

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 #1217.02
Facility ID # 0-000709
Maricopa County

former \$3 Car Wash
2550 W. Camelback Road
Phoenix, Arizona 85017

The property is part of the Grand Canyon University (GCU) east campus. The first notification form for USTs is dated 1988 for three USTs installed in 1978. One UST was removed in 1990, and a release (.01) was reported that was closed in 1995. The remaining USTs were removed in 1997, and a release was reported for the 10,000-gallon UST (.02). The UST owner/operator in 1997 was Danny's Family Car Wash. In 2003, soil boring B1 was drilled/sampled at the location of the removed USTs, and petroleum hydrocarbon compounds were found to exceed residential soil remediation levels. Boring B1 was converted to monitor well MW-1, and the lateral extent of soil contamination was characterized to within 30 feet of MW-1. In 2006, MW-2 and MW-3 were installed at the site, and the depth to groundwater was observed at about 97 feet bgs flowing towards the northwest. ADEQ approved soil characterization in June 2007, but did not approve groundwater characterization.

Terranext was retained by the State Lead Unit to conduct additional site characterization activities and remediation of the subject release during June 2014. The wells were sampled in 2014, and about eight inches of free product was detected in MW-1, and MW-2 and MW-3 exhibited detectable concentrations of methyl tertiary butyl ether (MTBE) and 1,2-dichloroethane (1,2-DCA). Monitoring wells MW-4 and MW-5, vapor extraction wells VE-1 (dual nested) and VE-2, and air sparging wells AS-1 through AS-5 were installed at the subject site during October 2014. Soil vapor extraction (SVE) and air sparging (AS) were selected to remediate the subject release. The SVE system was started on March 31, 2015 and the AS system was started in April 2015 and operated continuously through March 16, 2018. During January 2016, off-site point-of-compliance (POC) monitoring well MW-6 was installed about 400 feet down-gradient (west-southwest) of the subject release to evaluate the extent of gasoline contamination. The SVE system operated continuously until July 14, 2016, after which the SVE system was operated in a pulsed mode. Pulsed operation of the SVE system continued during 2017, along with continuous operation of the AS system. Concentrations of COCs in source area wells MW-1 and MW-4 generally decreased from October 2016 to October 2017, with benzene being the only COC remaining above the AWQS. Reduced VOC recoveries by the SVE system indicated that a majority of the lower vadose zone contamination also had been removed; however, benzene persisted in groundwater near the source area. Accordingly, in-situ chemical oxidation (ISCO), using Persulfox® solution injections into MW-1 and MW-4, was conducted during September 2017. Based on remedial progress, SVE operations were terminated permanently on December 11, 2017. Another ISCO event was done on February 20, 2018 using source area monitoring wells MW-1 and MW-4 due to rebound of COC concentrations in groundwater observed following the first two ISCO treatments. Accordingly, an additional Persulfox® injection was performed using wells MW-1, MW-4 and AS-1 in July 2018.

Terranext submitted a *Remedial Progress and Corrective Action Completion Report* that indicates that the concentrations of chemicals of concern (COCs) exceeding the applicable regulatory standard is limited to

benzene in MW-1. Data provided in the *Remedial Progress and Corrective Action Completion Report* received January 30, 2019, and all other available site information has been used by ADEQ to determine whether remaining levels of contaminants at the site are adequately protective of human health and the environment. A site-specific risk assessment and detailed file/information search were also completed.

Based upon the results of remedial activities and 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 AWQS or Tier 1 Corrective Action Standards. ADEQ has considered the results of a site-specific assessment and the rule specific criteria below:

1. *Threatened or impacted drinking water wells:* Currently the City of Phoenix (COP) uses surface water [Salt River Project (SRP) reservoirs and the Colorado River] as its main source of drinking water. Nearly 50% comes from the Colorado River, which may begin to have shortages as soon as 2020 according to the Bureau of Reclamation. Because of this, COP views all water within their service area boundary as a potential water supply source in the event that Colorado River allocations are curtailed during a drought declaration.

Terranext conducted a review of the Arizona Department of Water Resources (ADWR) available records to identify potential water production wells within one half mile of the subject site. A potential "unused" well was identified on the current GCU Hotel and Conference Center parcel, about 300 to 700 feet northeast of the subject release. Additionally, a COP water supply well (ADWR Reg. No. 55-700936) is located about 1700 feet east-southeast of the subject release and a Salt River Project (SRP) production well (ADWR Reg. No. 55- 617702) is located about 1940 feet east of the subject release. The "potential unused," COP and SRP wells are all up-gradient of the former \$3 Car Wash facility and not expected to be affected by the subject release. ADWR records indicated the presence of monitoring and remediation wells associated with a former Exxon facility (LUST File Nos. 5325.01 & .04) located about 850 feet south-southwest of the subject release besides the monitoring and remediation wells associated with 3\$ Car Wash.

GCU recently has redeveloped the subject site and surrounding properties to expand their east campus. According to their director of operations, all of GCU's east campus water is provided from the City water system and there are no plans to install or use an on-site supply well. Based on the potential attenuation and migration rates; therefore, the residual groundwater contaminant plume has no potential to impact future water uses at the site.

