

## PROPOSED LEAKING UST (LUST) CASE CLOSURE

The Arizona Department of Environmental Quality (ADEQ) is considering closure of the following leaking underground storage tank (LUST) cases:

**LUST Case File #: 5637.01**  
**Facility ID # 0-006030**  
**Maricopa County**

**Interstate Mechanical Corporation**  
**1841 E. Washington Street**  
**Phoenix, Arizona 85034**

The facility operates as a metal fabrication facility. The facility used one 12,000 gallon underground storage tank (UST) that was installed in approximately 1980. The 12,000 gallon UST was closed-in-place in August 2015.

The UST Owner/Operator, Interstate Mechanical Corporation [IMCOR], began site characterization activities immediately after discovering the LUST release in 2015. Site activities included the installation of a single soil boring and six monitoring wells. Free product has been seen intermittently in MW-1. Free product at a depth of 0.04 feet was seen in MW-1 in July 2016.

A site specific risk assessment and detailed file/information search were also completed. Benzene analytical groundwater results in MW-1 remains above the Aquifer Water Quality Standards (AWQS).

Based upon site specific information the above-referenced LUST site is eligible for alternative LUST closure under Arizona Revised Statutes (A.R.S.) §49-1005(E). Arizona Administrative Code (A.A.C.) R18-12-263.04 allows case closure of a LUST site with groundwater contamination above the Arizona Aquifer Water Quality Standards or Tier 1 Standards. ADEQ has considered the results of a site specific assessment and the rule specific criteria below:

1. *Threatened or impacted drinking water wells:* According to ADWR records, there are no drinking water wells within ¼ mile of the site. There are no municipal drinking water wells within 1/4 mile of the site. The facility is located within the boundaries of a Superfund site which has impacted the regional groundwater with chlorinated solvent contamination.
2. *Other exposure pathways:* Soil samples between 15 and 100 feet had no VOC contamination present over an applicable regulatory standard. Dermal contact, ingestion, and inhalation are not complete exposure pathways. There are no surface water, agricultural or ecological receptors within ¼ mile of the site.
3. *Groundwater plume stability:* Groundwater plume stability is demonstrated by the remaining VOC contamination present over a regulatory standard in groundwater is limited to MW-1 which is located near the former UST. Groundwater sampling results at the property boundaries indicate that the plume is delineated and decreasing in areal extent. Dissolved-phase benzene is limited to on-site well MW-1 and the historic concentrations are trending downward and are expected to continue to attenuate. All of these factors indicate that the groundwater plume is stable.

4. *Characterization of the groundwater plume:* Monitoring wells were installed and collection of volatile organic compounds (VOCs) samples has taken place since 2015. Dissolved-phase petroleum hydrocarbons have been characterized and the only VOC remaining over AWQS is benzene in MW-1 at 27 µg/L. Depth specific groundwater samples were collected in May 2016 and the benzene concentration in the shallow sample was below 1µg/L, and the benzene concentration was non-detect in the deep sample.
5. *Removal or control of the source of contamination:* Source control has been completed by the closure of the UST in 2015. In addition MW-1, source well and the primary release location area, had a benzene concentration of 3,900 µg/L prior to any remedial activities in July 1988. Benzene concentrations have significantly decreased since that time. Currently benzene levels are at a maximum of 27 µg/L in MW-1. All monitoring wells except MW-1 have not had VOC contamination present over applicable regulatory standards since they were installed in 2015, with the exception of MW-2. MW-2 had benzene contamination present over the AWQS in August 2015, but subsequent sampling events have been non-detect or below 1µg/L. The VOC contamination is likely trapped in the smear zone, so as the depth to water increases, the VOC contamination in the groundwater decreases.
6. *Natural Attenuation:* Natural attenuation can be demonstrated by decreasing VOC concentrations below AWQS in all of the monitoring wells except for MW-1.
7. *Requirements of A.R.S. §49-1005(D) and (E):* The results of the corrective action completed at the site assure protection of public health, welfare and the environment, to the extent practicable, the clean-up activities completed at this site allow for the maximum beneficial use of the site, while being reasonable, necessary and cost effective.
8. *Other information that is pertinent to the LUST case closure approval:* The facility and LUST files were reviewed for information regarding prior cleanup activities, prior site uses and operational history of the UST system prior to removal.

