

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the reissuance of the AZPDES permit listed below. This facility is a multi-unit electric power generating plant with a combined net output for the discharging units of approximately 365 megawatts and is considered a major facility under the AZPDES program. The discharge limitations contained in this permit will maintain the Water Quality Standards listed in Arizona Administrative Code (A.A.C.) R18-11-101 *et seq.* This permit is proposed to be issued for a period of 5 years.

I. PERMITTEE INFORMATION	
Permittee's Name:	Arizona Public Service Company (APS)
Permittee's Mailing Address:	P.O. Box 53933, Mail Station 4120 Phoenix, AZ 85072-3933
Facility Name:	West Phoenix Power Plant
Facility Address or Location:	4606 West Hadley Street Phoenix, AZ 85043
County:	Maricopa
Contact Person(s): Phone/e-mail address	Thomas Livingston, Plant Manager (602) 250-4760 / Thomas.Livingston@aps.com
AZPDES Permit Number:	AZ0023159
Inventory Number:	501828
LTF Number:	105783

II. STATUS OF PERMIT(s)	
AZPDES permit applied for:	Renewal
Date application received:	10/8/2024
Date application was determined administratively complete:	10/17/2024
Previous permit expiration date:	4/7/2025

208 Consistency:

In accordance with A.A.C. R18-9-A903(6), a permit cannot be issued for any discharge inconsistent with a plan or plan amendment approved under section 208(b) of the Clean Water Act.

208 Plan consistency is not required for industrial facilities.

APS has the following permits issued by ADEQ applicable to the West Phoenix Power Plant:		
Type of Permit		
Aquifer Protection Permit (APP)	P501828	Regulates discharges to the local aquifer

III. GENERAL FACILITY INFORMATION	
Type of Facility:	Natural gas-fueled electric power generating plant (Private).
Facility Location Description:	North of W. Buckeye Road and east of 47 th Avenue, next to the Salt River Project (SRP) Irrigation Lateral Canal 16.4, a Phoenix Area Canal. The facility is approximately two miles north of the Salt River.
Nature of facility discharge:	<p>There are seven generating units including five combined cycle units and two simple cycle turbines. The “sanding water” discharge is groundwater from five on-site production wells. The five production wells provide water for facility operations (Wells 1, 6, 7, 8, and 9). The power plant uses groundwater to provide make-up water for facility operations. Upon startup of the wells, “sanding water” is discharged for a short period of time. The industrial wastewater comes from the cooling tower blowdown and low volume wastes.</p> <p>Internal Outfall I-001 meets the criteria as a Significant Industrial User (SIU) NAICS code 221112 – Fossil Fuel Electric Power Generation, and is consequently subject to Effluent Limitations Guidelines (ELG) outlined in 40 CFR Part 423.</p>
Average flow per discharge:	<p>The application indicates that for the existing permit term, the long-term average flow per discharge from Outfall 005 was 0.002 MGD, with a daily maximum discharge of 0.275 MGD. All discharges were made up of sanding water.</p> <p>There were no discharges from Internal Outfall I-001 to Outfall 005.</p>
Continuous or intermittent discharge:	Intermittent
Discharge pattern summary:	Discharge flow records submitted during the existing permit term indicate that the facility discharges 1–2 days per week.
<p>The APS West Phoenix Power Plant is authorized to discharge industrial wastewater to the City of Phoenix sanitary sewer under Class A Wastewater Discharge Permit No. 2311-1240 issued October 13, 2023. The renewal of the AZPDES permit continues to provide an alternative disposal method for the industrial wastewater if the sanitary sewer discharge is not available.</p>	

IV. RECEIVING WATER	
<p>The State of Arizona has adopted water quality standards to protect the designated uses of its surface waters. Streams have been divided into segments and designated uses assigned to these segments. The water quality standards vary by designated use depending on the level of protection required to maintain that use.</p>	
Receiving Water (Federal):	The Water of the U.S. Protected Surface Water (WOTUS PSW) for facility/ outfall is Salt River Project (SRP) Irrigation Lateral Canal 16.4, a Phoenix Area Canal (Below municipal WTP intakes and all other locations). This is a surface water listed in A.A.C. R18-11 Appendix B.