The residual groundwater contaminant plume consists of gasoline constituents, with benzene remaining as the only constituent above its AWQS at the source well only. Benzene has never been detected in the down-gradient well, MW-6. The contaminant plume has impacted the Upper Aquifer Unit of the Phoenix Basin, which is not used for potable water supply near the subject site. Water supply wells in the central Phoenix Basin typically derive water from the Middle and Lower Aquifer Units. The closest such supply well is owned by the COP and is screened below 500 feet bgs. SRP and COP submitted a Water Provider Questionnaire, which is included in this notice. According to the COP, there are no plans to install a new municipal well in this area in the immediate future. The COP did indicate that groundwater development could occur within one mile of the LUST site for municipal supply during severe water shortages.

2. *Other exposure pathways:* Subsurface soil VOC contamination was found over rSRLs in 2003. The maximum Terranext conducted a soil vapor survey in April 2017 to evaluate the potential for vapor

intrusion into the current and hypothetical, future site buildings. Seven temporary soil vapor probes were installed to a depth of five feet bgs at the source (UST basin) for potential future construction and outside the source (former UST basin) for potential future construction. Field and laboratory quality assurance/quality control (QA/QC) was acceptable. Terranext utilized the laboratory analytical VOC results of the soil vapor samples collected at these soil vapor probes and the EPA on-line version of the Johnson and Ettinger (J&E) Model to perform a Tier 3 Risk Assessment. Analytes detected at concentrations exceeding 10 percent of their respective EPA Regional Screening Levels for Resident Air were included in the model. The cumulative cancer risk value from petroleum COCs in the source area is 2.51×10^{-7} , which is below the target value of 1×10^{-6} . The cumulative hazard quotient from petroleum COCs in the source area is 6.45×10^{-3} , well below the target value of 1. The cumulative cancer risk value from petroleum COCs outside the former UST basin is 1.84×10^{-6} , and the cumulative hazard quotient is 6.91×10^{-2} , which is well below the target value of 1. Similarly, non-petroleum COCs were modeled for both areas. The cumulative cancer risk value is 1.05×10^{-7} and the cumulative hazard quotient is 1.13×10^{-4} for the non-petroleum COCs in the source area. All of these calculated values are below the target ELCR of 10^{-6} and HI of 1, which indicates an acceptable level of vapor intrusion risk into hypothetical, concrete slab on-grade on-site buildings, used for residential purposes. Inhalation risks were deemed acceptable by the 2017 soil vapor survey results and subsequent modeling, leaving residual benzene near source area well MW-1 as the only remaining risk to be assessed for the subject release.

Incidental dermal contact with the groundwater is considered *de minimis* risk. The closest residential area is a single family residence located about 530 feet south of the subject release. The subsurface soil contamination is localized on site and is not a risk to the residential area. No schools, daycare facilities, hospitals or nursing homes were observed within a one-half mile radius of the site.

3. *Groundwater plume stability:* To evaluate the stability of the residual groundwater contamination by petroleum hydrocarbons from the subject release, Terranext used Mann-Kendall trend analyses software available to the public via GSI Environmental, Inc. (version 1.0, 2012). Trend analyses were performed on each of the COCs identified for the site [benzene, toluene, ethylbenzene and xylenes (BTEX), 1, 2-DCA, MTBE, 1, 2, 4- trimethylbenzene (TMB), 1, 3, 5-TMB, and EDB] in source area wells MW-1 and MW-4. Decreasing trends were confirmed in both wells for BTEX constituents and TMBs.

No trend was confirmed for 1, 2-DCA and MTBE in either well; however, this is due to a general lack of detectable concentrations of these analytes. It is more important to note that the lack of detections indicate that these COCs are no longer present in groundwater below the site.

Concentrations of COCs in groundwater from the subject release have been reduced by remedial activities to below detectable concentrations and well below ADEQ AWQSSs, with the exception of benzene. The benzene concentrations have rebounded since the last chemical oxidation treatment in June 2018. However, the concentration is below the previous concentration prior to the treatment. The benzene concentration trend in the down-gradient source area well, MW-4, demonstrates that the plume is collapsing. Mann-Kendall analyses confirm a decreasing trend for BTEX and TMBs in the source area wells. Concentrations of 1,2-DCA, MTBE and EDB have not been detected in the source area wells during the last three rounds of groundwater sampling, which conforms to Tier 1 closure criteria.

Due to property boundary and land development constraints, the down-gradient extent of groundwater contamination is defined between on-site source area well MW-4, located about 24 feet down-gradient, and off-site well MW-6, located about 400 feet of the "point of release," respectively. Accordingly, the down-gradient extent of the plume was estimated using centerline output from EPA's BIOSCREEN Natural Attenuation Decision Support System, version 1.4, 1997 (BIOSCREEN) modeling software.

