

## **A.0 SUPPLEMENTARY SITE HISTORY INFORMATION**

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*The OUI region has been evaluated, monitored, and remediated since 1983 by Motorola and an independent successor company, Freescale Semiconductor, Inc. (Freescale) on behalf of Motorola since December 2004. As noted previously, ON Semiconductor (which spun off from Motorola in 1999) currently operates and owns portions of the former Motorola 52<sup>nd</sup> Street Facility but has no responsibility to address Site contamination.*

### **A.1 Initial Discovery of Site Contamination**

The history of the Site began with the discovery of contamination at the former Motorola 52<sup>nd</sup> Facility located at 5005 East McDowell Road in Phoenix, Arizona. This facility commenced operations in 1956 and used chlorinated solvents such as trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA) to clean parts and equipment in the manufacture of electronics. In November of 1982, Motorola discovered a discrepancy in the inventory for a 5,000-gallon 1,1,1-TCA underground storage tank (UST) located in the Courtyard area of the facility (see Figure 3-1 of the 2011 Five-Year Review Report). The UST was tested and determined to be leaking. The Arizona Department of Health Services (ADHS; ADHS was the predecessor agency to ADEQ until 1985) was notified and a preliminary investigation of soil and groundwater contamination was initiated.

### **A.2 Preliminary Investigation of the Former Motorola 52<sup>nd</sup> Street Facility**

In December 1983, a preliminary investigation report entitled “Preliminary Report – Chemical Leak Project,” was submitted to ADHS that verified vadose zone contamination sources at the site and a groundwater contamination plume migrating west of the former Motorola 52<sup>nd</sup> Street Facility. As part of the preliminary investigation, monitoring wells were installed and sampled from February 1983 through November 1983. At many of these locations, multiple port wells (or Westbay Wells) were installed to allow sampling at different depths. In addition, private wells downgradient from the site were also surveyed and sampled.

The Preliminary Report identified twenty-five combined possible sources of contamination in the Courtyard, Acid Treatment Plant (ATP), and Southwest Parking Lot (SWPL) areas of the former Motorola 52<sup>nd</sup> Street Facility. These sources included surface discharges, spills, tank and pipe leaks, and discharges to leach fields and dry wells. The principle source of contamination was determined to be the leaking 1,1,1-TCA UST (which in earlier years stored TCE) and a former dry well, both located in the facility Courtyard. This dry well was used for solvent disposal from 1963-1974 (prior to environmental regulations) and was abandoned in 1983. It was originally

estimated that approximately 93,000 gallons of TCE was disposed of in the dry well. The results of sampling monitoring wells and private wells showed that volatile organic compounds (VOCs) were present at significant levels in the groundwater. The Preliminary Report identified the following chemicals of concern (COCs) at the Site: TCE, 1,1,1-TCA, tetrachloroethene (PCE), 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and cis-1,2-dichloroethene (cis-1,2-DCE).

### **A.3 Former Motorola 52<sup>nd</sup> Street Facility RI/FS Activities**

The RI/FS was conducted from October 1984 to January 1987. The purpose of the RI was to characterize potential sources of contamination, evaluate the physical environment in which contamination occurred, and identify potential pathways of exposure. The FS was intended to evaluate different remedial alternatives that would address the contaminated soil at the facility and contaminated groundwater both at the facility and downgradient of the facility. During the implementation of the RI/FS, several topical draft reports were generated. Many of these reports included preliminary results from a particular aspect of the investigation. Other documents submitted included task specifications which described how a particular phase of the investigation would be completed.