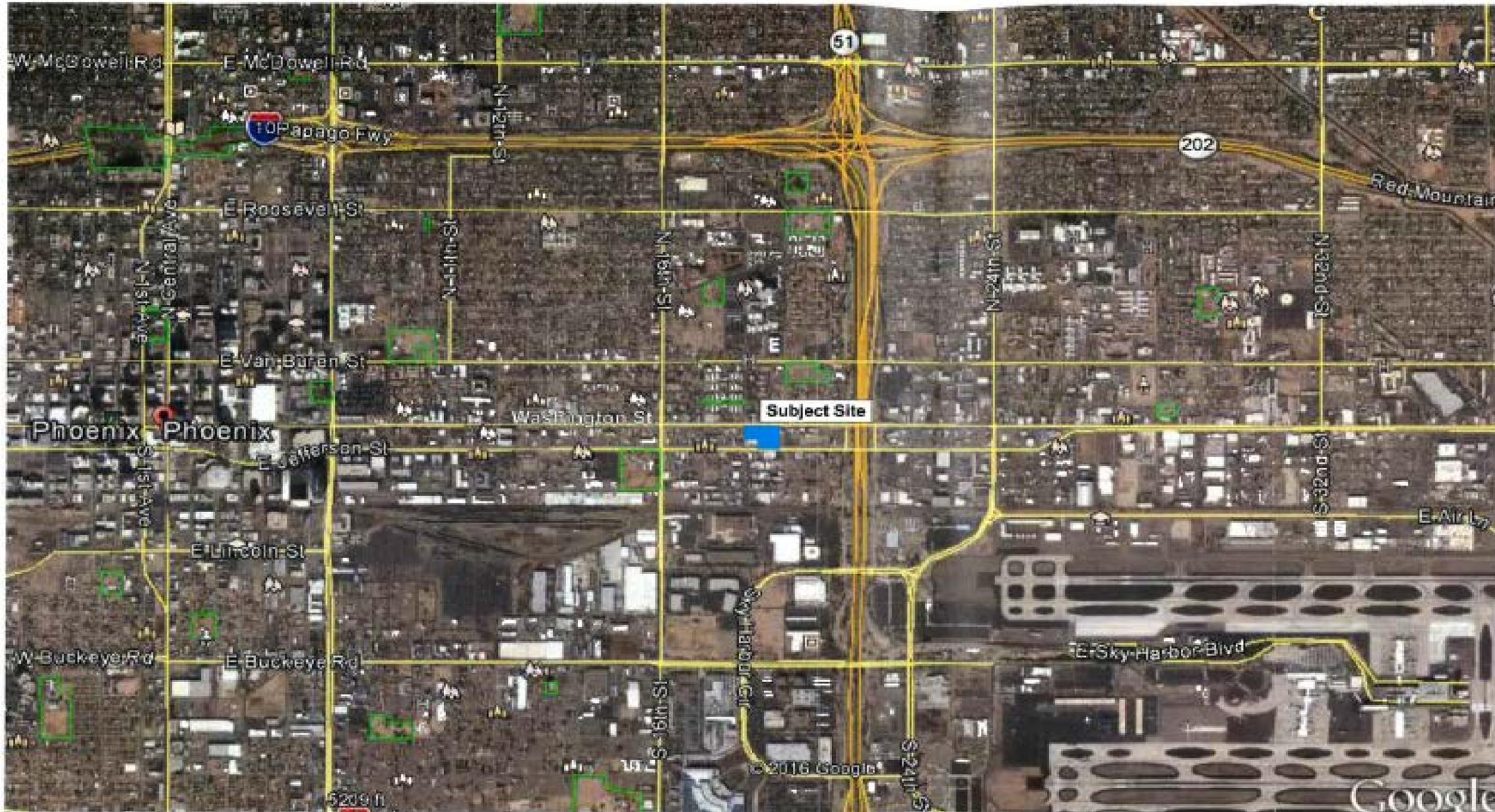
Groundwater information: MW-1 (source well)

<b>Date</b>	<b>Benzene AWQS is 5 µg/L</b>	<b>Depth to water (Feet)</b>
6/2015	92 grab	100.51
9/2015	69 purge	101.94
5/4/2016	37 grab	103.15
5/4/2016	25 purge	103.15
5/18/2016	34 purge	103.28
7/2016	27 purge	103.81

Site specific information concerning this closure is available for review during normal business hours at the ADEQ Records Center <http://www.azdeq.gov/function/assistance/records.html> , 1110 W. Washington St., Suite 140, Phoenix, AZ 85007. ADEQ welcomes comments on the proposed LUST case closure. Please call the Records Center at 602-771-4380 to schedule an appointment. A 30-day public comment period is in effect commencing **October 14, 2016** and ending **November 14, 2016**. Comments should be submitted in writing to the Arizona Department of Environmental Quality, Waste Programs Division, and Attention: Debi Goodwin, 1110 W. Washington Street, Phoenix, AZ 85007.