Modeled dispersion (about nine feet) was compared to recent data from MW-4 (about 24 feet), which reflects actual migration due to both hydraulic dispersion and chemical diffusion. The ratio was used to estimate the extent of the plume at about 64 feet down-gradient of the release point. Accordingly, the plume is estimated to extend about 62 feet off-site, but both properties are now owned by GCU, which developed them as part of their east campus expansion. BIOSCREEN results estimated the residual groundwater plume extends about 64 feet down-gradient of the point of release with contaminant mass of about 180 grams. Modeling results also indicated that natural attenuation of the residual plume should occur in 3.4 years (with a margin of error of +/- an order of magnitude) and that migration due to chemical diffusion would be negligible during that time. The plume of groundwater contamination below the former \$3 Car Wash has been confirmed to be shrinking.

4. *Characterization of the groundwater plume:* Terranext performed groundwater sampling at the former \$3 Car Wash facility on an approximately quarterly basis during September 2014 through August 2018. The September 2014 sampling event was conducted using MW-1 and MW-3 only, and revealed the presence of ethylene dibromide (EDB) at a concentration of 0.027 ug/L, below its aquifer water quality standard (AWQS) in MW-1. Tetraethyl lead (TEL) was not detected in MW-1 or MW-3 during September 2014. MW-1 also was analyzed for polynuclear aromatic hydrocarbons (PAHs) during April 2015. Relatively low concentrations of seven PAHs were reported; however, benzo (a) pyrene was not detected. The 2015 groundwater sampling events confirmed an overall decrease in contaminant concentrations in source area wells MW-1 and MW-4 after the remediation system began operation. Additionally, those results confirmed lateral characterization of the groundwater contaminant plume by MW-3 and MW-5, but that petroleum contamination extended off-site and down-gradient of MW-4. Accordingly, during January 2016, off site MW-6 was installed about 400 feet down-gradient (west-southwest) of the subject release to characterize the extent of gasoline contamination. Persistent COC concentrations in MW-1, and especially MW-4, indicated that the deeper portion of the vadose zone plume and smear zone are displaced westward. Accordingly, MW-4 was tested and then incorporated into the SVE system during October 2016. Continued SVE/AS operation then reduced COC concentrations in groundwater further in source area wells MW-1 and MW-4.

5. *Natural Attenuation:* Natural attenuation processes include diffusion, dispersion, sorption, volatilization, and biodegradation. A decreasing trend in chemical concentrations in groundwater has been established, which supports natural attenuation is occurring. Hydrologic and geochemical data can be used to indirectly demonstrate the type(s) of natural attenuation processes. Field measurements for oxidation-reduction potential, conductivity, pH, temperature and dissolved oxygen) were recorded at regular intervals. In support of this risk assessment, groundwater samples collected during March, June and September 2018 also were analyzed for geochemical parameters. The data indicates that ample electron acceptors are now available in groundwater below the site; therefore, any COCs that do reach groundwater should be quickly metabolized by microbial activity. Natural attenuation of residual groundwater contaminants was modeled using BIOSCREEN, Modeling parameters input based on site-specific data and conditions yielded that natural attenuation of the residual plume will occur in approximately 3.4 years. Site data indicates that dissolved oxygen and sulfate concentrations improved near MW-4, which allowed the concentration of nitrates to rebound after depletion. The decrease in methane concentrations also indicated that the anaerobic portion of the plume was reduced. Results from up-gradient well MW-5 indicates that a sustainable supply of electron receptors (oxygen, nitrate and sulfate) will remain available to attenuate the residual hydrocarbon plume.

6. *Removal or control of the source of contamination.* Three underground storage tanks (USTs) were removed between 1990 and 1997. Remedial activities at the subject site included SVE system

operation from March 2015 to December 2017, AS system operation from April 2015 to March 2018, and three ISCO treatments of source area wells during September 2017 to July 2018. The contaminant mass in the vadose zone was estimated at 22,300 pounds, free product at about 20,800 pounds, and the mass dissolved in groundwater at about 600 pounds. Remedial activities removed considerably more contaminant mass than was originally estimated to exist below the site, completely removed free-product from the groundwater surface, and reduced groundwater COC concentrations by three or four orders of magnitude. The estimated residual in groundwater is approximately 0.397 pounds, and the residual mass in the vadose zone is approximately 1,500 pounds. ISCO also removed additional mass from the vadose zone that is not accounted for in the residual mass calculation. Future leaching of petroleum hydrocarbons has been reduced significantly by the removal of the majority of the contamination in the vadose zone and a barrier of up to 17 feet of oxidant impregnated soils above the groundwater surface.

