

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the issuance of the AZPDES permit listed below. This facility is groundwater remedial project and is considered to be a minor industrial facility under the NPDES program. The effluent 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 Department of Environmental Quality (ADEQ) |
| Permittee's Mailing Address: | 400 E. Congress St., Suite 433 Tucson, Arizona 85701 |
| Facility Name: | Central Tucson PFAS Project Demonstration Facility |
| Facility Address or Location: | 4301 East 32 nd St. Tucson, Arizona 85711 |
| County: | Pima |
| Contact Person(s): Phone/e-mail address | Matthew Narter (520) 770-3128 / narter.matthew@azdeq.gov |
| AZPDES Permit Number: | AZ0026212 |
| Inventory Number: | 513556 |
| LTF Number: | 87949 |

| II. STATUS OF PERMIT(S) | |
|------------------------------------------------------------|-------------------|
| AZPDES permit applied for: | New |
| Date application received: | February 11, 2021 |
| Date application was determined administratively complete: | February 16, 2021 |
| Previous permit number (if different): | N/A |
| Previous permit expiration date: | N/A |

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.

| III. GENERAL FACILITY INFORMATION | |
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| Type of Facility: | Groundwater remediation facility |
| Facility Location Description: | 4301 East 32 nd Street in Tucson Arizona |
| Discharge Flow: | 0.58 mgd |
| Applicable Treatment Processes: | <p>The demonstration facility will have two (2) bag filters (one duty, one standby) to prevent sediment buildup in the ion exchange (IX) pressure vessels. If required, desander units may be added to the system if the well produces too much sediment for the bag filters to effectively manage.</p> <p>Synthetic IX resin systems use pressure vessels with an IX resin bed instead of granular activated carbon (GAC) media. IX resin provides a basic adsorptive material for PFAS to be removed. Removal capacity diminishes over time with the volume of water treated, and the resin must be replaced and sent off-site for disposal. Two (2) IX pressure vessels in a lead/lag series configuration.</p> |
| Nature of facility discharge: | Tucson Water production well C-007A will discharge treated groundwater to the City of Tucson storm sewer system (MS4). |
| Average flow per discharge: | The expected average flow per discharge is 0.58 mgd. |
| Continuous or intermittent discharge: | Continuous |
| Discharge pattern summary: | Discharge flows are expected to be continuous for the duration of the demonstration facility. |
| <p>The Arizona Department of Environmental Quality is conducting the Central Tucson PFAS Project Pilot Test at a former Tucson Water production well site (C-007A) to prove long-term efficacy of ion exchange treatment for the removal of per and polyfluoroalkyl substances (PFAS) from impact groundwater. This project will provide a platform for evaluating other treatment technologies, remove contaminant mass from the aquifer, and contribute to the containment of the PFAS plume. Discharge is expected to begin July 1, 2021.</p> | |

| IV. RECEIVING WATER | |
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| <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: | <p>Santa Cruz River</p> <p>Discharges from the CTPP demonstration facility will be to the City of Tucson's storm drain. The MS4 flows into Citation Wash and is conveyed to Arroyo Chico Wash and discharges into the Santa Cruz River, a Water of the U.S.</p> |
| River Basin: | Santa Cruz River Basin |

| IV. RECEIVING WATER | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Outfall Location(s): | Outfall 001: Township 14 S Range 14 E, Section 22 Latitude 32° 11' 48" N Longitude 110° 54' 02" W |
| Designated uses for the receiving water listed above: | Aquatic and Wildlife effluent dependent water (A&Wedw) Partial Body Contact (PBC) |
| Is the receiving water on the 303(d) list? | No, and there are no TMDL issues associated. |
| <p>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.</p> | |

| V. DESCRIPTION OF DISCHARGE | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------|
| <p>Because this is a new facility and no discharges have yet occurred, effluent monitoring data are not available. The following is the effluent quality based on the Tucson Water Quality Report, as outlined in the application.</p> | | |
| Parameters | Units | Maximum Concentration |
| Hardness | mg/L | 168 |
| pH | S.U. | 8.1 |
| Total Dissolved Solids (TDS) | mg/L | 379 |
| Temperature | °C | 27.9 |
| Turbidity | NTU | 6.5 |

