

## ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the issuance of the AZPDES permit listed below. This facility is a groundwater recharge project with a design capacity of 3.57 million gallons per day (mgd) and thus is considered to be a major 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.

Permittee's Name:	Tucson Water Department
Permittee's Mailing Address:	310 W. Alameda Street Tucson, AZ 85701
Facility Name:	Santa Cruz River Heritage Project
Facility Address or Location:	1580 S. Santa Cruz Lane Tucson, AZ 85713
County:	Pima
Contact Person(s): Phone/e-mail address	Dee Korich, Chief Hydrologist (520) 837-2238
AZPDES Permit Number:	AZ0026166
Inventory Number:	512733

<b>I. STATUS OF PERMIT(s)</b>	
AZPDES permit applied for:	New
Date application received:	<b>2/15/18</b>
Date application was determined administratively complete:	3/26/18
<b><u>208 Consistency:</u></b>	
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.	
Due to the addition of a new discharge outfall, a 208 Plan Consistency Review was required; the facility was determined to be not inconsistent with the Pima Association of Governments Regional Water Quality Management Plan on March 23, 2018.	

<b>II. GENERAL FACILITY INFORMATION</b>	
Type of Facility:	Groundwater recharge facility
Facility Location Description:	The facility is located approximately 1.5 miles southwest of downtown Tucson.
Permitted Design Flow:	3.57 MGD
Nature of facility discharge:	Treated effluent from Pima County- Agua Nueva Water Reclamation Facility (AZPDES Permit AZ0026107) is sent to Tucson Water Dept.'s Reclaimed Water Treatment System. The treated effluent is blended with groundwater from recovery wells, filtered, and disinfected using chloramination before being sent through the distribution system to end users. Reclaimed water received at the Heritage Project location is de-chlorinated using sodium bisulfite prior to being discharged at the outfall. The Heritage Project will annually use a maximum total of 4,000 acre-feet per year (AF/YR) of Class A reclaimed water from the Tucson Reclaimed Water System.
Average flow per discharge:	3.57 MGD
Continuous or intermittent discharge:	Continuous
The Heritage Project is an important planned reclaimed water recharge facility near downtown Tucson that will allow Tucson Water to develop additional recharge capacity for the long-term storage of reclaimed water for future use while enhancing the downtown area with a perennial water feature.	

<b>III. RECEIVING WATER</b>	
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.	
Receiving Water :	Santa Cruz River (Tubac Bridge to Roger Road WWTP outfall)
River Basin:	Santa Cruz– Rio Magdalena – Rio Sonoyta River Basin
Outfall Location(s):	Outfall 001: Township 14 S, Range 13 E, Section 23 Latitude 32° 11' 59" N, Longitude 110° 59' 20.7" W
The outfall discharges to a surface water listed in Appendix B of A.A.C. Title 18, Chapter 11, Article 1.	
Designated uses for the receiving water listed above:	Aquatic and Wildlife ephemeral (A&We) Partial Body Contact (PBC) Agricultural Livestock watering (AgL)
Per A.A.C. R18-11-113(D), the water quality standards that apply to effluent-dependent waters (EDWs) will be applied to derive discharge limitations for any point source discharge of wastewater to an ephemeral water. The draft AZPDES permit includes discharge limitations and monitoring requirements designed to achieve compliance with A&Wedw standards.	
Therefore, the following uses are being applied to the receiving water:	
<ul style="list-style-type: none"> <li>• Aquatic and Wildlife effluent dependent water (A&amp;Wedw)</li> <li>• Partial Body Contact (PBC)</li> </ul>	

• 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.	

<b>IV. DESCRIPTION OF DISCHARGE</b>		
This is an existing facility that has not discharged under the terms of an AZPDES permit before, however effluent monitoring data from the Tucson Reclaimed Water Treatment Facility is available. The following is the effluent quality based on the results of previous monitoring data, as outlined in the application.		
Parameters	Units	Maximum Daily Discharge Concentration
Ammonia	mg/L	5.7
Total Residual Chlorine (TRC)	mg/L	4.4
Total Kjeldahl Nitrogen (TKN)	mg/L	8.3
<i>E. coli</i>	MPN	<1

<b>V. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT</b>
This section is not applicable because this is a new permit.

<b>VI. PROPOSED PERMIT CHANGES</b>
This section is not applicable because this is a new permit.

<b>VII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS</b>
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.
<b>Technology-based Limitations:</b> No Technology based limitations have been established for this type of facility.
<b>Numeric Water Quality Standards:</b> 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.

Because the discharge will consist of reclaimed wastewater effluent, it is assumed that RP exists for exceedance of water quality criteria for the pollutants *E. coli* and, if chlorine or bromine is used in the treatment process, total residual chlorine (TRC). These parameters have been shown through extensive monitoring of WWTPs to fluctuate greatly and thus are not conducive to exclusion from limitation due to a lack of RP. Therefore, the draft permit contains WQBELs for *E. coli* and TRC.

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, 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 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.

