authorize stormwater discharge.

An applicant/operator will be authorized to commence discharging upon receipt of ADEQ's authorization document called Notice of Intent Certificate that contains the "AZMS" authorization number.

The condition to provide a copy of the NOI to the applicable Municipal Separate Storm Sewer System (MS4) has been removed from the permit requirements. The public can contact ADEQ's Record Management Center (RMC) to determine if a site has stormwater permit coverage and in the future ADEQ will provide a searchable database for stormwater permits.

Continuation of the permit (Part 1.3.2)

If this permit is not reissued or replaced (or revoked or terminated) prior to its expiration date, ADEQ has the authority to administratively extend coverage for existing dischargers, in accordance with A.A.C. R18-9-C903(A). If coverage is provided to a permittee prior to the expiration date of the 2019 MSGP, the permittee is authorized to discharge under the permit until the earliest of: (1) the authorization for coverage under a reissuance or replacement of the permit, following timely and appropriate submittal of a complete NOI; (2) submittal of a Notice of Termination; (3) denial of coverage under the 2019 MSGP, or issuance or denial of an individual AZPDES permit for the permittee's discharges; or (4) a formal permit decision 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 the 2019 MSGP will cease at the end of this time period.

ADEQ reserves the right to modify or revoke and reissue the 2019 MSGP under 40 CFR 122.62 and 63, in which case permittees will be notified of any relevant changes or procedures to which they may be subject. Where ADEQ does not issue another general permit prior to the expiration of a previous one, ADEQ does not have the authority to provide coverage to industrial operators not already covered under that prior general permit.

IV.D. Coverage under Alternative Permits (Part 1.4)

This section describes the procedures for obtaining an alternative permit. The following are scenarios in which an alternative permit may be required: 1) a new or previously permitted site is denied coverage under the MSGP; 2) an existing site covered under the 2019 MSGP loses their authorization under the MSGP; or 3) a permittee requests to be covered under an alternative permit.

For discharges to a WOTUS: 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). For discharges to a non-WOTUS: Discharges to non-WOTUS protected surface waters, ADEQ may require an operator to obtain authorization under an Individual AZPDES Permit if the requirements in A.R.S. § 49-255.04(C) are made.

After the submittal of a complete and accurate NOI, operators may be notified in writing by ADEQ that they are not covered under the 2019 MSGP, and that they must apply for and/or obtain coverage under either an individual AZPDES permit or an alternate general AZPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information or NOI requirements.

If an operator is currently covered under a previously issued MSGP or the 2019 MSGP, ADEQ will set a deadline to file the permit application or NOI for an individual permit or alternative general

permit, and will include a statement that on the effective date of the individual AZPDES permit or the date of coverage under an alternative general AZDES permit, coverage under this general permit will terminate. ADEQ may grant additional time to submit the application or NOI if the permittee requests it. If a permittee fails to submit an individual AZPDES permit application or NOI as required by ADEQ, the applicability of the MSGP is terminated at the end of the day specified by ADEQ as the deadline for application or NOI submittal. If a timely permit application or NOI is submitted, coverage under the MSGP is terminated on the effective date of the coverage under the alternative permit.

IV.E. Terminating Coverage (Part 1.5)

The purpose of submitting a Notice of Termination (NOT) is to document that a permittee's obligation to manage industrial stormwater is no longer necessary.

When to Submit a Notice of Termination

The permittee must submit an NOT within 30 calendar days after:

- A new owner or operator has assumed ownership or responsibility for the site.
- The site changes locations (i.e. change in geographic coordinates).
- The change of name/legal ownership (i.e., *from ABC Inc. to ABC LLC*).

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

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

The NOT must be submitted electronically through ADEQ's online permitting process (myDEQ).

Coverage under the MSGP terminates automatically only when the permittee obtains coverage under an individual or alternative general permit for all discharges requiring AZPDES permit coverage. This could happen either because ADEQ required it (see Part 1.4 of the permit) or the permittee petitioned ADEQ requesting coverage under an alternative permit. See A.A.C. R18-9-A902(A) and R18-9-A902(B).

IV.F. Conditional Exclusion for No Exposure (Part 1.6)

Facilities in Arizona with stormwater discharges associated with industrial activity may qualify for a Conditional Exclusion for No Exposure. Dischargers qualifying for No Exposure Certification (NEC) must maintain a condition of "no exposure" in accordance with 40 CFR 122.26(g)(4)(iii) and the certification must be renewed by the operator every five years (from the date certification) to remain valid. ADEQ clarified permit language to provide more detail about the intent of the no exposure exclusion and how the operator can qualify for/ comply with this exclusion from MSGP coverage. NECs can be obtained electronically through myDEQ.

Operators covered by this exclusion must allow ADEQ representatives to inspect the site. The permit also explains that ADEQ may revoke or deny the exclusion (NEC) and require authorization under an individual AZPDES permit with cause.

V. Effluent Limitations and Control Measures (Part 2)

V.A. Water Quality Based Effluent Limitations and Control Measures (Part 2)

Part 2 describes the requirements for implementation of stormwater control measures to minimize the discharge of pollutants and meet numeric technology-based effluent limitations and water quality-based effluent limitations. Part 2.2 requires operators to implement, as appropriate, control measures

listed in the permit. In previous permits, these were referred to as best management practices (BMPs) and are now referred to as control measures. Additional control measures may be required for discharges to Arizona listed water quality impaired waters (Part 2.1.1 of the permit). Technology-based effluent limitations do not apply to non-WOTUS protected surface waters. See Part V.B. for additional details.

V.A.1. Introduction to CWA Requirements to Control Pollutants in Discharges

Water quality-based requirements are required by CWA Section 301(b)(1)(C). Water quality-based requirements are discussed in more detail in Section V.C. The CWA requires that discharges meet technology-based effluent limitations reflecting, among other things, the technological capability of permittees to control pollutants in their discharges. Both water quality-based requirements and technology-based effluent limitations are implemented through AZPDES permits. See CWA sections 301(a) and (b). Technology-based effluent limitations do not apply to non-WOTUS protected surface waters. See Part V.B. for additional details.

V.A.2. Numeric and Water Quality-Based Effluent Limitations

The 2019 MSGP includes water quality-based effluent limits (WQBELs) and effluent limitation guidelines. The provisions of Part 2.1 constitute the numeric technology-based effluent limitations and WQBELs of the permit. The WQBELs are the Water Quality Standards applicable to the protected surface water in A.A.C. R18-11, Article 1. In the permit WQBELs are either referred to as the Water Quality Standards or water quality-based requirements to distinguish them for technology based effluent limitations. Technology-based effluent limitations do not apply to non-WOTUS protected surface waters. See Part V.B. for additional details.

VI.A.3 Water Quality-Based Standards (Part 2.1)

The provisions of Part 2.1 constitute the WQBELs of the 2019 MSGP, and supplement the permit's technology-based effluent limits in Part 2.2. The following is a list of the permit's WQBELs:

- Control discharges as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard (See Part 2.1.1); and
- Implement any additional measures that are necessary to be consistent with the assumptions and requirements of the applicable Total Maximum Daily Load (TMDL) and its wasteload allocation (See Part 2.1.1.1.a). For discharges to impaired waters without a TMDL, conduct impaired waters monitoring (See Part 2.1.1.1.b.). Additionally, new discharges to impaired waters must implement any measures required per the Part 1.1.4.6 eligibility requirements.

The WQBELs included in the permit continue to be non-numeric. ADEQ relies on a narrative limit to ensure discharges are controlled as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard, and to ensure that additional measures are employed where necessary to meet the narrative WQBELs, or to be consistent with the assumptions and requirements of an applicable TMDL and its WLA.

VI.A.3.1 Water Quality Standards (Part 2.1.1)

Permittees are required to control discharges as necessary to not cause or contribute to an exceedance of applicable surface water quality standards. ADEQ expects that compliance with the other conditions in the permit (e.g., the control measures, corrective actions, etc.) will result in discharges that are controlled as necessary as not cause or contribute to an exceedance of an applicable surface water quality standard in the protected surface water body. If the permittee becomes aware, or ADEQ determines, that the discharge causes or contributes to a surface water quality standard exceedance, corrective actions and ADEQ notification are required. In addition, at any time ADEQ may impose additional, more stringent water quality-based requirements on a site-specific basis, or require an individual permit, if information suggests that the discharge is not controlled as necessary to not cause or contribute to an exceedance of an applicable surface water quality standards.

VI.A.3.2 Existing Discharge to an Impaired Water with an Approved TMDL (Part 2.1.1.a)

This Section specifies ADEQ may inform permittees that additional requirements are necessary for the discharge to be consistent with the assumptions and requirements of an applicable TMDL and its wasteload allocation (WLA). Where an operator indicates on its NOI that a discharge is to one of the types of waters this section covers, ADEQ will review the applicable TMDL to determine whether it includes provisions that apply to the individual discharger or its industrial sector. ADEQ will determine whether any more stringent requirements are necessary to comply with the WLA, whether compliance with the existing permit limits is sufficient, or alternatively, whether an individual permit application is necessary.

VI.A.3.3 Existing Discharge to an Impaired Water without an Approved TMDL (Part 2.1.1.b)

This section reiterates the requirement for permittees that discharge to an impaired water without an approved or established TMDL, must still control the discharge as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard (Part 2.1.2). ADEQ expects permittees will achieve this if they comply with other requirements in the permit including monitoring requirements for impaired water discharges in Part 6.2.3. However, if information in the NOI, required reports, or from other sources indicates that discharges are not controlled as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard, ADEQ may inform operators of the need to implement additional measures on a site-specific basis to ensure the WQBEL is met, or alternatively, of the need to apply for an individual permit.

VI.A.3.4 New Discharge to an Impaired Water (Part 2.1.1.c.) (Applicable only to discharges to WOTUS)

This provision requires permittees that are “new sources” or meet the definition of “new discharger” (see Appendix A) that discharge to impaired waters, to maintain control measures that have been implemented to meet the eligibility requirements of Part 1.1.4.6. This section does not apply to discharges to non-WOTUS protected surface waters. See A.R.S 49-255.04(B)(1).

VI.B. Explanation of the Use of Control Measures to Meet the Permit Limits

Technology-based effluent limitations do not apply to non-WOTUS protected surface waters. Therefore, under the September 2021 permit modification, the permit clarified the control measures and effluent limitation requirements for WOTUS and non-WOTUS protected surface waters. The requirement to implement control measures in accordance with Permit Part 2.2.1 applies to all sites that discharge to a WOTUS. Permit Part 8 contains additional control measures imposed on a sector-specific basis for discharges to a WOTUS. Consistent with Part 2.2.1 for discharges to non-WOTUS protected surface waters, a permittee may elect to implement control measures in Permit Part 2.2.1.2.1-2.2.1.2.10 and Part 8 (sector specific control measures) as applicable, or as an alternative, conduct analytical monitoring in accordance with Permit Part 6 and Part 8 (sector specific routine analytical monitoring).