| VI. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT |
|--------------------------------------------------------------|
| This section is not applicable because this is a new permit. |

| VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS |
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| <p>When determining what parameters need monitoring and/or limits included in the draft permit, both technology-based and water quality-based criteria were compared and the more stringent criteria applied.</p> |
| <p>Technology-based Limitations: There are no promulgated technology-based limits (TBELs) for a groundwater treatment system such as the Central Tucson PFAS project. However, this demonstration facility technology is designed for efficient removal of PFAS, and the discharge can be sampled with low detection limits. PFAS is identified as a pollutant of concern as this project will be treating contaminated groundwater. The CTPP demonstration facility is being designed, constructed, and operated to provide information on the ultimate full-scale remedy for PFAS contamination in groundwater, while actively removing contaminant mass from the aquifer. PFAS are not currently listed as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), but EPA is currently investigating the appropriate program(s) and procedures to designate PFAS as hazardous substances. The EPA has issued a Health Advisory Level (HAL) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) under the Safe Drinking Water Act (SDWA). The proposed limits are based on Safe Drinking Water Act HAL of 70 parts per trillion (ppt) for PFOA and PFOS.</p> |

VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

Numeric Water Quality Standards: 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 effluent 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 table below.

Since this is a new facility and effluent data are not yet available, RP could not be calculated for other potential pollutants that are subject to numeric water quality standards. Instead of WQBELs, assessment levels (ALs) were established for Trace Substances (Table 2 in the permit) using the Tucson Water Quality data. ALs and relatively frequent monitoring are necessary for these parameters because they are commonly present at variable concentrations and at a level that could exceed the applicable water quality criteria for them. (See discussion under “Assessment Levels” below for further details.) For a number of other pollutants, Effluent Characterization (EC) monitoring is required at a lesser frequency and without established ALs or numeric limits (Tables 4.a. – 4.b in the draft permit). (See discussion under “Effluent Characterization” below for further details.)

The proposed assessment levels 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 maximum daily limit (MDL) necessary to protect all uses. This methodology takes into account criteria, effluent 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 daily maximum limit was determined as specified in Section 5.4.4 of the TSD.

Mixing Zone
Arizona water quality rules require that water quality standards be achieved without mixing zones unless the permittee applies and is approved for a mixing zone. Since the receiving stream for this discharge is ephemeral prior to the discharge, no water is available for a mixing zone and all water quality criteria are applied at end-of pipe. This means that the effluent concentration must meet stream standards.

Assessment Levels (ALs)
ALs are listed in Part I.B of the permit. An AL differs from a discharge limit in that an exceedance of an AL is not a permit violation. Instead, ALs serve as triggers, alerting the permitting authority when there is cause for re-evaluation of RP for exceeding a water quality standard, which may result in new permit limitations. The AL numeric values also serve to advise the permittee of the analytical sensitivity needed for meaningful data collection. Trace substance monitoring is required when there is uncertain RP (based on non-detect values or limited datasets) or a need to collect additional data or monitor treatment efficacy on some minimal basis. A reopener clause is included in the draft permit should future monitoring data indicate water quality standards are being exceeded.

The requirement to monitor for these parameters is included in the draft permit according to A.A.C. R18-11-104(C) and Appendix A. ALs listed for each parameter were calculated in the same manner that a limit would have been calculated (see Numeric Water Quality Standards Section above).

VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

Hardness

The permittee is required to sample hardness as CaCO₃ at the same time the trace metals are sampled because the water quality standards for some metals are calculated using the water hardness values. The hardness value of 142 mg/L (the average hardness of the effluent as supplied in the application) was used to calculate the applicable water quality standards and any assessment levels or limits for the hardness dependent metals (cadmium, chromium III, copper, lead, nickel, silver and zinc).

Whole Effluent Toxicity (WET)

WET testing is required in the draft permit (Parts I.C and III) to evaluate the discharge according to the narrative toxic standard in A.A.C. R18-11-108(A)(5), as well as whether the discharge has RP for WET per 40 CFR 122.44(d)(iv). However, because this permit is for a new facility, the permittee may report these required WET test results up to two years after submitting the initial application for an AZPDES permit.

