



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 9**

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

**JUN 11 2014**

Mr. Terry Rambler, Chairman  
San Carlos Apache Tribe  
P.O. Box 0  
San Carlos Avenue  
San Carlos, Arizona 85550

**Subject: Conditional No Further Action ("NFA") for the Former San Carlos Service Station UST Cleanup Site in San Carlos, Arizona (EPA ID# SANC-018)**

Dear Chairman Rambler:

The U.S. Environmental Protection Agency ("EPA") has completed its review of documents pertaining to the removal of underground storage tanks ("USTs") at the San Carlos Service Station in San Carlos, Arizona ("Site"). Based on the residual contaminant concentrations at the Site, the Tribe's continued UST operations at the Site, and no current or planned future usage of the groundwater beneath the Site, EPA and the San Carlos Apache Tribe's Environmental Protection Agency ("SCAT-EPA") are not requiring further action for the Site at this time. However, this no further action ("NFA") determination acknowledges that low levels of residual contamination remain at the Site, and is adopted with the following acknowledgements:

1. On June 3, 2014, the SCAT amended Water Ordinance No. 94-01 to prohibit the installation of drinking water or agricultural wells within a one-quarter mile radius of the Site for a period of fifty (50) years from the date of this letter;
2. On June 3, 2014, the SCAT's Council adopted amended Water Ordinance No. 94-01 in Resolution No. JN-14-160; and
3. In Resolution No. JN-14-160, the Tribe also agreed to add analyses for total lead in "source water" to the existing analyses every three years for volatile organic compounds ("VOCs") at the North and South Gilson Wash Wells (operated by the San Carlos Tribal Utility Authority), and require that BIA also perform total lead analyses every three years at its Well #6 (and backup Well #5, if in operation).

If information becomes available in the future regarding hydrocarbon concentrations in soil and/or groundwater at the Site, or the planned use of the site changes including removal of the current USTs, 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, or Ms. Loretta Stone, Director, SCAT-EPA, at (928) 475-2218.

Sincerely,



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

Enclosures (LUST No Further Action Summary and SCAT Resolution No. JN-14-160)

cc (all w/enclosures):

Loretta Stone, Director, SCAT-EPA  
Alexander Ritchie, Attorney General, SCAT  
Terry Jones, General Manager, SCAT  
John Krause, BIA, Western Regional Office

**Enclosure A**  
**LUST No Further Action Summary**  
**Former San Carlos Service Station UST Cleanup Site in San Carlos, Arizona**  
**(EPA ID# SANC-018)**

**Previous and current UST operations at the Site and confirmed release dates**

Based on the file information and conversations with Tribal members, EPA understands that fueling operations at the Site potentially began in the 1940s and ended (for a few months) in November 2011, when the last remaining operational UST was removed. From 1987 until approximately 2004, the file documents indicate that William G. Conner operated "Bill Conner Automotive" and the USTs at the Site. Based on the UST Notification Form dated July 26, 2004, it appears that the Tribe had assumed UST operations at the Site.

EPA believes that there were at least two generations of USTs at the Site. The earlier generation of USTs consisted of two "abandoned" 1,000 gallon USTs (unknown dates of installation), which were located immediately east of the UST facility building. On October 14, 1999, soil samples were collected from below the abandoned USTs and the laboratory results yielded 28,000 milligrams per kilogram ("mg/kg") of total petroleum hydrocarbons ("TPH") for one of the samples. This earlier generation of USTs may have also included the fifth UST (10,000 gallons), described below, that was discovered in November 2011 near the eastern boundary of the Site.

The most recent generation of USTs consisted of the 10,000 gallon and 7,500 gallon USTs, which were located immediately west of the UST facility building. On November 8, 2011, a soil sample was collected from below the northern end of the 10,000 gallon UST, and this sample showed multiple low-level detections for polynuclear aromatic hydrocarbons ("PAHs").

In May 2012, following the removals of the original five USTs, the Tribe installed a new 6,000 gallon UST at the Site and continues to dispense gasoline. This new UST facility is known as the "San Carlos Market Place."

