

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

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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 MSGP 2010. 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 MSGP 2019 to replace the expired MSGP 2010. The permit will have a five year term; hence, it will expire five years after the permit’s effective date. 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.

All facilities on non-tribal lands in Arizona subject to the permit, including those previously covered by the MSGP 2010, must apply for coverage under ADEQ’s new MSGP within 60 calendar days from the effective date of the 2019 MSGP. 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.

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

II.A Structure and Terminology of the MSGP 2019

ADEQ has divided the permit into eight parts:

- Part 1 Permit Coverage;
- Part 2 Control Measures, Water Quality Standards and Effluent Limitations;
- Part 3 Corrective Actions;
- Part 4 Inspections;
- Part 5 SWPPP Preparation and Maintenance;
- Part 6 Monitoring;
- Part 7 Reporting and Recordkeeping Requirements; and
- Part 8 Industry Sector-Specific Conditions.

Appendices include 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 MSGP 2010

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.

Information Required for NOIs

The MSGP 2019 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 receiving water(s) the site discharges to, including the receiving water(s) status (e.g. special water) and can apply the applicable water quality standard to the discharge.

No Discharge Certification

If a site is not eligible for authorization under this permit because stormwater is not discharged to a Water of U.S., the operator may elect to 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 Water of the U.S., 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.

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 submitted 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 the Department. When electronic reporting becomes available, corrective action reporting will then be required using an established myDEQ account. The submittal of all Corrective Action Reports is a new requirement and enables ADEQ to: 1) be notified when a permit violation has occurred; 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 inspection, 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 significant changes were made to the monitoring provisions as compared to the MSGP 2010. 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 events to compare to the action level. Routine analytical monitoring will consist of a discrete sample that will be compared to Arizona surface water quality standards (with the exception of TSS which has no water quality standard). Compositing of sample results 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 numeric limits for routine analytical monitoring which were adapted from EPA's industrial stormwater permit and are based on EPA's water quality criterion. ADEQ replaced EPA's water quality criterion with Arizona surface water quality standards to represent and protect Arizona's surface waters. The resulting numeric action levels are based on the designated use of the receiving water and the most protective standard is applied where the receiving water has more than one (1) designated use. 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. For example, parameters such as BOD and COD were generally removed / substituted for a parameter that has a 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;
- The ephemeral exemption for total suspended solids (TSS) and turbidity are no longer exempt parameters if the discharge goes to an ephemeral water. The ephemeral exemption was removed in order to provide continued assessment of control measures, provide environmental protection of all receiving waters including ephemeral waters and protect downstream uses. In those cases, the surface water quality standard for ephemeral washes or the sector-specific permit limit will be applied to the discharge.
- The Total Suspended Solids (TSS) in routine analytical monitoring for Sector in D, E and L will remain as "reserved" until additional samples can be collected and evaluated.
- Follow-up monitoring requirements (accelerated monitoring) have been added when one sample result indicates a permittee's discharge exceeds a numeric limit (an action level, a water quality standard for an impaired water or OAW, exceeds a WLA, or an ELG), to verify that control measures have been modified to control the discharge as necessary to meet the effluent limitation. If, after one event, a pollutant is identified above a numeric permit limit, accelerated monitoring shall be initiated. Accelerated monitoring consists of sampling each subsequent qualifying storm event. Accelerated monitoring shall continue until two consecutive sampling events are below the corresponding numeric limit. Accelerated monitoring is required after one event above a permit standard in order to confirm or dispel the exceedance in a timely manner and to demonstrate that control measures are continuing to operate effectively.

