

SITE REGISTRY REPORT (FINAL)
WATER QUALITY ASSURANCE REVOLVING FUND (WQARF) SITE
7th Avenue and Bethany Home Road
Phoenix, Maricopa County, Arizona
August 2004

The 7th Avenue and Bethany Home Road Water Quality Revolving Fund (WQARF) Registry site (the Site) consists of a contaminated groundwater plume located in the vicinity of the intersection of 7th Avenue and Bethany Home Road, Phoenix, Arizona. The Site is approximately bounded to the north by Berridge Lane, to the south by Bethany Home Road, to the east by 6th Avenue and to the west by 8th Avenue.

Arizona Revised Statutes (A.R.S.) § 49-287.01 outline the process for completing preliminary investigations and listing sites on the WQARF Registry. Upon completion of the Site's Preliminary Investigation, an Eligibility & Evaluation (E&E) scoring document and a Site Registry Report (SRR) were drafted in January, 2004. In a March 3, 2004 ADEQ letter, copies of the drafts were provided to Bayless Investment & Trading Company (BIT), initiating the statutory 15-day owner/operator comment period. Based on information received from BIT, the SRR was redrafted in May, 2004. Copies of the drafts were then placed in the public file and the E&E score was published in the *Arizona Republic* on July 1, 2004, to initiate the statutory 30-day public comment period. The public comment period ended on July 30, 2004. Subsequently, all comments received were considered before finalizing the attached E&E scoring document and this final SRR.

Background

A 2.6-acre commercial property located at the northeast corner of 7th Avenue and Bethany Home Road operated as a shopping center between 1952 and 1992. Businesses that occupied the shopping center included a grocery store, clothing store, bakery, beauty shop, barbershop, pharmacy and a dry cleaner. The dry cleaner occupied one of the commercial spaces between 1952 and 1992. The grocery store was destroyed by fire in 1987, but the other businesses remained until 1992. The buildings were demolished in 1994. The chemical used in the Site's dry cleaning process was tetrachloroethylene (PCE), which is a volatile organic compound (VOC) commonly referred to as perc. The property was not located within the city limits when first developed, and serviced by an onsite septic system. In 1960, the property was connected to the City of Phoenix sewer system, but the on-site septic tanks and cesspools remained in place. In 1993, all businesses were closed, and the shopping center was demolished in 1994.

In 1995, a prospective purchaser of the Site conducted a Phase I and a Phase II Environmental Site Assessment. Five soil borings were drilled to depths of thirty feet below ground surface (bgs). Soil samples were collected and analyzed for VOCs. PCE detections ranged from 0.022 to 0.065 milligrams per kilogram (mg/Kg). The Arizona Residential Soil Remediation Level is 53.0 mg/Kg. According to the only groundwater data available in the WQARF file, PCE was detected in groundwater collected in 1995 from the on-site monitoring wells which were installed by a prospective purchaser of the Site. PCE was detected at concentrations ranging from 200 to 15,000 micrograms per liter ($\mu\text{g/L}$). The Aquifer Water Quality Standard (AWQS) for PCE is 5.0 $\mu\text{g/L}$.

In 1999, a consultant working for the property owner conducted a soil gas investigation. The consultant suspected that buried tanks or sumps were present. Excavation activities revealed two separate septic tanks, three cesspools, and several runs of piping. The cesspools were found to be 25 feet deep and three feet in diameter. The property owner believed that the old septic tanks, which were unused for decades, had been removed or abandoned around the time the property was connected to the sewer.

A dried sludge sample was collected from the bottom of one of the septic tanks and was analyzed for VOCs, and it contained PCE at 54 mg/Kg. On March 21, 2000, soil samples were collected from the cesspools and analyzed for VOCs, and PCE was detected ranging from non-detect to 2.1 mg/Kg. On May 9, 2000, the septic tanks and its piping were excavated along with 1 foot of soil beneath the tanks. Soil samples were collected from beneath the excavation, and no VOCs were detected.

Groundwater flow direction at the Site is to the west-northwest and the depth to groundwater is approximately 70 feet bgs. There are no production wells within the boundaries of the Site. The City of Phoenix obtains most of its drinking water supply from a blended system that uses mostly surface water and some groundwater. Monitor wells, and two Salt River Project (SRP) irrigation wells appear to be the only wells impacted by this groundwater plume. The E&E score for the Site is 29 out of a possible 120. ADEQ has identified one social or economic factor associated with the Site, the potential future loss of groundwater resources.

Rationale to list the Site on the WQARF Registry

- The highest PCE contamination found in the 1995 groundwater sampling was 15,000 µg/L, which exceeds the AWQS of 5.0 µg/L.
- The source of PCE contamination appears to have been the on-site septic tanks.
- Two SRP irrigation wells located within ½ mile of the Site have shown PCE contamination.
- The E&E score for the Site is 29 out of a possible 120.

This SRR is based upon information available as of the date shown. Site boundaries depicted on the attached Site Boundary Map represent ADEQ's interpretation of data available at the time the map was constructed. The map is intended to provide the public with basic information as to the estimated geographic extent of known contamination as of the date of the SRR. The actual extent of contamination will be investigated and the geographic boundaries for the Site may change in the future as new information becomes available.

An updated SRR and associated Site Boundary Map will not be issued. As new information becomes available, it will be made available for public review through placement in the public file.