

South Houghton Area Recharge Project (SHARP)  
Aquifer Protection Permit No. P-511628  
Place ID 147575, LTF No. 104849  
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:**

City of Tucson – South Houghton Area Recharge Project (SHARP) is located at 9900 East Drexel Road in Tucson, Arizona, Pima County.

**III. Facility Description:**

The SHARP is designed to recharge up to 7.14146 million gallons per day (mgd) with a maximum total of 8,000 acre-feet per year (ac ft/yr) of Class A Reclaimed Water from the Tucson Water Department TWD - Houghton Reclaimed Reservoir (HRR). Reclaimed Water from the Tucson Reclaimed Water Treatment Plant (RWTP, APP #100147), water pumped directly into the reclaimed distribution system from Sweetwater Recharge Facilities (SRF; APP #103370) recovery wells and remediated groundwater from the Tucson Airport Remediation Project (TARP) is conveyed to the HRR through a 30-inch transmission pipeline which runs along the west and south boundaries of the SHARP site. The SHARP Basins (recharge basins) are located within a 40-acre desert landscaped parcel (141-01-007G) owned by TWD adjacent to the HRR approximately 0.4 miles west of Houghton Road, south of Drexel Road.

**IV. Amendment Description:**

The purpose of this amendment is to add a fourth recharge basin to the facility, designated as Recharge Basin 304, and increase the maximum total recharge capacity from 4,000 ac ft/yr to 8,000 ac ft/yr.

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

Not applicable for recharge facilities.

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

Compliance with AWQS is demonstrated through routine discharge monitoring and groundwater monitoring at the POC wells. There are no recently reported analyte exceedances in either POC well.