

Mohave Energy Park
Aquifer Protection Permit No. P-515173
Place ID 251311, LTF No. 112620
New Permit

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

Arizona Electric Power Cooperative, Inc.

III. Facility Name & Location:

Mohave Energy Park
2897 E. King Street
Mohave Valley, Arizona 86440

IV. Facility Description:

The facility is a new peaking natural gas-fired electric generating facility in Mohave Valley, Arizona. The facility consists of four natural gas-fired, simple cycle, LM6000 combustion turbine generators, each capable of producing approximately 49 megawatts of electricity. Excess water generated as a byproduct of reverse osmosis treatment of raw water is managed within an 8.3-acre, two-cell, lined Evaporation Pond located on site. The Evaporation Pond stores and evaporates the excess water. AEPCO anticipates a facility lifespan of approximately 40 years.

V. Best Available Demonstrated Control Technology (BADCT):

The Evaporation Pond is constructed with dual, 60 mil high-density polyethylene geomembrane liners, separated by a Leak Collection and Removal System and underlain by a geosynthetic clay liner. The Evaporation Pond is located outside of the 100-year floodplain and stormwater is routed around the Evaporation Pond.

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

The Pollutant Management Area (PMA) circumscribes the discharging facility. The Discharge Impact Area (DIA) is established at the facility footprint. To demonstrate compliance with AWQS, the applicant has established a conceptual Point of Compliance (POC). Routine groundwater monitoring is not required for the conceptual POC under normal operating conditions. In the event of a release, the applicant must execute their contingency plan, and

follow permit contingency actions, which may require the installation and monitoring of a 4-inch diameter monitoring well at the POC that extends through the uppermost aquifer pursuant to A.R.S. § 49-244.