Control measures can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), or structural or installed devices to prevent or minimize water pollution. There are many options that accomplish the objective of preventing pollutants from entering protected surface water and meeting applicable limits.

The MSGP requires industrial site operators to select, design, install, and implement site-specific control measures to meet these limits. Most industrial facilities already have such control measures in place for product loss prevention, accident and fire prevention, worker health and safety or to comply with other environmental regulations. Sometimes, treatment devices or constructed/installed controls may be necessary, particularly where a site might otherwise cause or contribute to an exceedance of an applicable surface water quality standard.

There are many control measures that could be used to meet the limits in the permit. The following are helpful resources for developing and implementing control measures for a site that can be obtained using the web:

- Sector-specific Industrial Stormwater Fact Sheet Series (<http://water.epa.gov/polwaste/npdes/stormwater/Industrial-Fact-Sheet-Series-forActivities-Covered-by-EPAs-MSGP.cfm>);
- National Menu of Stormwater BMPs (<http://water.epa.gov/polwaste/npdes/swbmp/index.cfm>); and
- National Management Measures to Control Nonpoint Source Pollution from Urban Areas (<http://water.epa.gov/polwaste/nps/urban/>)

Part 2.2 requires the operator to select, design, install and implement control measures to meet the numeric effluent limitations in Part 2.2.2 and surface water quality standards listed in Part 2.1. The selection, design and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications.

V.B.1. Control Measure Selection and Design Considerations (Part 2.1.1)

The permit requires regulated sites to implement appropriate control measures (found in Parts 2.2 and 8 of the permit). ADEQ expects that the implementation of control measures will result in the reduction or elimination of pollutants from the operator's stormwater discharge to meet the effluent limitations in Part 2.2.2 and surface water quality standards in Part 2.1. The permittee is not limited to control measures specified in the permit. ADEQ encourages permittees to consider new control measures or new applications of existing practices at times during permit coverage when adjustments to their selection, design and implementation are being considered (e.g., when corrective action is triggered). This will help ensure that control measures continue to reflect best industry practice.

In Part 2.2 operators are required to consider certain factors when selecting and designing control measures, including:

- Preventing stormwater from coming into contact with polluting materials is generally more effective and less costly than trying to remove pollutants from stormwater;
- Using combinations of control measures is more effective than using control measures in isolation for minimizing pollutants;
- Assessing the type and quantity of pollutants, including their potential to impact protected surface water quality, is critical to determining which control measures will achieve the limits in the permit;
- Minimizing impervious areas at the site and infiltrating runoff onsite (via bioretention cells, green roofs, pervious pavement, etc.) can reduce runoff, and improve groundwater recharge and stream base flows in local streams (although care must be taken to avoid groundwater contamination);
- Attenuating flow using open vegetated swales and natural depressions to reduce in-stream impacts of erosive flows;
- Conserving and restoring riparian buffers will help protect streams from stormwater runoff and improve water quality; and
- Using treatment interceptors (e.g., swirl separators, oil-water separators, sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

Technology-Based Effluent Limits, Best Management Practices, and State-Specific Requirements (Part 2.2.1.2)

The MSGP requires permittees that discharge to a WOTUS to comply with non-numeric technology-based effluent limits, pursuant to 40 CFR 122.44(k), by implementing stormwater control measures. The achievement of these non-numeric limits will result in the reduction or elimination of pollutants in stormwater discharges. A permittee discharging to a WOTUS shall comply with the following non-numeric effluent limits (except where otherwise specified in Part 8) as well as any sector-specific non-numeric effluent limits in Part 8.

A permittee discharging to non-WOTUS protected surface waters shall either choose; (1) to implement either non-numeric best management practices (BMP) in Section 2.2.1.2.1-10 to presumptively meet SWQS or (2) conduct routine analytical monitoring per Section 6.0 and Part 8 (sector specific routine analytical monitoring) to demonstrate that discharges do not cause or contribute to an exceedance of SWQS. Numeric effluent limitation guidelines do not apply to discharges to non-WOTUS protected surface waters. Permittees discharging to non-WOTUS protected surface waters are subject to state requirements only per A.R.S. 49-255.04(C), enforceable solely by ADEQ.

The following is a list of the types of control measures permittees should evaluate and implement as appropriate in order to minimize pollutants in stormwater discharges:

- *Minimize Exposure to Stormwater* (Permit Part 2.2.1.2.1).
- *Good Housekeeping* (Permit Part 2.2.1.2.2).
- *Maintenance* (Permit Part 2.2.1.2.3).
- *Spill Prevention and Response Procedures* (Permit Part 2.2.1.2.4).
- *Erosion and Sediment Controls* (Permit Part 2.2.1.2.5)
- *Management of Stormwater Runoff* (Permit Part 2.2.1.2.6).
- *Salt Storage Piles or Pile Containing Salt* (Permit Part 2.2.1.2.7).
- *Employee Training* (Permit Part 2.2.1.2.8).
- *Non-Stormwater Discharges* (Permit Part 2.2.1.2.9).
- *Dust Generation and Vehicle Tracking of Industrial Material* (Permit Part 2.2.1.2.10)

V.B.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines (Part 2.2.2)

(Applicable only to discharges to WOTUS)

This section requires permittees to comply with any applicable federal effluent limitations guidelines (ELGs) for discharges to a WOTUS. The following describes where these limits can be found in the permit. The following table corresponds to Table 2-2 in the permit. ELGs do not apply for discharges to non-WOTUS protected surface waters.

Regulated Activity	40 CFR Part/Subpart	Effluent Limitation
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	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
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
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449	See Part 8.S.8

VI. Corrective Actions (Part 3)

A permittee must take corrective actions to eliminate or correct a problem if any of the conditions in this part are met. The provisions in Part 3 specify the types of conditions at the site that trigger corrective action requirements, what must be done to eliminate such conditions or conduct further inquiries into their cause, and the deadlines for completing corrective action.

A summary of corrective actions initiated and/or completed is required to be summarized in a Corrective Action Report (CAR) and shall be kept with the SWPPP.

Conditions Requiring Corrective Action (Part 3.1.1)

For the 2019 MSGP, ADEQ has differentiated conditions that trigger a corrective action based on whether the condition needs to be eliminated. The following conditions require corrective action:

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

Substantially Identical Outfalls (Part 3.1.2)

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the permittee's review must assess the need for corrective action for each outfall (as practicable) represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

Corrective Action Documentation, Deadlines and Reporting (Part 3.2)

The permit includes specific deadlines for permittees to take corrective actions. The permit requires that within 72 hours following identification or discovery of any of the conditions listed in Parts 3.1.1, the permittee must document such discovery. Subsequently, within 14 calendar days of the discovery, the permittee must document corrective actions taken or to be taken to eliminate the condition and any additional review necessary to further investigate the condition. If the permittee determines that changes are necessary following the review, any modifications to the control measures must be made before the next storm event if possible, or as soon as practicable following that storm event.

Corrective Action Reporting

The 2019 MSGP requires the permittee to submit a Corrective Action Report (CAR) to ADEQ on a form prescribed by ADEQ. If electronic reporting becomes available, the CAR must be submitted electronically by the permittee.

Permittees must submit a CAR within 30 days of discovery of a condition in Part 3.1.1. In addition to submitting the CAR to ADEQ, a copy must also be kept with the SWPPP and be made available to ADEQ upon request.

VII. Inspections (Part 4)

In the 2019 MSGP, ADEQ has consolidated the inspection and documentation requirements into four (4) routine site inspections. The Comprehensive Site Inspection (CSI) requirement was removed in the 2019 MSGP, but key elements of the CSI were incorporated into the routine inspections.

Part 4 describes the inspection and evaluation of the performance of existing stormwater control measures. The permit requires all site operators to conduct two types of inspections every year: four routine quarterly inspections and four visual assessments (two in the summer and two in the winter wet seasons – see Section IX.A.4 of this Fact Sheet). The inspections should take place during normal site operating hours. Inactive and unstaffed sites qualify for certain exceptions.

VII.A. Routine Site Inspections (Part 4.1)

Permittees are required to conduct routine site inspections (RFIs) at least quarterly and include all areas of the site where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with the requirements in Part 2.0 of the MSGP. A routine site inspection provides permittees with a mechanism to ensure that developing problems are detected and addressed early and helps ensure that stormwater control measures are adequate and are operated and maintained properly.

During each calendar year, at least one of the routine inspections must be conducted during a period when a stormwater discharge is occurring if practicable. This inspection will enable permittees to identify sources of pollutants discharged in stormwater runoff from the site, and to actively observe the effectiveness of control measures implemented to comply with effluent limits. Discharge points, as defined in Appendix A, must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.

Qualified personnel must conduct the routine site inspections with at least one member of the Pollution Prevention Team participating. If only one person regularly conducts the inspection, that individual must be a Pollution Prevention Team member. Because some equipment, processes, and procedures may require more frequent inspections, the relevant inspection schedules must be documented in the SWPPP. If there is no measurable storm event(s) during the calendar year, the permittee must document the inability to perform a routine inspection when a discharge is occurring. In any case, the permittee must complete routine quarterly inspections.

Part 4.1 provides specific information to be documented for each routine inspection. This documentation must include when the inspection took place, who conducted the inspection, and any indication that controls may not be adequate or are not functioning properly. The findings of these routine inspections must be maintained on-site with the SWPPP.

VII.A.1. Routine Site Inspection Documentation (Part 4.1.1)

Part 4.1.1 elaborates on the specific information to be documented for each routine inspection.

Part 4.1.1 specifies that any corrective action required as a result of a routine site inspection must be performed consistent with Part 3 of the permit. See Section VI of this Fact Sheet for additional discussion of corrective action in response to inspection findings.

VII.A.2. Exceptions to Routine Site Inspections for Inactive and Unstaffed Sites (Part 4.1.2)

Operators of inactive and unstaffed sites may invoke an exception from routine inspections if they eliminate all exposure of industrial activities and materials to stormwater, and document this in the SWPPP. Facilities that make use of this exemption must still implement any necessary control measures to comply with applicable permit requirements and must still conduct one routine inspection each year.

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

VII.B. Visual Assessment of Stormwater Discharges (Part 4.2)

Visual assessments provide a useful and cost effective way for permittees to evaluate the effectiveness of their control measures. Four visual assessments must be conducted annually, twice per wet season. The visual examinations must be conducted when the site is discharging stormwater, if predictable. A visual assessment can be conducted concurrently with a routine site inspection required by Part 4.1. All industrial sectors covered by the permit are required to conduct these examinations.

