UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
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May 10, 2019

Catherine Jerrard
AFCEC/CIBW
76 Hangar Rd
Rome, NY 13441

RE: Review of the U.S. Air Force's Evaluation Summary for Potential Additional Monitoring Wells, Site ST012, Former Williams Air Force Base, Mesa, Arizona

Dear Ms. Jerrard:

The US Environmental Protection Agency (EPA) and Arizona Department of Environmental Quality (ADEQ) have jointly reviewed and discussed Air Force's (AF's) proposal for additional monitoring wells to delineate the extent of benzene contamination and evaluate containment. We are in general agreement with the proposed locations (Attachment 1) and well installation prioritization schedule (Attachment 2) with some exceptions as provided in the comments below:

Specific Comments:

1) Cobble Zone Location 2. The Air Force (AF) recommends this location be medium priority only if concentrations increase again at well CZ23. EPA and ADEQ still consider this location to be high priority. Benzene was reported as high as 97 ug/L in well CZ23 in April 2018 prior to the start of groundwater extraction at upgradient well CZ07. Subsequent pumping reduced concentrations in CZ23, however, during the March 21,2019 conference call the AF reported that the march 1, 2019 sample from this well contained 24ug/L benzene, and a subsequent sample had a concentration of 47 ug/L. It appears likely that high benzene concentrations may extend significantly beyond well CZ23. AF has not provided a capture zone analysis for the CZ07 pumping; please provide the regulatory agencies with the required information to complete the analysis.

2) UWBZ Locations 1 and 2. AF recommends combining locations 1 and 2 and installing a single well between the two locations. The Agencies disagree. Combining these 2 wells into one as shown on the AF figure leaves considerable northern boundary extent in the UWBZ that is not defined (see dashed line to the north in the figure). This would not fulfil the objective of defining the plume. Additional wells further downgradient (N-NE of Location 1) should be considered for a follow-on phase, depending upon sampling results.

3) LSZ Location 1. AF recommends leaving the location as originally proposed, which is about 60-ft. further downgradient than EPA's proposed location and correlates with ADEQ's initial preferred location. The Agencies concur with the recommendation.

4) LSZ Location 3. AF recommends moving the well outside the plume (east of boring SB18) if goal is to improve plume boundary definition. The Agencies concur with the recommendation.

5) LSZ Location 6. AF proposes this location be deferred contingent on continued monitoring at LSZ52. The regulatory agencies proposed this location to better understand the occurrence of LNAPL and high dissolved COC concentrations in well LSZ46. LSZ37 is also a planned sulfate injection well with high benzene concentrations and upgradient extraction. Well location 6 should be installed to ensure characterization of LNAPL in this area. Since the plume has not shown up thus far at LSZ52, it may very well be migrating to the south. The Agencies believe a well in this area should have a higher priority to better define the plume.

6) LSZ Location 7. AF recommends moving this well further west and deferring to a subsequent phase. This location is upgradient of the main ST012 site in the area of boring SB019. The Agencies are requesting this area of the plume be characterized and not deferred to the future.

EPA and ADEQ request these wells be installed as soon as possible and without further delay, given the fact that the Enhanced Bioremediation portion of the site remedy has been implemented. We understand that AF intends to install these wells in a phased approach and we may need to adjust or add additional locations based upon sampling results. Please don't hesitate to contact us if you have any questions about this letter.

Sincerely,

Carolyn d'Almeida

Carolyn d'Almeida
Remedial Project Manager
US EPA

Wayne Miller
Remedial Project Manger
ADEQ

Enclosures