



# FACT SHEET

## 56th Street and Earll Water Quality Assurance Revolving Fund Site January 2013

*This information is from the Arizona Department of Environmental Quality (ADEQ) to the members of the community near the 56th Street and Earll Drive Water Quality Assurance Revolving Fund (WQARF) site.*

### **SITE DESCRIPTION**

The 56th Street and Earll Drive WQARF Site is an area of groundwater impacted by volatile organic compounds (VOCs), primarily trichloroethene (TCE) and tetrachloroethene (PCE), in the east central Phoenix area. The site is generally bounded by the underlying groundwater contaminant plume and the former Motorola 56th Street Facility. The plume is defined by the extent of the 5 parts per billion (ppb) TCE concentration contour. The site is generally bounded by Earll Drive on the north, the Loop 202 - Red Mountain Freeway on the south, 56th Street on the east, and 32nd Street on the west. The site was placed on the ADEQ WQARF Program registry on June 2, 2004. The ADEQ WQARF Program (also known as State Superfund) oversees, investigates, and cleans up contaminated groundwater and soils sites throughout the State of Arizona. Please see map on back.

### **SITE INVESTIGATIONS/REMEDIATION**

Prior to placement on the ADEQ WQARF registry, the site was informally referred to as the 56th Street Study Area. This site has been investigated, remediated, and monitored by Freescale Semiconductor, Inc. and previously by Motorola Inc. since 1985. Freescale is a spinoff of Motorola. The monitor well network for the site includes 45 wells with data that have been used to characterize the site. Groundwater monitor wells are scheduled for routine sampling on either an annual or semi-annual basis. The water quality data, including depth-to-water, are reported to ADEQ in semi-annual reports. These reports are available to the public.

In 2005, Freescale provided an updated groundwater model for the site, proposed a plan for a remedy, began installing additional groundwater wells, and initiated the design, permitting, and installation

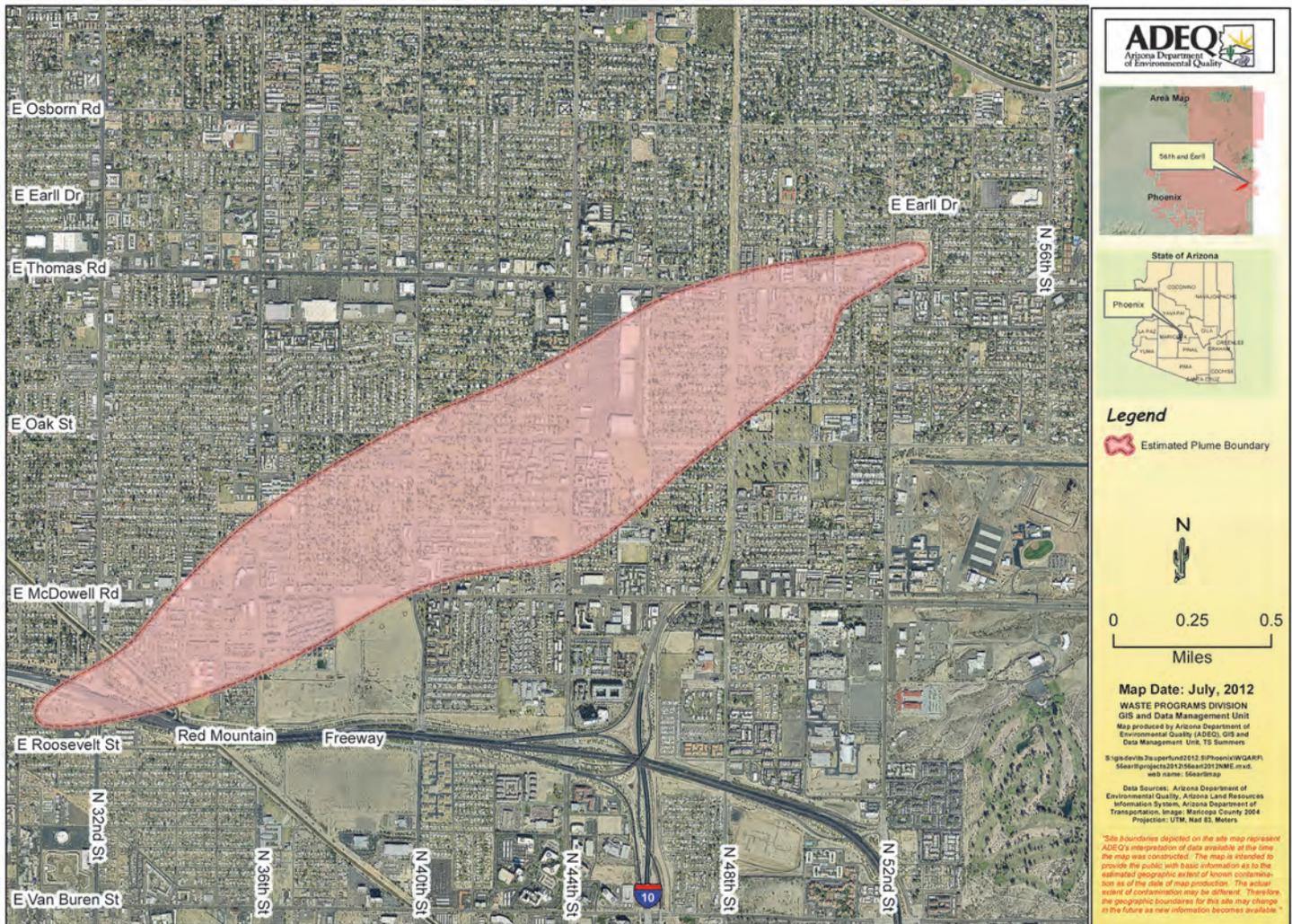
of a treatment system for the remedy as part of the Early Response Action (ERA). Freescale and Salt River Project (SRP) signed an agreement in June 2009 allowing Freescale to install extraction and monitor wells and equipment related to a treatment system along the Grand Canal to the east of 32nd Street. Freescale submitted a complete application for the Arizona Pollutant Discharge Elimination System (AZPDES) permit to ADEQ in January 2010 to discharge treated groundwater to the Grand Canal. The AZPDES permit was approved on March 8, 2011. A Consent Order (Docket No. RP-28-11) between ADEQ and Freescale was signed on April 22, 2011, formalizing the terms of the continued remediation and ongoing investigations by the authority of ADEQ.