IV. RECEIVING WATER (CONTINUED)	
River Basin:	Middle Gila River Basin
Outfall Location(s):	Outfall 005: Township 1N, Range 2E, Section 23 Latitude 33° 26' 25" N, Longitude 112° 09' 37 W Internal Outfall I-001: Township 1N, Range 2E, Section 23 Latitude 33° 26' 31" N, Longitude 112° 09' 30" W
Designated uses for the receiving water listed above:	Agricultural Irrigation (Agl) Agricultural Livestock watering (Agl)
Is the receiving water on the 303(d) list?	No, and there are no TMDL issues associated.
Given the uses stated above, the applicable narrative water quality standards are described in A.A.C. R18-11-108, and the applicable numeric water quality standards are listed in A.A.C. R18-11-109 and in Appendix A thereof. There are two standards for the Aquatic and Wildlife uses, acute and chronic. In developing AZPDES permits, the standards for all applicable designated uses are compared and limits that will protect for all applicable designated uses are developed based on the standards.	

V. DESCRIPTION OF DISCHARGE		
Because the facility is in operation and discharges have occurred, discharge monitoring data are available. The following is the measured discharge quality reported in the application.		
Parameters	Units	Maximum Daily Discharge Concentration
Biochemical Oxygen Demand (BOD)	mg/L	15
Total Suspended Solids (TSS)	mg/L	251
Boron	µg/L	120
Chromium, Total	µg/L	80
Selenium	µg/L	0.88
Zinc	µg/L	14
pH	S.U.	8.22

VI. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT	
Date of Most Recent Inspection:	1/10/2023; no potential violations were noted as a result of this inspection.
Discharge Monitoring Reports (DMR) Reviewed:	10/2020 through 9/2024
Lab Reports Reviewed:	8/2020 through 7/2024

VI. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT (CONTINUED)	
DMR Exceedances:	No other exceedances were noted.
Notice(s) of Violation (NOV) Issued:	None
NOVs Closed:	N/A
Formal Enforcement Action(s):	None

VII. PROPOSED PERMIT CHANGES			
The following table lists the major changes from the previous permit in this permit.			
Parameter	Existing Permit	Proposed Permit	Reason for Change
Noncompliance Reporting Hotline	(602) 771-2330	Noncompliance resulting in imminent threat to human health or the environment must be reported to (602) 771-2330, while all other noncompliance must be reported to (602) 771-1440.	Routing emergency calls to the emergency hotline, but all other calls to a non-emergency number.
Reporting Location for Discharge Characterization (DC) Monitoring	Submit results through DMRs	Report results on the DC Monitoring Data Sheet Excel form provided by ADEQ and submit annually to azpdes_data@azdeq.gov by January 28 th following each annual reporting period. See Part I.D.2 and Part II.B.3 of permit. Laboratory reports for DC monitoring shall be submitted through myDEQ with the last DMR of the calendar year. See Part II.B.3.b. of the permit.	ADEQ is implementing this new procedure to facilitate data analysis by ADEQ and reporting by permittees. Outcomes include expedited data processing and improved data quality review, per ADEQ Surface Water Protection Quality Assurance Program Plan (2022).
Sufficiently Sensitive Test Methods and Limit of Quantitation (LOQ) Reporting Requirements	Limited explanation of analytical requirements for LOQ	Analytical test sensitivity requirements are specified in the footnotes of Part I Tables 1-2 of the permit and associated definitions in Appendix A. Part B. The requirement to use sufficiently sensitive test methods is specified in Part II.A.5.	The Limit of Quantitation (LOQ) must be low enough to allow comparison of the results to the applicable water quality standards (WQS) to be protective of the receiving water designated uses. New language clarifies the requirement that parameters must be analyzed using sufficiently sensitive test methods in accordance with 40 CFR 136.1(c).