Ammonia water quality criteria vary based on the effluent pH and temperature at the time of discharge sampling. As a result, no single ammonia concentration can be included as a permit limit. To overcome this, an Ammonia Impact Ratio (AIR) of 1 for the monthly average and a value of 2 for the maximum daily has been established as the assessment level for ammonia. The AIR is calculated by dividing the ammonia concentration in the effluent by the applicable ammonia standard based on the effluent pH and temperature at the time of sampling. AIR values will be reported on DMRs and on the Ammonia Data Log which is included as Appendix B in the permit.

**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 discharge 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).

The following trace substances were not included as limits or assessment levels in the draft permit due to a lack of RP based on best professional judgment (BPJ): barium, nitrates, nitrites, and manganese. The numeric standards for these pollutants are well above what would be expected from this type of discharge.

**Hardness:** The permittee is required to sample hardness as  $\text{CaCO}_3$  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 241 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, copper, lead, nickel, silver and zinc).

**Whole Effluent Toxicity (WET):** WET testing is required in the draft permit (Parts I.C and IV) 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).

WET testing for chronic toxicity is required. The requirement to conduct chronic toxicity testing is contingent upon the frequency or duration of discharges. Since completion of the chronic WET test requires a minimum of three samples be taken for renewals, the chronic WET test is not required during any given monitoring period in which the discharge does not occur over seven consecutive calendar days and is not repeated more frequently than every thirty days.

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 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 an action level will trigger follow-up testing to determine if effluent toxicity is persistent. If toxicity above an 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.

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.

**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. and 4.b., *Effluent Characterization Testing*, as follows:

- Table 4.a. – General Chemistry and Microbiology: ammonia, *E. coli*, total residual chlorine (TRC), dissolved oxygen, total Kjeldahl nitrogen (TKN), nitrate/nitrite, oil and grease, pH, phosphorus, temperature, total dissolved solids (TDS), and total suspended solids (TSS)
- Table 4.b. – Selected Metals, Hardness, Cyanide, and WET

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*.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value (4)	No. of Samples (4)	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Flow	---	---	---	---	---	Discharge flow is to be monitored on a continual basis using a flow meter.
Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS)	No applicable numeric standard	BOD: 6.7 mg/L (6) TSS: 7.9 mg/L	BOD: 1249 TSS: 41	N/A	N/A	TSS monitoring required for effluent characterization.
Chlorine, Total Residual (TRC)	11 µg/L/ A&Wedw chronic	4.4 mg/L	27	N/A	RP always expected when chlorine or bromine is used for disinfection.	TRC is to be monitored as a discrete sample and a WQBEL is set. 40 CFR Part 136 specifies that discrete samples must be collected for chlorine. At least one sample per month must coincide with WET testing to aid in the determination of the cause of toxicity, if toxicity is detected.
pH	Minimum: 6.5 Maximum: 9.0 A&Wedw and PBC A.A.C. R18-11-109(B)	7.79 S.U.	52	N/A	N/A	pH is to be monitored using a discrete sample of the effluent and a WQBEL is set. 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. pH sampling must also coincide with ammonia sampling when required.
Temperature	No applicable numeric standard	32.1° C	51	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. Temperature sampling must also coincide with ammonia sampling when required.
Total Dissolved Solids (TDS)	No applicable standard	848 mg/L	48	N/A	N/A	Monitoring required for effluent characterization.
Ammonia	Standard varies with temperature and pH	5.7 mg/L	39	N/A	RP Exists	Ammonia is to be monitored by discrete sample and a WQBEL in the form of an ammonia impact ratio (AIR) is set in the permit (5). An ammonia data log with concurrent pH and temperature monitoring is also required. One sample must coincide with WET sampling to aid in the determination of the cause of toxicity, if toxicity is detected.
Nutrients (Total Nitrogen and Total Phosphorus)	No applicable standards	N-13.75 mg/L P-3.4 mg/L	N/A	N/A	N/A	Monitoring required for effluent characterization.
Antimony	600 µg/L/ A&Wedw chronic	<1.0 µg/L	15	1.3 µg/L	No RP	Monitoring required for effluent characterization.
Arsenic	150 µg/L/ A&Wedw chronic	5.83 µg/L	14	15.2 µg/L	No RP	Monitoring required for effluent characterization.
Beryllium	5.3 µg/L/ A&Wedw chronic	<1.0 µg/L	14	1.3 µg/L	No RP	Monitoring required for effluent characterization.
Boron	186667 PBC	291 µg/L	20	669 µg/L	No RP	Monitoring required for effluent characterization.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value (4)	No. of Samples (4)	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)	
Cadmium (2)	4.3 µg/L/ A&Wedw chronic	<1.0 µg/L	14	1.3 µg/L	No RP	Monitoring required for effluent characterization.	
Chromium (Total)	1000 µg/L/ AgL	<20 µg/L	14	N/A	No RP	Monitoring required as an indicator parameter for Chromium VI.	
Chromium VI	11 µg/L/ A&Wedw chronic	0.042 µg/L	1	N/A	RP Indeterminate (Limited Data)	Monitoring required and an assessment level is set.	
Copper (2)	19 µg/L/ A&Wedw chronic	<20 µg/L	14	N/A	RP Indeterminate (High LOQ)	Monitoring required and an assessment level is set.	
Cyanide	9.7 µg/L/ A&Wedw chronic	300 µg/L	38	570 µg/L	RP Exists	Monitoring is required and a WQBEL is set.	
Hardness	No applicable standard. Hardness is used to determine standards for specific metal parameters.	269 mg/L	22	N/A	N/A	A&W standards for cadmium, copper, lead, nickel, silver and zinc used for RP determinations were based on the average effluent hardness value of 241 mg/L. Monitoring for hardness is required whenever monitoring for hardness dependent metals is required.	
Iron	1,000 ug/L / A&Wedw chronic	499 µg/L	14	1297 µg/L	RP Exists	Monitoring is required and a WQBEL is set.	
Lead (2)	6.5 µg/L / A&Wedw chronic	5.37 µg/L	13	14.5 µg/L	RP Exists	Monitoring is required and a WQBEL is set.	
Mercury	0.01 µg/L/ A&Wedw chronic	<0.5 µg/L	14	N/A	RP Indeterminate (High LOQ)	Monitoring required and an assessment level is set.	
Nickel (2)	109 µg/L/ A&Wedw chronic	<20 µg/L	14	N/A	No RP	Monitoring required for effluent characterization.	
Selenium	2 µg/L/ A&Wedw chronic	2.62 µg/L	14	6.8 µg/L	RP Exists	Monitoring required and a WQBEL is set.	
Silver (2)	14.6 µg/L/ A&Wedw acute	<20 µg/L	14	N/A	RP Indeterminate (High LOQ)	Monitoring required and an assessment level is set.	
Thallium	75 µg/L/ PBC	<1.0 µg/L	14	N/A	No RP	Monitoring required for effluent characterization.	
Zinc (2)	245 µg/L/ A&Wedw acute and chronic	83.5 µg/L	14	217 µg/L	No RP	Monitoring required for effluent characterization.	
Whole Effluent Toxicity (WET)	No toxicity (A.A.C. R18-11-108(A)(6) )	<i>Pseudo-kirchneriella subcapitata</i> (3)	N/A	0	N/A	RP Indeterminate	Monitoring required and an action level is set.
		<i>Pimephales promelas</i>	N/A	0	N/A	RP Indeterminate	Monitoring required and an action level is set.
		<i>Ceriodaphnia dubia</i>	N/A	0	N/A	RP Indeterminate	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 or receiving water as indicated above.
- (3) Formerly known as *Selenastrum capricornutum* or *Raphidocelis subcapitata*.
- (4) The new treatment facility and outfall have not been constructed. Monitoring data used to calculate RP for this application were taken from an internal sampling location within the Tucson Reclaimed Water Treatment System.