- All types of monitoring required by the permit (routine analytical, effluent limitation guideline, impaired water(s), OAW, or ADEQ requested) 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.
- Permittees are required to enter sampling results onto the DMR within 30 days of receiving the laboratory analytical data. The electronic DMR will calculate the action level. If there is an exceedance of an action level, the DMR shall be submitted to ADEQ at that time. When the sampling data is entered onto the DMR, and the electronic DMR does not indicate a permit exceedance, the DMR shall be submitted on July 15th of the reporting period. The submittal of the DMR at the time the permit exceedance is to provide timely notification of potential sampling exceedances.
- New provisions were added enabling permittees to discontinue potential corrective action and subsequent accelerated monitoring requirements for routine analytical monitoring. To use this provision, the permittee shall: determine through sampling, the exceedance(s) are attributed to natural background concentrations; determines through sampling, run-on to the site is causing the exceedance; determines through sampling, the site is not causing or contributing to water quality standard exceedance by collecting in-stream sampling, at, above and below the outfall; complete a site-specific standard; stop or control the discharge; or obtains an Individual AZPDES Permit. Provisions were added to this demonstration to provide the permittee with additional options for determining reasons for an exceedance under routine analytical monitoring program. The demonstration can either be proposed by the permittee or may be requested by ADEQ.

Inactive and Unstaffed Sites

For those sites that invoke the inactive and unstaffed provision under the 2019 MSGP, will provide notification to ADEQ by modifying the NOI through myDEQ, within 30 days that the site has changed to inactive and staffed status, or the site has reverted back to an active and staffed status. This is to provide ADEQ with timely notification of site status as it relates to permit requirements that may be waived based on the inactive and unstaffed exemption.

Sites that qualify for the inactive and unstaffed provision under the 2019 MSGP must provide notification to ADEQ within 30 days of permit issuance, by modifying their NOI through myDEQ. This notification will provide ADEQ an updated status for the site, as it relates to any permit requirements that may be waived based on the inactive and unstaffed provision.

Inactive and unstaffed sites are required to submit electronic DMRs annually. The 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. Information regarding compliance with permit conditions will be more adequately captured in 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 the Department of issues regarding 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 waterbody that operators intend to return to the waterbody following spraying/wetting, the permit contains an allowance for credit for pollutants originally in the waterbody 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 MSGP 2019

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.

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.

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 MSGP 2019 (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 MSGP 2019, 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 MSGP 2019, 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.

If a site not eligible for authorization under this permit because stormwater is not discharged to a water of U.S., 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. ADEQ has updated the Table 2-1 in Part 2.1.2 to incorporate the Airport Deicing ELG for the discharge of urea in stormwater from deicing operations.

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. 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 authorized 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. ADEQ encourages other control measures 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 & 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 prodigious amounts as to constitute disposal and is not applied during heavy storm events, such that it is mixed with stormwater that discharges offsite. The MSGP 2019 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 waters of the US.

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 Type 1.02, 1.03, 1.04 or 1.05) or require coverage under the AZPDES DeMinimis Permit.

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 comingled 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 MSGP 2019. 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)

Discharges subject to stormwater-specific federal effluent limitations guidelines that are eligible for coverage under the permit are listed in Table 2-1 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.

New Dischargers and New Sources: Based on Water Quality Standards (Part 1.1.4.5)

This is a new section in 2019 MSGP that describes permit eligibility for the construction or operation of 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 that ADEQ determines will not meet an applicable water quality standard (i.e., discharges that will cause or contribute to a violation of a 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 meets water quality standards. ADEQ notes that while Part 1.1.4.5 is designed to specifically implement A.A.C. R18-9-A903 (40 CFR 122.4(i)), 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 meet water quality standards.

New Dischargers and New Sources to Water-Quality Impaired Waters (Part 1.1.4.6)

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. To satisfy the requirements of 40 CFR 122.4(i), an operator must complete one of the following: (a) prevent all exposure to stormwater of the pollutant(s) for which the waterbody 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 pollutant(s) for which the waterbody is impaired is not present at the site ; or (c) submit data or other technical documentation in the SWPPP along with the NOI, to support a conclusion that the discharge will meet applicable water quality standards (i.e., that pollutants of concern will not be discharged at levels that will cause or contribute to a violation of water quality standards) (A.A.C. R18-11-107.F.)