Major RI activities performed during the period from October 1984 to January 1987 included:

- Installation of monitoring wells to further characterize horizontal and vertical hydrogeologic and water quality conditions at and downgradient of the facility. Well installation activities commenced in November 1984 and continued through August 1986.
- In November 1984 and February/March 1985, soil gas investigations were conducted at the facility and in the residential area to the west of the facility to determine the extent of VOC contamination in groundwater and to help identify possible source areas on the facility. *(Subsequent soil gas investigations were conducted after completion of the RI; these include the following: In January 1989, Motorola conducted a supplementary soil gas survey in the Courtyard area as part of the design for a soil vapor extraction system. In March and October 1991, a supplementary soil gas survey was conducted in the area of the SWPL to identify possible sources of VOCs in groundwater. In March and July 1992, and November 1995, Freescale resampled selected locations in the residential area to update previous work.)*
- Source verification investigations were performed from October 1985 to February 1986.

- In September and October 1986, a well survey was conducted to identify existing monitoring wells, public supply wells, and private wells in an area downgradient from the former Motorola 52<sup>nd</sup> Street Facility. The area surveyed was bounded by Oak Street to the north, Washington Street to the south, 52<sup>nd</sup> Street to the east, and 24<sup>th</sup> Street to the west.

The chronology of the major FS activities performed during the period of October 1984 to January 1987 is as follows:

- During May 1986, Motorola voluntarily initiated a groundwater treatment program at the former Motorola 52<sup>nd</sup> Street facility. Two groundwater extraction wells, DM-301 and DM-302, were installed in the Courtyard area (see Figure 3-1 of the 2011 Five-Year Review Report) to supply contaminated groundwater to the Pilot Treatment Plant (PTP). DM-301 was drilled next to existing monitoring well MP-3. MP-3 exhibited the highest concentrations of TCE, TCA, and other VOCs and contained dense non-aqueous phase liquid (DNAPL). Well DM-302 was installed in the Courtyard near the dry well, the identified major source of the VOC contamination.
- On August 8, 1986, the results of a preliminary screening of remedial action technologies and/or alternatives were submitted to ADEQ as a draft report. The preliminary screening process identified five technologies to be screened for detailed evaluation. These technologies included: (1) groundwater extraction and barriers; (2) water and soil treatment; (3) in situ processes; (4) waste containment and removal; and (5) water supply and drainage control. The preliminary screening of technologies was separated into “on-site source control” and “off-site management of migration” (referring to whether the technologies were implemented at the former Motorola 52<sup>nd</sup> Street Facility or off-site). The following four alternatives were advanced to the detailed final alternatives evaluation:
  - On-Site Source Control Alternatives: (1) groundwater extraction in the alluvium and treatment, (2) groundwater extraction in bedrock and treatment, and (3) in situ soil vapor extraction.
  - Off-Site Management of Migration: (4) groundwater extraction from the alluvium and bedrock and treatment of the water.

Other FS activities performed after the screening process included: development of a detailed cost estimate of the design and installation of each alternative; conduct of a risk assessment to evaluate exposure pathways and to collect toxicological data on contaminants; preparation of

a detailed capital and operations and maintenance cost estimate; and model simulation of remedial alternatives.

- On September 4, 1986, a work plan to implement the groundwater PTP was issued. The PTP was operated from September 15, 1986 until startup of the Integrated Groundwater Treatment Plant (IGWTP) in July 1992 as part of OU1 implementation.

#### **A.4 Establishment of the OU1 Interim Remedy and Listing of the Site**

**Activities Leading to the Listing of the Site.** As discussed above, Motorola conducted an FS of remedial action alternatives for contamination associated with the former Motorola 52<sup>nd</sup> Street Facility following the completion of RI activities. The FS report, submitted to ADEQ in June 1987, presented a systematic evaluation of various groundwater recovery/plume migration control scenarios as well as a source removal/containment option. The alternative identified as the most feasible option (Alternative C) was proposed for implementation in a Draft Remedial Action Plan (RAP) prepared by Motorola in June 1988. This alternative was proposed as a partial or interim remedial measure to reduce contaminant concentrations and provide capture of contaminated groundwater until a final remedy is selected.