If sufficient public interest is demonstrated during the public comment period, ADEQ will announce and hold a public meeting. ADEQ will respond to written comments following the public comment period. For more information on this notice, please contact Debi Goodwin at 602-771-4453 or 800- 234-5677 ext. 771-4453 or at [dg1@azdeq.gov](mailto:dg1@azdeq.gov).

Copies of the cited statutes and rules can be found at:  
<http://www.azleg.gov/ArizonaRevisedStatutes.asp?Title=49>, and  
[http://www.azsos.gov/public\\_services/Title\\_18/18-12.htm](http://www.azsos.gov/public_services/Title_18/18-12.htm)



VICINITY MAP  
IMCOR  
1841 East Washington Street  
Phoenix, Arizona 85040  
Project # 2870  
July 2016

FIGURE  
1



**SITE PLAN**  
IMCOR  
1841 East Washington Street  
Phoenix, Arizona 85040

Project # 2870  
July 2016

**FIGURE**  
**2**



# Memorandum

**Date:** October 4, 2016  
**To:** LUST File  
**From:** Debi Goodwin, Risk Assessor  
UST-LUST Section  
**Subject:** Corrective Action Completion Report  
Interstate Mechanical Corporation  
F 0-006030 L 5637.01

A handwritten signature in blue ink, appearing to be "Debi Goodwin", is written over the "From:" field of the memorandum.

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## **Background**

This commercial property (the Site) is located at 1841 E. Washington Street in Phoenix. The property is covered with asphalt and concrete. The Site operated one UST that was installed in 1980. The 12K UST was closed in place in August 2015. ADEQ assigned LUST release number 5637.01.

Site characterization activities began in May 2015 and the site was characterized as of February 2016. Soil borings and monitoring wells were installed.

## **Purpose**

EnTech submitted a *Corrective Action Completion Report* which was received August 3, 2016. It is the intention of EnTech that this submittal will satisfy the LUST closure criteria under R18-12-263.04. The information described above and all available information was utilized by ADEQ to determine whether levels of contaminants at the site are adequately protective of human health and the environment.

## **Risk Assessment**

### **Soil**

Soil boring SB-1 was installed near the former UST location. Soil samples were collected every 5 feet between 15 and 100 feet bgs. The samples were analyzed for VOCs, PAHs and organic lead. No contamination was present over an applicable regulatory standard. SB-1 was completed as a nested MW and VE well. The soil lithology is a coarse-grained material. The VOC contamination is likely located in the smear zone and as the depth to water increases, the contaminant is remaining in the soil.

### **Groundwater**

MW-1 showed free product within three months of installation. Five additional monitoring wells were installed to characterize the lateral extent of the groundwater contamination. The monitoring wells have been sampled since June 2015. The most recent sampling event was in July 2016. The samples were analyzed for VOCs by EPA Method 8260B (including the AZ extended list). Benzene was reported over the Aquifer Water Quality Standard in MW-1 at 27 µg/L. No VOCs were reported over applicable regulatory standards in MW-2 through MW-6. The depth to groundwater is approximately 103 feet bgs. Depth specific groundwater sampling

has been done twice and the shallow and deep sample both showed benzene concentrations below laboratory reporting limits or detected at less than 1 µg/L.

The regional groundwater is not used as potable drinking water. The Site is located within the boundaries of a Superfund site where chlorinated solvents are present over applicable regulatory standards. An ADWR database search shows there are no domestic or public drinking water wells located within ¼ mile of the characterized groundwater plume.

### **Conclusions and Recommendations**

#### ***Soil***

Under A.A.C. R18-7-206(D), multiple contaminants, multiple pathways of exposure, uncertainty of exposure and sensitive populations are evaluated as part of a site specific risk assessment. There isn't a risk posed by the dermal, ingestion, or inhalation exposure routes since the soil samples indicated no contamination present over an applicable regulatory standard.

#### ***Groundwater***

For alternative groundwater closure, several criteria under R 18-12-263.04 must be met. The contamination has been characterized and analytical data supports that the plume is stable and localized on-site. The groundwater VOC concentrations have significantly declined. The water that is impacted by VOC contamination over an applicable regulatory standard is not used as a potable water source since the regional groundwater is impacted by chlorinated solvents associated with a Superfund site.

There are no potable wells within ¼ mile of the property, and there were no identified receptors associated with the property.

It is recommended that LUST release 5637.01 be closed under R18-12-263.04.

If there any questions regarding this memo, please contact me at [dq1@azdeq.gov](mailto:dq1@azdeq.gov), or 771-4453.