DRAFT EXECUTIVE SUMMARY

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Picacho Water Reclamation Plant
Aquifer Protection Program Permit No. P-103890
Place ID 6976, LTF No. 93437
Significant Amendment

I. Introduction:

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Program (APP) Permit for the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

II. Permittee & Facility Location:

The facility is located at 6197 West Cornman Road in Eloy, Arizona, Pinal County.

III. Facility Description:

The Picacho Water Reclamation Plant (PWRP) is a Grade 3 Wastewater Treatment Plan that produces Class A+ effluent. The facility includes an influent pump station, ground level screenings and grit process, SBR pump station, elevated steel SBR tanks, filtration process, open channel UV system, and an effluent pump station. The facility treats residential discharges only.

IV. Amendment Description:

The purpose of this amendment is to approve the Basis of Design Report prepared by Wilson Engineers, LLC, dated October 2021, which includes an expansion of the plant's total capacity from 0.25 million gallons per day (mgd) to 0.499 mgd and includes the following plant upgrades:

- New Headworks and Influent Pump Station improvements
- New Sequencing Batch Reactor System (SBR) equipment package, to match existing
- Additional UV disinfection
- Biosolids handling facilities
- Electrical, instrumentation, and control upgrades

This is a Significant Amendment as per A.A.C. R18-9-A211(B)(2)(b), an increase in design flow of a sewage treatment facility that treats 500,000 gallons per day or less by 10%. The facility also requested to upgrade the effluent classification from Class B+ to Class A+ to remain consistent with the 208 Areawide Plan and to reflect the capability of the plant to produce Class A+ effluent.

V. Best Available Demonstrated Control Technology (BADCT):

The PWRP and the expansion is designed to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility is designed to produce Class A+ effluent

which is put to beneficial use though irrigation for the Sun Lakes at Casa Grande Golf Course or recharge through the Sun Lakes at Casa Grande Effluent Recharge Facility (ADWR Recharge Permit No. 71-591938.0002).

VI. Compliance with Aquifer Water Quality Standards (AWQS):

The facility has demonstrated compliance with AWQS through discharge monitoring. There was one exceedance for Fecal Coliform in June of 2019 which was resolved through contingency reporting on April 27, 2020. The DIA was calculated using a MODPATH particle tracking analysis simulation. The model assumes a maximum recharge rate over a 40-year projection period. The areal extent of the DIA was drawn by surrounding all of the particle path lines emanating from the Picacho WRP. For the expansion, the updated DIA encompasses 0.3 miles to the west, 0.6 miles to the north, 0.4 miles to the east and 0.35 miles to the south.