



**CLOSURE GUIDANCE for
UNDERGROUND STORAGE TANKS (USTs)
on INDIAN LANDS, EPA Region 10
Alaska, Idaho, Oregon and Washington
January 2009**

GENERAL: Regulation of UST closures is covered under federal regulation 40 CFR Part 280, which became effective on December 22, 1988. Requirements for UST closures are described under Subpart G of these regulations, specifically §280.70 through §280.74. This guidance is intended to clarify these regulations and offer specific procedural recommendations. "Closures" of regulated USTs consist of the following three actions:

- ▶ **Permanent Closure** ▶ **Temporary Closure** ▶ **Change-In-Service Modifications**

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APPLICABILITY: If an UST facility is within the boundaries of an Indian Reservation or outside a reservation but on Indian trust land or on land recognized as an "dependent Indian community," regulatory jurisdiction remains with EPA (i.e. the federally approved state UST program does not extend into Indian Country) ["Indian Country," 18 USC §1151(b)]. Hence, any such UST closure work on these lands must be coordinated directly with EPA. For lands within a reservation, this policy applies regardless if the UST facility is on privately-owned lands, government-owned lands or Indian trust lands, whether on tribal or individual allotments. (The only exception to this policy is the Puyallup Indian Reservation. EPA approved the Washington State program for non-trust and unrestricted lands on this reservation pursuant to the Puyallup Lands Claims Settlement Acts, 25 USC §1773.)

SIGNIFICANCE: The importance of following this tank closure guidance to the owner/operator of an UST facility is as follows:

- ▶ It will assist the owner/operator in properly verifying that the UST system has not leaked, thus allowing EPA to give a timely approval of the closure action results.
- ▶ If contamination is found during the closure work, it will alert the owner/operator to immediate reporting requirements. The closure site assessment work also will serve to help plan remediation (cleanup) activities. In addition, the sooner contamination is identified and cleanup work is started, the easier and usually cheaper it is to cleanup the site.
- ▶ Following this guidance should help to minimize any private party damage claims if any contamination is found that has the potential to impact offsite lands, such as neighboring water wells, basements (vapors), etc.
- ▶ Following recommended industry safety standards during the closure work should prevent serious accidents involving workers, equipment and other assets. **Remember, regardless of how old or empty an UST is thought to be, the tank is still a very real source of explosive and toxic gases. This work is not for amateurs.** A number of fatalities still happen each year due to explosions and suffocations during closure work. While federal UST regulations do not provide specific requirements for tank decommissioning work, many other regulations and codes have extremely important bearing on this kind of work, such as the Uniform Fire Code and OSHA (e.g. confined space entry).

It should be noted that tank decommissioning work performed under most state UST jurisdictions is required to be done by certified personnel. Good reference guides include the American Petroleum Institute's (API) "Closure of Underground Petroleum Storage Tanks" (RP 1604, 3rd edition, 1996) and API's "Cleaning Petroleum Tanks"

(Standard 2015, 5th edition, 1994). Copies of these publications can be ordered at (202) 682-8375.

NOTIFICATION REQUIREMENTS: At least 30 days prior to beginning tank closure, you must notify EPA of your intent to perform closure work (See the attached 30-Day Advance Closure Notification form). The purpose of this notification is to allow EPA the option of overseeing the closure work and providing technical assistance. It is recommended that the actual notification be in writing sent to EPA via mail or fax. It also is acceptable to telephone one of EPA UST staff listed in this guidance document, who will log-in your verbal notification. Information needed in the notification is as follows:

- ▶ name and location of the UST facility,
- ▶ the U.S. EPA UST facility identification number,
- ▶ the kind of closure (permanent, temporary, etc.),
- ▶ specific tanks involved,
- ▶ the names and phone numbers of the contractor and/or site assessment consultant,
- ▶ method of closure (either removal or in-place), and
- ▶ the date(s) the work is scheduled.

Upon receipt of the notification, EPA will send you a letter confirming the closure information. The 30-day period will commence upon receipt of the notification by EPA.

To submit the required 30-day advance notification for Indian lands UST closures in Alaska, Idaho, Oregon and Washington, please send it to:

U.S. EPA Region 10
Attention: Rob Rau, UST Program
1200 6th Avenue, Suite 900 (OCE-082)
Seattle, WA 98101
Telephone: (800) 424-4372, ext. 6285
Fax: (206) 553-0151

CLOSURE REQUIREMENTS: As soon as an owner or operator decides to discontinue using their tank system, EPA strongly encourages the owner / operator to pump out the contents of the tank as soon as possible, even in advance of any closure activities, to minimize the potential of contaminating nearby soils and groundwater. "Closures" of regulated USTs consist of the following three actions:

1. Permanent Closure: EPA regulations for permanent closure (40 CFR §280.71) require all tanks to be emptied and all liquids and sludge to be removed and disposed in an approved manner. The tank must then either be removed from the ground or closed-in place, filling the tank with solid inert material. A sand slurry, a weak cement slurry (in case you want to break it up and remove it in the future) or some of the new foam products are acceptable fill materials.

Although U.S. EPA regulations allow in-place closures, EPA **strongly recommends tank removal** for the following reasons:

- ▶ it is easier to obtain soil or groundwater samples needed below the tank for the site assessment;
- ▶ site characterization is more difficult because the tank is in the way, limiting visual observation and soil screening efforts;
- ▶ if any contamination is found below the tank, it is almost certain that the tank will need to be removed; and
- ▶ it will probably make any future sale of your property less complicated.

