UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
Underground Storage Tanks Program Office
75 Hawthorne Street (LND-4-3)
San Francisco, CA 94105

JUN 25 2015

CERTIFIED MAIL: 7001 2510 0003 5942 5152
RETURN RECEIPT REQUESTED

Mr. Jeffrey Fuller, Superintendent
Whiteriver Unified School District #20
P.O. Box 190
Whiteriver, Arizona 85941

Subject: No Further Action
Former Emergency Generator UST
Alchesay High School
200 Falcon Way, Whiteriver, Arizona (EPA ID# WMAP-057)

Dear Mr. Fuller:

The U.S. Environmental Protection Agency Region 9 ("EPA") has reviewed the report entitled "Removal and Closure of 5,000-Gallon Underground Diesel Fuel Storage Tank" ("the Closure Repot") that was prepared by RECON Engineering on February 17, 2015. The Closure Report documents the proper closure of a 5,000 gallon underground storage tank ("UST") formerly located at Alchesay High School ("the Site"), which contained diesel fuel for an adjacent emergency generator. The key findings of the Closure Report, as well as EPA's conclusions regarding the data within the Closure Report, are contained in Enclosure A.

Based on the documentation in the Closure Report, EPA has determined that no further action ("NFA") is required for the Site at this time. However, if additional information becomes available in the future regarding hydrocarbon contamination in soil and/or groundwater at the Site related to USTs, or the planned use of the Site changes, EPA may reopen the Site and require additional site assessment and/or corrective action.

Please note that this NFA letter, as well as all supporting documentation, will be available to the general public. If you have any questions regarding this letter, please contact me at (415) 972-3369.

Sincerely,

Steven C. Linder, P.E., Manager
Underground Storage Tanks Program Office

Enclosure: A) Site Background and Justification for NFA

cc: Brenda Pusher-Begay, Environmental Protection Office, White Mountain Apache Tribe

ENCLOSURE A
Site Background and Justification for NFA

Former Emergency Generator UST at Alchesay High School, Whiteriver, Arizona (EPA ID# WMAP-057)

UST site background

Documentation on the operational history of the 5,000 gallon diesel UST at the Site is limited. However, based on EPA's telephone communication on March 5, 2015 with Mr. Jeffrey Fuller, Superintendent of Whiteriver Unified School District #20 ("WUSD #20"), the UST was installed in 1979. In his email to EPA dated March 9, 2015, Mr. John Sempert, Construction Manager for WUSD #20, stated that the UST was last used in 2013. The Closure Report indicates that the steel UST was approximately 14 feet long and 8 feet in diameter, and was connected to an emergency generator located approximately 15 feet northeast of the UST. A concrete vault had been installed on top of the UST to allow for easy access to the fittings on top of the UST. A remote fill port for the UST was located approximately 20 feet south of the southern end of the UST.

The only UST notification form for the Site was completed by Robert Rehm of RECON Engineering on February 17, 2015 and listed WUSD #20 as the owner of the UST. Mr. Rehm was the subcontractor in charge of conducting the site assessment during the UST removal.

Site assessment findings and documentation of a hydrocarbon release

The Closure Report states that during the removal of the UST on January 29, 2015, the UST appeared to be in good condition with no apparent holes and only minimal corrosion. However, the in-situ soil at 14 feet below ground surface ("bgs") beneath the northern end of the UST had a grey color and a slight organic odor. The soil in the remaining areas of the UST system excavation, and below the adjacent emergency generator, showed no evidence of staining or odors.

RECON Engineering collected samples of in-situ soil from below the northern and southern ends of the UST at 14 feet bgs. For quality control purposes, a duplicate sample was collected from below the southern end of the UST at 14 feet bgs. Soil samples were also collected from below the remote fill port at 3 feet bgs, below the emergency generator at 4 feet bgs, and from two stockpiles of soil. All soil samples were analyzed for volatile organic compounds ("VOCs") by EPA Method 8260B, polynuclear aromatic hydrocarbons ("PAHs") by EPA Method 8270C, and total petroleum hydrocarbons ("TPH") as gasoline, diesel and oil by Arizona Method 8015AZ. In addition, the soil samples for VOC and TPH (as gasoline) analyses were preserved with methanol.