The permit Part 4.2.1, requires that grab samples of stormwater discharges be taken and examined visually for the presence of color, odor, clarity, floating solids, settled solids, suspended solids,

foam, oil sheen, and other obvious indicators of stormwater pollution. No analytical tests are required to be performed on these samples. The grab samples must be taken within the first 30 minutes or as soon as practicable after the occurrence of an actual discharge from the site (including documentation of why sampling was not practicable within the first 30 minutes). ADEQ has also included, as an option, for permittees to collect flow-weight samples instead of grab samples to assess the entire Stormwater discharge event.

Areas Subject to Snow: In areas subject to snow, the permittee may complete one wet season visual assessment by collecting snowmelt discharge. Significant snowfall only occurs regularly in the high country in Arizona, which is the only place ADEQ would expect such sampling to be applicable. These snowfall events tend to be isolated in geography and occurrence (i.e., relatively infrequent), so for practical purposes, the permit does not require that these snowmelt samples be collected within the first 30 minutes of discharge, as is the case for samples collected during rain events.

Permittees must document the results of their visual assessments in a report that includes the sample location, date and time, personnel collecting the sample and performing visual assessments, nature of the discharge (i.e., runoff or snowmelt), results of the observations, and probable sources of any observed stormwater contamination. The visual examination reports must be maintained onsite with the SWPPP.

When conducting a stormwater visual examination, the pollution prevention team, or individual team member, should attempt to relate the results of the examination to potential sources of stormwater contamination on the site. For example, if an oil sheen is observed, site personnel should conduct an inspection of the area of the site draining to the examined discharge to look for obvious sources of spilled oil, leaks, etc. If a source can be located, then this information would allow the site operator to immediately conduct a clean-up of the pollutant source, and/or to revise control measures to minimize the contaminant source.

Exceptions to Visual Assessments (Part 4.2.3)

Part 4.2.3 of the permit includes exceptions for visual assessment monitoring. The exceptions are conditions in which the visual assessment monitoring is not feasible. Where these types of conditions prevent a site from performing these assessments quarterly, permittees may modify their assessment schedule such that the four assessments are conducted over the course of the year during periods when site discharges actually occur and can be safely observed.

VIII. Stormwater Pollution Prevention Plan (SWPPP) (Part 5)

Part 5 requires operators to develop a SWPPP to document the specific control measures they will use to meet the limits contained in Part 2 and Part 8, as well as to document compliance with other permit requirements (e.g., monitoring, recordkeeping, reporting).

To be covered under the 2019 MSGP, operators must complete a SWPPP prior to submitting an NOI for permit coverage (previous permittees must update their existing SWPPP to reflect the 2019 MSGP). In doing so helps to ensure that permittees acknowledge a new permit has been issued and that the site has (1) taken steps to identify all sources of pollutant discharges in stormwater; and (2) implemented appropriate measures to control these discharges in advance of authorization to discharge under the new permit. Part 5.1 of the permit contains most of the required elements to be documented in the SWPPP; however, sector-specific requirements are also included in Part 8 of the permit.

VIII.A. Contents of the Site's SWPPP (Part 5.1)

ADEQ's intent in the 2019 MSGP for reducing textual descriptions for each specific SWPPP requirement from the 2010 MSGP, was to simplify this section and reduce duplicative information already provided in Part 2.2.1.1, under Control Measures. It should be noted that the SWPPP is a documentation requirement of the permit that incorporates the specific control measures that will be used at the site to meet permit limits.

Numerous SWPPP resources, guidelines and templates currently exist and are readily available on ADEQ's or other stormwater websites to assist permittees with developing a SWPPP that complies with this permit.

Permittees may choose to reference other documents in the SWPPP rather than recreating the same text in the SWPPP; however, when referencing other documents, the permittees are responsible for ensuring their SWPPP and the other documents together contain all the necessary elements for a complete SWPPP. In addition, permittees must ensure that a copy of the referenced document is located with the SWPPP. Program documents such as Spill Prevention Control and Countermeasure (SPCC) Plans that fully meet the documentation requirements for a SWPPP (e.g., site inspections that incorporate and document stormwater inspection requirements) will fulfill the relevant provision of the permit.

VIII.A.1. Stormwater Pollution Prevention Team

Developing a SWPPP requires that a qualified individual or team of individuals be identified as responsible for developing and revising the site's SWPPP. Additionally, this team is responsible for implementing and maintaining the control measures to meet the permit effluent limits, and taking corrective action where necessary. Identification of this team in the plan provides notice to site staff and management (i.e., those responsible for signing and certifying the plan) of the responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

Team members should be selected for their expertise in the relevant departments at the site to ensure all aspects of site operations are considered in developing the plan. The SWPPP must clearly describe the responsibilities of each team member to ensure that each aspect of the plan is addressed. The permit requires that team members have ready access to any applicable portions of the SWPPP and the permit.

VIII.A.2. Site Description

The SWPPP must describe activities, materials, and physical features of the site that may contribute significant amounts of pollutants to stormwater runoff or, during periods of dry weather, result in pollutant discharges through the municipal separate storm sewers or stormwater drainage systems that drain the site. The SWPPP must also contain both a general location map of the site that shows the location of the site in relationship to protected surface waters and other geographical features, and a more detailed site map that contains information on site characteristics that affect stormwater runoff quality and quantity. For areas of the site that generate stormwater discharges with a reasonable potential to contain significant amounts of pollutants (i.e., pollutant that could cause a water quality exceedance), the map must indicate the probable direction of stormwater flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion must also be identified.

VIII.A.3. Summary of Potential Pollutant Sources

The permit requires permittees to identify potential sources of pollutants from industrial activities that could result in contaminated stormwater discharges, unauthorized stormwater discharges, and potential sources of allowable non-stormwater discharges. Identification of sources of pollutants in stormwater is critical for selecting source control practices at the site necessary for meeting permit limits.

Describing the potential pollutant sources is only applicable to those parts of the site for which the permittee is covered under the permit. For example, a site that discharges stormwater to an area of the site covered by a different AZPDES permit, is not required to identify the specific activities occurring in that area. ADEQ does expect permittees to clearly identify those areas of the site and describe why they need not be covered under the permit.

Note that potential pollution sources include a site's roof(s) and other surfaces that could accumulate pollutants originating from an industrial process and deposited through the air. Roofs, walls, etc., exposed to emissions from industrial areas can build up such pollutants over dry periods, which can be mobilized during a rain event or in snowmelt. These areas should be identified and included in SWPPP development. Likewise, industrial structures containing materials that could become pollutants

discharged in stormwater (e.g., copper cladding on buildings or zinc from galvanized fences) should also be identified as potential pollutant sources.

- **Spills and Leaks**

The SWPPP must document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that could be affected by such spills and leaks. The pollutant list must include all significant materials that have been handled, treated, stored or disposed, and exposed to stormwater in the three years prior to SWPPP preparation or amendment. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under section 311 of the CWA (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Significant spills may also include releases of materials that are not classified as oil or hazardous substances. The list of significant spills and leaks should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar spills or leaks in the future. This effort will aid operators in developing spill prevention and response procedures and any additional procedures necessary to fulfill the requirements set forth in Part 2.2.1.2.4 of the permit.

As required in Part 5.6 of the permit, any spills or leaks that occur while covered under the permit must be documented. Documenting spills does not relieve permittees of any reporting requirements established in 40 CFR 110, 40 CFR 117, and 40 CFR 302, or any other statutory requirements relating to spills or other releases of oils or hazardous substances.

- **Unauthorized Non-Stormwater Discharges**

The SWPPP must document the occurrence of unauthorized non-stormwater discharges. The documentation must include the date of any evaluation, and describe any test or evaluation conducted to detect such discharges, the list of the outfalls or drainage points that were directly observed during evaluation, and the actions taken such as control measures used to eliminate unauthorized non-stormwater discharges. The permittee must eliminate unauthorized non-stormwater discharges or document that a separate AZPDES permit was obtained.

- **Salt Storage**

The SWPPP must identify any storage piles containing salt, including piles that only contain salt as a portion of the mixture in the pile, used for deicing or other commercial or industrial purposes.

- **Sampling Data**

A summary of stormwater sampling data collected from the site during the previous permit term must be described in the SWPPP. The summary shall include a textual evaluation of sampling results and include data where necessary to summarize stormwater sampling data. New dischargers must provide a summary of any available stormwater discharge sampling data they may have, including the methods used to collect the data and the sample collection location.

VIII.A.4. Description of Control Measures to Meet Numeric and Non-Numeric Effluent Limitations

The SWPPP must include a description of the control measures implemented at the site achieve each of the requirements in Part 2.1, and Part 8 (if applicable to address any stormwater run-on that commingles with discharges covered under the permit). The description of the control measures implemented to meet the requirements in Part 2.1 must include an explanation of the measures implemented at the site, including how the Part 2.2.1 selection and design considerations were followed.

VIII.A.5. Schedules, Practices and Procedures – Control Measures

The permit identifies specific information that must be documented in the SWPPP. ADEQ emphasizes that control measures implemented to meet the Part 2 limits must be documented in the SWPPP.

In addition to the description of the on-the-ground control measures implemented to meet the requirements in Part 2.1, the permit requires certain schedules and procedures to be documented in the SWPPP.

VIII.A.6. Schedules and Procedures – Inspection and Visual Monitoring

The permit requires permittees to plan and document (in the SWPPP) inspection and monitoring activities in advance of when they are required to be conducted. These documentation provisions will help ensure that appropriate monitoring and inspection procedures consistent with permit requirements are implemented and improve site compliance with the requirements.

For inspection activities, permittees must document procedures for performing the two types of inspections specified in the permit, namely, routine site inspections (Part 4.1), and visual assessments (Part 4.2). For each of these types of inspections, the SWPPP must include information such as person(s) or position(s) performing inspections, the inspection schedule, and items to be covered by the inspection. Permittees invoking the exception for inactive and unstaffed sites for quarterly inspections or visual assessments must provide information in the SWPPP to document the exception.

When choosing to use the substantially identical outfall exception for visual assessment, the operator is required to describe in the SWPPP the locations of each of these outfalls, the general industrial activities conducted in the drainage area of each outfall, the control measures being implemented for each outfall, the exposed materials that are likely to be a significant contributor of pollutants to the stormwater discharge, an estimate of the runoff coefficient of the drainage area, and why the outfalls are expected to discharge substantially identical effluents.

VIII.A.7. Monitoring and Sampling Procedures

For monitoring activities, the permittee must document procedures and requirements in the SWPPP such as locations where samples are to be collected, person(s) or position(s) responsible for collecting those samples, the frequency of sampling and the parameters to be sampled, sampling protocol, permit limits for sampling, and procedures that will be followed to gather storm event data. Any permittee subject to sampling should prepare and keep a copy of a Sampling and Analysis Plan (SAP) with their SWPPP. The SAP can be within the SWPPP content or can be a separate Appendices.