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 data for MW-1 (source area)

Date	PSH thickness in feet	Benzene AWQS is 5 µg/L	Depth to water (feet)
September 2003	---	4,100	---
November 2006	---	11,000	91.58
April 2008	0.80	---	93.03
March 2014	0.67	5,360	97.18
April 2015	0.02	1,980	97.55
July 2015	---	93	97.62
October 2015	---	134	98.19
January 2016	---	35.4	97.81
April 2016	---	14.2	98.81
July 2016	---	33.1	99.43
October 2016	---	66.9	99.78
January 2017	---	8.93	100.07
April 2017	---	32.7	100.47
July 2017	---	11.4	100.81
September 2017 ISCO	---	---	---
October 2017	---	6.26	101.14
January 2018	---	6.36	101.44
February 2018 ISCO	---	---	---
March 2018	---	7.81	101.90
June 2018	---	33	102.36
July 2018 ISCO	---	---	---
August 2018	---	19	102.42

Groundwater data for MW-4 (in source area down-gradient of MW-1)

Date	Benzene AWQS is 5 µg/L	Depth to water (feet)
April 2015	1,400	97.69
July 2015	483	98.01
October 2015	292	98.31
January 2016	209	98.74
April 2016	292	98.95
July 2016	97.4	99.52
October 2016	151	99.89
January 2017	35.8	100.12
April 2017	54.9	100.37
July 2017	11.5	100.88
September 2017 ISCO	---	---
October 2017	23.0	101.19
January 2018	23.2	101.52
February 2018 ISCO	---	---
March 2018	<3.31	102.01
June 2018	8.0	102.44
July 2018 ISCO	---	---
August 2018	3.7	102.51

Groundwater data for MW-6 (down-gradient)

Date	Benzene AWQS is 5 µg/L	Depth to water (feet)
January 2016	<1.0	106.96
April 2016	<1.0	107.30
July 2016	<1.0	107.75
October 2016	<1.0	105.42
January 2017	<1.0	105.74
April 2017	<1.0	105.87
July 2017	<1.0	106.42
October 2017	<1.0	106.57
January 2018	<1.0	107.00
March 2018	<1.0	107.42
June 2018	<2.0	107.87
August 2018	<2.0	108.14

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 **April 8, 2019 and ending May 8, 2019**. Comments may be submitted by mail or email. Written comments should be sent to:

Arizona Department of Environmental Quality
Waste Programs Division
Attn: Debi Goodwin
1110 W. Washington Street
Phoenix, AZ 85007

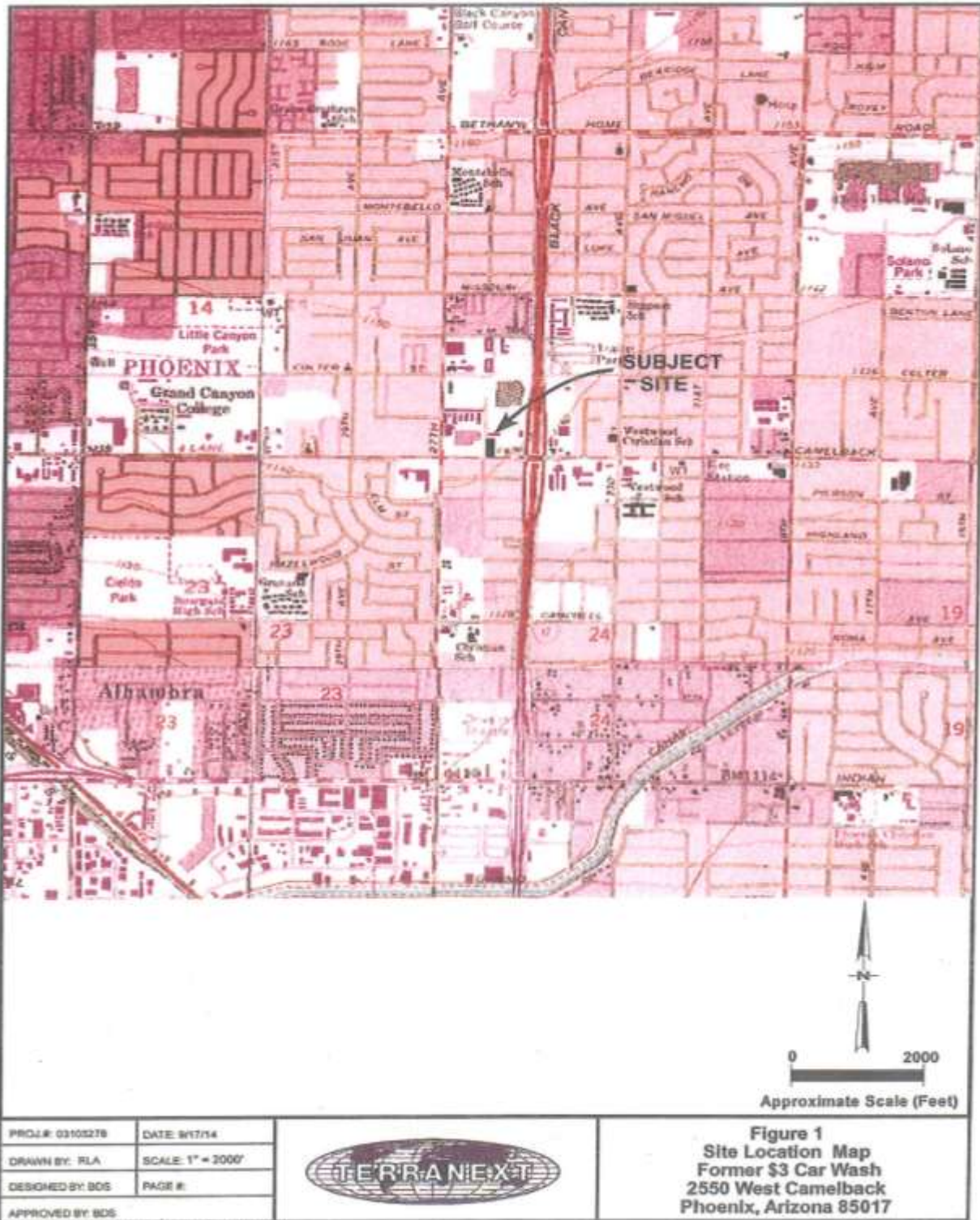
or electronically mailed to: goodwin.debi@azdeq.gov.