For discharges to waters without a 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 waterbody. For discharges to waters with a TMDL, the information must demonstrate that there are sufficient remaining wasteload allocations to allow for the discharge, and the existing dischargers into the segment are subject to schedules of compliance designed to bring the segment into compliance with water quality standards. 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 (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, request modifications to the SWPPP, or that the discharge is ineligible for coverage under this permit.

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 receiving water is impaired for suspended solids, turbidity or sediment/ sedimentation, a mine 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 not discharging only within the first 48 hours have elapsed 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)

Per the anti-degradation rules, coverage under the MSGP 2019 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 MSGP 2019 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 lowered 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 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 impaired waters 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 specifies that any failure to comply with the conditions of the permit constitutes a violation of the CWA. 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 MSGP and the CWA, and subsequent failure to remedy such deficiencies within the specified time periods constitutes an independent, additional violations of the permit and CWA.

IV.C. Authorization under the MSGP 2019 (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 completion and submission of a complete and accurate NOI and the receipt of the applicant's payment.

NOI Submission Deadlines (Table 1-2). 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 MSGP 2019 within 120 calendar days of the permit's date of issuance. A discussion of the Table 1-2 information follows:

- **Existing dischargers** in operation and authorized for coverage under MSGP 2010: no later than 60 calendar days from the effective date of 2019 MSGP. The operator's authorization under the MSGP 2010 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;
 - **Other eligible dischargers** in operation but not covered under MSGP 2010 or another AZPDES permit, are granted 60 calendar days from the effective date of the 2019 MSGP. Coverage begins upon the applicant's receipt of the Notice of Intent Certificate;
 - **New dischargers** commencing after issuance of the MSGP 2019, 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/ 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 seven (7) 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/ operator must submit a NOT to ADEQ within 30 calendar days after the change in site location. At least seven (7) 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/ operator must submit a NOT to ADEQ within 30 calendar days after the name change of the site. At least seven (7) 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.

Change to a NOI- The permittee is required to submit a revised (modified) NOI for the following changes to their previous NOI: site geographic coordinates, 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, receiving water, receiving 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.

If ADEQ does not receive a complete and 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, a copy of the SWPPP, along with the NOI, must be submitted to the Department. The department 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 "AZMSG—" 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 the Department 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, the Department 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 MSGP 2019, 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 MSGP 2019, 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 the Department 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.

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, the notice 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 site changes name (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;
- The site meets the requirements for a No Exposure Certification and has obtained NEC coverage; or
- The permittee obtained coverage under an individual or alternative general permit for all discharges required to be covered by an AZPDES permit; or
- There are no longer discharges of stormwater to Waters of U.S., either directly or by way of conveyance) storm sewer, street, ditch, etc).

The 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 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. NEC's 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).

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 from existing facilities, at a minimum, must 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).

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

The MSGP 2019 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 receiving 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.

VI.A.3 Water Quality-Based Effluent Limitations (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 meet applicable water quality standards (discharges must not cause or contribute to a violation of applicable water quality standards) (See Part 2.1.1);
- 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;
- Implement any additional measures that ADEQ determines are necessary to comply with applicable antidegradation requirements for discharges (see Part 2.1.1.2).

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 meet applicable water quality standards, 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, or to comply with the antidegradation requirements.

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

Each permittee is required to control its discharge as necessary to not cause or contribute to an exceedance of applicable 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 to not cause or contribute to an exceedance of water quality standards in the receiving water body. If the permittee becomes aware, or ADEQ determines, that the discharge causes or contributes to a water quality standards 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 meet applicable water quality standards.

VI.A.3.2 Existing Discharge to an Impaired Water with an Approved TMDL (Part 2.1.1.1.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 meet water quality standards (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 meet applicable water quality standards, 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 2.1.1.1.c.)

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.

VI.A.3.5 Tier 2 Antidegradation Requirements for New Discharges, New Sources or Increased Discharges (Part 2.1.1.2)

This section applies to new dischargers, new sources, and existing permittees that discharge to tributaries of OAWs.. These added protections are included in Part 1.1.4.7 and require demonstrations in order to discharge to OAWs; and Part 6.2.4 which requires additional monitoring for discharges to OAWs.