VII. PROPOSED PERMIT CHANGES (CONTINUED)			
Free Available Chlorine (FAC)	Limit only	DC monitoring required and limit remains in the permit	Monitoring required to assess if parameters are present in the discharge and at what level.
DC monitoring for Outfall 005 and Internal Outfall I-001	Minimal monitoring required for Outfall 005 only.	DC monitoring required for Outfall 005 and Internal Outfall I-001.	Monitoring required to assess if parameters are present in the discharge and at what level. Additionally, monitoring for EPA's priority pollutants is required based on applicable federal Effluent Limitation Guidelines (ELGs).
<p>Anti-backsliding considerations — “Anti-backsliding” refers to statutory (Section 402(o) of the Clean Water Act) and regulatory (40 CFR 122.44(l)) requirements that prohibit the renewal, reissuance, or modification of an existing NPDES permit that contains discharge limits, permit conditions, or standards that are less stringent than those established in the previous permit. The rules and statutes do identify exceptions to these circumstances where backsliding is acceptable. This permit has been reviewed and drafted with consideration of anti-backsliding concerns.</p> <p>No limits have been removed from the permit. Limits are retained in the permit for parameters where reasonable potential (RP) for an exceedance of a standard continues to exist or is indeterminate. In these cases, limits will be recalculated using the most current Arizona Water Quality Standards (WQS). If less stringent limits result due to a change in the WQS then backsliding is allowed in accordance with 303(d)(4) if the new limits are consistent with antidegradation requirements and the receiving water is in attainment of the new standard; see Section XII for information regarding antidegradation requirements.</p>			

VIII. DETERMINATION OF DISCHARGE LIMITATIONS and ASSESSMENT LEVELS
When determining what parameters need monitoring and/or limits included in the permit, both technology-based and water quality-based criteria were compared and the more stringent criteria applied.
<p>Technology-based Limitations: As outlined in 40 CFR Part 423 and incorporated by reference in A.A.C. R18-9-A905(A)(9):</p> <p>The industrial discharge from the APS West Phoenix Power Plant is subject to the requirements specified under 40 CFR 423, Steam Electric Power Generating Point Source Category. This section applies to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas). This part applies to discharges associated with both the combustion turbine and steam turbine portions of a combined cycle generating unit.</p> <p>The regulations found at 40 CFR Part 423 require that steam power generating plants achieve specified treatment standards for pH, total suspended solids (TSS), oil and grease, free available chlorine (FAC), chromium (total), and zinc based on the type of treatment technology available. Therefore, technology-based effluent limitations (TBELs) have been established in the permit for these parameters:</p> <p>40 CFR 423.12(b)(1) establishes that the pH of all discharges, except once through cooling water, shall be within the range of 6.0 – 9.0.</p>

Technology-based Limitations (CONTINUED):

40 CFR 423.12(b)(2) and 40 CFR 423.13(a) establish that there shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid.

40 CFR 423.12(b)(3) establishes discharge limitations applicable to the quantity of pollutants discharged from low volume waste sources. The following limitations represent the degree of discharge reduction attainable by the application of the best practicable control technology currently available (BPT):

<u>Parameter</u>	<u>Maximum for any 1 day</u>	<u>Average of daily values for 30 consecutive days</u>
TSS	100.0 mg/L	30.0 mg/L
Oil and Grease	20.0 mg/L	15.0 mg/L

40 CFR 423.12(b)(7) and 40 CFR 423.13(d)(1) establish discharge limitations applicable to the quantity of pollutants discharged in cooling tower blowdown. The following limitations represent the degree of discharge reduction attainable by the application of the best practicable control technology currently available (BPT):

<u>Parameter</u>	<u>Maximum concentration</u>	<u>Average concentration</u>
Free Available Chlorine (FAC)	0.5 mg/L	0.2 mg/L

40 CFR 423.12(b)(8) establishes that free available chlorine may not be discharged from any unit for more than two hours in any one day.

40 CFR 423.13(d)(1) establishes discharge limitations application to the quantity of pollutants discharged in cooling tower blowdown. The following limitations represents the degree of discharge reduction attainable by the application of the best available technology economically achievable (BAT):

<u>Parameter</u>	<u>Maximum for any 1 day</u>	<u>Average of daily values for 30 consecutive days</u>
Chromium, total	0.2 mg/L	0.2 mg/L
Zinc	1.0 mg/L	1.0 mg/L

No detectable amount of any of the 126 priority pollutants may be contained in any chemical added for cooling tower blowdown except for chromium and zinc at the maximum levels listed above.