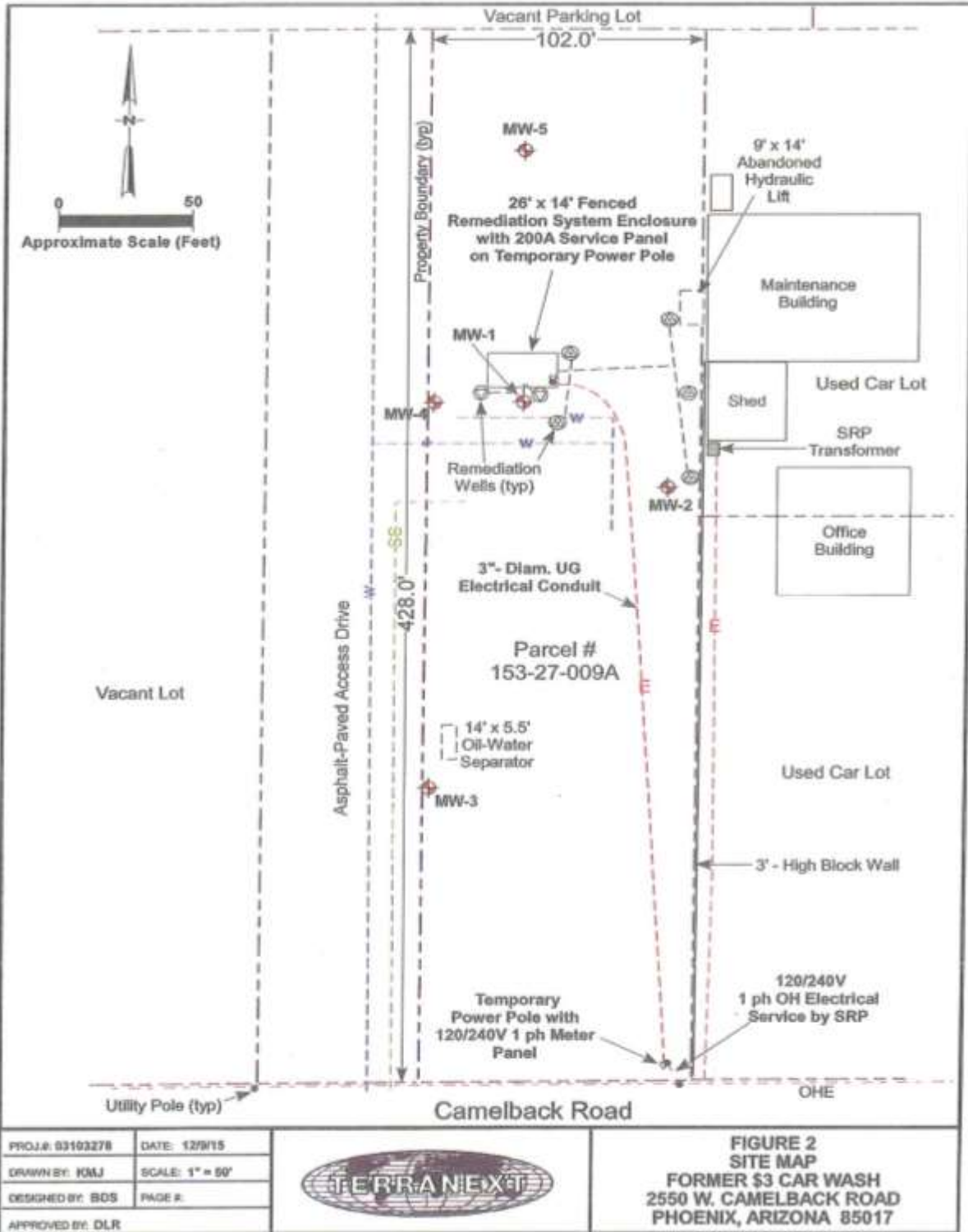
If sufficient public interest is demonstrated during the public comment period, ADEQ may announce and hold a public meeting. ADEQ will consider all submitted comments and reserves the right to respond to those comments following the public comment period. For more information on this notice, please contact the Sr. Risk Assessor, Debi Goodwin at (602) 771-4453 or at goodwin.debi@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