**UST removal and site assessment work**

EPA reviewed the following three reports that were prepared by Blaes Environmental Management, Inc. ("Blaes"):

- Underground Storage Tank Closure and Dry Well Overexcavation Report, dated December 21, 2011
- Soil Overexcavation Report, dated July 2, 2012
- Underground Storage Tank Removal and Closure Report (for the fifth UST), dated August 7, 2012

These reports indicate that between November 2011 and July 2012, the following work was conducted at the Site: 1) five USTs and two above ground storage tanks ("ASTs"), along with the associated dispensers and piping, were removed and disposed offsite, 2) petroleum contaminated soil ("PCS") was stockpiled and isolated from soil not impacted by hydrocarbons, 3) PCS was removed and disposed

offsite, 4) initial and confirmatory soil and groundwater sampling was conducted, and 5) the excavated areas were backfilled with clean soil.

In November 2011, the Tribe's contractor removed the following four USTs at the Site: 10,000 gallon gasoline, 7,500 gallon gasoline, and two abandoned 1,000 gallon USTs that had been closed in-place in 1999 and partially filled with sand. A non-operating fifth UST ("Tank 5") was subsequently discovered in the eastern area of the Site. The Tribe's contractor collected 22 soil samples during this work and the analytical results showed no concentrations for volatile organic compounds ("VOCs") above EPA's Regional Screening Levels ("RSLs") for industrial settings. In addition, most of the VOC concentrations (e.g., benzene, toluene, ethylbenzene and total xylenes) were below the residential RSLs. The analytical results also showed elevated TPH concentrations in the soil samples collected from the following areas: below one of the abandoned 1,000 gallon USTs, below the dispenser island that formerly served the abandoned USTs, and in an area contiguous to the USTs (referred to as the "dry well"). The analytical results from these same three areas also showed relatively low concentrations for some PAH compounds. Some of the PAH concentrations were slightly above EPA Region 9's RSLs for residential settings, but none of the PAH concentrations was above EPA Region 9's RSLs for industrial settings.

The soil sample analyses also showed elevated total lead concentrations in two samples from the dry well area. These two lead concentrations (i.e., 2,800 and 1,300 mg/kg) were higher than EPA's residential and industrial RSLs for total lead.

In March 2012, a single soil sample was collected from the western end of Tank 5. The analytical results for this soil sample showed no detectable concentrations for VOCs or PAHs, but did show elevated TPH as diesel and oil. In July 2012, the Tribe's contractor removed Tank 5 and the confirmatory soil samples showed no hydrocarbon detections.

### **Remedial work at the Site**

Based on the total lead, PAH and TPH concentrations identified during the UST removals, SCAT-EPA and EPA determined that additional soil excavation should be conducted at the Site. In March 2012, the Tribe's contractor conducted over-excavation work in the following areas of the Site: below the northern end of the former 10,000 gallon UST ("Tank 1"), below the former dispenser island that served the abandoned USTs, and in the area of the dry well. The over-excavation in the dry well area extended to the depth of groundwater at approximately 27 feet below ground surface ("bgs"). A total of approximately 850 tons of PCS was excavated from the Site, profiled by laboratory analyses, and transported under proper manifesting to the Cactus Landfill in Florence, AZ.

Following the over-excavation work at the Site in March 2012, confirmatory soil samples were collected and analyzed. The analytical results for these soil samples showed no exceedances of EPA Region 9's RSLs for industrial areas (the site is still an active gas station). Only one soil sample showed a slight exceedance of an EPA Region 9 RSL for residential areas for one compound (i.e., indeno (1,2,3-cd) pyrene), and this sample was collected from 20 bgs. In addition, the analytical results showed that the soil previously containing high total lead concentrations had been removed (i.e., the highest post-excavation total lead concentration was 200 mg/kg versus the previous 2,800 mg/kg concentration).

### **Groundwater sampling at the Site**

As noted above, the over-excavation work in March 2012 in the area of the dry well extended to the depth of groundwater at approximately 27 feet bgs. Blaes collected an unfiltered groundwater “grab” sample from the standing water in the excavation. Although this groundwater sample was collected at EPA’s request, it may not have been representative of the actual groundwater conditions beneath the Site because of its potential turbidity (i.e., soil particles that would not normally be flowing with the groundwater). The analytical results for this groundwater sample showed no contaminant concentrations above EPA’s MCLs, except for total lead. The total lead concentration was 190 µg/l, which was above EPA’s 15 µg/l MCL for lead. The analytical results also showed exceedances of EPA’s “tap water” RSLs for ethylbenzene, naphthalene, 1,2,4-trimethylbenzene, benzo(a)pyrene and benzo(b)fluoranthene. The direction of groundwater flow in the town of San Carlos has not been determined.