The SWPPP shall contain the justifications for any other exemptions or exceptions to analytical monitoring.

VII.B. Signature Requirements (Part 5.2)

The permit requires the permittee sign and date the SWPPP consistent with procedures detailed in Appendix B, Subsection 11 (standard permit condition for signatory requirements). The requirement is consistent with standard AZPDES permit conditions described in 40 CFR 122.22 and is intended to ensure that the permittee understands its responsibility to create and maintain a complete and accurate SWPPP. The permittee may appoint an authorized representative consistent with the regulations. Therefore, if a site feels it is more appropriate for a member of the stormwater pollution prevention plan team to sign the documentation, that option is available under the permit.

VIII.C. Required SWPPP Modifications (Part 5.3)

The permit requires that the SWPPP be updated whenever any of the triggering conditions for corrective action in Part 3.1 occur such that modifications or replacement to the permittee's control measures are necessary to meet the requirements of Part 2.1 in the permit. This ensures that the SWPPP document is kept up-to-date.

VIII.D. SWPPP Availability (Part 5.4)

The permit requires that a copy of the SWPPP be kept at the site and be immediately available to representatives of ADEQ, EPA (only if the SWPPP covers a discharge to a WOTUS), a State, or a local stormwater agency (e.g., MS4 operator) at the time of an on-site inspection or upon request.

The SWPPP at inactive and unstaffed sites does not need to be kept on-site. However, the SWPPP must be kept up to date and on-site when routine site inspections are conducted. Furthermore, the SWPPP must be made available within 48 hours, if requested, when a regulatory inspection is performed by ADEQ, EPA (only if the SWPPP covers a discharge to a WOTUS), or other Federal or local authority.

VIII.E. SWPPP Submittal (Part 5.5)

Upon written notification from ADEQ, or as part of the electronic permitting process, the permittee must submit a complete and up-to-date copy of the SWPPP to ADEQ in response to the following criteria:

- The site is located within 2.5 miles of a special water. Note: a SWPPP does not have to be submitted for a new discharger or new source if the discharge is to a non-WOTUS protected surface water that is impaired or not-attaining water;
- ADEQ has determined stormwater discharges are (or have the potential to) causing or contributing to the exceedance of a surface water quality standard in the protected surface water;
- As the result of an inspection conducted by ADEQ or U.S. EPA;
- To demonstrate compliance with permit conditions;
- A complaint about the site or discharge activity was submitted to ADEQ and ADEQ determines the SWPPP is necessary to assess compliance and respond to the complaint;
- The SWPPP has been requested as part of a public records request.

Additionally, the permittee may voluntarily submit a copy of the SWPPP at any time for ADEQ's review.

All SWPPPs submitted to ADEQ shall be done so electronically using the online myDEQ portal. The corresponding review fee (A.A.C. Title 18, Chapter 14, Article 1) must also be submitted electronically using myDEQ at the time the SWPPP is submitted.

VIII.F. Additional SWPPP Documentation Requirements (Part 5.6)

Part 5.6 includes a list of documents, findings, activities, and information that must be kept with the permittee's SWPPP. Part 5.6 in the permit consolidates all additional documentation requirements into one section and is intended to clarify those requirements for permittees. See permit language for details.

The SWPPP itself should describe the site, the control measures, and the site activities to be performed, but activities undertaken to comply with the provisions of the permit are more appropriately compiled separately. Hence, the language, "kept with the SWPPP" used in various places throughout the permit is intentional. "Kept with the SWPPP" is intended to clarify that these records are separate from the SWPPP documentation requirements. Instead, these records, which should be kept with the actual SWPPP document, provide documentation of the permittee's compliance with the permit. In general, this documentation requires the signature of the person performing the activity (e.g., inspection, sampling), not an authorized site representative as specified in Appendix B, Subsection 11.

Facilities, including those with co-permittees, may retain copies of records and documentation required by this permit electronically or at locations other than with the SWPPP, however, the records must be accessible and the SWPPP must clearly identify where the information is kept.

IX. Analytical Monitoring Program (Part 6)

In addition to visual assessments required in Part 4.2, the permittee shall analyze stormwater samples, in accordance with Part 6 and any sector-specific requirements in Part 8 for discharges to a WOTUS.

Consistent with Part 2.2.1.2 for dischargers to non-WOTUS protected surface waters, a permittee may elect to implement the measures define in Part 2.2.1.2.1- 2.2.1.2.10, and Part 8 (sector specific control measures), or conduct the analytical monitoring required by Part 6 and Part 8.(sector specific monitoring).

Due to Arizona's unique climate, ADEQ has reduced the monitoring frequency to one time each wet season, for a total of two samples a year for the following analytical monitoring requirements:

- Routine monitoring for select industrial dischargers, and
- Special waters monitoring (impaired waters, not-attaining waters, and Outstanding Arizona Waters).

ADEQ's 2019 MSGP aims to promote timely response to evaluate control measures and the discharge of pollutants that may impact human health or the environment.

A key component to timely response is to assess existing control measures when sample concentrations are above an action level. ADEQ instituted Arizona Surface Water Quality Standard derived action levels in the 2019 MSGP. The action levels replace EPA's surface water quality criteria utilized as "benchmarks," that were used in ADEQ's 2010 MSGP. ADEQ replaced the EPA water quality criteria to more accurately represent and protect Arizona's protected surface waters.

Similar to other environmental programs (solid waste, air quality, safe drinking water, etc.) ADEQ implemented additional monitoring and reporting when numeric effluent limitation guideline (ELG) limit is exceeded when a discharge is to a WOTUS. ADEQ's 2019 MSGP requires "accelerated monitoring" if a numeric limit is exceeded (ELG.). The accelerated monitoring requires the site to conduct analytical monitoring each time there is a stormwater discharge from the site. The accelerated monitoring provision is limited to the pollutant(s) and outfall(s) for which the exceedance was reported. Accelerated monitoring continues until there are two consecutive sampling events that demonstrate pollutant concentration(s) are below the corresponding numeric limit(s).

IX.A. Analytical Monitoring Procedures (Part 6.1)

The permit requires certain permittees to sample and analyze their stormwater discharges as a way to assess the effectiveness of control measures in meeting the effluent limitations contained in the permit.

IX.A.1. Analytical Monitoring Types (6.1.1)

The 2019 MSGP more clearly describes the types of monitoring that may be required by this permit. Depending on the industrial activity, discharge activity, site location, type of protected surface water, or potential to cause or contribute to an exceedance of a surface water quality standard, any or all of the monitoring requirements may be applicable:

- Routine analytical;
- Effluent Limitation Guideline (ELG) (does not apply to discharges to a non-WOTUS protected surface water);
- Accelerated Monitoring for ELG Exceedance (does not apply to discharges to a non-WOTUS protected surface water);
- Impaired waters (including not-attaining waters);
- Outstanding Arizona Waters (does not apply to discharges to a non-WOTUS protected surface water. All OAWs are WOTUS.); and/or
- Other monitoring prescribed by ADEQ.

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

The 2019 MSGP is using the term "routine analytical monitoring" in place of benchmark monitoring used in the 2010 MSGP. The name change was implemented to more adequately reflect the type of sampling required for a site.

IX.A.2. When to Collect a Sample (Part 6.1.2)

Many facilities in Arizona are subject to limited rainfall conditions throughout the year (i.e., the winter wet season or the summer wet season). The climate throughout the state of Arizona is characterized as arid or semi-arid with irregular stormwater runoff. In addition, certain areas of the state experience freezing conditions that may prevent runoff from occurring for extended periods. Therefore, monitoring periods have been adapted accordingly and the section on climates with irregular stormwater runoff has been combined into the section on monitoring periods.

The monitoring requirement begins 90 calendar days of receiving the authorization to discharge. ADEQ recognizes the variability of rainfall in the state and, to ensure that all storm events fall into one of the two rainy seasons for the purposes of MSGP monitoring, ADEQ has defined monitoring seasons in the permit as follows:

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

This definition applies statewide. The frequency for MSGP stormwater sampling in the permit is at least once each wet season (summer and winter) from each monitoring location, for the duration of permit coverage.

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.

Precipitation or runoff patterns in Arizona's arid climates is unpredictable and sporadic, and often times it can be months between a measurable storm events that causes a discharge. The 2019 MSGP requires sampling to be conducted for the duration of the permit. This change to the monitoring duration was to gather data throughout the permit term and to evaluate a sites pollutant levels over time. This will yield a more accurate characterization of pollutant concentrations in the site's discharge for the variable stormwater flow/ volumes in Arizona's climate and monitor pollutant levels after long dry periods (i.e., months between rain events). This provision also takes into account that operations at any given site are often dynamic and routinely change through the year as well as from year to year.

In the 2019 MSGP, the routine analytical monitoring is no longer an averaged sample value collected over various storm events, to determine compliance with the permit limit. The routine analytical sample will consist of a single discreet (grab) sample or a flow-weighted composite for comparison to action levels or ELGs. The change was implemented to address the acute nature of stormwater impacts which could be months, or more, between storm events.

In the 2010 MSGP, benchmark limits were at, above, or below Arizona's water quality standards, some parameters had no applicable Arizona water quality standard. In the 2019 MSGP, the action limits for most parameters for routine analytical monitoring are derived from Arizona surface water quality standards. This is to be protective of the specific protected surface water that receives the stormwater discharge and to assess a correlation between pollutant concentrations and whether or not the site may be causing or contributing to an exceedance of a water quality standard.

The actual action levels will be specified by myDEQ when the applicant applies for the NOI and selects the applicable protected surface water(s). The concentration applied as alert levels for routine analytical monitoring will assign the lowest of the acute designated uses for the protected surface water (selected on the NOI). If no acute standard exists, the lowest of the chronic standard will apply. If the selected protected surface water is listed as a tributary, then the tributary designated uses rule (R18-11-105), will apply. For total phosphorus and total nitrogen, for dischargers within 2.5 miles of surface waters listed in A.A.C. R18-11-109.F., the single sample maximum value for that parameter would be applied. This process of first applying the acute standard and if no acute, apply the chronic standard follows U.S. EPA's application of Water Quality Criteria as benchmarks in the federal 2015 MSGP.

Additionally, certain parameters in various sectors were removed or other parameters were added to the sector specific sampling. Parameters removed included those that did not have an Arizona surface water quality standard, such as magnesium. In the cases where a parameter was removed from the sampling list, a parameter that is a common pollutant associated with the industrial activity was added to sampling parameter list. This will provide more meaningful data relative to pollutants associated with industrial activities and their impacts to surface water.