For antidegradation purposes, permittees must implement any additional measures that ADEQ determines are necessary to comply with the permit's WQBEL, including the applicable state or federal antidegradation requirements (A.A.C. R18-11-107.01.C). ADEQ may also, per the applicable antidegradation policy, notify permittees that they cannot be covered under the MSGP due to the unique characteristics of the discharge or the receiving waters, and that they must apply for an individual permit. If ADEQ does not notify a permittee that additional measures are needed to ensure compliance with antidegradation requirements, the permittee is authorized to discharge under the permit. New dischargers to waters designated as Tier 3, as defined in 40 CFR 131.12(a)(3), are not eligible for coverage under the 2019 MSGP and must apply for an individual permit.

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

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 waters of the U.S. and meeting applicable limits.

The broader term "Control measures" has replaced "best management practices" and "BMPs" in the MSGP 2019. This change was adopted to better describe the range of pollutant reduction practices that may be employed, whether they are structural, non-structural or procedural. In addition, the definition of "control measures" in Appendix A of the permit includes both BMPs and "other methods" used to prevent or minimize the discharge of pollutants to receiving waters. The greater breadth of meaning of control measures versus BMPs is why ADEQ uses this term in Part 2.1, and throughout the permit.

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 a violation of water quality standards.

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 and 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. If operators find their control measures

are not minimizing pollutant discharges adequately, the control measures must be modified in accordance with Section 3.0 corrective action requirements.

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 and water quality standards in the permit. 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 receiving 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.

Non-Numeric Technology-Based Effluent Limits (Part 2.2.1.2)

The MSGP requires permittees 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. The requirements in Part 2 are the effluent limits applicable to all discharges associated with industrial activity for all sectors, while additional sector-specific effluent limits are found in Part 8.

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)

This section requires permittees to comply with any applicable federal effluent limitations guidelines. The following describes where these limits can be found in the permit. The following table corresponds to Table 2-2 in the permit.

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 release or discharge from the site (e.g., non-stormwater discharge not authorized by this or another AZPDES permit to a water of the U.S.);
- The permittee becomes aware, or ADEQ determines, that the site's discharge causes or contributes to an exceedance of applicable water quality standard(s) in the receiving water (Part 2.1.1);
- A discharge from the site to water listed as not-attaining (or to an upstream tributary within 2.5 miles) exceeds a waste load allocation (WLA) for the pollutant(s) causing the impairment (Part 2.1.1.1);
- A discharge from the site to an impaired water (or to an upstream tributary within 2.5 miles) exceeds an applicable surface water standard for the pollutant(s) causing the impairment (Part 2.1.1.1) (see Part 6.2.3 for exceptions);
- A discharge from the site to an Outstanding Arizona Water (or to an upstream tributary within 2.5 miles) exceeds the applicable surface water quality standard (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.

Permittees are required to review and revise the selection, design, installation, and implementation of their control measures when any of the conditions described below has occurred.

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 to ADEQ on a form prescribed by the Department. If electronic reporting becomes available, the CAR must be submitted electronically.

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). 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 the 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.

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 inexpensive means 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. 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).

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 the Department 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 that 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.

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

Part 5.1 of the permit contains the required elements to be documented in the SWPPP; however, sector-specific SWPPP documentation requirements are also included in Part 8 of the permit.

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 readily available on the Departments or other stormwater websites to assist permittees with developing a SWPPP that complies with this permit.

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 (Part 5.1.1)

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 (Part 5.1.2)

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 receiving 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 also must 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, so these areas need to 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) must 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, 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 to 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 support such a claim.

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 for information 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 to 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, a State, or a local stormwater agency (e.g., MS4 operator) at the time of an on-site inspection or upon request. Part 5.3 also indicates that ADEQ may otherwise request the permittee to submit copies of SWPPP documents with 14 calendar days.

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 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 shall submit a complete and up-to-date copy of the SWPPP to the Department in response to the following criteria:

- The site is located within 2.5 miles of a special water;
- 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 receiving 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;
- 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 SWPPP's 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 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 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.

