

ARIZONA STATE PRISON COMPLEX SAFFORD/FORT GRANT WASTEWATER
TREATMENT PLANT

Aquifer Protection Permit No. P-102341

Place ID 1846, LTF No. 69124

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:

15500 South Fort Grant Road
Fort Grant, Arizona 85643
Graham County

III. Facility Description:

The permittee is authorized to operate the Arizona State Prison Complex (ASPC) Safford/Fort Grant Wastewater Treatment Plant (WWTP), with a maximum average monthly flow 0.178 million gallons per day (MGD). The effluent is disposed by evaporation or discharged by percolation through the land application area. Sludge accumulation in the aeration lagoons will be hauled off-site for management or disposal in accordance with state and federal regulations, on an as needed basis.

IV. Amendment Description:

The purpose of this amendment is to:

1. Change the Total Coliform monitoring to Fecal Coliform monitoring,
2. Reduce the groundwater monitoring frequency for Fecal Coliform from weekly to Quarterly,
3. Reduce the groundwater monitoring frequency for Total Nitrogen, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen (TKN) from monthly to quarterly, and
4. Reduce the groundwater monitoring frequency for Volatile Organic Compounds (VOCs) from quarterly to semi-annually.

The reduction in monitoring frequency makes this a significant amendment as per A.A.C. R18-9-A211(B)(4).

V. Regulatory Status

- Not applicable.

VI. Best Available Demonstrated Control Technology (BADCT):

In plain English describe the facility and the BADCT. Examples include:

- The WWTP treatment process consists of headworks with a bar screen and a flow metering device, three clay-lined aeration ponds, and 44 acres of fenced land application area.
- The treatment facility shall be designed, constructed, operated, and maintained to meet the treatment performance criteria for existing facilities as specified in A.A.C. R18-9-B205

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

Groundwater monitoring is required at one POC well to ensure compliance with AWQS. The POC well is downgradient of the discharging facility and serves to provide ADEQ with groundwater quality data. ADEQ uses groundwater quality data to make regulatory and enforcement decisions.

The permittee shall not cause or contribute to a violation of an Aquifer Water Quality Standard (AWQS) at the applicable point of compliance (POC) for the facility. Where, at the time of issuance of the permit, an aquifer already exceeds an AWQS for a pollutant, the permittee shall not discharge that pollutant so as to further degrade, at the applicable point of compliance for the facility, the water quality of any aquifer for that pollutant.