WET testing for chronic toxicity shall be conducted using the following three surrogate species:

- *Ceriodaphnia dubia* (water flea) – for evaluating toxicity to invertebrates
- *Pimephales promelas* (fathead minnow) – for evaluating toxicity to vertebrates
- *Pseudokirchneriella subcapitata* (formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*) (a green alga) – for evaluating toxicity to plant life

ADEQ does not have a numeric standard for Whole Effluent Toxicity. However, ADEQ adopted the EPA recommended chronic toxicity benchmark of 1.0 TUC for a four day exposure period. Using this benchmark, the limitations and/or action levels for WET included in the draft permit were calculated in accordance with the methods specified in the TSD. The species chosen for WET testing are as recommended in the TSD and in *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*.

An exceedance of a limit or action level will trigger follow-up testing to determine if effluent toxicity is persistent. If toxicity above a limit or action level is found in a follow-up test, the permittee will be required to conduct a Toxicity Reduction Evaluation (TRE) and possibly a Toxicity Identification Evaluation (TIE) to identify the source of toxicity and reduce toxicity. These conditions are required to ensure that toxicants are not discharged in amounts that are toxic to organisms [A.A.C. R18-11-108(A)(5)]. A reopener clause is included in accordance with 40 CFR Parts 122 and 124 and AAC R18-9-B906.

The draft permit requires 24-hour composite samples be collected for WET testing. WET sampling must coincide with testing for all the parameters in Parts I.A and B of the draft permit, when testing of those parameters is required, to aid in the determination of the cause of toxicity if toxicity is detected. Additional procedural requirements for the WET test are included in the proposed permit.

The required WET monitoring frequency for this facility is consistent with the WET testing frequency required for facilities with a similar design flow. The draft permit requires WET test results to be reported on discharge monitoring reports and submittal of the full WET lab report to ADEQ.

Effluent Characterization (EC)

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 4.a. through 4.b., *Effluent Characterization Testing*, as follows:

- Table 4.a. – General Chemistry, PFOS/PFOA, and TDS
- Table 4.b. – Selected Metals, Hardness, Cyanide, and WET

VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

NOTE: Some parameters listed in Tables 4.a. and 4.b. are also listed in Tables 1 or 2. In this case, the data from monitoring under Tables 1 or 2 may be used to satisfy the requirements of Tables 4.a. and / or 4.b., provided the specified sample types are the same. In the event the facility does not discharge to a water of the U.S. during the life of the permit, EC monitoring of representative samples of the effluent is still required.

The purpose of EC monitoring is to characterize the effluent 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)). EC 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

The table that follows summarizes 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*.

| 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) |
| Flow | --- | --- | --- | --- | --- | Discharge flow is to be monitored. |
| pH | Minimum: 6.5 Maximum: 9.0 A&Wedw and PBC A.A.C. R18-11-109(B) | 8.1 | 71 | N/A | N/A | pH is to be monitored using a discrete sample of the effluent for effluent characterization. 40 CFR Part 136 specifies that grab samples must be collected for pH. At least one sample must coincide with WET testing to aid in the determination of the cause of toxicity if toxicity is detected. |
| Temperature | R18-11-109C the discharge shall not cause an increase in the ambient water temperature. A&Wedw: no more than 3.0°C | 27.9°C | 9 | N/A | N/A | Effluent temperature is to be monitored for effluent characterization by discrete sample. 40 CFR Part 136 specifies that discrete samples must be collected for temperature. |
| Total Dissolved Solids (TDS) | No applicable standard | 379 | 31 | N/A | N/A | Monitoring required for effluent characterization. |
| Antimony | 600 µg/L/ A&Wedw chronic | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Arsenic | 150 µg/L/ A&Wedw chronic | 6.3 µg/L | 21 | 14.5 µg/L | No RP | Monitoring required for effluent characterization. |
| Beryllium | 5.3 µg/L/ A&Wedw chronic | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Cadmium (2) | 2.56 µg/L/ A&Wedw chronic | < 10 µg/L | 15 | N/A | RP Indeterminate (High LOQ) | Monitoring required and an assessment level is set in the permit. |
| Chromium (Total) | No applicable standard | < 20 µg/L | 17 | N/A | No RP | Monitoring required for effluent characterization. |
| Chromium VI | 11 µg/L/ A&Wedw chronic | No Data | 0 | N/A | No RP (Based on total chromium data) | Monitoring required for effluent characterization. |
| Copper (2) | 11 µg/L/ A&Wedw chronic | 59 µg/L | 17 | 136 µg/L | RP Exists | Monitoring required and an assessment level is set in the permit. |
| Cyanide | 9.7 µg/L/ A&Wedw chronic | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |

| 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) |
| Hardness | No applicable standard. Hardness is used to determine standards for specific metal parameters. | | 168 mg/L | 20 | N/A | N/A | A&W standards for cadmium, chromium III, copper, lead, nickel, silver and zinc used for RP determinations were based on the average effluent hardness value of 142 mg/L. Monitoring for hardness is required whenever monitoring for hardness dependent metals is required. |
| Hydrogen Sulfide | 2 µg/L/ A&Wedw chronic | | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Iron | 1,000 ug/L / A&Wedw chronic | | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Lead (2) | 3.07 µg/L / A&Wedw chronic | | 26 µg/L | 14 | 67.6 µg/L | RP Exists | Monitoring required and an assessment level is set in the permit. |
| Mercury | 0.01 µg/L/ A&Wedw chronic | | < 1 µg/L | 15 | N/A | RP Indeterminate (High LOQ) | Monitoring required and an assessment level is set in the permit. |
| Nickel (2) | 60.7 µg/L/ A&Wedw chronic | | < 20 µg/L | 9 | N/A | No RP | Monitoring required for effluent characterization. |
| Selenium | 2 µg/L/ A&Wedw chronic | | < 10 µg/L | 15 | N/A | RP Indeterminate (High LOQ) | Monitoring required and an assessment level is set in the permit. |
| Silver (2) | 4.40 µg/L/ A&Wedw acute | | < 10 µg/L | 15 | N/A | RP Indeterminate (High LOQ) | Monitoring required and an assessment level is set in the permit. |
| Sulfides | No applicable standard | | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Thallium | 75 µg/L/ PBC | | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required for effluent characterization. |
| Zinc (2) | 137 µg/L/ A&Wedw acute and chronic | | 57.3 µg/L | 14 | 149 µg/L | RP Exists | Monitoring required and an assessment level is set in the permit. |
| Whole Effluent Toxicity (WET) | No toxicity (A.A.C. R18-11-108(A)(6) | <i>Pseudo-kirchneriella subcapitata</i> (3) | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required and an action level is set. |
| | | <i>Pimephales promelas</i> | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required and an action level is set. |
| | | <i>Ceriodaphnia dubia</i> | No Data | 0 | N/A | RP Indeterminate (No Data) | Monitoring required and an action level is set. |

Footnotes:

- (1) The monitoring frequencies are as specified in the permit.
- (2) Hardness-dependent metal - the standard is for this parameter is based on the average hardness value of the effluent as indicated above.
- (3) Formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*.

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 E of the draft 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 effluent limitations. Additionally, monitoring may be required to gather data for future effluent limitations or to monitor effluent 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 effluent 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(e). 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. 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 effluent 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)].

XI. 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 Central Tucson Demonstration Facility will be to an effluent-dependent water. Except for flows resulting from rain events, the only water in the stream will be the effluent.

XI. ANTIDegradation

Therefore, the discharge and the receiving water will normally be one and the same. Effluent 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.

XII. STANDARD CONDITIONS

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

XIII. 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 draft 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.

XIV. 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: Devin McAllister
1110 West Washington Street
Phoenix, Arizona 85007

Or by contacting Devin McAllister at (602) 771 – 4374 or by e-mail mcallister.devin@azedeq.com.

XV. INFORMATION SOURCES

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

1. AZPDES Permit Application Form(s) 1 and 2D, received February 11, 2021, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.
2. 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. *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*, US EPA, May 31, 1996.
9. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA /821-R-02-013).
10. U.S. EPA NPDES Permit Writers' Manual, September 2010.