IX. Analytical Monitoring Program (Part 6)

The analytical monitoring incorporated into ADEQ's 2019 industrial stormwater permit is intended to close gaps in previous permit terms that failed to provide adequate response for discharges of pollutants, as well as provide a clear path for response and mitigation.

Due to Arizona's arid 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,
- Effluent Limitation Guideline (ELG) monitoring, and
- Special waters monitoring (impaired waters, not-attaining waters, and Outstanding Arizona Waters)

Also due to the infrequency and variability of stormwater discharges in Arizona's arid climate, ADEQ does not allow for averaging of four monitoring events. Many facilities in Arizona report that it is not uncommon to go one or more years before there is storm event that results in a discharge. Retaining analytical data over one or more years to average sample results does not provide a timely response to pollutants being discharged from the site. ADEQ's

2019 industrial stormwater permit aims to promote timely response to the discharge of pollutants that may impact human health or the environment.

A key component to timely response is to assess existing control measures for exceedances of alert levels. ADEQ instituted Arizona Surface Water Quality Standards in the 2019 industrial stormwater permit. The Arizona SWQS replace EPA's surface water quality criteria utilized as "benchmarks," also used in ADEQ previous permit term. ADEQ replaced the EPA water quality criteria to more accurately represent and protect Arizona's receiving waters.

Similar to other environmental programs (solid waste, air quality, safe drinking water, etc.) ADEQ implemented additional monitoring and reporting when numeric limit is exceeded. ADEQ's 2019 industrial stormwater permit requires "accelerated monitoring" if a numeric limit is exceeded (ELG, alert level, waste load allocation, etc.). 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 receiving 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);
- Impaired waters (including not-attaining waters);
- Outstanding Arizona Waters; 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. Whereas the federal MSGP 2015 requires much of the monitoring to be conducted by calendar quarter or calendar year, ADEQ has established a winter and summer “wet season” for monitoring in the permit.

The monitoring requirement begins immediately after authorization to discharge received by permittee. 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, the Department 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, unlike the 2010 MSGP that gave some allowances to cease monitoring after a number of sampling events (e.g. former benchmark and impaired waters monitoring). 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 value to determine compliance with the permit limit. The routine analytical sample will consist of a single discreet sample for comparison to the permit standard. The change was implemented because the averaging of a sample value over time did not address acute nature of stormwater impacts and could be months, possibly up to year between storm events before an averaged value was calculated to compare to the numeric permit limit.

In the previous 2010 MSGP, benchmark limits were at, above, or below Arizona’s water quality standards, at the Federal water quality criterion, or some parameters had no applicable Arizona water quality standard. When comparing the results to the previous permit limits, it is unclear how to interpret the impact to surface water based on those limits. In the 2019 MSGP,

the permit limit for routine analytical monitoring is set at Arizona surface water quality standards. This is to be protective of the specific receiving water that receives the stormwater discharge and to assess a correlation between pollutant concentrations and whether or not, the site maybe causing or contributing to an exceedance of a water quality standard.

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 aluminum. 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 included. This will provide more meaningful data relative to pollutants associated with industrial activities and their impacts to surface water.

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 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. The first 30 minutes of the discharge is also the time when receiving stream flows are the lowest during wet weather events and thereby presents the greatest potential pollutant impacts to aquatic species. 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.

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, the Department 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 with the numeric effluent limitations 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. Records.

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:

- General Analytical Monitoring (see Part 6.2.1);
- Effluent limitations monitoring (see Part 6.2.2);
- Impaired and Not-Attaining waters monitoring (see Part 6.2.3);
- Outstanding Arizona Waters monitoring (see Part 6.2.4) 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).