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

Measurable Storm Event The permit defines a measurable storm event as an event that results in a discharge from the permitted site. Samples must be collected from the discharge resulting from a storm event that occurs at least 72 hours (3 days) after a previous measurable storm event.

Facilities that are located in colder areas of the state may have extended periods of freezing temperatures and snow events that do not meet the definition of a measurable storm event. The 72-hour (3-day) requirement does not apply to snowmelt as the actual discharge is not clearly tied to a specific snow event (i.e., may be the accumulation from multiple events). The permittee must record the date the snowmelt sample was collected.

IX.A.3. How to Collect a Sample (Part 6.1.3)

The permit specifies that a minimum of one discrete grab sample or flow weighted composite sample must be taken from the measurable storm event being monitored. This allows facilities to make accurate comparisons of monitoring results to the corresponding routine analytical, effluent limitation or water quality standard to determine whether additional action may be needed to reduce concentrations of pollutants detected in stormwater discharges. The sample may be collected manually by a qualified person by using an automatic or passive sampler.

Whenever possible, a grab sample is required during the first 30 minutes, because the highest pollutant concentrations generally occur during these first flush events. If more than one grab sample is collected, only those samples collected during the first 30 minutes of discharge are to be used for performing any necessary analyses. If the collection of a grab sample during the first 30 minutes is impractical, a grab sample can be taken as soon as practicable after the first 30 minutes, but the permittee must document and keep with the SWPPP an explanation of why a grab sample during the first 30 minutes was impractical.

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

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

Grab samples of snowmelt discharge that have been exposed to industrial activities, materials storage, or materials handling areas are to be collected from each outfall for characterization, but they do not have to be collected within 30 minutes of discharge.

IX.A.4. Where to Sample (Part 6.1.4)

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

In the event there are two or more discharge locations that are composed of the same, or substantially similar, stormwater discharge characteristics (substantially identical outfalls), the number of sample locations can be reduced. The substantially identical outfall provision allows permittees to reduce the number of outfalls that must be sampled and analyzed while still providing monitoring data that are indicative of discharges from each outfall.

Operators do not need advance ADEQ approval for this determination, however, ADEQ may subsequently determine that outfalls are not substantially identical and require sampling of additional outfalls. The permit clarifies that the allowance for monitoring only one of the substantially identical outfalls is applicable to routine analytical and impaired waters monitoring. The substantially identical outfall provision cannot be used for outfalls that discharge to a WOTUS with the numeric effluent limitation guidelines or that discharge to an Outstanding Arizona Water.

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 streams, to the extent practicable. The intent of this provision is to ensure that monitoring results are representative of discharges covered under the permit and not indicative of other discharges from the site. In certain instances, sampling only authorized streams may be inappropriate or infeasible, such as when authorized discharges are commingled with other streams prior to on-site treatment.

The permittee shall monitor allowable non-stormwater discharges only when they are commingled with stormwater discharges associated with industrial activity (unless modified by ADEQ).

IX.A.5. Sampling and Analysis Plan (SAP) (Part 6.1.5)

The SWPPP must contain a written SAP covering all analytical monitoring required by this permit, either as a separate section or as an appendix to the SWPPP. The contents of the SAP must include:

1. Sample collection, preservation, tracking, and handling information;
2. Calibration and maintenance of monitoring equipment;
3. A description of analytical methods and laboratories; and
4. Proper recordkeeping.

IX.B. Required Monitoring (Part 6.2)

Five types of analytical monitoring are required, one or more of which may apply to the site's discharge:

- Routine analytical monitoring (see Part 6.2.1);
- Effluent limitations monitoring (see Part 6.2.2) (does not apply to discharges to a non-WOTUS protected surface water);
- Impaired and Not-Attaining waters monitoring (see Part 6.2.3);
- Outstanding Arizona Waters monitoring (see Part 6.2.4) (does not apply to discharges to a non-WOTUS protected surface water. All OAWs are WOTUS.); and
- Additional monitoring as required by ADEQ (see Part 6.2.5).

The permit provides that if any of these monitoring requirements overlap, permittees are authorized to use a single sample to comply with those overlapping requirements.

Table 4 below summarizes analytical monitoring (routine analytical monitoring and effluent limitation guidelines) for each sub-sector. Refer to Part 8 of the permit for additional details.

(Parameters that are **bolded** under *required parameters for analytical monitoring in 2019 MSGP* are new parameters added to the monitoring for a specific sector).

TABLE 4

Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
A	General Sawmills and Planing Mills (SIC 2421)	Total Suspended Solids (TSS), Total Zinc	COD
A	Wood Preserving (SIC 2491) (only applies to facilities that use chromium/arsenic formulations)	Total Arsenic Total Copper	N/A
A	Wet Decking Discharges at Log Storage and Handling Areas (SIC 2411)	pH, Debris (woody material such as bark, twigs, branches, heartwood, or sapwood)	N/A
A	Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2448, 2449, 2451, 2452, 2593, and 2499)	COD, TSS	N/A
B	Paperboard Mills (SIC 2631)	TSS, Chlorine (total residual)	COD
C	Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR § 418.10) (applies to precipitation runoff, that during manufacturing or processing, comes into contact with any raw material, intermediate product, finished product, by-products or waste product (SIC 2874))	Total Phosphorus (as P), Fluoride	N/A
C	Industrial Inorganic Chemicals (SIC 2812-2819)	pH , Total Recoverable Iron, Nitrate + Nitrite N	Aluminum
C	Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate + Nitrite N, Zinc, Total Phosphorus (as P)	N/A
C	Agricultural Chemicals (SIC 2873-2879)	Nitrate + Nitrite N, Total Recoverable Lead, Total Recoverable Iron, Total Recoverable Zinc, Phosphorus	N/A
C	Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Recoverable Zinc, Vinyl Chloride	N/A
D	Asphalt Paving and Roofing Materials (SIC 2951, 2952)	TSS, Total Recoverable Copper, Total Recoverable Zinc, Naphthalene	N/A
D	Discharges from areas where production of asphalt paving and roofing emulsions occurs (SIC 2951, 2952)	TSS, Oil and Grease, pH	N/A
E	Clay Products Manufacturers (SIC 3245-3259, 3261-3269)	pH, TSS, Total Recoverable Lead	Total Recoverable Aluminum
E	Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	pH , TSS, Total Recoverable Iron	N/A

TABLE 4

Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
E	Cement Manufacturing Facility, Material Storage Runoff: 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.	TSS, pH	N/A
F	Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	pH, Total Recoverable Zinc	Total Recoverable Aluminum
F	Iron and Steel Foundries (SIC 3321-3325)	pH, TSS, Total and Dissolved Chromium IV, Total Recoverable Copper, Total Recoverable Iron, Total Recoverable Zinc	Total Recoverable Aluminum
F	Non-Ferrous Rolling and Drawing (SIC 3351-3357)	Total Recoverable Copper, Total Recoverable Zinc	N/A
F	Non-Ferrous Foundries (SIC 3363-3369)	Total Recoverable Copper, Total Recoverable Zinc	N/A
K	Hazardous Waste Treatment Storage or Disposal (Industrial Activity Code "HZ") (applies only to stormwater discharges associated with industrial activity from such activities other than contaminated stormwater discharges from landfills subject to the numeric effluent limitations set forth at 40 CFR Part 445, Subpart A)	TSS, pH, Ammonia, Total Recoverable Arsenic, Total Recoverable Cadmium, Total Cyanide, Total Recoverable Lead, Total Recoverable Mercury, Polychlorinated Biphenyl (PCB).	COD, Total Recoverable Magnesium, Total Recoverable Selenium, Total Recoverable Silver
K	Hazardous Waste Treatment Storage or Disposal (Industrial Activity Code "HZ") (applies only to discharges subject to 40 CFR Part 445, Subpart A)	Biochemical Oxygen Demand (BOD ₅), TSS, Ammonia, Alpha Terpineol, Aniline, Benzoic Acid, Naphthalene, p-Cresol, Phenol, Pyridine, Arsenic (total), Chromium (total), Zinc (total), pH	N/A
L	Landfills, Land Application Sites, and Open Dumps (Industrial Activity Code "LF")	TSS	N/A
L	Landfills, Land Application Sites, and Open Dumps (Industrial Activity Code "LF") except Municipal Solid Waste Landfill Areas Closed in Accordance with 40 CFR 258.60	TSS, Total Recoverable Iron	N/A
L	Landfills (Industrial Activity Code "LF") Subject to the Requirements of 40 CFR Part 445, Subpart B	BOD ₅ , TSS, Ammonia, Alpha Terpineol, Benzoic Acid, p-Cresol, Phenol, Zinc (total), pH	N/A

TABLE 4			
Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
M	Automobile Salvage Yards (SIC 5015)	TSS, , Total Recoverable Cadmium, Total Recoverable Copper , Total Recoverable Iron, Total Recoverable Lead	Total Recoverable Aluminum
N	Scrap Recycling (SIC 5093)	Total Recoverable Cadmium , Total Recoverable Copper, Total Recoverable Iron, Total Recoverable Lead, Total Recoverable Zinc, TSS.	Total Recoverable Aluminum, COD
O	Steam Electric Generating Facilities (Industrial Activity Code "SE") (only applies to facilities that use or store coal)	pH , Total Recoverable Iron	N/A
Q	Water Transportation Facilities (SIC 4449, 4489, 4493, 4499)	Total Recoverable Iron, Total Recoverable Lead, Total Recoverable Zinc, Total Phosphorus (as P)	Total Recoverable Aluminum
S	Facilities at airports that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport site that collect runoff from areas where deicing/anti-icing activities occur (SIC 4512-4581)	BOD ₅ , COD, Ammonia, pH	N/A
S	Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Ammonia as Nitrogen	N/A
U	Grain Mill Products (SIC 2041-2048)	TSS	N/A
U	Fats and Oils Products (SIC 2074-2079)	pH , Nitrate + Nitrite N, TSS	BOD ₅ , COD
Y	Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing, and Sealing Devices; Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified (SIC 3011-3069 (Rubber Products))	Total Recoverable Zinc	N/A
AA	Fabricated Metal Products Except Coating (SIC 3411-3471, 3482-3499, 3911-3915)	Total Recoverable Chromium , Total Recoverable Iron, Total Recoverable Zinc Nitrate + Nitrite N	Total Recoverable Aluminum
AA	Fabricated Metal Coating and Engraving (SIC 3479)	Total Recoverable Cadmium , Total Recoverable Zinc, Nitrate + Nitrite N.	N/A

N/A= Not Applicable

IX.B.1. Routine Analytical Monitoring (Part 6.2.1)

A routine analytical monitoring requirement is where discharges must be sampled to determine the efficacy of control measures and to assess impacts to human health and the environment. In the 2019 MSGP the majority of action levels for routine analytical monitoring are based on Arizona surface water quality standards.

