

# 56<sup>th</sup> Street and Earll Drive

## Water Quality Assurance Revolving Fund ([WQARF](#)) Site

### Boundaries:

The [56th Street and Earll Drive Site](#) (Site) is bounded approximately to the north by Earll Drive, to the south by McDowell Road, to the east by 56th Street, and to the west by 36th Street.

### Site Status Update:

[Freescale Semiconductor Inc.](#), a spin-off of Motorola, Inc. has agreed to implement an [early response action](#) (ERA) to address the [trichloroethene](#) (TCE) and [tetrachloroethene](#) (PCE) in the groundwater. The most recent sampling results indicate that TCE and PCE levels present in the groundwater have remained relatively stable from year to year.

Freescale has been involved in negotiations with the various landowners of the land adjacent to the Grand Canal that would be the site of the extraction and treatment system. Negotiations are ongoing. To date, [Salt River Project](#) (SRP) has agreed to accept the treated water into the Grand Canal system.

### Community Involvement Activities:

A [community advisory board](#) (CAB) has been formed for the Site and meets on a regular basis. CAB members are only selected from [applications](#) that are received. Details of meeting agendas and [minutes](#) for 2007 and 2008 can be viewed at the Arizona Department of Environmental Quality ([ADEQ](#)) Web site. These meetings are open to the public. The most recent [fact sheet](#) that was mailed to the community involvement area can be found on the ADEQ Web site.

### Site History:

**1985:** Motorola began investigation of the 56th Street facility. Investigations were conducted in stages and included:

- Investigation of possible source locations (Off-site soil gas investigation identified five potential source areas for VOC contamination)
- Soil [borings](#) and sampling program
- On- and off-site soil gas investigations
- Off-site soil gas investigation identified five potential source areas for VOC contamination
- Installation of 39 groundwater monitor wells (including 3 multi-port monitoring wells)
- Groundwater sampling program (currently semi-annual)
- [Aquifer](#) tests and groundwater modeling
- Investigation of inorganic constituents found in groundwater

**1989:** The Site was originally investigated as part of the [Motorola 52nd Street National Priorities List \(NPL\) Site](#). However, groundwater data indicated that there were two separate and distinct areas of contamination. Therefore, the Site was disassociated from the larger Motorola 52nd Street NPL Site in 1989.

**1996-1993:** The following ERA activities have been conducted by Motorola:

- Abandonment of on-site [drywells](#) (1993)
- Pilot scale [bioremediation](#) test operations
- On-site [soil vapor extraction](#) (SVE) system installed (1994)
- On-site soil excavation (1996)

**1997:** Following an on-site confirmation soil gas investigation, ADEQ granted a soil no further action (NFA) determination to Motorola.

**2004:** The Site was placed on the [WQARF Registry](#) on June 2, 2004 due to the presence of PCE and TCE in the groundwater at levels that exceeded their Arizona AWQS of 5.0 µg/L. The eligibility and evaluation (E&E) score for placement on the WQARF Registry was 40 out of 120.

**2005:** Freescale Semiconductor Inc. (a successor company to Motorola) installed additional monitor wells during the 3rd Quarter 2005 to the west and southwest of TCE contaminant plume to further delineate the extent of groundwater contamination. Following installation and sampling of these wells, an ERA evaluation was conducted

**2006:** Freescale agreed to implement an ERA evaluation to evaluate potential impact to a down-gradient SRP well for the site. The maximum PCE and TCE levels present in the groundwater were 46 µg/L and 770 µg/L, respectively.

**2007:** Freescale tentatively selected the use of a groundwater extraction and treatment system to address the contaminant plume. The system will employ [granular activated carbon](#) (GAC) to remove contaminants from the groundwater prior to discharge to the Grand Canal.

## **Contaminants:**

The current contaminants of concern in groundwater include [tetrachloroethene](#) (PCE), [trichloroethene](#) (TCE) and [arsenic](#). Contaminants of concern at the Site may change as new data become available.

## **Public Health Impact:**

There is no known public health impact to drinking water because there are no known drinking water wells in the area of the contaminant plume. A [public health consultation](#) completed by the [Arizona Department of Health Services](#) determined that there is no public health threat associated

with the use of water from the private irrigation wells located in the vicinity of the 56th Street and Earll Drive Site. All owners of the private irrigation wells are aware that these wells are not suitable for public drinking water purposes.

**Site Hydrogeology:**

The depth to groundwater in the area ranges from approximately 13 to 75 feet below ground surface (bgs). Groundwater flow in the Site area is to the southwest.

**Contacts:**

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\*In Arizona, but outside the Phoenix area, call toll-free at (800) 234-5677.

**Information Repository:**

Interested parties can review select site documents at the Saguaro Branch Public Library, 5648 N. 15th Avenue, Phoenix, 85015, (602) 262-4636.

The complete official site file can be reviewed at the ADEQ Main Office located at 1110 W. Washington Street, Phoenix. With 24 hour notice, an appointment to review related documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m. at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, Arizona. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment to review these documents.