An Investigation Summary Report was prepared in response to the Consent Order summarizing the remedial investigations that have been conducted over time at the site and the extent of soil and groundwater contamination at the site. The report was submitted to ADEQ in August 2011.

The ERA chosen was a pump and treat system and design began in 2010 along with related permitting and licensure agreements. With ADEQ approval of the plan, permitting and construction of the treatment plant began in early 2012. Construction is expected to be completed by early 2013 and the treatment system is expected to be in operation after start-up activities are completed, expected by summer 2013. Additional wells located downgradient of the extraction wells and treatment system on the Grand Canal were completed in July 2012 to monitor the contaminant plume.

### **CURRENT ACTIVITY AND FUTURE PLANS**

Currently a pump and treat system located along the bank of the Grand Canal to the east of 32nd Street is nearing completion. The system is expected to be in operation by summer 2013. The contaminated groundwater will be extracted by wells located on the canal, piped to the treatment plant, contaminants of concern removed, and the treated water will then be discharged into the Grand Canal for non-potable beneficial reuse as agricultural



Plume map.

irrigation water. When the remedial investigation is completed, final clean up options will be developed and analyzed in a feasibility study report. These reports will be available to the public for review and comment.

### CONTAMINANTS AT THE SITE

Groundwater at the site is contaminated with TCE, a solvent primarily used in the metal degreasing and cleaning operations and PCE, a commonly used solvent in the dry cleaning process. Historical operations at a number of commercial and industrial facilities, including the former Motorola 56th Street facility, are potential sources of the VOC contamination observed in groundwater at the site. Contaminants of concern at the site may change as new data become available.

Groundwater flow is toward the west-southwest and southwest in the area. Early investigations noted higher TCE and PCE concentrations in offsite wells downgradient of the facility. Additional wells have been installed to further characterize the contaminant plume. The concentrations have been increasing downgradient showing the plume con-

tinues to migrate. Water quality samples from wells adjacent to the former Motorola facility indicate all contaminant sources to groundwater have been removed as the upgradient edge of the plume (as shown by the TCE 5 ug/l or 5 ppb concentration contour) has moved downgradient. The highest concentrations which indicate the core of the plume also continue to move downgradient.

### HEALTH/WATER QUALITY

Risks associated with exposure to contaminated groundwater are encountered primarily through drinking the contaminated water. The groundwater under the site is not used as part of the City of Phoenix public drinking water system.

If you receive your drinking water from the City of Phoenix, your current drinking water is not affected by the groundwater contamination at the site.

The source of drinking water for this portion of the city is from surface water delivered through a series of canals to the water treatment plants. The city is required by law to provide water that meets all state and federal drinking water standards and

conducts regular testing of the drinking water to ensure that these standards are met. The City of Phoenix Water Services Department provides information on its web site or may be contacted directly at (602) 262-6251 for questions. If you are using a private well located within the boundary of the 56th Street and Earll Drive WQARF Site, please call ADEQ's project manager, Nichole Osuch, at (602) 771-4847. If you have concerns about possible health issues, please contact the Arizona Department of Health Services, Office of Environmental Health, at (602) 364-3118.

## **SITE HISTORY**

The site includes the former Motorola facility located on 14 acres at the northwest corner of 56th Street and Earll Drive in east central Phoenix. The facility was first occupied by Motorola in 1950, was expanded over the years, and used for a variety of product development, research, manufacturing, and testing operations until 1982 when the facility was redeveloped for administrative offices. Some of these operations included the use of solvents, acids, and metals. During the manufacturing operations, some solvents were released to the ground primarily through a septic system used in the early operations before the facility was connected to the City of Phoenix sewer system. The property was vacated and sold to developers in 2005. Other possible sources of contaminants to the soils and groundwater include dry cleaners and other businesses and operations yet to be more thoroughly researched in the site area.

## **FOR MORE INFORMATION**

As progress continues at the site, ADEQ will keep the public informed through fact sheets, and public meetings. A Community Advisory Board (CAB) for the site was established in 2004. The primary purpose of the CAB is to advise ADEQ and the public of issues and concerns related to the remediation of the site. Details of the CAB meeting agenda and minutes and other information about this WQARF site are available on the ADEQ Web site (go to Waste Programs, then Superfund/WQARF). The CAB is currently accepting applications for membership. Please contact Wendy Flood, Community Involvement Coordinator (see below), to obtain an application and/or answer questions about the CAB.

With 24-hour notice, an appointment to review relating documentation for the 56th Street and Earll Drive WQARF site is available. File reviews are available Monday through Friday from 8:30 a.m. to 4:30 p.m. Selected documents may also be viewed at the Saguaro Branch of the City of Phoenix Public Library, 2808 N. 46th Street, Phoenix, AZ 85008. Call (602) 262-6801 for information and hours.

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Hearing-impaired individuals may call our TDD line at (602) 771-4829.

Para información en español sobre este sitio, comuníquese con Ceclia Montiel al (602) 771-4151.