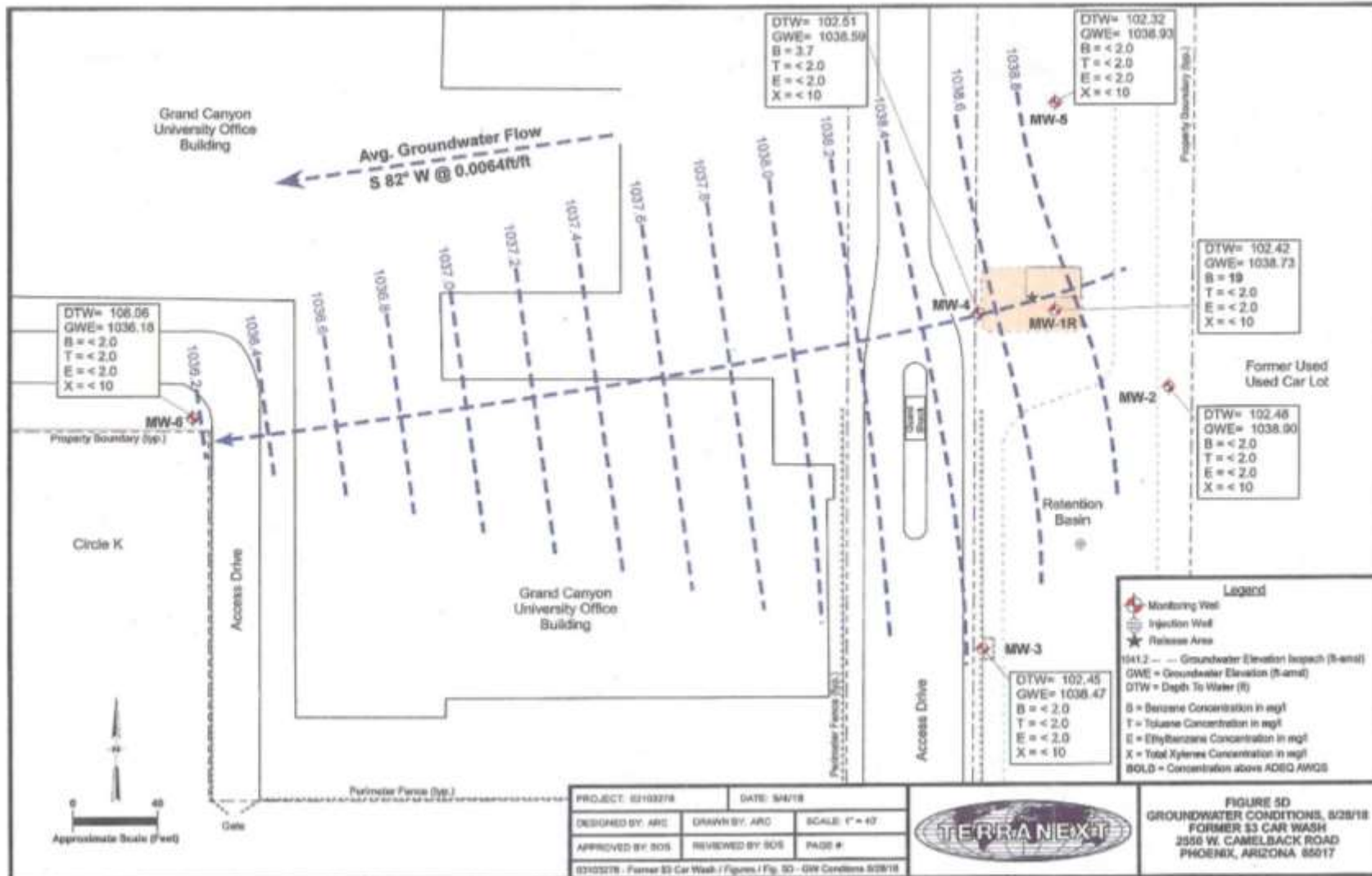
ADEQ will take reasonable measures to provide access to department services to individuals with limited ability to speak, write or understand English and/or to those with disabilities. Requests for language interpretation, ASL interpretation, CART captioning services or disability accommodations must be made at least 48 hours in advance by contacting Ian Bingham, Title VI Nondiscrimination Coordinator at 602-771-4322 or bingham.ian@azdeq.gov. Teleprinter services are available by calling 7-1-1 at least 48 hours in advance to make necessary arrangements.