**Issuance of the LOD and ROD.** Based on their review of the Draft RAP, ADEQ issued a Letter of Determination (LOD) and the EPA issued a Record of Decision (ROD) in September 1988 that designated the proposed remedy as an interim measure to partially cleanup VOC contamination in the soil and groundwater. In October 1989, EPA added the Site to the CERCLA National Priorities List (NPL) which designated it as a Superfund site. EPA delegated regulatory authority so that ADEQ could continue as the lead agency for OU1.

Section 4.1 of the 2011 Five-Year Review Report presents detailed information regarding the OU1 interim remedy.

**The OUI Consent Order.** On June 20, 1989, Motorola signed a Consent Order (CO) with ADEQ agreeing to implement the interim groundwater and soil remedy defined as OU1 (Civil Action No. CV89-16807). Motorola was identified as an RP and, as required by the LOD and ROD, ordered to contain and control the migration and reduce the level of contaminants in the groundwater. The CO was issued to establish an agreement between Motorola and ADEQ to: (1) design, construct, implement, and maintain a groundwater extraction, conveyance, and treatment system; and (2) to design, construct, and operate SVE systems in specified regions of the former Motorola 52<sup>nd</sup> Street Facility. The CO acknowledged that the OU1 LOD/ROD does not constitute the final remedy for the Site, and no clean up level for the contaminated aquifer was established. The final remedy was to be determined after completion of a Final RI/FS and ROD.

However, in implementing OU1, Motorola was still required to comply with Arizona treatment standards for all contaminants attributable to the former Motorola 52nd Street Facility.

According to the CO, the objective of OU1 is to ‘perform interim cleanup of soil and groundwater contamination while preventing contaminant migration’ (Arizona Superior Court, 1989). However, there are specific work requirements presented in the OU1 CO that form the basis for ongoing assessment of remedial action performance and effectiveness. These operational CO requirements include:

- Maintain a zone of capture to hydraulically contain groundwater contamination by VOCs from the former Motorola 52<sup>nd</sup> Street Facility to the east bank of the OCC.
- Operate groundwater extraction systems to have a beneficial impact on the quality of groundwater within the bedrock.
- Treat extracted groundwater to meet federal, state, and local standards; a compliance monitoring program must demonstrate continued compliance with these standards.
- Implement Best Available Technologies for treatment of VOCs.
- Beneficially use all water from the groundwater extraction and treatment systems at the former Motorola 52nd Street Facility consistent with the Groundwater Code, including applicable area management plans.
- Operate soil vapor extraction (SVE) systems in the Courtyard Area/adjacent areas on 50<sup>th</sup> Street, the ATP, and the SWPL of the former Motorola 52<sup>nd</sup> Street Facility to extract and treat soil gas throughout the thickness of the unsaturated zone. Operation of the SVE systems should occur until VOC concentrations are reduced to levels that stabilize at minimal concentrations of recovery, or are so low as to render extraction uneconomical as agreed to by the State of Arizona with respect to recovery and treatment of VOCs by other methods.
- Treat soil vapor to meet federal, state, and local standards.

In addition, the CO identified specific treatment standards for discharges from the groundwater treatment plant and former Motorola 52<sup>nd</sup> Street Facility:

- The total concentration of VOCs shall not exceed 100 parts per billion (ppb) in discharges of treated groundwater from the groundwater treatment plant.

- The Total Toxic Organic (TTO) concentration in the wastewater discharged from the former Motorola 52<sup>nd</sup> Street Facility shall not exceed 186 ppb.
- Should the TTO concentration in wastewater discharged from the former Motorola 52<sup>nd</sup> Street Facility exceed 186 ppb for 3 consecutive months, the total concentration of VOCs in the treated groundwater must not exceed 50 ppb of VOCs, of which there must be less than 5 ppb of TCE.

**Activities Supporting Final Remedy Development.** In support of ongoing final remedy development, Freescale (on behalf of Motorola) submitted a Groundwater Remedial Alternatives Analysis (RAA) Report in September 2005 and an Addendum to the RAA Report in December 2005. The RAA provided a focused evaluation of groundwater remedial alternatives intended to enhance OU1 operations given the current contaminant distribution and remediation progress. Freescale also developed a groundwater flow model to analyze future system effectiveness under continuing groundwater decline and a Technical Impracticability (TI) evaluation of groundwater restoration at OU1.