- (5) An AIR will be calculated by dividing effluent ammonia concentration by the applicable standard using the receiving water pH and temperature.
  - (6) Source water- Treated effluent from the Pima County Agua Nueva Water Reclamation Facility- was used to determine RP for BOD & TSS.
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### **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 and F 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 second term 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 I.J) 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.2) 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, Sections B.1 and 2 of the permit, including completion and submittal of Discharge Monitoring Reports (DMRs), and Ammonia Data Logs. 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 requires 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.

The permit also requires annual submittal of an Ammonia Data Log that records the results for temperature, pH, and ammonia samples and date of sampling (Part II.B.3). Because the ammonia standards in 18 A.A.C. 11, Article 1, Appendix A are contingent upon the pH and temperature at the time of sampling for ammonia, the permittee must determine the applicable ammonia standard using the ammonia criteria table(s) and calculate the Ammonia Impact Ratio for that ammonia sample result. The AIR is recorded on the DMR.

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

**X. BIOSOLIDS REQUIREMENTS (Part III in Permit)**

Not applicable.

**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 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)].

**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 Santa Cruz Heritage Project will be to an ephemeral stream which will become (for purposes of this permit) an effluent-dependent water. Except for flows resulting from rain events, the only water in the stream will be the discharge. 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.

**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 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.

### **XV. ADDITIONAL INFORMATION**

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

Arizona Department of Environmental Quality  
Water Quality Division – AZPDES Individual Permits Unit  
Attn: Richard Mendolia  
1110 West Washington Street  
Phoenix, Arizona 85007

Or by contacting Richard Mendolia at (602) 771 – 4374 or by e-mail at [rjm@azdeq.gov](mailto:rjm@azdeq.gov).

### **XVI. 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 Forms 1 and 2D, received February 15, 2018, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.
2. 208 Consistency Review Form dated March 26, 2018.
3. ADEQ Geographic Information System (GIS) Web site
4. Information provided to ADEQ staff during a site visit to the future facility location on March 15, 2018.
5. Arizona Administrative Code (AAC) Title 18, Chapter 11, Article 1, *Water Quality Standards for Surface Waters*, adopted December 31, 2016.
6. A.A.C. Title 18, Chapter 9, Article 9. *Arizona Pollutant Discharge Elimination System* rules.
7. 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*.
8. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.
9. *Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs*, US EPA, May 31, 1996.
10. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA /821-R-02-013).
11. U.S. EPA NPDES Permit Writers' Manual, September 2010.