

ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM (AZPDES)

This document gives pertinent information concerning the reissuance of the AZPDES permit listed below. This facility is a wastewater treatment plant (WWTP) with a design capacity of 4.5 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.

I. PERMITTEE INFORMATION	
Permittee's Name:	City of Buckeye
Permittee's Mailing Address:	21749 W. Yuma Road, Suite 107 Buckeye, Arizona 85326
Facility Name:	Central Buckeye Wastewater Treatment Plant (WWTP)
Facility Address or Location:	915 S. 7 th Street Buckeye, Arizona 85326
County:	Maricopa County
Contact Person(s): Phone/e-mail address	Mr. Henry Cornejo, Wastewater Supervisor (623) 349-6187 / hcornejo@buckeyeaz.gov
AZPDES Permit Number:	AZ0025313
Inventory Number:	100574
LTF Number:	78714

II. STATUS OF PERMIT(s)	
AZPDES permit applied for:	Renewal
Date application received:	September 26, 2019
Date application was determined administratively complete:	October 7, 2019
Previous permit number (if different):	N/A
Previous permit expiration date:	March 26, 2020

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.

Based on review of the application, there are no changes to the facility that require a new determination of consistency with the Regional Water Quality Management Plan.

The city of Buckeye has the following permits issued by ADEQ applicable to the Central Buckeye WWTP:

Type of Permit

Aquifer Protection Permit (APP)	P100574	Regulates discharges to the local aquifer
Reuse Permit	R100574	Regulates the practice of reusing treated wastewater for beneficial purposes

III. GENERAL FACILITY INFORMATION

Type of Facility:	Publicly owned treatment works (POTW)
Facility Location Description:	Central Buckeye WWTP is located one mile south of City Hall at 7 th Street and Irwin Avenue
Permitted Design Flow:	4.5 mgd
Treatment level (WWTP):	Secondary treatment with advanced filtration
Treatment Processes :	Influent screening and grit removal, secondary treatment including return activated sludge process, secondary clarification, tertiary filtration, chlorination and dechlorination. Polymer is added to the remaining sludge then treated by a gravity belt thickener and belt filter press before being discarded into roll off bins for transportation to a local landfill for disposal. The excess water from the gravity belt thickener and belt filter press is recycled to the influent pump station.
Sludge Handling and Disposal:	All the sludge including screenings, grit, scum hauled to an off-site location.
Nature of facility discharge:	Domestic wastewater from residential and commercial sources
Total Number of significant industrial Users (SIUs):	None
Average flow per discharge:	1.6 mgd
Service Area:	City of Buckeye
Service Population:	Approximately 40,000

Reuse / irrigation or other disposal method(s):	Treated effluent, in addition to being discharged through Outfalls 002, 003 and 004 under existing AZPDES permit, is reused as irrigation at parks and common landscape areas. The proposed AZPDES permit reauthorizes discharge of treated effluent to the Buckeye Canal tributary to the Arlington Canal and to the Roosevelt Canal.
Continuous or intermittent discharge:	Continuous discharge - Discharge flow records submitted during the existing permit term indicate continuous discharge through Outfall 002.

IV. RECEIVING WATER

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 :	<p>Outfall 002: Into a lateral of the Buckeye water Conservation and Drainage District (BWCCD) Canal, which flows approximately one half mile south where it enters the Arlington Canal. Both the Arlington Canal and the BWCCD are tributary to the Gila River in the Middle Gila River Basin. (From Gila River at 33° 20' 54" / 112° 35' 39" to Gila River at 33° 13' 44" / 112° 46' 15")</p> <p>Outfall 003: Into the Roosevelt Canal. Roosevelt Irrigation District (RID) has a Groundwater Savings Facility (GSF) that is permitted by Arizona Department of Water Resources (ADWR) to accept up to 60,000 acre-feet of effluent annually into the Roosevelt Canal, and deliver it as renewable water supply. The City of Buckeye has a Water Storage Permit for RID's GSF, which allows the City to deliver up to 5,000 acre-feet (1,629 million gallons) of effluent annually to the Roosevelt Canal and receive Long-Term Storage Credits (LTSCs) in return for the effluent used by RID customers to reduce groundwater pumping. (A Phoenix Area Canals - Below municipal WTP intakes and all other locations)</p> <p>Outfall 004: Into the main Buckeye Canal. (A Phoenix Area Canals - Below municipal WTP intakes and all other locations)</p>
River Basin:	Outfalls 002, 003, and 004: Middle Gila River Basin
Outfall Location(s):	<p>Outfall 002: This Outfall is located on the east side of 7th Street (North Drive), across from the Central Buckeye Wastewater Treatment Plant. Township 1 S, Range 3 W, Section 8 Latitude 33° 21' 32" N, Longitude 112° 34' 55" W</p> <p>Outfall 003: This Outfall is located adjacent to the City of Buckeye Sundance Water Reclamation Facility. Township 1 N, Range 3 W, Section 13 Latitude 33° 25' 26.751" N, Longitude 112° 31' 4.795" W</p>

