

Kingman Correctional & Rehabilitation Water Reclamation Facility (WRF)
Aquifer Protection Permit No. P-103892
Place ID 9303, LTF No. 95573
Significant Amendment

I. Introduction:

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) for the subject facility that covers 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:

Kingman Correctional & Rehabilitation Water Reclamation Facility (WRF)
4626 W. English Drive, Golden, Mohave County, Arizona, 86413

III. Facility Description:

The GEO Corrections and Detention L.L.C. is authorized to operate the Kingman Correctional & Rehabilitation Water Reclamation Facility (WRF), a 0.350 million-gallons-per-day (mgd) sequencing batch reactor (SBR) facility which includes headworks with grinder and screen with an auger assembly, influent pump station, two sequencing batch reactors, post equalization basin, chlorination, and de-chlorination. The SBR tanks provide nitrification and denitrification. Effluent may be stored in two lined effluent storage ponds or discharged to four recharge basins. Sludge is treated through aerobic digestion, dewatered through a belt filter press, and hauled off-site for disposal at a landfill.

All industrial hookups and other non-residential hookups to the treatment system shall be authorized according to the applicable federal, state or local regulations.

IV. Amendment Description:

The purpose of this amendment is to:

- Convert former Effluent Storage Pond 1 to a Recharge Basin. The pond was no longer being used for effluent storage and the liner had been removed. The conversion to a recharge basin will enhance the recharge capacity of the facility.
- Update the permit to the new Wastewater Facility Boilerplate and correct typographical errors.

V. Regulatory Status

This "Significant" amendment application was received on October 20, 2022.

The latest inspection report (No. # 347298) dated April 23, 2020, indicated that the facility was not found to be in compliance with the APP and Arizona rules and statutes. A Notice of Correction was issued on May 15, 2020 and closed on June 1, 2020.

VI. Best Available Demonstrated Control Technology (BADCT):

The WRF was designed, constructed, operated, and maintained to meet the treatment performance criteria for new facilities as specified in A.A.C. R18-9-B204. The facility shall meet the performance requirement for industrial pre-treatment as per A.A.C. R18-9-B204(B)(6)(b).

The treatment facility shall not exceed a maximum seepage rate of 550 gallons per day per acre for all containment structures within the treatment works.

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

To ensure that site operations do not violate Aquifer Water Quality Standards at the point of compliance, representative samples of the effluent shall be collected after dechlorination prior to the recharge basins. The permittee shall monitor the effluent daily for fecal coliform, monthly for total nitrogen, quarterly for metals, and annually for VOCs (see Section 4.2, Table 8 in the permit). To ensure that site operations do not result in violation of Aquifer Water Quality Standards at the point of compliance, the permittee will monitor the groundwater at the POC well monthly for nitrogen species and Total Coliform, quarterly for metals, and semi-annually for VOCs and SVOCs. Groundwater monitoring will be conducted as per Section 4.2, Table 9, in the permit.

Facility inspections and operational monitoring shall be performed on a routine basis (see Section 4.2, Table III in the permit).

The POC for this facility is designated at the following location:

POC #	POC Location	Latitude	Longitude
1	Northeast corner of the property	35° 01' 30" N	114° 11' 15" W

The Director may amend this permit to designate additional points of compliance if information on groundwater gradients or groundwater usage indicates the need.