### **Residual hydrocarbon and lead contamination at the Site**

As noted above, the groundwater sample from the dry well had contaminant concentrations exceeding EPA’s MCL for lead, and EPA’s tap water RSLs for ethylbenzene, naphthalene, 1,2,4-trimethylbenzene, benzo(a)pyrene and benzo(b)fluoranthene. In addition, elevated TPH concentrations were found in soil at 20 feet bgs in the area of the dry well, and one soil sample from this same location and depth had a concentration of indeno (1,2,3-cd) pyrene that slightly exceeded EPA Region 9’s RSL for residential settings. It should be noted that hydrocarbon compounds degrade rapidly once the source areas have been addressed, as is the case here. In addition, total lead in groundwater is relatively immobile.

### **Current and potential future use of the Site**

As noted above, the Tribe installed a new UST at the Site in May 2012 and is currently dispensing fuel from the UST. On December 24, 2013, Chris Prokop of my staff contacted Terry Jones, the Tribe’s General Manager, to discuss the potential future use of the Site. During that discussion, Mr. Jones indicated that the Tribe had no future plans for the Site other than its current use as a UST facility and convenience store. Mr. Jones also indicated that the Tribe intends to pave over the entire former UST area (this will greatly reduce rain and surface water infiltration). The area surrounding the Site consists of a mixture of residential, commercial (Tribal Telecommunications) and governmental properties (Tribal and BIA). The nearest residential area is located approximately 300 feet north of the former UST area.

### **Drinking water for the town of San Carlos**

The town of San Carlos receives its drinking water from the North and South Gilson Wash Wells (operated by the San Carlos Tribal Utility Authority), and BIA Well #6 (BIA Well #5 is the backup drinking water well). The North Gilson Wash Well is located approximately 0.29 mile southwest of the Site, and the South Gilson Wash Well is located approximately 0.39 mile south-southwest of the Site. BIA Well #6 is located approximately 0.29 mile northwest of the Site. On October 30, 2012, the San Carlos Tribal Utility Authority sampled the North and South Gilson Wash wells and the analytical results showed no detectable concentrations for VOCs or total lead. On December 6, 2012, BIA sampled its Well #6 and the analytical results also showed no detections for VOCs, except for chloroform at a very low 0.0007 mg/l concentration (a possible laboratory contaminant), and no detections for total lead.

**SAN CARLOS APACHE TRIBE  
SAN CARLOS APACHE INDIAN RESERVATION  
SAN CARLOS, ARIZONA**

**RESOLUTION**

**No. JN-14-160**

**(Enacting Ordinance No. 2014-002, Amendments to the Tribe's Water Quality  
Standards and Water Ordinance)**

**WHEREAS**, the San Carlos Apache Tribe ("Tribe") is a federally recognized Indian Tribe organized pursuant to the provisions of Section 16 of the Indian Reorganization Act of June 18, 1934 (48 Stat. 984); and

**WHEREAS**, the Tribal Council has the authority, among other things, to "represent the Tribe and act in all matters that concern the welfare of the Tribe, and to make decisions not inconsistent with or contrary to [the Tribe's] Constitution and Bylaws," pursuant to Article V, Section 1(a) of the Amended Constitution and By-Laws of the San Carlos Apache Tribe; and

**WHEREAS**, pursuant to Ordinance No. 94-1 (Resolution No. JA-94-01), the Tribe has established a Water Ordinance, prohibiting the discharge of any pollutant into the waters of the San Carlos Apache Reservation, and pursuant to Resolution No. DC-13-278, the Tribe adopted Water Quality Standards; and

**WHEREAS**, the Tribe is subject to certain federal laws and regulations pertaining to leaking underground storage tanks ("USTs"), namely the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") of 1980, as amended (42 U.S.C. §103 *et seq.*), 40 CFR Parts 280, 281, 282.50-282.105 and 302.4, and the Clean Water Act ("CWA") of 1972 (33 U.S.C. §1251 *et seq.*); and

**WHEREAS**, the U.S. Environmental Protection Agency ("USEPA") Region 9 established an underground storage tank ("UST") clean up site at the former San Carlos Service Station, located approximately 350 feet east of San Carlos Avenue and one block south of Coyotero Street at the GPS coordinates of 33.352240, -110.451317 in the community of San Carlos; and

**WHEREAS**, the USEPA requires a prohibition against the installation of drinking water or agricultural wells within 1/4 mile of the San Carlos Service Station UST cleanup site for fifty years, through to the year 2064, in order to ensure compliance with the CWA and CERCLA; and