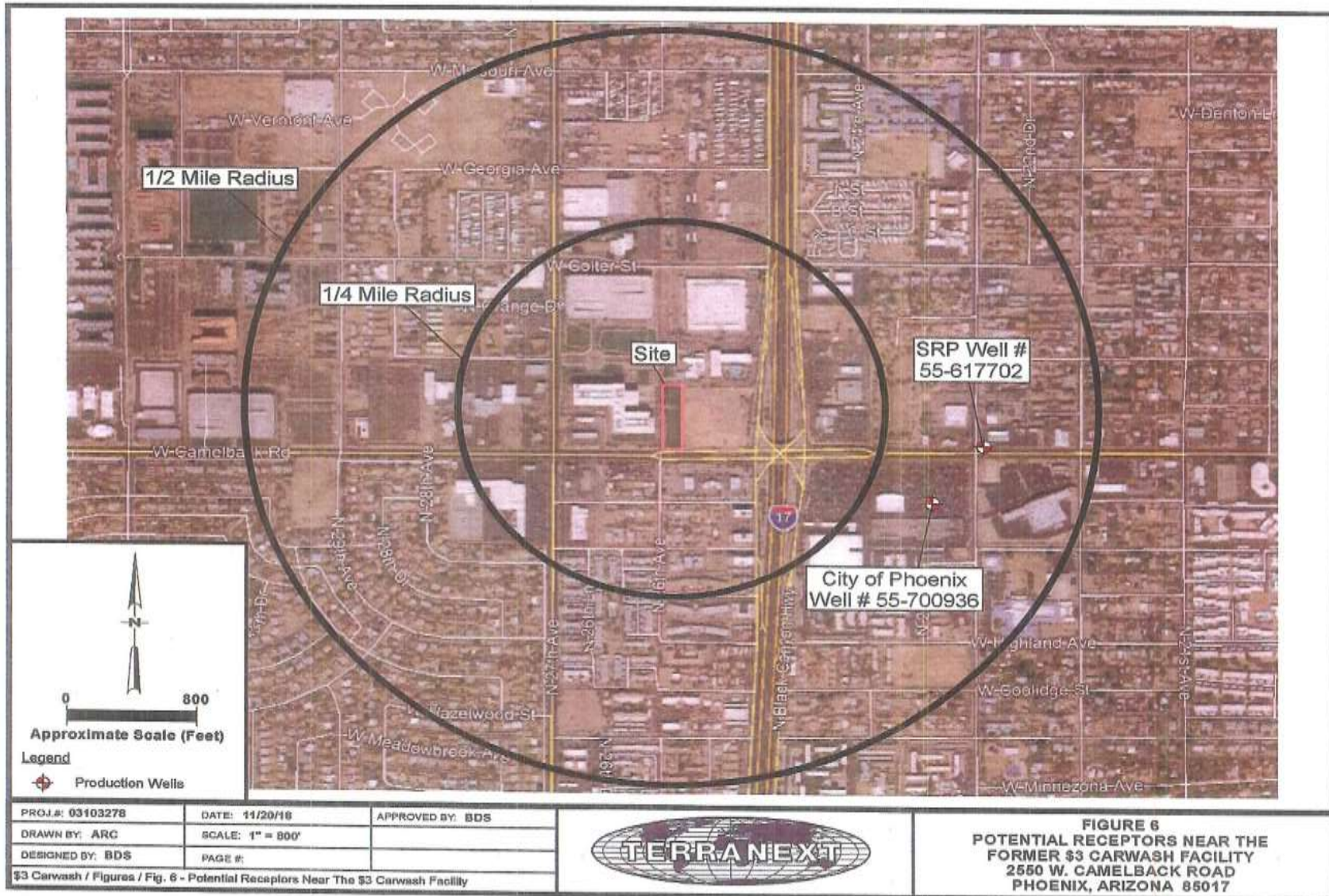
ADEQ tomará las medidas razonables para proveer acceso a los servicios del departamento a personas con capacidad limitada para hablar, escribir o entender inglés y / o para personas con discapacidades. Las solicitudes de servicios de interpretación de idiomas, interpretación ASL, subtítulos de CART, o adaptaciones por discapacidad deben realizarse con al menos 48 horas de anticipación contactando a Ian Bingham, Coordinador de Anti-Discriminación del Título VI al 602-771-4322 o bingham.ian@azdeq.gov. Los servicios de teleimpresores están disponibles llamando al 7-1-1 con al menos 48 horas de anticipación para hacer los arreglos necesarios.





03103278 - \$3 Car Wash 1 Eye Design Matrix 1/fig 2 Parcel Map & Site







Email completed form to: dq1@azdeq.gov

UST- LUST Section
GROUNDWATER USE QUESTIONNAIRE

LUST FACILITY NAME 3\$ Car Wash
 ADDRESS 2550 W. Camelback Road, Phoenix, 85017
 LUST FACILITY ID 0-000709
 LUST CASE NO 1217.02

Please answer all questions. Mark "UNK" if the answer is unknown to you at the time of completion. Please attach any additional pages as needed.

Water user municipality/utility name: Salt River Project
 Date Questionnaire was completed: March 19, 2019
 Contact Name: Karis Nelson
 Title: Senior Environmental Scientist
 Address: Environmental Compliance and Permitting
PAB 359, P.O. Box 52025, Phoenix, AZ 85072
 Phone Number: 602-236-2916
 Email address: karis.nelson@srpnet.com

1. Please indicate current or near future anticipated groundwater development by the municipality/utility within 1 mile of the above named LUST site.

SRP operates water conveyance structures and groundwater supply wells within a 1-mile radius of the LUST site. SRP wells within the 1-mile radius include: 12.1E-8.9N and 11.5E-9N. When active, SRP wells produce water for SRP shareholder use. For the reasonably foreseeable future groundwater development, please see the response to question #2, below.

2. What is the future use (up to 100 years) for groundwater within 1 mile of the above named LUST site?

SRP anticipates that properties near the subject area will remain in use over the next 100 years. Water from supply wells in the vicinity (including well 12.1E-8.9N) could be included in the raw drinking water supply for the City of Goodyear (Goodyear), once the future Goodyear water treatment plant starts treating its raw water delivered by SRP.