For the 2019 MSGP, ADEQ followed in concept, the approach the 2015 EPA MSGP used for the derivation of routine analytical monitoring alert levels (ADEQ's former benchmark levels). The process used in the 2015 EPA permit for selecting the benchmark values for the permit is as follows: Step 1: Use EPA's final CWA section 304(a) recommended acute criterion value; and Step 2: If no EPA acute criterion exists, use the chronic EPA criterion. Therefore, based on the protected surface water, ADEQ will apply to the lowest acute standard, and if there is no acute standard, the lowest chronic standard would apply. For those parameters that did not have an acute or chronic standard for a particular protected surface water, typically the parameter was not used for routine analytical monitoring (an example of an exception to this would be TSS). If the protected surface water was a tributary and not listed in Appendix B (A.A.C. R18-11), the tributary rule (A.A.C. R18-11-105) would be used to calculate the action level (for example an unlisted tributary that is perennial or intermittent and is above 5,000 feet in elevation would use aquatic and wildlife-cold water, full body contact and or fish consumption. The system would take the lowest of applicable standard that could apply). For total phosphorus and total nitrogen the single sample maximum value would apply for discharges within 2.5 miles of surface waters listed in A.A.C. R18-11-109.F.

For those discharges to non-WOTUS protected surface waters, if the parameter includes an analysis solely for total metals, the permittee may substitute the dissolved fraction for that parameter when conducting metals sampling in Part 8 if as long as there is a SWQS in the non-WOTUS protected surface water for that parameter that is expressed as dissolved. The metals that are subject to the dissolved fraction and may have a SWQS in a non-WOTUS protected surface water include: cadmium, chromium III, copper, lead, nickel, silver and zinc. Otherwise monitoring shall be for total metals.

Because of the intermittent nature of wet weather (i.e., stormwater) discharges and the high ambient flows that generally result from precipitation events, ADEQ views acute criteria as generally more appropriate than chronic criteria in this context.

NOTE: ADEQ retained TSS as an indicator monitoring parameter in the MSGP, even though there is no Arizona surface water quality standard for TSS. Elevated TSS levels can indicate control measures are not functioning as designed, cause adverse effects for aquatic and human health, and can adversely impact downstream users.

Routine analytical action levels are not effluent limitations, and sample values above the action level are not permit violations. Rather, a sample value above an action level concentration is an indicator () to the operator that there may be a problem with the control measures, or the discharge may be adversely affecting water quality.

If a sample value is above an action level concentration, the enforceable requirement is for the discharger to examine its control measures and implement, supplement, or enhance existing controls, as necessary. The 2019 MSGP includes a requirement to submit a Control Measure Assessment Report (CMAR) after one sample event above an action level. The report must be submitted to ADEQ on a form provided by ADEQ (paper or electronic, if applicable). The report must be submitted within 30 days of receiving the laboratory analytical results. The CMAR is an opportunity to provide an explanation for the sample result, describe the modifications to control measures, or provide a reason why additional time may be needed to modify control measures. The purpose of the report is to provide a timely notification to ADEQ of a potential issue and to verify that permittee has assessed site conditions in a reasonable time frame.

Because of the variability inherent in stormwater and in stormwater control measure efficacy, ADEQ expects that stormwater controls will often need adjustment in response to indications of potential deficiencies to ensure the permit's technology-based and water quality-based limits are being met.

Routine analytical monitoring is an important feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of

Where permittees have examined their control measures and determined, considering good engineering practices, that no further pollutant reductions are technologically available and economically practicable to reduce the discharge of a pollutant, no SWPPP modifications are required (provided the permit's water quality-based effluent limits are being met).

IX.B.1.a. Changes to Routine Analytical Monitoring Requirements

The "benchmark limits" nomenclature was changed to "action levels" to better convey the intent that an exceedance of an action level requires follow up activity, namely control measure assessment, and reporting to ADEQ.

IX.B.1.a.i. Retaining TSS for Routine Analytical Monitoring at 100 mg/L

ADEQ retained the TSS action level of 100 mg/L for all sectors except D, E, and L. Sector D, E, and L TSS value remains as "reserved" until enough data is collected to establish a TSS action level.

IX.B.1.a.ii. Application of Action Levels and Numeric Effluent Limitations for the Same Pollutant

Several sectors have both routine analytical and effluent limitations guidelines that apply to the same pollutant. Specifically, five sectors in the permit have both routine analytical monitoring permit values and effluent limitations guidelines for a specific pollutant. For example, TSS in Sectors D, E, L, and O and ammonia and arsenic in Sector K. Routine analytical monitoring values apply to the entire stormwater discharge associated with industrial activity from the site whereas the effluent limitation guidelines only apply to the specific activity identified by the national effluent limitation guideline. For example, in Sector D, effluent limitations guidelines apply only to stormwater runoff from asphalt emulsion facilities, while the routine analytical monitoring apply to all stormwater discharge associated with industrial activities at the site. Routine analytical monitoring and effluent limitations guidelines are separated into different tables in Part 8 to clarify the difference between the applicability of these two sets of requirements, including contingency requirements. Numeric effluent limitation guideline monitoring is not required for discharges to non-WOTUS protected surface waters.

IX.B.1.a.iii. Requiring Hardness Data for Certain Metals

The routine analytical monitoring values, based on water quality criteria of some metals, are dependent on water hardness. The 2010 MSGP tabulated applicable hardness-dependent benchmarks using 25 mg/L hardness increments using conversion tables. For each hardness range the benchmark level was set at the upper end of that range. In the 2019 MSGP the tabulated applicable hardness-dependent action levels will use a formula to calculate the action level. The action levels for those metals requiring hardness, are automatically calculated on the e-DMR when a hardness value is entered, using myDEQ.

For any sectors required to conduct routine analytical monitoring for a hardness dependent metal (see Section 8.0), the hardness of the protected surface 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) must be analyzed in order to calculate the routine analytical monitoring action levels. The formulas used to calculate the action level for a specific metal using a hardness value, are located in individual tables at the end of A.A.C. R18-11, Appendix A, Table 2 through Table 9. The action level for that specific metal, will be the lowest formula driven (from Table 2 through 9) acute designated use that applies to that protected surface water. If no acute standard exists, the lowest chronic standard will apply.

IX.B.1.a.iv. Updating Routine Monitoring Parameters for Certain Sectors

As part of the permit reissuance process, ADEQ evaluated existing routine analytical parameters for each sector and subsector in the 2019 MSGP to assess the appropriateness of retaining these existing requirements. ADEQ has removed or added parameters based on the likelihood of the parameter being in the sector's discharge and has an Arizona surface water quality standard. Parameters that were removed included those that did not have an Arizona surface water quality standard, such as aluminum.

Electronic permitting through the myDEQ portal application will provide a listing of analytical parameters and corresponding action levels (based on the protected surface water) as a clear way to convey routine analytical monitoring requirements.

IX.B.1.a.vi. Data Evaluation – Addressing Natural Background Pollutant Levels

The permittee can justify routine analytical monitoring action level concentrations based on local natural background concentrations. For example, high natural background levels of copper in soils or groundwater could cause exceedances of a routine analytical monitoring action level. This provision for establishing natural background levels is not available for demonstrating compliance with effluent limitation monitoring (Part 6.2.2).

After monitoring and adequately determining that action levels are the result of pollutants present in the natural background, permittees must notify ADEQ of these findings and can then use natural background exception. The exception allows the permittee to stop further evaluation of the effectiveness of control measures. To do this, the permittee must document the basis for concluding that exceedances are attributable solely to natural background pollutant levels. This explanation must include any data previously collected that describe the levels of natural background pollutants in the site's protected surface waters. The full justification for this exception must be kept on-site with the site's additional documentation, and made available to ADEQ on request.

A similar exception may also be available to permittees who attribute their exceedances solely to run-on sources.

IX.B.1.b. Routine Analytical Monitoring Schedule

The routine analytical monitoring schedule is one that adapts to Arizona's climate (summer and winter wet seasons – see Section IX.A.4 of this Fact Sheet). The routine analytical monitoring requirement begins immediately after authorization to discharge is received by permittee and is required once per wet season for the duration of the permit term. Facilities must monitor for any routine analytical monitoring parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to their discharge. The industry-specific routine analytical monitoring concentrations are listed in the sector-specific sections of Part 8.

IX.B.1.d. Routine Analytical Monitoring Exceptions for Discharges to to Non-WOTUS segments of one of the eight major rivers listed in ARS 49-221(G)(1)(b) Waters or an ephemeral that may transport pollutants by stormwater to a protected surface water.

The 2019 MSGP retains the routine analytical monitoring exemption for discharges to to Non-WOTUS segments of one of the eight major rivers listed in ARS 49-221(G)(1)(b) Waters or an ephemeral that may transport pollutants by stormwater to a protected surface water waters for TSS and turbidity. When reporting to ADEQ on the electronic DMR, a no data code of *ephemeral monitoring exception* should be used instead of entering a sample value. Note: under the September 2021 permit modification the word ephemeral was removed and replaced with a non-WOTUS segments of one of the eight major rivers listed in ARS 49-221(G)(1)(b) Waters.

IX.B.2. Effluent Limitations Monitoring (Parts 6.2.2) (Applicable only to discharges to WOTUS)

Numeric effluent limitations have been included in previous versions of the MSGP, based on national effluent limitation guidelines for certain industry-specific discharges (see Part 6.2.2). Consistent with minimum monitoring requirements for AZPDES permit limits established at 40 CFR 122.44(i), monitoring for these parameters must be conducted at least once per year for the duration of permit coverage. ELG monitoring does not apply to discharges to non-WOTUS protected surface water.

The permit includes one notable change regarding effluent limitations. ADEQ has updated the requirements for Sector S to incorporate the airport deicing effluent limitation guidelines and new source performance standards established by the EPA. Airlines and airports conduct deicing operations on aircraft and airfield pavement to ensure the safety of passenger and cargo flights. In the absence of controls, deicing chemicals are widely dispersed causing pollutants to enter nearby rivers, lakes, streams, and bays. On May 16, 2012, EPA published the Airport Deicing ELG in the Federal Register to control the discharge of pollutants from airport deicing operations to surface waters. See 40 CFR Parts 9 and 449. The requirements largely apply to wastewater associated with the deicing of airfield pavement at primary airports. The rule also established New Sources Performance Standards (NSPPs) for wastewater discharges associated with aircraft deicing for a subset of new airports. Therefore, the 2019 MSGP is incorporating the requirements from the Airport ELG that are appropriate to the kinds of discharges the permit authorizes. These requirements are found in Part 8.S.8 of the permit.

The permit clarifies that permittees subject to effluent limitation guidelines are required to monitor each outfall discharging runoff, and that the flexibility to apply the substantially identical outfalls provision does not apply to effluent limitation guidelines monitoring.