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

Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
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
E	Cement Manufacturing Facility, Material Storage Runoff: Any discharge composed of runoff that derives from the storage of materials including raw 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 Chromium IV , Total Recoverable Copper, Total Recoverable Iron, Total Recoverable Zinc	Total Recoverable Aluminum

Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
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
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

Industry sector	Industry sub-sector	Required parameters for analytical monitoring in 2019 MSGP	Parameter Removed in 2019 MSGP
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

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

A routine analytical value is a numeric monitoring requirement 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 numeric action level for routine analytical monitoring is the Arizona surface water quality standard. Routine analytical monitoring standards are not effluent limitations, and exceedances of these values are not necessarily permit violations. Rather, exceedance of a routine analytical value is an indicator (an action level warning) to the

operator that there may be a problem with the control measures, or the discharge may be adversely affecting water quality.

If an action level is exceeded, 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 implement accelerated monitoring (Part 6.3) upon the exceedance of an action level for the purpose of confirming or denying the exceedance, and assessing potential impacts to human health and the environment.

New provisions were added enabling dischargers to eliminate corrective action and subsequent accelerated monitoring requirements for routine analytical monitoring. If the permittee or ADEQ determines that additional control measures are not feasible, the permittee must do one or more of the following:

- Provide a demonstration that the exceedance(s) are attributed to natural background concentrations;
- Demonstrate that run-on to the site is causing the exceedance;
- Demonstrate the discharge is not causing or contributing to a water quality standard exceedance by collecting in-stream sampling, above and below the outfall;
- Complete a site-specific standard;
- Eliminate the discharge; or
- Obtain individual permit coverage.

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 controls in meeting the permit's effluent limits. An exceedance of a routine analytical monitoring value provides permittees with an indication that the site's controls may not be sufficiently controlling pollutants in stormwater, and that modifications may be necessary.

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).

To further the understanding of the correlation between stormwater pollutant discharges and ambient water quality, and to assess the state of the science of stormwater management, EPA commissioned a study with the National Research Council (NRC). The NRC report of the study was not available at the time of ADEQ's industrial stormwater permit reissuance process. ADEQ will assess the finding of the study and may incorporate any recommendations into this permit in the future.

IX.B.1.a. Changes to Routine Analytical Monitoring Requirements (Part 6.2.1.1)

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 accelerated monitoring, 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 value 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 limit.

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.

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 is set at the upper end of that range. In the MSGP 2019 permittees are required to use formula using a hardness value, for certain metals. This change was made to be consistent with Surface Water Quality Rule update. The permit limits for those metals requiring hardness, are automatically calculated on the DMR when a hardness value is entered, using myDEQ.

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 being in the sector’s discharge and has an Arizona surface water standard. Parameters that were removed included those that did not have an Arizona surface water quality

standard, such as aluminum. The parameters permit value will be compared to the lowest designated use for that applicable receiving water.

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

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

The permit includes an option for permittees to justify routine analytical exceedances 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 value. This provision for establishing natural background levels is not available for demonstrating compliance with effluent limitation monitoring (Part 6.2.2) or impaired water monitoring (Part 6.2.3).

After monitoring and adequately determining that exceedances are the result of pollutants present in the natural background, permittees must notify ADEQ of these findings to claim the natural background exception. The exception allows the permittee to by-pass the requirement for further evaluation of the effectiveness of control measures and to discontinue further accelerated sampling. 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 receiving 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. This exception is available after an appropriate number of run-on samples have been collected, and receiving guidance and approval from ADEQ.

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 Ephemeral Waters

The MSGP 2019 no longer contains a monitoring exemption for discharges to ephemeral waters. All permittees must sample the required parameters, regardless of the water body type. ADEQ removed the exception to monitoring for TSS and turbidity if the discharge is to ephemeral washes because ephemeral washes contribute flow to downstream waters.

IX.B.2. Effluent Limitations Monitoring (Parts 6.2.2)

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 twice each year for the duration of permit coverage.

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 (NSPSs) 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 receiving waters.

As noted earlier, ADEQ's permit requires the permittee to develop and implement a monitoring program for authorized discharges to impaired waters.

IX.B.3.a. Determine Whether the Receiving Waterbody Is Impaired or Not-Attaining (Part 6.2.3.)

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 receiving 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 Discharge Monitoring Report (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 the Department.

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.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 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 receiving water.