Water Quality-Based Effluent Limitations: As outlined in A.A.C. R18-11-109 and Appendix A:

Per 40 CFR 122.44(d)(1)(ii), (iii) and (iv), discharge limits must be included in the permit for parameters with “reasonable potential” (RP), that is, those known to be or expected to be present in the discharge at a level that could potentially cause any applicable numeric water quality standard to be exceeded. RP refers to the possibility, based on the statistical calculations using the data submitted, or consideration of other factors to determine whether the discharge may exceed the Water Quality Standards. The procedures used to determine RP are outlined in the *Technical Support Document for Water Quality-based Toxics Control (TSD)* (EPA/505/2-90-001). In most cases, the highest reported value for a parameter is multiplied by a factor (determined from the variability of the data and number of samples) to determine a “highest estimated value”. This value is then compared to the lowest applicable Water Quality Standard for the receiving water. If the value is greater than the standard, RP exists and a water quality-based effluent limitation (WQBEL) is required in the permit for that parameter. RP may also be determined from BPJ based on knowledge of the treatment facilities and other factors. The basis for the RP determination for each parameter with a WQBEL is shown in the tables below.

For a number of other pollutants, Discharge Characterization (DC) monitoring is required at a lesser frequency and without established numeric limits (Tables 2.a. – 2.c. in the permit). See discussion under “Discharge Characterization” below for further details.

Water Quality-Based Effluent Limitations (CONTINUED):

The proposed permit limits were established using a methodology developed by EPA. Long Term Averages (LTA) were calculated for each designated use and the lowest LTA was used to calculate the average monthly limit (AML) and maximum daily limit (MDL) necessary to protect all uses. This methodology takes into account criteria, discharge variability, and the number of observations taken to determine compliance with the limit and is described in Chapter 5 of the TSD. Limits based on A&W criteria were developed using the “two-value steady state wasteload allocation” described on page 99 of the TSD. When the limit is based on human health criteria, the monthly average was set at the level of the applicable standard and a daily maximum limit was determined as specified in Section 5.4.4 of the TSD.

Mixing Zone

The limits in this permit were determined without the use of a mixing zone. Arizona state water quality rules require that water quality standards be achieved without mixing zones unless the permittee applies for and is approved for a mixing zone. Since a mixing zone was not applied for or granted, all water quality criteria are applied at end-of-pipe.

Hardness

There are no aquatic and wildlife designated uses for the receiving water, therefore, hardness is not required to determine standards for hardness-dependent metals.

Whole Effluent Toxicity (WET)

ADEQ does not require WET testing if the receiving water has no aquatic and wildlife designated uses. Although the narrative standard prohibiting the discharge of toxic pollutants applies to all discharges, the test species are not appropriate for these receiving waters and no alternative tests are readily available. Therefore, WET testing is not required in this permit, and Part IV for WET testing is shown as “not applicable.”

Discharge Characterization (DC)

In addition to monitoring for parameters assigned either a limit or an AL, sampling is required to assess the presence of pollutants in the discharge at certain minimum frequencies for additional suites of parameters, whether the facility is discharging or not. This monitoring is specified in Tables 2.a. through 2.c., *Discharge Characterization Testing*, as follows:

- Table 2.a.—General Chemistry (Outfall 005 & Internal Outfall I-001)
- Table 2.b.—Selected Metals and Cyanide (Outfall 005 & Internal Outfall I-001)
- Table 2.c.—Priority Pollutants (Outfall 005 & Internal Outfall I-001)

NOTE: Some parameters listed in Tables 2.a. and 2.b. are also listed in Tables 1. In this case, the data from monitoring under Tables 1 may be used to satisfy the requirements of Tables 2.a. and / or 2.b., provided the specified sample types are the same. In the event the facility does not discharge to a Protected Surface Water during the life of the permit, DC monitoring of representative samples of the discharge is still required.