	<p>Outfall 004: This Outfall is located on the west side of Dean Road, about ¼ mile south of Southern Avenue. Township 1 N, Range 3 W, Section 35 Latitude 33° 23' 23" N, Longitude 112° 31' 18" W</p>
<p>The outfall discharges to, or the discharge may reach, a surface water listed in Appendix B of A.A.C. Title 18, Chapter 11, Article 1.</p>	
<p>Designated uses for the receiving water listed above:</p>	<p>Outfall 002: Arlington Canal Agricultural Livestock watering (AgL)</p> <p>Arlington Canal: The Buckeye Canal flows approximately ½ mile south where it enters the Arlington Canal. Based on the volume and continuous nature of the discharge, in conjunction with the effluent entering the Arlington Canal very quickly after being discharged, the applicable designated use applied to the discharge is Agricultural Livestock watering (AgL).</p> <p>Outfalls 003 and 004: Buckeye Canal Agricultural Irrigation (AgI) Agricultural Livestock watering (AgL)</p>
<p>Is the receiving water on the 303(d) list?</p>	<p>The Buckeye Irrigation District Canal, which is the receiving water for Outfalls 002 and 004 is not listed on the 303 (d) list. However, this facility has been assigned a Waste Load Allocation (WLA) in the Gila River TMDL that was approved in December 23, 2015 for boron and selenium impairments.</p>
<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>	

<p>V. DESCRIPTION OF DISCHARGE</p>		
<p>Because the facility is in operation and discharges have occurred, effluent monitoring data are available. The following is the measured effluent quality reported in the application.</p>		
<p>Parameters</p>	<p>Units</p>	<p>Maximum Daily Discharge Concentration</p>
<p>Biochemical Oxygen Demand (BOD)</p>	<p>mg/L</p>	<p>42.8</p>
<p>Total Suspended Solids (TSS)</p>	<p>mg/L</p>	<p>21</p>
<p>Total Kjeldahl Nitrogen (TKN)</p>	<p>mg/L</p>	<p>48.7</p>
<p><i>E. coli</i></p>	<p>cfu / 100 mL</p>	<p>2420</p>

Facility design removal rates:	BOD 97 % TSS 97 % N 85 %
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VI. STATUS OF COMPLIANCE WITH THE EXISTING AZPDES PERMIT	
Date of most recent inspection:	May 10, 2017; potential violations that were noted as a result of this inspection are an influent flowmeter was out of service.
DMR files reviewed:	04 /2015 through 09 / 2019
Lab reports reviewed:	04 /2015 through 09 / 2019
DMR Exceedances:	pH Out of Range (September 2017, October 2017, May 2019, and July 2019); Selenium (July 2017).
NOVs issued:	NOV Issued on August 28, 2018 - Failure to monitor discharges from the outfall as established by the Permit.
NOVs closed:	September 21, 2018
Compliance orders:	None

VII. PROPOSED PERMIT CHANGES			
The following table lists the major changes from the previous permit in this draft permit.			
Parameter	Existing Permit	Proposed permit	Reason for change
Reporting Location	Mail in hard copies of DMRs and other attachments	DMRs and other reports to be submitted electronically through myDEQ portal	Language added to support the NPDES electronic DMR reporting rule that became effective on December 21, 2015.
<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 effluent 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>Limits are retained in the draft 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> <p>No limits are less stringent due to a change in the WQS in this permit.</p>			

VIII. DETERMINATION OF EFFLUENT LIMITATIONS and ASSESSMENT LEVELS

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.

Technology-based Limitations: As outlined in 40 CFR Part 133:

The regulations found at 40 CFR §133 require that POTWs achieve specified treatment standards for BOD, TSS, and pH based on the type of treatment technology available. Therefore, technology-based effluent limitations (TBELs) have been established in the permit for these parameters. Additionally, oil & grease will be monitored with a TBELs based on best professional judgment (BPJ). The average monthly limit of 10 mg/L and daily maximum of 15 mg/L are commonly accepted values that can be achieved by properly operated and maintained WWTPs. This level is also considered protective of the narrative standard at A.A.C. R18-11-108(B).