The analytical results for the soil samples collected from below the northern end of the UST at 14 feet bgs showed detections for multiple VOCs and PAHs, as explained below.

VOCs detected in the soil samples from below the northern end of the UST at 14 feet bgs

- N-Butylbenzene: 0.16 mg/kg
- Sec-Butylbenzene: 0.084 mg/kg
- 4-Ethyltoluene: 0.032 mg/kg
- Naphthalene: 0.87 mg/kg
- N-Propylbenzene: 0.059 mg/kg

- 1,2,3-Trimethylbenzene: 0.043 mg/kg
- 1,2,4-Trimethylbenzene: 0.082 mg/kg
- 1,3,5-Trimethylbenzene: 0.022 mg/kg

PAHs detected in the soil samples from below the northern end of the UST at 14 feet bgs

- Acenaphthene: 0.22 mg/kg
- Acenaphthylene: 0.031 mg/kg
- Anthracene: 0.075 mg/kg
- Benzo(a)anthracene: 0.014 mg/kg
- Chrysene: 0.016 mg/kg
- Fluoranthene: 0.023 mg/kg
- Fluorene: 0.24 mg/kg
- 1-Methylnaphthalene: 1.2 mg/kg
- 2-Methylnaphthalene: 1.3 mg/kg
- Naphthalene: 0.43 mg/kg
- Phenanthrene: 0.54 mg/kg
- Pyrene: 0.41 mg/kg

Despite the multiple detection for VOCs and PAHs listed above, none of these concentrations exceeded EPA's Regional Screening Levels ("RSLs") for residential areas. The analytical data for the soil samples from the northern end of the UST at 14 feet bgs also showed detections for TPH as gasoline (2.6 mg/kg), diesel (1,400 mg/kg) and oil (130 mg/kg). There were low level detections for anthracene (0.007 mg/kg) and benzo(ghi)perylene (0.0063 mg/kg) in the soil samples from below the southern end of the UST at 14 feet bgs. However, these concentrations were also below EPA's RSLs for residential areas.

Current use of the Site and potential receptors

In addition to the removal of the UST system and the emergency generator, all of the surrounding structures in the vicinity of the UST were demolished as part of a building mold abatement project by WUSD #20. As such, the former UST area is currently within a large vacant lot. During the telephone conversation on March 5, 2015, mentioned previously, Mr. Fuller indicated that WUSD #20 plans to construct one or more athletic fields on this vacant lot within approximately five years. Prior to constructing the athletic fields, the existing asphalt parking lots may continue to be used. Mr. Fuller also indicated that WUSD #20 is connected to the White Mountain Apache Tribe's public water supply system. The classrooms associated with the high school are located approximately 1,000 feet north of the former UST area. Based on EPA's previous discussions with Gerd Von Glinski with the White Mountain Apache Tribe's Water Resources Program, the nearest active Tribal drinking water wells are located in Miner Flats, approximately 8 miles north of the Site.

Conclusion

As noted above, the analytical results for the soil samples collected during the UST removal showed multiple detections for VOCs and PAHs, but none of these concentrations exceeded EPA's RSLs for residential areas. Although TPH as gasoline, diesel and oil were detected in the soil samples, the maximum concentrations obtained in these samples (noted above) are relatively low when compared to UST sites that have had significant fuel releases. In addition, the 14 foot depth of burial of the soil samples showing detectable hydrocarbon concentrations makes direct human exposure very unlikely if

conditions at the Site remain the same. Should Site conditions change in the future, EPA will reassess the human exposure assumptions and potentially require further work at the Site.