The purpose of DC monitoring is to characterize the discharge and determine if the parameters of concern are present in the discharge and at what levels. This monitoring will be used to assess RP per 40 CFR 122.44(d)(1)(iii). DC monitoring is required in accordance with 40 CFR 122.43(a), 40 CFR 122.44(i), and 40 CFR 122.48(b) as well as A.R.S. §49-203(A)(7). If pollutants are noted at levels of concern during the permit term, this permit may also be reopened to add related limits or conditions.

Permit Limitations and Monitoring Requirements

Tables 1 and 2 below summarize the parameters that are limited in the permit and the rationale for that decision. Also included are the parameters that require monitoring without any limitations or that have not been included in the permit at all and the basis for those decisions. The corresponding monitoring requirements are shown for each parameter. In general, the regulatory basis for monitoring requirements is per 40 CFR §122.44(i) *Monitoring requirements*, and 40 CFR §122.48(b), *Required monitoring*; all of which have been adopted by reference in A.A.C. R18-9-A905, *AZPDES Program Standards*.

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Table 1. Permit limitations and monitoring requirements.

Parameter	Lowest Standard/Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/Rationale (1)
OUTFALL 005						
Flow	---	---	---	---	---	Discharge flow is to be monitored on a continual basis using a flow meter.
Biological Oxygen Demand (BOD); Chemical Oxygen Demand (COD); Total Organic Carbon (TOC)	No applicable numeric standard	BOD: 15 mg/L COD: <20 mg/L TOC: <0.5	BOD: 1 COD: 1 TOC: 1	N/A	N/A	Monitoring is required for discharge characterization.
Total Suspended Solids (TSS)	30-day average: 100 mg/L Daily maximum: 30 mg/L Technology-based limits 40 CFR 423.12(b)(3)	63 mg/L	9	N/A	TBEL is always applicable to discharge.	Monitoring is required and a TBEL remains in the permit.
pH (2)	Minimum: 6.5 Maximum: 9.0 AgL A.A.C. R18-11-109(B) Minimum: 6.0 Maximum: 9.0 Technology-based limits 40 CFR 423.12(b)(1)	Min: 6.78 S.U. Max: 8.22 S.U.	182	N/A	WQBEL or TBEL is always applicable to discharge.	pH is to be monitored using a discrete sample of the discharge and a WQBEL remains in the permit. 40 CFR Part 136 specifies that grab samples must be collected for pH.
Temperature	No applicable numeric standard	Min: 17.5°C Max: 39.3 °C	182	N/A	N/A	Discharge temperature is to be monitored for discharge characterization by discrete sample. 40 CFR Part 136 specifies that discrete samples must be collected for temperature.
Total Dissolved Solids (TDS)	No applicable numeric standard	920 mg/L	1	N/A	N/A	Monitoring required for discharge characterization.
Ammonia	No applicable numeric standard	<0.05 mg/L	1	N/A	N/A	Monitoring required for discharge characterization.
Oil & Grease	30-day average: 15 mg/L Daily maximum: 20 mg/L Technology-based limits 40 CFR 423.12(b)(3)	<5.6 mg/L	N/A	N/A	TBEL is always applicable to a discharge.	Monitoring required and TBEL remains in the permit.
Free Available Chlorine (FAC)	30-day average: 0.2 mg/L Daily maximum: 0.5 mg/L Technology-based limits 40 CFR 423.12(b)(7) and 423.(d)(1)	N/A	0	N/A	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.

Table 1. Permit limitations and monitoring requirements.