In addition, *E.coli* and total residual chlorine (TRC) will also be monitored with TBELs based on best professional judgment (BPJ). These parameters have been shown through extensive monitoring WWTPs to fluctuate greatly and thus are not conducive to exclusion from limitation due to a lack of RP due to no applicable numeric WQS. Therefore, the draft permit contains TBELs for *E. coli* and TRC.

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.

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.

Total Mass Daily Loads / Waste Load Allocations:

A TMDL for total boron and selenium impairments on the Gila River between Centennial Wash and Gillespie Dam was approved by the EPA on December 23, 2015. The TMDL resulted in setting Waste Load Allocations (WLAs) for boron and selenium concentrations to Central Buckeye WWTP that discharges to the Buckeye Canal and Roosevelt Canal. The TMDL listed the WLAs for these parameters as average monthly and daily limit concentrations. The WLAs assigned to this facility are applied to all Outfalls and are set as limits in the permit.

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.

Assessment Levels (ALs)

None

Based on best professional judgment (BPJ), the following trace substances were not included in the draft permit due to a lack of numeric standards for these pollutants: barium, nitrates, nitrites, and manganese.

Hardness

Since there are no aquatic and wildlife designated uses for the receiving water, no hardness monitoring is required to determine limits or assessment levels for the hardness-dependent metals (cadmium, chromium III, copper, lead, nickel, silver, and zinc).

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.”

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 2.a. through 2.f., *Effluent Characterization Testing*, as follows:

- Table 2.a. – General Chemistry and Microbiology: ammonia, BOD-5, *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 2.b. – Selected Metals, & Cyanide
- Table 2.c. – Selected Volatile Organic Compounds
- Table 2. d. – Selected Acid-Extractible Compounds
- Table 2. e. – Selected Base-Neutral Compounds
- Table 2.f. – Additional Parameters Based on Designated Uses (from Arizona Surface Water Quality Standards, Appendix A, Table 1)

NOTE: Some parameters listed in Tables 2.a. and 2.b. are also listed in Table 1. In this case, the data from monitoring under Table 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 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*.

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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 on a continual basis using a flow meter.
Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS)	30 mg/L 30-day average 45 mg/L 7-day average/ Technology-based limits 40 CFR 133.102	BOD: 42.8 mg/L TSS: 21 mg/L	BOD: 290 TSS: 293	N/A	TBELs for BOD and TSS are always applicable to WWTPs.	Monitoring for influent and effluent BOD and TSS to be conducted using composite samples of the influent and the effluent. The sample type required was chosen to be representative of the discharge. The requirement to monitor influent BOD and suspended solids is included to assess compliance with the 85% removal requirement in this permit.
Chlorine, Total Residual (TRC)	No applicable numeric standards. TBELs included based on BPJ. Properly operated and maintained WWTPs are capable of meeting limits set in the permit.	16 µg/L	1850	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 remains in the permit. 40 CFR Part 136 specifies that discrete samples must be collected for chlorine.
<i>E. coli</i>	No applicable numeric standards. TBELs included based on BPJ. Properly operated and maintained WWTPs are capable of meeting limits set in the permit.	2,420 MPN / 100 mL	361	N/A	RP always expected for WWTPs. See explanation above.	<i>E. coli</i> is to be monitored as a discrete sample and a limit remains in the permit.
pH	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 133.102	Min: 6.24 s.u. Max: 8.01 s.u.	1,825	N/A	WQBEL or TBEL is always applicable to WWTPs.	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. pH sampling must also coincide with ammonia sampling when required.
Temperature	No applicable numeric standard	Oct.–Mar: 28.6 °C Apr.–Sep: 32.6 °C	920	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	1,970 mg/L	48	N/A	N/A	Monitoring required for effluent characterization.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Ammonia	No applicable standard	14.5 mg/L	44	N/A	N/A	Monitoring required for effluent characterization by discrete sample and an ammonia data log is required.
Nutrients (Total Nitrogen and Total Phosphorus)	No applicable standards	N: 22.9 mg/L P: 3.86 mg/L	N: 291 P: 21	N/A	N/A	Monitoring required for effluent characterization.
Oil & Grease	BPJ Technology-Based Level of 10 mg/L monthly average and 15 mg/L daily maximum	15 mg/L	19	N/A	RP Indeterminate (2)	Monitoring required and a limit remains in the permit.
Antimony	No applicable standard	< 2.5 µg/L	19	N/A	N/A	Monitoring required for effluent characterization.
Arsenic	200 µg/L / AgL	19 µg/L	19	43.7 µg/L	No RP	Monitoring required for effluent characterization.
Beryllium	No applicable standard	< 4 µg/L	19	N/A	N/A	Monitoring required for effluent characterization.
Boron	TMDL WLAs AVG Monthly Limit – 1,231 µg/L Daily Max Limit – 1,682 µg/L	1440 µg/L	68	2,304 µg/L	N/A	Monitoring required and the TMDL WLAs remains in the permit.
Cadmium	50 µg/L / AgL	< 2 µg/L	19	N/A	No RP	Monitoring required for effluent characterization.
Chromium (Total)	1000µg/L / AgL	15.5 µg/L	19	35.7 µg/L	No RP	Monitoring required for effluent characterization.
Chromium VI	No applicable standard	5.5 µg/L	8	N/A	N/A	Monitoring required for effluent characterization.
Copper	500 µg/L / AgL	< 20 µg/L	17	N/A	No RP	Monitoring required for effluent characterization.
Cyanide	200 µg/L / AgL	12.8 µg/L	19	29.4 µg/L	No RP	Monitoring required for effluent characterization.
Hardness	No applicable standard	No Data	0	N/A	N/A	Monitoring not required.

