

**SITE REGISTRY REPORT**  
**Los Reales Landfill**  
**Pima County, Tucson, Arizona**  
**March 3, 1999**

The Los Reales Landfill Site (the Site) is located within the Tucson basin, which is part of the upper Santa Cruz River Valley. The Site lies between but is not bounded by Valencia Road to the north, Los Reales Road to the south, Alvernon Way to the west, and Craycroft Road to the east. Located within the Site boundary is the Los Reales Landfill (the Landfill). The Landfill is an active municipal sanitary landfill approximately 347 acres in size located at 5300 East Los Reales Road in southeast Tucson. The City of Tucson (COT) owns and operates the Landfill. Approximately 5 acres in the southwest corner of the Landfill were designated for hazardous waste disposal from 1977-1980. This area has been closed, leveled, and fenced in. The COT is conducting remedial activities at the Site with the Arizona Department of Environmental Quality (ADEQ) providing oversight through the Water Quality Assurance Revolving Fund (WQARF) Program.

The Landfill has been in operation since 1967. Groundwater samples taken in August 1988 and January 1989 indicated the presence of volatile organic compounds (VOCs) in two groundwater monitor wells in the vicinity of Los Reales Road. In September 1989 the COT proposed and initiated a phased plan for the purpose of investigating and remediating the contaminated groundwater at the Site.

The Phase I Remedial Investigation (RI), completed in October 1991, focused on characterizing the nature and extent of groundwater contamination around the Landfill. A VOC plume was identified extending approximately one-half mile northwest of the northwest corner of the Landfill. Several monitoring wells exceeded Aquifer Water Quality Standards (AWQS) for both tetrachloroethene (PCE) and trichloroethene (TCE).

The Phase II RI focused on a detailed evaluation of the VOC contamination and the assessment of remedial objectives for the Site. Soil gas surveys did not indicate any single area of the Landfill as the source of the VOCs. The data indicate that the VOC source is dispersed throughout the main body of the Landfill. The Phase II RI was completed and submitted to ADEQ in June 1994 followed by the Feasibility Study (FS) in July 1994.

ADEQ completed the Responsiveness Summary and signed the Letter of Determination approving the final remedial action plan (RAP) for the Site on April 5, 1995. The remedial strategy approved under the RAP is a groundwater pump and treat system. Groundwater will be extracted and treated by air stripping and then passed through a carbon filter. A portion of the treated water will be reinjected into the aquifer and a portion will be used for dust control at the Landfill.

The COT's Conceptual Design Plan for the Landfill remediation system was approved by ADEQ in September 1997. Currently the remedial system is under construction and is scheduled to be operating in early 1999.

The COT constructed a landfill gas recovery system in 1998. The landfill gas is currently burned at a flare. In 1999 the landfill gas will be piped to Tucson Electric & Power for alternative energy use. By removing VOCs present in the landfill gas, this system acts as a source control.

The Site was evaluated using the Eligibility and Evaluation (E&E) form developed by the Department in 1996, resulting in a score of 32. See the attached E&E form.

This draft Site Registry Report (SRR) is based upon information available as of the date shown. The SRR is intended as a historical document meeting the public notification requirements of ARS § 49-287.01 (B) and (D). Site boundaries depicted on the attached Site Boundary Maps represent ADEQ's interpretation of data available at the time the maps were constructed. The maps are 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 may be different. Therefore, the geographic boundaries for this site may change in the future as new information becomes available.

Public comments to the draft SRR will be considered prior to finalization. An updated SRR will not be issued. As new information becomes available in the future, it will be made available for public review through placement in the public file.

Interested persons are encouraged to review current information, and more detailed historical information, located in the public site file at either the ADEQ Tucson Office or the ADEQ Phoenix Office (Site File E-5440) and identified by the attached site file index.