Parameter	Lowest Standard/Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/Rationale (1)
Arsenic	200 µg/L AgL	4.2 µg/L	4	19.9 µg/L	No RP	Monitoring required for discharge characterization.
Boron	1,000 µg/L Agl	120 µg/L	12	146 µg/L	No RP	Monitoring required for discharge characterization.
Cadmium	50 µg/L Agl	<0.1 µg/L	4	N/A	No RP	Monitoring required for discharge characterization.
Chromium (Total)	1,000 µg/L Agl 30-day average: 1.0 mg/L Daily maximum: 1.0 mg/L Technology-based limits 40 CFR 423.12(d)(1)	80 µg/L	5	335.4 µg/L	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.
Copper	500 µg/L AgL	12 µg/L	4	56.8 µg/L	No RP	Monitoring required for discharge characterization.
Cyanide	200 µg/L AgL	<50 µg/L	4	41.2 µg/L	No RP	Monitoring required for discharge characterization.
Lead	100 µg/L AgL	<15 µg/L	4	N/A	No RP	Monitoring required for discharge characterization.
Mercury	0.01 µg/L AgL	<0.2 µg/L	4	N/A	No RP	Monitoring required for discharge characterization.
Selenium	20 µg/L Agl	<100 µg/L	4	5.9 µg/L	No RP	Monitoring required for discharge characterization.
Zinc	10,000 µg/L Agl 30-day average: 1.0 mg/L Daily maximum: 1.0 mg/L Technology-based limits 40 CFR 423.12(d)(1)	<50 µg/L	5	58.7 µg/L	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.

Footnotes:

1. The monitoring frequencies are as specified in the permit.

Table 2. Permit limitations and monitoring requirements for Internal Outfall I-001.

Parameter	Lowest Standard/Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/Rationale (1)
INTERNAL OUTFALL I-001 (Combined Cycle Cooling Tower Blowdown)						
Flow	---	---	---	---	---	Discharge flow is to be estimated.
pH	Minimum: 6.0 Maximum: 9.0 Technology-based limits 40 CFR 423.12(b)(1)	N/A	0	N/A	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.
Free Available Chlorine (FAC)	30-day average: 0.2 mg/L Daily maximum: 0.5 mg/L Technology-based limits 40 CFR 423.12(b)(7) and 423.(d)(1)	N/A	0	N/A	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.
Boron	1,000 µg/L Agl	N/A	0	N/A	RP Indeterminate due to lack of data	Monitoring is required and a WQBEL remains in the permit.
Chromium (Total)	30-day average: 0.2 mg/L Daily maximum: 0.2 mg/L Technology-based limits 40 CFR 423.13(d)(1)	N/A	0	N/A	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.
Zinc	30-day average: 1.0 mg/L Daily maximum: 1.0 mg/L Technology-based limits 40 CFR 423.12(d)(1)	N/A	0	N/A	TBEL is always applicable to a discharge.	Monitoring is required and TBEL remains in the permit.

Footnotes:

1. The monitoring frequencies are as specified in the permit.

VIII. NARRATIVE WATER QUALITY STANDARDS

All narrative limitations in A.A.C. R18-11-108 that are applicable to the receiving water are included in Part I, Sections C of the permit.

IX. MONITORING AND REPORTING REQUIREMENTS (Part II of Permit)

Section 308 of the Clean Water Act and 40 CFR Part 122.44(i) require that monitoring be included in permits to determine compliance with discharge limitations. Additionally, monitoring may be required to gather data for future discharge limitations or to monitor discharge impacts on receiving water quality.

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Monitoring frequencies for some parameters may be reduced in subsequent permits if all monitoring requirements have been met and the limits or ALs for those parameters have not been exceeded during the first permit term.

Discrete (i.e. grab) samples are specified in the permit for all parameters. The quality of the discharge is not expected to be highly variable.

Monitoring locations are specified in the permit (Part I.A and Part II.A) in order to ensure that representative samples of the influent and discharge are consistently obtained.

The requirements in the permit pertaining to Part II, Monitoring and Reporting, are included to ensure that the monitoring data submitted under this permit is accurate in accordance with 40 CFR 122.41(j). The permittee has the responsibility to determine that all data collected for purposes of this permit meet the requirements specified in this permit and is collected, analyzed, and properly reported to ADEQ.

The permit (Part II.A.3) requires the permittee to keep a Quality Assurance (QA) manual at the facility, describing sample collection and analysis processes; the required elements of the QA manual are outlined.