Parameter	Lowest Standard / Designated Use	Maximum Reported Daily Value	No. of Samples	Estimated Maximum Value	RP Determination	Proposed Monitoring Requirement/ Rationale (1)
Hydrogen Sulfide	No applicable standard	No Data	0	N/A	N/A	Monitoring not required.
Iron	No applicable standard	< 200 µg/L	3	N/A	N/A	Monitoring required for effluent characterization.
Lead	100 µg/L / AgL	< 5 µg/L	19	N/A	No RP	Monitoring required for effluent characterization.
Mercury	10 µg/L / AgL	< 2 µg/L	19	N/A	No RP	Monitoring required for effluent characterization.
Nickel	No applicable standard	< 40 µg/L	19	N/A	N/A	Monitoring required for effluent characterization.
Selenium	TMDL WLAs AVG Monthly Limit – 2 µg/L Daily Max Limit – 4 µg/L	4 µg/L	19	9.2 µg/L	N/A	Monitoring required and the TMDL WLAs remains in the permit.
Silver	No applicable standard	< 2 µg/L	18	N/A	N/A	Monitoring required for effluent characterization.
Sulfides	No applicable standard	No Data	0	N/A	N/A	Monitoring not required.
Thallium	No applicable standard	< 2.5 µg/L	19	N/A	N/A	Monitoring required for effluent characterization.
Zinc	25,000 µg/L/ AgL	167 µg/L	18	400 µg/L	No RP	Monitoring required for effluent characterization.

Footnotes:

- (1) The monitoring frequencies are as specified in the permit.
- (2) Monitoring with ALs or Action Levels always required for WWTPs for these parameters unless RP exists and limits are set.

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, Section C 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.

For the purposes of this permit, a "24-hour composite" sample has been defined as a flow-proportioned mixture of not less than three discrete samples (aliquots) obtained at equal time intervals over a 24-hour period. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling.

These criteria for composite sampling are included in order to obtain samples that are representative of the discharge given the potential variability in the duration, frequency and magnitude of discharges from this facility.

Discrete (i.e., grab) samples are specified in the permit for parameters that for varying reasons are not amenable to compositing.

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.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 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.

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 use the ammonia criteria table found in Appendix B of the permit to determine the applicable ammonia standard.

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

X. BIOSOLIDS REQUIREMENTS (Part III in Permit)

Standard requirements for the monitoring, reporting, record keeping, and handling of biosolids, as well as minimum treatment requirements for biosolids according to 40 CFR Part 503 are incorporated in the draft permit.

XI. SPECIAL CONDITIONS (Part V in Permit)

Operation

This permit condition requires the permittee to ensure that the WWTP has an operator who is certified at the appropriate level for the facility, in accordance with A.A.C. R18-5-104 through -114. The required certification level for the WWTP operator is based on the class (Wastewater Treatment Plant) and grade of the facility, which is determined by population served, level of treatment, and other factors.

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 Central Buckeye WWTP will be to a canal which is subject to Tier 1 antidegradation protection. 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 – Surface Water Permits Unit
Attn: Swathi Kasanneni
1110 West Washington Street
Phoenix, Arizona 85007

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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 Form 2A and 2S, received September 26, 2019, along with supporting data, facility diagram, and maps submitted by the applicant with the application forms.
2. ADEQ files on Central Buckeye Wastewater Treatment Plant (WWTP).
3. 208 Consistency Review Form dated November 4, 2008.
4. ADEQ Geographic Information System (GIS) Web site
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.

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