#### **A.5 Investigation of the East Washington WQARF Area**

Before being designated as part of the Site, groundwater contamination was discovered in wells west of the former Motorola 52<sup>nd</sup> Street Facility. In 1982, TCE was detected in the Desert Hills well (near Monroe and 27th Streets) at 640 micrograms per liter ( $\mu\text{g/L}$ ) and in the Eastlake Park well (near Jefferson and 16th Streets) at 44  $\mu\text{g/L}$ . The groundwater contamination was initially thought to be unrelated to Site contamination.

From 1985 to 1989, ADEQ conducted a remedial investigation and initiated an investigation of potentially responsible parties. In 1987, ADEQ designated the area as the East Washington (EW) WQARF Area. Under the WQARF program, ADEQ oversaw various property-specific investigations at facilities including:

- The Walker Power System, Inc./Tienary Turbines facility located at 1301 E. Jackson Street in Phoenix, Arizona
- The Arvin Industries/Adobe Air facility located at 1301 E. Jackson Street in Phoenix, Arizona
- The former FMC Corporation pesticide formulating plant located at 1450 Buckeye Road in Phoenix, Arizona

## **A.6 Expansion of Site Investigation Activities and Establishment of OU2**

Between 1990 and 1992, ADEQ and Motorola conducted an area-wide groundwater investigation to define the extent of groundwater contamination associated with the Motorola 52<sup>nd</sup> Street Facility downgradient of OU1. Approximately 48 monitor wells (with a total of 120 sampling ports) were installed and over 300 aquifer tests were conducted. The area-wide sampling effort confirmed that contamination from the former Motorola 52<sup>nd</sup> Street Facility had migrated westward into the East Washington WQARF area. As a result, ADEQ and EPA designated a region downgradient of OU1 as a second operable unit (OU2) to the Site (see Figure 3-2 of the 2011 Five-Year Review Report) to address the groundwater contamination before a final remedy was selected.

## **A.7 Designation of Additional Site PRPs**

In 1992, additional PRPs AlliedSignal (now Honeywell), ITT Cannon, and Tiernay Turbines (now Walker Power Systems) were named by the EPA. In 1993, EPA also named the City of Phoenix a PRP as the landowner of a portion of the Honeywell and ITT Cannon properties.

## **A.8 OU2 FS Activities and Selection of an Additional Interim Remedy**

Motorola completed a Draft Interim Remedy FS Report for OU2 in 1993. The report evaluated sixty-seven remedial alternatives in accordance with the requirements of the NCP. Proposed remedial objectives were also presented in the FS Report. The results of the FS concluded that a pump and treat remedy would be an effective interim remedy for the OU2 region of the groundwater plume.

In July 1994, ADEQ and EPA issued a ROD selecting an interim OU2 groundwater remedy. The purpose of the OU2 interim remedy was to provide additional containment of contaminated groundwater in the region downgradient of OU1. EPA delegated authority to ADEQ to continue as the lead agency for the OU2 area in 1997.

In September 1999, the EPA issued an Explanation of Significant Differences (ESD) to the interim OU2 remedy ROD describing changes in the treatment system based on the results of analysis in the OU2 Final (100%) Design Report. The final design included the following components:

- Three groundwater extraction wells (EWN, EWM, and EWS);
- A treatment facility with GAC adsorption (and ultraviolet oxidation if required); and

- Discharge of treated groundwater to the SRP Grand Canal.

Details regarding the OU2 interim remedy are presented in the relevant decision documents and are summarized in Section 4.2 of the 2011 Five-Year Review Report.