Consistent with other types of effluent monitoring, the permit requires that follow-up monitoring results be reported to ADEQ through myDEQ.

IX.B.3. Monitoring Discharges to Impaired Waters (Part 6.2.3)

Part 6.2.3 of the permit clarifies provisions for discharges to water quality impaired protected surface waters. ADEQ's permit requires the permittee develop and implement a monitoring program for authorized discharges to impaired waters.

IX.B.3.a. Determine Whether the Protected Surface Water Is Impaired or Not-Attaining

As part of the NOI process in myDEQ, the permittee will be notified if any of the discharge locations are within 2.5 miles of an impaired water and or not-attaining water, and, if so, what are the pollutants identified as causing the impairment. Analytical monitoring may be required under this permit to ensure protection of the protected surface water and attainment of designated use(s). As part of the on-line NOI process, the SWPPP will be required to be submitted electronically (using myDEQ), and the corresponding review fee be included. If monitoring is required, the type, frequency, and analytical parameters will be included in the final permit authorization certificate. That information will then be used to automatically pre-populate the Electronic Discharge Monitoring Report (e-DMR) Form.

MyDEQ has been designed and coded to determine if a certain sector will likely contain the pollutant that is causing the impairment (based on the industrial activity). In this case, those parameters would be required to be monitored and SWPPP submittal required. Conversely, if the industrial activity would not likely be an additional source of the pollutant causing the impairment, the permittee would not, by default, have to sample for that impaired parameter(s) or be required to submit a SWPPP. For those permittees that had coverage under the 2010 MSGP and obtained new permit coverage within the required timeframes (Table 1-2), even though the site may be within 2.5 mile radius of an impaired water, a SWPPP would not be required to be re-submitted to ADEQ.

When developing TMDLs, ADEQ evaluates contributions from upstream segments and contributing waterbodies. As such, in some instances, upstream sources may be identified as a contributor to an impairment. Where ADEQ has reason to believe that a permitted site has the potential to cause or contribute to an impairment in a downstream water, the permittee may be required to perform

additional monitoring or adopt additional control measures to address the potential contribution to the impairment.

IX.B.3.b. Determine the Pollutant(s) of Concern

The myDEQ system will identify the pollutant(s) of concern in the final authorization certificate. Permittees are required to monitor for all of these pollutants, with a few noteworthy exceptions as discussed below. For impaired waters without a TMDL, monitoring is required only for those parameters for which a standard analytical test method in 40 CFR Part 136 exists. If a TMDL has been approved that applies to the discharge, ADEQ will determine whether there are any other monitoring specifications that are contained in the TMDL and that apply to the site, and notify the permittee of any additional requirements. If the pollutant for which the protected surface water is impaired is suspended solids, turbidity, or sediment/sedimentation, Total Suspended Solids (TSS) must be monitored. If the pollutant of concern is an indicator or surrogate pollutant, than the pollutant indicator (e.g., dissolved oxygen) must be monitored. No monitoring is required when a protected surface water's biological communities are impaired but no pollutant is specified as causing the impairment, or when a protected surface water's impairment is related to hydrologic modification, impaired hydrology, or temperature.

IX.B.3.c. Impaired Waters Monitoring Frequency

The impaired water monitoring schedule is one that adapts to Arizona's climate (summer and winter wet seasons – see Section IX.A.4 of this Fact Sheet). The impaired waters monitoring requirement begins immediately after authorization to discharge is received by permittee, and is required once per wet season for the duration of the permit term. Facilities must monitor for impaired parameters and any other parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to their discharge.

The monitoring requirements in Part 6.2.3 will provide ADEQ with further information on the impacts permitted industrial facilities have on impaired waters, and to help ensure that the facilities are not causing or contributing to the impairment and further degradation of the protected surface water.

IX.B.4. Outstanding Arizona Water Monitoring (Part 6.2.4) (Applicable only to discharges to WOTUS)

As noted earlier, when a new NOI is submitted, myDEQ will determine whether the site's discharge is within 2.5 miles of an outstanding Arizona water. Based on this determination, the parameters, frequency and type of monitoring will be included on the permit authorization certificate. The parameters to be monitored will be determined by ADEQ and will be dependent on the site's industrial activities and location relative to the OAW.

Permittees that discharge to upstream tributaries of OAWs are required to submit a copy of the SWPPP as part of the initial NOI process. Upon review of the SWPPP, ADEQ will notify the permittee if additional discharge monitoring and/or control measures are required to protect surface water quality.

The permit clarifies that permittees subject to OAW monitoring are required to monitor each outfall discharging runoff, and that the flexibility to apply the substantially identical outfalls provision does not apply to OAW monitoring.

IX.B.5. Additional Monitoring Required by ADEQ (Part 6.2.5)

As with the 2010 MSGP, the 2019 MSGP requires facilities to perform additional discharge monitoring in those instances when ADEQ determines it is necessary to ensure the protection of surface water quality. Such monitoring serves as a tool for ADEQ and the permittee to evaluate whether additional control measures are needed to protect surface water quality.

ADEQ will require additional monitoring when there is evidence that a pollutant is being discharged that is not being monitored for, and that the pollutant may be causing or contributing to exceedances of a water quality standard. In this case, ADEQ will provide in writing a brief description of

why additional monitoring is needed, locations and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

IX.C. Accelerated Monitoring (Part 6.3) (Applicable only to discharges to WOTUS)

The 2019 MSGP contains follow-up monitoring provisions for pollutants that exceed a numeric limit (ELG). This is a new requirement, designed to ensure that existing control measures are modified as necessary and, as soon as practicable to bring the site back into compliance with the effluent limitations and water quality requirements contained in the permit, and to protect human health and the environment.

While the AZPDES regulations require a minimum of annual monitoring to demonstrate compliance with applicable effluent limitations and water quality standards, the vast majority of AZPDES permits for industrial wastewater discharges require more frequent monitoring. The 2019 MSGP monitoring requirements of once per wet season are deemed appropriate for stormwater discharges in Arizona, provided the site remains in compliance with the numeric limits.

Accelerated monitoring is required for exceedances of numeric limits. Accelerated monitoring means that if a numeric limit was exceeded, the site must implement analytical monitoring for each subsequent stormwater discharge. ELG and associated accelerated monitoring do not apply non-WOTUS protected surface waters.

Accelerated monitoring is required to continue until two (2) consecutive sampling events are below the corresponding numeric limit for all pollutants.

IX.D. Exemptions or Exceptions to Analytical Monitoring

Absence of Discharge

When a storm event results in no-discharge from the site or outfall(s) during a wet season, the permittee is excused from analytical monitoring for the site or outfall(s) for that season provided. This provision applies to all monitoring types in the permit. Absence of discharge conditions do not exempt the permittee from the requirement to file a discharge monitoring report (e-DMR) form in accordance with the corresponding wet season reporting period. The permittee must document the absence of discharges in the monitoring record and retain that record within the SWPPP.

Adverse Conditions

When adverse weather conditions make sampling dangerous, the permittee may postpone analytical monitoring until the next qualifying storm event. This provision applies to weather conditions such as: lightning, flash flooding, and high winds or other unsafe conditions that result from violent weather, such as downed power lines in the immediate area where sampling would take place.

This provision is not be used as an excuse for not conducting sampling under conditions associated with more typical storm events and safe conditions. Adverse weather conditions do not exempt the permittee from the requirement to file a discharge monitoring report (e-DMR) form in accordance with the corresponding wet season reporting period.

In many cases, sampling during a subsequent non-hazardous storm event may still be possible during the reporting period. Where this is not possible, operators are still required to report the inability to monitor indicating the basis for not sampling during the reporting period. This provision applies to all monitoring types in the permit. The permittee shall document the adverse conditions in the monitoring record and retain that record within the SWPPP.

Substantially Identical

The substantially identical outfall provision provides facilities that have multiple stormwater outfalls with a means to reduce the number of outfalls that must be sampled and analyzed while still providing monitoring data that are indicative of discharges from each outfall.

This provision applies to routine analytical and impaired waters monitoring. It should be noted that ADEQ may determine that outfalls are not substantially identical and may require monitoring at the other

outfalls. The substantially identical outfalls exemption to monitoring cannot be applied to outfalls that discharge to a WOTUS, with numeric effluent limit guidelines or outfalls that discharge to OAWs. NOTE: because ELG and OAW monitoring are not required for non-WOTUS protected surface waters, the substantially identical outfalls provision can apply for those outfalls discharging to non-WOTUS protected surface waters.

Sites that invoke the substantially identical outfall provision shall comply with the requirement to file a discharge monitoring report (e-DMR) form in accordance with the corresponding wet season reporting period. The permittee must document the use of the substantially identical outfall provision exemption in the monitoring record and retain that record within the SWPPP.

Inactive and Unstaffed Sites

Inactive and unstaffed sites, provided that no industrial materials or activities are exposed to stormwater are exempt from routine analytical monitoring and impaired and not-attaining waters monitoring. These facilities could alternatively submit a No Exposure Certification (NEC), terminating permit coverage. However, ADEQ acknowledges that some facilities plan to recommence industrial activity in the future and therefore may wish to keep active permit coverage.

If a permitted site will be inactive and unstaffed, the permittee can suspend analytical monitoring. To be eligible for the suspended monitoring condition, the permittee shall update their NOI in myDEQ indicating the time period for which the site will be inactive and unstaffed. The site status cannot retroactively be made inactive and unstaffed and, as such, all monitoring conditions apply until such time as ADEQ is notified of the inactive and unstaffed status (by modifying the NOI in myDEQ).

Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI to update the status of the site. If a site becomes active, the permittee must update the NOI in myDEQ indicating the site is active and resume any monitoring requirements specified in this permit.

To qualify for this exception, permittees must maintain a signed certification with their SWPPP documentation (Part 5.6 of the permit) that indicates that the site is inactive and unstaffed, and that there are no industrial activities or materials exposed to stormwater. Permittees are not required to obtain advance approval to invoke this exception.

This provision applies to routine analytical and impaired water monitoring. The unstaffed and unstaffed exemption to monitoring provision cannot be applied to outfalls that discharge to a WOTUS, with numeric effluent limit guidelines or outfalls that discharge to OAWs. Additionally, sites that discharge to a WOTUS and are subject to accelerated monitoring (6.3) are not eligible to suspend their monitoring program due to inactive and unstaffed designation. NOTE: because ELG and OAW monitoring are not required for non-WOTUS protected surface waters, the inactive and unstaffed site provision can apply for those outfalls discharging to non-WOTUS protected surface waters.

Inactive and unstaffed sites shall comply with the requirement to file a discharge monitoring report (e-DMR) form in accordance with the corresponding wet season reporting period. The permittee must document the inactive and unstaffed site status in the monitoring record and retains that record within the SWPPP.