IX.B.4. Outstanding Arizona Water Monitoring (Part 6.2.4)

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 OAWs are required to submit a copy of the SWPPP 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 receiving water quality.

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

As with the MSGP 2010, the MSGP 2019 requires facilities to perform additional discharge monitoring in those instances when ADEQ determines it is necessary to ensure the protection of receiving water quality. Such monitoring serves as a tool for the Department and the permittee to evaluate whether additional control measures are needed to protect receiving 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 is causing or contributing to exceedances of a water quality standard. In this case, the Department will provide in writing, the appropriate site with 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)

The 2019 MSGP contains follow-up monitoring provisions for pollutants that exceed a numeric limit (action level, ELG, WLA, etc.). 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 and water quality standards. However, more frequent monitoring is appropriate in the event a numeric limit is exceeded.

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 discharge.

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

Note- an exceedance of a numeric effluent limitation or applicable water quality standard for an impaired water and OAW, and or an exceedance of a TMDL/ WLA does warrant corrective action as described in Part 3.1. The permittee shall submit a Corrective Action Report to the Department within 30 days of discovering a sampling exceedance occurred (see Part 3.3).

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 (DMR) form in accordance with the corresponding reporting period. The permittee must document the absence of discharge in the monitoring record and retains 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 to 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 (DMR) form in accordance with the corresponding reporting period.

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 water 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 with numeric effluent limit guidelines or outfalls that discharge to OAWs.

Sites that invoke the substantially identical outfall provision shall comply with the requirement to file a discharge monitoring report (DMR) form in accordance with the corresponding reporting period. The permittee must document the use of the substantially identical outfall provision exemption in the monitoring record and retains 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 for more than six (6) consecutive months, 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 in 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, after a six (6) month (or longer) period of inactive and unstaffed status, 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 with numeric effluent limit guidelines or outfalls that discharge to OAWs. Additionally, sites that are subject to compliance monitoring (6.3) are not eligible to suspend their monitoring program due to inactive and unstaffed designation.

Inactive and unstaffed sites shall comply with the requirement to file a discharge monitoring report (DMR) form in accordance with the corresponding 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 submitting monitoring data to ADEQ to document stormwater quality and identify potential water quality concerns. Monitoring data must be submitted to document stormwater quality and identify potential water quality concerns to ADEQ. Reports required under this permit include:

- Inspection report form (to be kept with the SWPPP)
- Discharge Monitoring Report (DMR) – for permittees who have to conduct analytical monitoring, submit electronically after each monitoring event
- Control Measure Assessment Report – submit to ADEQ as required
- Corrective Action Report – submit to ADEQ as required

X.A. Reporting Monitoring Data to ADEQ

Permittees must comply with reporting requirements required by this permit. All applications (i.e., notices of intent, notices of termination, no exposure, permit eligibility determinations, DMR forms and other reports and forms must 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 (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)

The purpose of submitting monitoring data is to document stormwater quality and identify potential water quality concerns to ADEQ. Monitoring data must be submitted using the MSGP discharge monitoring report (DMR) form that is electronically available using myDEQ.

All permittees must enter the sampling data on the downloadable DMR using myDEQ within 30 days of receiving the laboratory analytical data. Once entered onto the DMR, the permittee shall upload and submit the DMR. The myDEQ system will evaluate the sampling values and send any deficiency notifications based on the sampling results. The permittee shall comply with any subsequent monitoring or reporting based on the DMR deficiency report(s).

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 eDMR shall be submitted no later than July 15 of each year of permit coverage (for reporting period June 1 to May 31).

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

The 2019 MSGP has added a Control Measure Assessment Report. The report is required when a sample result is above an action level for routine analytical monitoring. The permittee shall implement accelerated monitoring (Part 6.3), and evaluate the cause of the exceedance of the action level. Within 15 days of discovery of a sample result above an action level, the permittee shall:

- Assess the existing control measures to ensure the control measures are properly maintained and appropriate for reducing pollutant discharges;
- Identify circumstances that lead to the 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 the Department (Part 7.2). The Control Measure Assessment Report will provide the Department with a timely notification of an alert level exceedance (an indicator warning) and the form will verify that the permittee has assessed their control measures based on the initial warning.