***ADEQ Consent Decree for OU2 Interim Remedy Design.*** In November 1996, a Consent Decree was entered into by ADEQ, Freescale, and the City of Phoenix for the design of the OU2 Treatment System. The Consent Decree required the following design performance standards:

- Establishing and maintaining a zone of capture that prevents groundwater in alluvium and bedrock contaminated with TCE in excess of 5 µg/L from migrating beyond the OU2 area provided that it does not adversely impact other groundwater remediation programs as determined by the State; and
- Treating the groundwater from the extraction system so that effluent water quality meets the applicable standards at point(s) of compliance. In addition, the treatment system was to be designed to provide beneficial end use of the treated water.

***EPA Unilateral Administrative Orders for OU2 Interim Remedy Construction, Operation and Maintenance.*** On November 30, 1998, EPA issued a Unilateral Administrative Order (UAO) to Freescale and Honeywell (the Companies) for construction, start up, and two years of operation and maintenance of the OU2 groundwater treatment system. A second amended UAO was issued on December 11, 2003 that required continued operation and maintenance of the OU2 interim remedy. The UAO also requires the Companies to prepare monthly progress reports of operation and maintenance activities, quarterly groundwater monitoring reports, and annual Effectiveness Reports.

## **A.9 Continuing Remedial Investigation Activities in OU2**

Since implementation of the OU2 interim remedy, additional sources of contamination in the OU2 area have been investigated, including both VOC and petroleum hydrocarbon impacts attributed to the Honeywell 34<sup>th</sup> Street Facility. In September 2008, ADEQ approved a finalized Focused Remedial Investigation (FRI) report for this facility.

## **A.10 Establishment of the OU3 Study Area**

To address co-mingling of regional VOC plumes downgradient of OU2, EPA and ADEQ established the boundaries of the OU3 Study Area in 1997 (see Figure 3-3 of the 2011 Five-Year Review Report). This act initiated management of the region by EPA in the federal Superfund program (the region ceased to be part of the East Washington WQARF site at that time).

From February 2002 through July 2003, EPA conducted a phased field program that included the installation of additional monitoring wells to further characterize groundwater contamination in the study area. TCE was the most commonly detected VOC, with the highest concentrations noted along Van Buren Street. Other VOCs detected during these monitoring activities included: 1,1-DCE, 1,1-dichloroethane (1,1-DCA), cis-1,2-DCE, PCE, and 1,4-dioxane.

### **A.11 Identification of PRPs in OU3**

In response to OU3 Study Area investigation activities conducted in 2002 and 2003, EPA issued General Notice Letters in 2003, 2004, and 2005 identifying the following companies as PRPs for OU3 contamination (see Figure 3-3 of the 2011 Five-Year Review Report for facility locations):

- AdobeAir, Inc. (owner/operator), ArvinMeritor, Inc. (former owner/operator), and Cooper Industries (former operator) – A Waiver of Special Notice was issued to Adobe Air and Arvin Meritor on March 26, 2004 and to Cooper Industries on May 10, 2004 (Special Notice letters trigger an enforcement moratorium; waivers are issued at EPA’s discretion). On October 13, 2004, EPA issued an Administrative Order on Consent (AOC) for RI/FS activities (EPA Docket No. 2004-18) to AdobeAir, ArvinMeritor and Cooper Industries.
- Arizona Public Service (APS; owner/operator), a subsidiary of Pinnacle West Capital Corporation – APS received a Special Notice Letter on March 26, 2004. On July 29, 2004, EPA and APS entered into an AOC for focused RI/FS activities at 501, 502, and 505 S. Second Avenue in Phoenix Arizona (EPA Docket No. 2004-25).
- Baker Metal Products (owner/operator), the Estate of B.D. Russell (former owner/operator), Phoenix Automatic Machine Products Company (former operator), and Phoenix Manufacturing, Inc. (former operator) – Phoenix Manufacturing received a Special Notice Letter on March 26, 2004 while Baker Metal Products, the Estate of B.D. Russell and Phoenix Automatic Machine Products Company received a Wavier of Special Notice on March 26, 2004. On November 12, 2004, EPA issued an AOC for RI/FS activities to Baker Metal Products/BDR Liquidating LLC.
- Capital Engineering Company (Capital) – Capital received a General Notice Letter on September 30, 2005.
- Milum Textile Services (Milum) – Milum received a General Notice Letter on September 30, 2005.