X. Reporting and Recordkeeping (Part 7)

This part describes the requirements for reporting and record keeping.

Reports required under this permit include:

- Inspection Report Form (to be kept with the SWPPP);
- Discharge Monitoring Report (e-DMR) – for permittees who have to conduct analytical monitoring;
- Control Measure Assessment Report – submit to ADEQ as required;
- Corrective Action Report – submit to ADEQ as required.

X.A. Reporting Monitoring Data to ADEQ

DMR and other reports and forms must be submitted to ADEQ electronically using myDEQ, if available. It is not required to submit any of the required information to EPA.

The purpose of submitting monitoring data is to document stormwater quality and identify potential water quality concerns to ADEQ. Monitoring data must be submitted electronically using the MSGP discharge monitoring report (e-DMR) form that is available through myDEQ. Electronic reporting was implemented to comply with the EPA's Electronic Reporting Rule signed on September 24, 2015.

X.A.1 Discharge Monitoring Report (DMR) Form (Part 7.1)

All permittees must enter the sampling data on the downloadable e-DMR using myDEQ within 30 days of receiving the laboratory analytical data. The myDEQ system will evaluate the sampling values and send any deficiency notifications based on the sampling results.

If the permittee has no sampling data during the reporting period because there was no discharge or another exemption to sampling applied, such as an inactive and unstaffed site, the e-DMR shall be submitted no later than July 30 (winter wet season) and November 30 (summer wet season) for each year of permit coverage. If the site is subject to a non-WOTUS protected surface water sampling exemption, NODI code 9g- ADEQ waived sampling shall be used.

X.B. Control Measure Assessment Report (Part 7.2)

The 2019 MSGP has added a Control Measure Assessment Report. The report is required when one sample result is above an action level for routine analytical monitoring. The permittee shall evaluate the cause of the sample value above an action level concentration. Within 15 days of discovery of a sample result above an action level, the permittee must:

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

Within 30 days of discovery of a sample result above an action level, the permittee shall complete and submit Control Measure Assessment Report on a form provided by ADEQ (Part 7.2). The Control Measure Assessment Report will provide ADEQ with a timely notification of an alert level exceedance and the form will verify that the permittee has assessed their control measures.

X.C. Removal of Annual Report Requirement in 2019 MSGP

ADEQ has removed the annual report requirement in the 2019 MSGP.

X.D. Removal of the Exceedance Report in 2019 MSGP

ADEQ has removed the 2010 MSGP requirement to submit Exceedance Reports and incorporated the reporting requirement into the Corrective Action Report in the 2019 MSGP. The 2019 MSGP requires notification of an unauthorized discharge to a protected surface water, any exceedance related to an effluent limitation guideline (for a discharge to a WOTUS), causing or contributing to an instream surface water quality standard, a sample value above a WLA, or the degradation of an OAW (for a discharge to a WOTUS) through the submittal of a Corrective Action Report.

The submittal of a Corrective Action Report is a new requirement and enables ADEQ to: 1) be notified when there is a condition triggering corrective action; 2) assess the potential impact of the discharges on water quality; and 3) evaluate the adequacy of the permittee's response to the unauthorized discharge and/or exceedance.

X.E. Additional Reporting (Part 7.4)

Permittees must comply with a number of different reporting requirements described throughout the permit. Reporting requirements to be submitted to ADEQ are summarized in Part 7.4 and standard reporting requirements described in Appendix B, Subsection 12.

X.F. Recordkeeping (Part 7.5)

Permittees must maintain certain records to help them assess performance of control measures and document compliance with permit conditions. These requirements are consistent with federal regulations at 40 CFR 122.41(j), but have been tailored to more closely reflect requirements of the MSGP. These include the original SWPPP and any modifications, to provide an historical record of the SWPPP and its evolution, the additional documentation, all reports and certifications required by the permit, monitoring data, and records of all data used to complete the NOI to be covered by the permit.

Permittees must retain copies of these documents for a period of at least three (3) years from the date that the permittee's coverage under the 2019 MSGP expires or is terminated. The recordkeeping requirements in Appendix B, Subsection B.12 include a more general statement of the AZPDES standard condition for records retention, but does not impose additional requirements on the permittee above what is required in Part 7.5.

X.G. Submitting Reports to ADEQ (Part 7.6)

All required documentation, including reports, must be submitted to ADEQ electronically using myDEQ, if available. If a myDEQ reporting component is not available, documents must be mailed to the following address:

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

XI. Sector-Specific Requirements for Discharges Associated with Industrial Activity (Part 8)

The changes under the September 2021 permit modification identify sections in Part 8 which certain permit conditions apply only to discharge to WOTUS, and which permit conditions do not apply for discharges to non-WOTUS protected subsurface waters. Notably, for Part 8, the discharge prohibitions, based on the technology-based effluent limitation guidelines do not apply to discharges to non-WOTUS protected surface waters, per A.R.S. § 49-255.04(B)(2). Additionally, the monitoring requirements in Part 8 were clarified for discharges to a WOTUS and discharges to a non-WOTUS protected surface waters. For sites that discharges to a WOTUS, the permittee shall comply with all applicable monitoring requirements in Part 6 and Part 8 (sector specific monitoring). For sites that discharge to a non-WOTUS protected surface water may either (1) elect to conduct analytical monitoring in accordance with Part 6 and in Part 8 sector specific routine analytical monitoring (instead if implementing control measures in the permit and sector specific measures in Part 8) or (2) implement control measures in the permit and sector specific measures in Part 8, and SWPPP requirements (instead of conducting analytical monitoring in accordance with Part 6 and Part 8 (sector specific routine analytical monitoring)).

Part 8 describes requirements specific to the particular industry sectors. The 2019 MSGP is available to facilities with stormwater discharges associated with industrial activity in 25 industry sectors (Sector A through F and Sector K through AC), as well as any discharge not covered under those sectors (Sector AD) that have been identified by ADEQ as appropriate for coverage. The sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes consistent with the definition of stormwater discharge associated with industrial activity at 40 CFR 122.26(b)(14)(i, ii, iv-ix, xi). Appendix C of the permit presents the specific information on each sector. Refer to Table 1 in Section III for the industrial sectors covered by the permit.

XI.A. Sector A – Timber Products

A new provision in Sector A has been added that allows for a pollutant credit in a discharge that is comprised only of water extracted from and returned to the same protected surface water.

A demonstration must be made that the control measures used to meet applicable technology-based standards would otherwise, if properly installed and operated, meet the limitations for the pollutant. This provision has been added to Sector A because of the effluent limitation guideline for spray down or intentional wetting of logs at wet deck storage areas, which often uses the kind of water this provision addresses.

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

The permit clarifies in Limitation of Coverage (Part 8.L.3.2) that discharges from open dumps as defined under RCRA are not authorized under this permit.

XI.C Sector O – Steam Electric Generating Facilities

This Part (Part 8.O.2) identifies the applicable industrial activities covered under Sector O. ADEQ has clarified the 2019 MSGP to exclude geothermal power generation from needing authorization to discharge stormwater under the permit. In the initial rulemaking, the definition of “stormwater discharge associated with industrial activity” did not address nor consider geothermal power generation in 40 CFR 122.26(b)(14)(vii). However, since the promulgation of the definition, the geothermal power industry has emerged and EPA has clarified that this industry was not within the scope of the original industrial definition.

XI.D. Sector S – Air Transportation Facilities

For the 2019 MSGP, ADEQ has updated the requirements for Sector S to incorporate the Airport deicing effluent limitation guidelines and new source performance standards. Airlines and airports conduct deicing operations on aircraft and airfield pavement to ensure the safety of passenger and cargo flights. In the absence of controls, deicing chemicals are widely dispersed causing pollutants to enter nearby rivers, lakes, streams, and bays. On May 16, 2012, EPA published the Airport Deicing ELG in the Federal Register to control the discharge of pollutants from airport deicing operations to protected surface waters. See 40 CFR Parts 9 and 449. ELG monitoring does not apply to non-WOTUS protected surface waters.

To provide the clarity air transportation sector representatives requested, ADEQ included clarifications on responsibilities when there are multiple operators at Air Transportation Facilities. Language updates were made the following permit sections; submittal of NOIs, SWPPP requirements, Corrective Action Requirements, and the option for Visual Assessment Alternatives.

XII. Appendices

The four appendices to the permit include:

- Definitions Abbreviations, and Acronyms;
- Standard Conditions;
- A table of sector-specific SIC codes covered by the permit; and
- Calculating hardness in protected surface waters receiving stormwater discharge for hardness dependent metals.

X.II.A. Appendix A – Definitions, Abbreviations and Acronyms

Numerous changes were made to update, remove or insert definitions, abbreviations and acronyms to incorporate non-WOTUS protected surface waters into the September 2021 permit modification and to more accurately reflect changes to the 2019 MSGP permit re-issuance.

X.II.B. Appendix B - Standard Permit Conditions

Appendix B – Standard Permit Conditions under the September 2021 permit modification include clarification for WOTUS and non-WOTUS protected surface waters for the following:

- Duty to Comply (Appendix B, Part1).
- Reporting Requirements for planned changes (Appendix B, Part 12.a)
- Requiring Coverage under an Individual Permit or an Alternative General Permit (Appendix B, Part 17).

- Request for an Individual Permit (Appendix B, Part 18).

Appendix B – Standard Permit Conditions – the standard conditions in the 2019 MSGP reissuance were essentially consistent with the standard conditions in other AZPDES general permits. However, the 2019 MSGP contains the following additional provisions and revisions which are consistent with 40 CFR 122.41:

- Include NECs under Signatory Requirements (Appendix B, Part 9).
- Validity of electronic signatures (Appendix B, Part 9.g).
- Electronic Reporting Requirements (Appendix B, Part 12.c).
- Retention of Records (Appendix B, Part 22).

X.II.C. Appendix C- Facilities and Activities Covered

Appendix C – Facilities and Activities Covered – Sectors A through F and K through AD are covered. The mineral industry of 40 CFR 122.26(b)(14)(iii) are covered in a separate MSGP (Sectors G, H, I and J).

X.II.D. Appendix D - Calculating Hardness in Protected Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals

Appendix D – Calculating Hardness in Protected Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals – Appendix D describes establishing the hardness level for an operator’s protected surface water. This appendix provides guidance to operators for determining their protected surface water’s hardness level and is calculated up to 400mg/ L to reflect hardness conditions in Arizona’s waters. The 2010 MSGP contained tables with ranges of hardness values to determine the surface water quality standard. The 2019 MSGP implements the use of a formula to calculate the surface water quality standard based on the hardness value. The change was made in response to updates in Arizona’s Surface Water Quality Standards Rule (A.A.C. R18-11 Appendix A tables 2 through 9).