The exceedance of a routine analytical monitoring action level does not necessarily constitute a permit violation. Failure to implement a control measure assessment and take action to remedy the problem, constitutes a violation of this permit.

When the sampling result for a routine analytical value exceeds an action level for two or more events under accelerated monitoring (Part 6.3), and the permittee, or ADEQ determines, that further pollutant reduction is not feasible, the permittee shall consider one or more of the following options:

- The permittee shall determine through stormwater sampling, the exceedance(s) are attributed to natural background concentrations. A minimum of two background stormwater samples (separate events) shall be collected in areas of the site unaffected by the industrial activities or materials at or where clean and unimpacted stormwater leaves the site. Background samples do not need to be collected concurrently with other sampling required by this permit, but is preferred.
- The permittee determines through stormwater sampling, run-on to the site is causing the exceedance. A minimum of two samples shall be collected from run-on (separate storm events) in areas of the site where stormwater run-on is occurring, prior to comingling with other discharges.
- The permittee determines through sampling, the site is not causing or contributing to a water quality standard exceedance by collecting in-stream sampling, at, above and below the outfall;
- The permittee can make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limitations or are necessary to meet the water-quality-based requirements;
- The permittee completes a site-specific standard;
- The permittee stops or controls the discharge; or
- The permittee obtains an Individual AZPDES Permit.

This evaluation is required to address and investigate the cause of the continued alert level exceedances that may adversely impact surface water quality.

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

ADEQ has removed the annual report requirement in this permit.

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 any exceedance related to an effluent limitation guideline, or exceedance of a numeric surface water quality standard to notify the Department 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 permit violation; 2) assess the potential impact of the discharges on water quality; and 3) evaluate the adequacy of the permittee's response to the 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 the Department 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 MSGP 2019 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
Surface Water Permits
1110 West Washington Street
Phoenix, Arizona 85007

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

Part 8 describes requirements specific to the particular industry sectors. The MSGP 2019 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 has 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.

Except for the changes to the monitoring requirements described in Section IX of this Fact Sheet and the changes to individual sectors listed below, the general format and requirements in the sector-specific parts of the permit (Part 8) are similar to the MSGP 2010. The following is a summary of sector-specific changes made in this permit term.

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 waterbody.

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 surface waters. See 40 CFR Parts 9 and 449.

To provide the clarity air transportation sector representatives requested, ADEQ included a new part in Sector S that enumerates the responsibilities and options when there are multiple operators (Part 8.S.3 Multiple Operators at Air Transportation Facilities). In addition to the NOI requirement for all operators, the new clarifying language explains what the collaboration may be between the airport authority and airport tenants regarding permit compliance responsibilities. One area needing more detail involves SWPPP generation. As in all previous MSGPs, a single comprehensive SWPPP must be developed for all stormwater discharges associated with

industrial activity at the airport. Part 8.S.3.3 explains that the comprehensive SWPPP should be developed collaboratively by the airport authority and tenants, but when an airport operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. The SWPPP must clearly identify all operators' individual contributions and compliance responsibilities, and all operators must sign and certify the SWPPP per Part 5.2. This Part further clarifies that the MSGP's requirements can be complied with by a) the airport authority for itself; or b) the airport authority on behalf of its tenants; or c) tenants for themselves. Communication procedures between operators must be included in the SWPPP to ensure permit compliance.

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 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 more accurately reflect the 2019 MSGP.

X.II.B. Appendix B

Appendix B – Standard Permit Conditions – the standard conditions in the MSGP 2019 are essentially consistent with the standard conditions in other AZPDES general permits. However, the MSGP 2019 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

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

Appendix D – Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals – Appendix D describes establishing the hardness level for an operator's receiving water. This appendix provides guidance to operators for determining their receiving 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 implement the use of a formula to calculate the surface water quality standard based on the hardness value. The change was made to reflect the updates made to Surface Water Quality Standards Rule.

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