

Gilbert, Town of – Municipal Center Vadose Zone Recharge Site (facility)  
Aquifer Protection Permit No. P-105303  
Place ID 17993, LTF No. 76883  
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. Facility Location:**

90 East Civic Center Drive  
Gilbert, Arizona 85296

**III. Facility Description:**

The permittee is authorized to operate the Town of Gilbert – Municipal Center Vadose Zone Recharge Site ('the facility'), a recharge site / underground storage facility (USF). The facility may recharge and/or store (in the aquifer) up to a total maximum average yearly flow 2,240 acre-feet per year (equivalent to an annual average flow of two (2.0) million gallons per day (mgd)) of denitrified and tertiary treated effluent from the Neely Water Reclamation Facility (WRF). The Neely WRF is regulated under a separate permit, Aquifer Protection Permit (APP) No. P100393.

The facility consists of two (2) vadose zone wells, which are constructed with 18 inch steel casing and extend approximately 120 feet below the ground surface (bgs).

**IV. Amendment Description:**

ADEQ reviewed and approved:

- The replacement of POC well M-1 with M-1A and ambient groundwater monitoring. Due to rising groundwater levels, the applicant requested to increasing the Aquifer Quality Limits (AQLs) for Nitrate and Total Nitrogen or to perform ambient groundwater monitoring at the new POC well M-1A;  
The update to the closure cost; and
- The update to the Contingency Plan.

**V. Regulatory Status:**

Records indicate that the facility has never been inspected.

**VI. Best Available Demonstrated Control Technology (BADCT):**

Not applicable as per A.A.C. R18-9-A201(C).

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

To ensure that site operations do not result in violation of Aquifer Water Quality Standards at the point of compliance, groundwater monitoring will be monitored as per Section 4.2, Table IIB for *E. Coli*, nitrogen species, metals and organic compounds. The permittee will monitor the effluent every day for flow only to the two (2) vadose wells (see Section 4.2, Table I, in the permit).

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