SRP entered into an Agreement with Goodyear in 2017 to wheel Goodyear's surface water supplies through the SRP water delivery system to the future Goodyear water treatment plant. Although the water delivered to Goodyear will primarily be Goodyear's surface water supplies (i.e., entitlement of Central Arizona Project water), from an operational perspective some of that water may physically be comingled with water from groundwater wells that discharge from around the site.

3. Is the municipality/utility currently sampling groundwater wells within 1 mile of the above named LUST site? If so, how often is the sampling conducted? Are analytical results being submitted electronically to ADEQ's the groundwater database? If not, will you share the data with ADEQ?

SRP conducts routine groundwater sampling of its wells. Water quality records are submitted electronically to the ADEQ groundwater database.

4. Are there any groundwater wells owned by the water provider that are known to have been affected by the above named LUST site? If so, please list the ADWR well identification numbers. What is the current status of these wells (e.g.- shut down, still pumping)?

SRP well 12.1E-8.9N (ADWR 55-214512) is currently not known to be affected by the LUST site. Levels of BTEX (benzene, toluene, ethylbenzene, and total xylenes) and Methyl-Tert-Butyl-Ether (MTBE) are below reportable limits. The well was most recently sampled for BTEX in 2014 and MTBE in 2009. SRP well 12.1E-8.9N is "Active" though it is used infrequently. SRP well 12.1E-8.9N could be pumped more frequently once the Goodyear water treatment plant is in operation.

SRP well 11.5E-9N (ADWR 55-617702) has been capped for decades and is considered "Inactive."

5. What is the future use (up to 100 years) for any wells that have been impacted by the above named LUST site?

Please see above responses to questions #2 and #4.

6. Is there any other information you wish to provide to assist ADEQ in the LUST case closure evaluation of this site?

SRP's water supply wells are a critical resource, especially in drought conditions, and it is very important that SRP has a reliable supply of water to meet customer and shareholder needs.



Email completed form to: dg1@azdeq.gov

UST- LUST Section
GROUNDWATER USE QUESTIONNAIRE

LUST FACILITY NAME 3\$ Car Wash
 ADDRESS 2550 W. Camelback Road, Phoenix, 85017
 LUST FACILITY ID 0-000709
 LUST CASE NO 1217.02

Please answer all questions. Mark "UNK" if the answer is unknown to you at the time of completion. Please attach any additional pages as needed.

Water user municipality/utility name: City of Phoenix
 Date Questionnaire was completed: 3/25/2019
 Questionnaire completed by: Julie Riemenschneider and Alexander Richards
 Contact Name: Nancy Allen
 Title: Office of Environmental Programs Administrator
 Address: 200 West Washington
Floor 14, Phoenix 85003
 Phone Number: 602-256-5669
 Email address: nancy.allen@phoenix.gov

1. Please indicate current or near future anticipated groundwater development by the municipality/utility within 1 mile of the above named LUST site.

The City of Phoenix does not have any operating or inactive municipal supply wells within 1 mile of the subject LUST site. Well 77 (ADWR 55-626555), located about 0.6 miles to the south of the subject site, was at one time operated by the City. However,

Groundwater Use Questionnaire

Page 2 of 3

according to city records this well was disconnected from the distribution system on 7/7/1996 and was later sold.

No new municipal supply wells are being planned for this area in the immediate future.

2. What is the future use (up to 100 years) for groundwater within 1 mile of the above named LUST site?

Groundwater development could occur within 1 mile of the LUST site for municipal supplies during severe water supply shortages.

The majority of the City's current supply for drinking water source comes from surface water, which is supplied by the SRP system (Salt and Verde Rivers), and from the Colorado River (CAP water). Of this supply, nearly 50% comes from the Colorado River. The Bureau of Reclamation (BOR) who manages the Lower Colorado River operations has indicated that shortages on the Lower Colorado River could begin as soon as 2020 with deeper cuts predicted over time. Because of this possibility, the City views all water within our service area boundary as a potential water supply source in the event that CAP allocations are curtailed during a drought declaration.

3. Is the municipality/utility currently sampling groundwater wells within 1 mile of the above named LUST site? If so, how often is the sampling conducted? Are analytical results being submitted electronically to ADEQ's the groundwater database? If not, will you share the data with ADEQ?

No sampling is being conducted.

4. Are there any groundwater wells owned by the water provider that are known to have been affected by the above named LUST site? If so, please list the ADWR well identification numbers. What is the current status of these wells (e.g.- shut down, still pumping)?

No COP wells are known to have been affected, as of the date of this questionnaire.

5. What is the future use (up to 100 years) for any wells that have been impacted by the above named LUST site?

No City of Phoenix wells have been impacted by the subject LUST site.

6. Is there any other information you wish to provide to assist ADEQ in the LUST case closure evaluation of this site?

Groundwater Use Questionnaire

Page 3 of 3

The City of Phoenix appreciates ADEQ efforts to clean up the environment. Groundwater is a very valuable resource to the City and as a water provider we thank you for including us in this process.