- Paul McCoy’s Laundry and Dry Cleaners, Inc. (owner/former operator) – This company received a Special Notice Letter on March 26, 2004. In 2006, EPA and Paul McCoy’s Laundry and Dry Cleaners, Inc. entered into an AOC for RI/FS activities at 1624 E. Washington Street, Phoenix, AZ (EPA Docket No. 2006-05).
- Phoenix Newspaper, Inc. (PNI) – PNI received a Special Notice Letter on March 26, 2004. That same year, EPA and PNI entered into an AOC for RI/FS activities at 120 E. Van Buren Road, Phoenix, AZ (EPA Docket No. 2004-31).
- SRP (owner/operator) – SRP received a Waiver of Special Notice on March 26, 2004. On June 2, 2004, EPA and SRP entered into an AOC for RI/FS activities at 1616 E. Lincoln Road, Phoenix, AZ (EPA Docket No. 2004-19).
- Wabash National Trailer Centers (former owner/operator), Wabash National Corporation (former owner/operator), and Fruehauf Trailer Sales – Wabash National Trailer Centers and Wabash National Corporation received a Waiver of Special Notice on March 26, 2004.
- Walker Power Systems (operator), Tiernay Properties (owner), Union Pacific Railroad Company (UPRR; former owner), and Federal Compress and Warehouse (former owner) – These companies received a Special Notice Letter from the EPA on March 26, 2004. On June 19, 2007, EPA issued a Unilateral Administrative Order (UAO) for a Focused RI/FS at the Walker Power Systems Site to Tiernay, Walker, and UPRR.
- Westinghouse – Viacom (on behalf of Westinghouse) received a General Notice Letter on September 30, 2005.

### **A.12 Continuing Remedial Investigation Activities in OU3**

On September 23, 2009, EPA signed a Settlement Agreement and AOC with the OU3 Working Group (Honeywell and APS) to complete a comprehensive RI/FS for OU3 (EPA Docket No. 2008-17). This work is referred to as the Phase III RI and is ongoing. The OU3 Working Group issued the *Final OU3 Phase III Groundwater Remedial Investigation and Feasibility Study Work Plan* in August 2010.

In response to various AOCs and UAOs, OU3 PRPs have conducted various FRIs of specific properties, including:

- AdobeAir, Inc./ArvinMeritor, Inc./ Cooper Industries, Inc conducted an FRI of the southern portion of the AdobeAir Facility located at 500 S. 15<sup>th</sup> Street in Phoenix Arizona and

documented the results in a report dated July 26, 2010. The FRI and associated Human Health Risk Assessment (HHRA) focused on the southern portions of the property and did not include the AdobeAir Warehouse building. A soil gas investigation, building survey, and groundwater monitoring/sampling events were conducted as part of the FRI. Based on these activities, the FRI and HHRA recommended approval of regulatory closure for the Southern Portion of the facility, with no further action required (Arcadis, 2010).

