



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9**

**75 Hawthorne Street  
San Francisco, CA 94105-3901**

July 20, 2009

Mr. Dennis Moser, P.G.  
Environmental Project Manager  
Ferrellgas, L.P.  
One Liberty Plaza  
Liberty, MO 64068

**Subject: No Further Action (NFA) for the Ferrellgas Leaking Underground Storage Tank (LUST) Site in Tuba City, AZ (EPA ID# NAV-002)**

Dear Mr. Moser:

The U.S. Environmental Protection Agency (EPA) has reviewed the report entitled "Limited Phase II Environmental Site Assessment Report" (Site Assessment Report) that was prepared by ATC Associates Inc. (ATC) for the Ferrellgas leaking underground storage tank (LUST) site. The Site Assessment Report documents field work conducted by ATC at the Ferrellgas site on January 27-28, 2009. This site assessment work was conducted pursuant to the Revised Workplan for Limited Phase II Environmental Assessment that was approved by EPA and the Navajo Nation EPA (NNEPA) in October 2008.

**Summary of field activities in January 2009 at the Ferrellgas site**

On January 27-28, 2009, ATC drilled four borings at the Ferrellgas site to a depth of approximately 18 feet below ground surface, and soil samples were collected at 2.5-foot intervals for field screening with a photo-ionization detector (PID). One soil sample was then selected from each boring for laboratory analysis based on the PID measurements. ATC installed 2-inch diameter PVC monitoring wells in the four borings, developed the wells by surging and bailing, and collected groundwater samples using Teflon-coated disposable bailers. Soil and groundwater samples were analyzed for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) using EPA Methods 8015B and 8260B, respectively. In addition, groundwater samples were analyzed for ethylene dibromide using EPA Method 504.1. NNEPA's contractor (iina' ba', Inc.) collected split samples during the groundwater sampling.

**Analytical data for soil and groundwater samples collected at the Ferrellgas site**

The analytical data for soil contained in ATC's Site Assessment Report show no detections for VOCs other than low-level trimethylbenzenes, and two low-level detections for TPH that are below NNEPA's draft TPH cleanup criterion. The analytical

data for groundwater contained in the Site Assessment Report show no hydrocarbon concentrations above EPA's Maximum Contaminant Levels (MCLs) or NNEPA's draft Water Clean Up Standards, except for ethylbenzene in monitoring well MW-4R. The ethylbenzene concentration in MW-4R was 1,100 micrograms per liter (ug/l), which is higher than EPA's 700 ug/l MCL (this is also NNEPA's draft Water Clean Up Standard). ATC's ethylbenzene concentration for the groundwater sample from MW-4R was slightly higher than the ethylbenzene concentration obtained by iina' ba', Inc. (840 ug/l) in its split sample from this well.

### **Previous site characterization and remediation work at the Ferrellgas site**

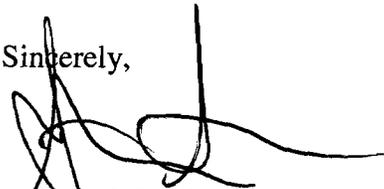
The former USTs at the Ferrellgas site were removed in 1985 and site characterization work began in 1986. Based on documents submitted to EPA by Ferrellgas, active remediation at the Ferrellgas site from 1987 to 1989 resulted in the excavation and treatment of over 2,500 cubic yards of petroleum-contaminated soil. This documentation also indicated that over 300,000 gallons of petroleum-contaminated groundwater was pumped from the Ferrellgas site and treated. The groundwater samples collected from monitoring well MW-4 on July 27, 2003, Ferrellgas' last sampling event prior to this year's sampling, contained no detectable concentrations for benzene and methyl tertiary-butyl ether (MTBE), and the concentrations for toluene, ethylbenzene and xylenes were below the MCLs.

### **Conclusion**

Although the ethylbenzene concentration in monitoring well MW-4R was above EPA's MCL and NNEPA's draft Water Clean Up Standard, there are no public water system (PWS) wells within ¼ mile of the Ferrellgas site. In addition, the PWS wells in the general area of the Ferrellgas site are sidegradient of the overall southerly groundwater flow direction from the Ferrellgas site.

Based on the analytical data obtained by ATC and iina' ba', Inc. following the field activities on January 27-28, 2009 at the Ferrellgas site, EPA and the NNEPA are not requiring further action at this time. However, if additional information becomes available in the future regarding hydrocarbon concentrations in soil and/or groundwater at the Ferrellgas site, EPA, or the NNEPA, may reopen the site and require additional site assessment and/or corrective action. If you have any questions regarding this letter, please contact Chris Prokop of my staff at (415) 972-3363, or NNEPA's UST program at (928) 871-7993.

Sincerely,



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