Reporting requirements for monitoring results are detailed in Part II, Section B of the permit, including completion and submittal of Discharge Monitoring Reports (DMRs) and AZPDES Flow Record forms. The permittee is responsible for conducting all required monitoring and reporting the results to ADEQ on DMRs or as otherwise specified in the permit.

Electronic reporting

The US EPA has published a final regulation that requires electronic reporting and sharing of Clean Water Act National Pollutant Discharge Elimination System (NPDES) program information instead of the current paper-based reporting (Federal Register, Vol. 80, No. 204, October 22, 2015). Beginning December 21, 2016 (one year after the effective date of the regulation), the Federal rule required permittees to make electronic submittals of any monitoring reports and forms called for in their permits. ADEQ has created an online portal called myDEQ that allows users to submit their discharge monitoring reports and other applicable reports required in the permit.

Requirements for retention of monitoring records are detailed in Part II.C.3 of the permit.

X. BIOSOLIDS REQUIREMENTS (Part III in Permit)

Not applicable – this is an industrial facility.

XI. SPECIAL CONDITIONS (Part V in Permit)

Permit Reopener

This permit may be modified based on newly available information; to add conditions or limits to address demonstrated discharge toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP), if assessment levels in this permit are exceeded [A.A.C. R18-9-B906 and 40 CFR Part 122.62 (a) and (b)].

XII. ANTIDEGRADATION

Antidegradation rules have been established under A.A.C. R18-11-107 to ensure that existing surface water quality is maintained and protected. The discharge from the APS West Phoenix Power Plant will be to a canal which is subject to Tier 1 antidegradation protection. Discharge quality limitations and monitoring requirements have been established under the proposed permit to ensure that the discharge will meet the applicable water quality standards. As long as the permittee maintains consistent compliance with these provisions, the designated uses of the receiving water will be presumed protected, and the facility will be deemed to meet currently applicable antidegradation requirements under A.A.C. R18-11-107.

XIII. STANDARD CONDITIONS

Conditions applicable to all NPDES permits in accordance with 40 CFR, Part 122 are attached as an appendix to this permit.

XIV. ADMINISTRATIVE INFORMATION

Public Notice (A.A.C. R18-9-A907)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft AZPDES permit or other significant action with respect to an AZPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

Public Comment Period (A.A.C. R18-9-A908)

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to ADEQ. After the closing of the public comment period, ADEQ is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

Public Hearing (A.A.C R18-9-A908(B))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

EPA Review (A.A.C. R18-9-A908(C))

A copy of this permit and any revisions made to this draft as a result of public comments received will be sent to EPA Region 9 for review. If EPA objects to a provision of the draft, ADEQ will not issue the permit until the objection is resolved.

XV. ADDITIONAL INFORMATION

Additional information relating to this proposed permit may be obtained from:

Arizona Department of Environmental Quality
Water Quality Division – Surface Water Permits Unit
Attn: Lesley Davidson
1110 West Washington Street
Phoenix, Arizona 85007

Or by contacting Lesley Davidson at (520) 628 – 5018 or by e-mail at davidson.lesley@azdeq.gov.

XVI. INFORMATION SOURCES

While developing discharge limitations, monitoring requirements, and special conditions for the permit, the following information sources were used:

1. AZPDES Permit Application Forms 1, 2C, and 2C Addendums, received October 8, 2024, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.
2. ADEQ files on APS West Phoenix Power Plant.
3. ADEQ Geographic Information System (GIS) Web site.
4. Arizona Administrative Code (AAC) Title 18, Chapter 11, Article 1, *Water Quality Standards for Surface Waters*, adopted December 31, 2016.
5. A.A.C. Title 18, Chapter 9, Article 9. *Arizona Pollutant Discharge Elimination System* rules.
6. Code of Federal Regulations (CFR) Title 40:
 - Part 122, *EPA Administered Permit Programs: The National Pollutant Discharge Elimination System*.
 - Part 124, *Procedures for Decision Making*.
 - Part 133. *Secondary Treatment Regulation*.
 - Part 503. *Standards for the Use or Disposal of Sewage Sludge*.
7. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.
8. U.S. EPA NPDES Permit Writers' Manual, September 2010.