- APS conducted an FRI of APS properties located at 501, 502 and 505 S. 2<sup>nd</sup> Avenue in Phoenix, Arizona and documented the results in a report dated May 28, 2010. The FRI included several soil vapor surveys, installation and sampling of soil vapor monitoring wells, installation of groundwater wells, sampling and monitoring of groundwater wells, a geophysical survey with excavation to identify unknown underground features, and two sewer surveys. Evaluation of data collected previously at an adjacent property (the former Southwest Solvents, Inc. facility; which is not part of OU3) was also included. The FRI concluded that any contamination attributable to potential APS sources would ‘not have commingled with regional OU3 groundwater contamination to the north’ and that ‘concentrations of COCs in soil vapor and groundwater do not warrant active remediation’ (AMEC Earth & Environmental, Inc., 2010).
- BDR Liquidating LLC conducted an FRI of the Baker Metals Products site located at 1601 East Madison Street Phoenix, Arizona and documented the results in a report dated March 3, 2008. The FRI included soil gas and soil sampling as well as vadose zone VLEACH modeling. The FRI concluded that operations at the property have not caused groundwater contamination and that detected soil gas concentrations do not represent a threat to human health, welfare, or the environment (Smith Consultants and Knight Piesold and Co, 2008). The FRI recommended no remedial action. EPA issued a Notice of Completion of Work agreeing with this recommendation on September 9, 2009 (EPA, 2009).
- PNI conducted an FRI at the property located at 120 E. Van Buren Road, Phoenix, AZ and submitted associated documentation in March 2010. The FRI included soil gas sampling conducted under the AOC. EPA approved the FRI on June 3, 2010 (EPA, 2010).
- SRP completed an FRI of SRP’s 16<sup>th</sup> Street Facility located at 1616 E. Lincoln Street in Phoenix, Arizona and documented the results in a report dated January 22, 2009. The FRI included passive and active soil gas sampling, sump removal and soil sampling, soil vapor monitoring, indoor air quality sampling, groundwater monitoring, and groundwater impact modeling. The FRI concluded that it is not necessary to perform further remedial actions at

the property or conduct a Focused Feasibility Study (AMEC Geomatrix, 2009). EPA approved the FRI and this conclusion on August 7, 2009 (EPA, 2009).

- Tiernay Properties, Inc. conducted a Phase I Remedial Investigation of the Walker Power Systems site located at 1301 W. Jackson Street in Phoenix, Arizona (W.L. Bouchard & Associates, 2009). This report was prepared to document a soil gas monitoring program that was conducted in August 2008 and various planning issues regarding the upcoming *Remedial Investigation Phase II – Installation of Groundwater and Soil Gas Wells*. On the basis of Phase I soil gas monitoring, the report concluded that there is only one source of COCs in the shallow vadose zone at the site: the Former 13<sup>th</sup> Street Chemical Storage Area and the immediate vicinity, including two former dry wells that were installed by the City of Phoenix.

### A.13 References

AMEC Geomatrix Inc., 2009. *Revised Final Focused Remedial Investigation Report, Salt River Project's 16<sup>th</sup> Street Facility, Phoenix, Arizona*. Prepared for SRP. Dated January 22, 2009.

AMEC Earth & Environmental, Inc., 2010. *Focused Remedial Investigation Report, APS 501, 502, & 505 South 2<sup>nd</sup> Avenue Properties, Phoenix, Arizona*. Motorola 52<sup>nd</sup> Street Superfund Site, Operable Unit 3, US EPA Docket No. 2004-25. Prepared for APS. Dated May 28, 2010.

Arcadis, 2010. *Focused Remedial Investigation Report, Southern Portion – 500 South 15<sup>th</sup> Street Facility*. 500 South 15<sup>th</sup> Street, Phoenix, Arizona. Prepared for ArvinMeritor, Inc., AdobeAir, Inc., and Cooper Industries, Inc. Dated July 26, 2010.

Smith Consultants and Knight Piesold and Co., 2008. *Focused Remedial Investigation Report, Baker Metal Products Site, 1601 East Madison Street, Phoenix, Arizona (Rev. 3)*. Prepared for BDR Liquidating, LLC, Successor in Interest to Phoenix Automatic Machine Products Company. Dated March 3, 2008.

EPA, 2009. Letter to Mr. K.A. Hodson of Mariscal, Weeks, McIntyre & Friedlander regarding the Baker Metal Products Site, Administrative Order on Consent (AOC) No. 2004-32, Motorola 52<sup>nd</sup> Street Superfund Site, Operable Unit 3. Dated September 9, 2009.

W.L.Bouchard & Associates, 2009. *Phase I – Remedial Investigation Report, Walker Power Systems Site, Motorola 52<sup>nd</sup> Street Superfund Site, Phoenix, Arizona*. Prepared for Tiernay Properties, Inc. Dated June 22, 2009.