**WHEREAS**, the Tribe's General Manager together with the Tribe's Environmental Protection Office this day present an amendment to the the Tribe's Water Ordinance (No. 94-

1), as attached and incorporated by this reference, that would divide Section 3 into two parts in order to append a new section, Section 3(B), to generally prohibit installation of a drinking water or agricultural well within a one-quarter mile radius of an underground storage cleanup site for a period of fifty (50) years from the date that the site is established; and

**WHEREAS**, in order to ensure monitoring of potential lead pollution associated with the San Carlos Service Station UST, it is further recommended that the Tribe's Water Quality Standards, Section 12, to include a new provision, Section 12(1), that requires total lead analyses to the existing 3-year sampling cycles for "source water" (versus "distribution system" water) at the North and South Gilson Wash wells (operated by the San Carlos Tribal Utility Authority), and to require sampling by the Bureau of Indian Affairs every 3 years of source water at BIA Well #6 (or possibly its backup well - Well #5, if in use); and

**WHEREAS**, the Tribal Council concurs with the recommendation of the Tribe's General Manager and EPO, and finds that the proposed amendment would be in the best interest of the Tribe and that it would further ensure water quality on the Reservation; and

**WHEREAS**, the Tribal Council further finds that allowing for public comment on the proposed amendment would be unnecessary as it is a technical amendment to the Tribe's Code that serves to further compliance with the federal Clean Water Act.

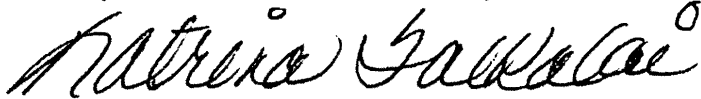
**BE IT RESOLVED** by the Tribal Council of the San Carlos Apache Tribe that:

1. The Tribe's Water Ordinance and Water Quality Standards are hereby amended by Ordinance No. 2014-002, as attached and incorporated by this reference.
2. In the event of any inconsistency between the terms of this Resolution and any prior Resolution, the terms of this Resolution shall supersede, govern, apply and control.
3. The Tribe's Office of Attorneys General is hereby directed to revise and re-issue the amendments, as attached, for publication.
4. The Tribal Council Secretary is hereby directed to post and publish the amendments, as attached, in the Tribal Council Secretary's Office, all District Offices and appropriate media outlets.

**BE IT FURTHER RESOLVED** by the Tribal Council of the San Carlos Apache Tribe that the Chairman, or in his absence, the Vice Chairman, or designee, is hereby authorized to execute any and all documents necessary to effectuate the intent of this Resolution.

### CERTIFICATION

I, the undersigned, Secretary of the San Carlos Tribal Council, hereby certify that the Tribal Council is composed of Eleven (11) members, of whom Six (6), constituting a quorum, were at a Regular Council Meeting hereto held on the 3<sup>rd</sup> day of June, 2014, and that the foregoing Resolution No. JN-14-160 was duly adopted by a vote of FOR: 7; OPPOSED: 0; ABSTAINED: 0; of the Tribal Council pursuant to Article V, Section 1 (a) of the Amended Constitution and Bylaws of the San Carlos Apache Tribe, effective, February 24, 1954.

A handwritten signature in cursive script, reading "Katrina Talkalai", written in black ink.

**Katrina Talkalai, Tribal Secretary**  
**San Carlos Apache Tribe**



**ORDINANCE NO. 2014-002**

**AMENDMENTS  
TO  
WATER ORDINANCE  
AND  
WATER QUALITY STANDARDS**

- 1. An amendment to Water Ordinance No. 94-01.** Section 3 is divided into two parts, A and B, appending a new provision under 3(B), which are highlighted in redline form, as follows:

Section 3. Prohibited Discharges; Wells.

- A. No person shall discharge any pollutant into the waters of the Reservation.
- B. No person shall install a drinking water or agricultural well within a one-quarter mile radius of an underground storage cleanup site for a period of fifty (50) years from the date that the site is established.

- 2. An amendment to the Tribe's Water Quality Standards.** A new Section 12(I) is appended, which is highlighted in redline form, as follows:

Section 12(I). The Tribe shall perform a total lead analysis to the existing 3-year sampling cycles for "source water" (versus "distribution system" water) at the North and South Gilson Wash wells (operated by the San Carlos Tribal Utility Authority). The Bureau of Indian Affairs shall similarly perform a total lead analysis every 3 years of source water at BIA Well #6 (or possibly its backup well - Well #5, if in use).