If you wish to perform an in-place closure, first check with your local fire department to ensure that they will allow it in your area; some local departments require removal.

2. Temporary Closure: An owner/operator may temporarily close a tank for up to 1 year. However, according to Federal UST regulation 40 CFR §280.70,
 - (a) *When an UST system is temporarily closed, owners and operators must continue operation and maintenance of corrosion protection in accordance with §280.31, and any release detection in accordance with Subpart D. Subparts E and F must be complied with if a release is suspected or confirmed. However, release detection is not required as long as the UST system is empty. The UST system is empty when all materials have been removed using commonly employed practices so that no more than 2.5 centimeters (one inch) of residue, or 0.3 percent by weight of the total capacity of the UST system, remain in the system.*
 - (b) *When an UST system is temporarily closed for 3 months or more, owners and operators must also comply with the following requirements:*
 - (1) Leave vent lines open and functioning, and
 - (2) Cap and secure all other lines, pumps, manways and ancillary equipment.

- (c) When an UST system is temporarily closed for more than 12 months, owners and operators must permanently close the UST system if it does not meet either performance standards in §280.20 for new UST systems or the upgrading requirements in §280.21, except that the spill and overflow equipment requirements do not have to be met. Owners and operators must permanently close the substandard UST at the end of this 12-month period in accordance with §§280.71-280.74, unless the implementing agency provides an extension of the 12-month temporary closure period. Owners and operators must complete a site assessment in accordance with §280.72 before such an extension can be applied for.
3. Change-in-Service Modifications: If an owner/operator would like to store a different material in a tank that held a petroleum product, they must follow Federal UST regulation 40 CFR §280.71, which states:
- (d) *Continued use of an UST system to store a non-regulated substance is considered a change-in-service. Before a change-in-service, owners and operators must empty and clean the tank by removing all liquid and accumulated sludge and conduct a site assessment in accordance with §280.72.*

SITE ASSESSMENT WORK: Before permanent closure is completed, 40 CFR §280.72 requires owners to conduct a site assessment to determine whether there has been a release from the tank system. This requirement means samples must be collected from representative locations, such as under and adjacent to the tank(s), piping and dispenser(s). These samples must be analyzed for appropriate contaminants based on the previous contents of the tank.

The soils below both the tank and piping should be tested, and state (e.g. Alaska, Idaho, Oregon or Washington) regulations on sample type, location, number of samples and method of analysis should be followed. In addition, if it appears that contamination has reached the groundwater, groundwater samples must be collected.

In selecting sample types and locations and methods of measurement, the following factors should be considered: the method of closure, the type of substance stored, the type of soil that was used as backfill, the depth to groundwater, and any other factors appropriate to identifying the release.

Having valid proof of a "clean closure" is important, not only because the law requires it and EPA inspectors will look for it, but because this proof also is increasingly required by lending institutions, insurance agencies, real estate companies and future potential buyers of property. It is important that the site assessment is complete and done properly. There may be a significant difference between just "squeaking by" to meet the

intent of the law and providing sufficient evidence of a clean site to satisfy a prospective buyer, bank or insurance company.

Results of the site assessment are your proof that the site was properly closed. Ensuring an adequate number of samples are collected and correctly analyzed is important if sample results are to have legal and scientific validity. Therefore, **it is important to have an experienced cleanup contractor or a site assessor to conduct or oversee the sampling and analysis for you.** They will determine the correct number and location of samples, use proper sampling procedures, select appropriate analyses and otherwise assure that your information is legally defensible. In other words, grabbing a single sample in a cup or jar and dropping it off to the nearest laboratory will not produce valid results or satisfy EPA, lending institutions, insurance companies or potential buyers.

REPORTING RELEASES (Leaks and Spills): If a leak is discovered, or if results of sample analyses conducted during the site assessment indicate contamination above the state action levels for contaminated soil or groundwater, or if free product (liquid) or vapors are discovered at any time or by any other means, **Federal regulation 40 CFR §280.50 requires the owner or operator to notify EPA within 24 hours of detecting the leak or spill.** After the initial report, EPA will send you a confirmation letter. The owner must begin the cleanup process immediately following federal regulations and state cleanup guidance. Clean up any free product immediately, and if there may be a potential fire or explosion hazard, the owner or operator must immediately notify the local fire department. Contractor reports should be submitted to EPA. The agency will evaluate the site and determine the level of EPA involvement / oversight in the corrective action based on these reports and any site visits made. Once EPA has determined that the site has been adequately remediated, it will send the owner a closure letter.

ACTION AND CLEANUP LEVELS: EPA has adopted the leak reporting and cleanup standards of the state in which the Indian Lands are located as standards to be used on Indian Lands. Each state has set action levels or implemented a risk-based corrective action approach for reporting contamination and target cleanup levels. The owner should follow these procedures of the state in which their property is located. State publications that provide guidance on their action/cleanup levels include:

Alaska: "18 AAC 75, "Oil and Other Hazardous Substances Pollution Control", Article 3" "Underground Storage Tank Procedures Manual"(ADEC Publication, November 7, 2002); 18 AAC 78 "Underground Storage Tanks", Article 2; and, "Risk Assessment Procedures Manual"(ADEC Publication, June 8, 2000)

Idaho: "Risk Evaluation Manual" (IDEQ Publication, July 2004)

Oregon: "Risk-Based Decision Making for the Remediation of Petroleum Contaminated Sites" (ODEQ Publication, September 22, 2003). "UST Cleanup Manual", OAR 340-122-0205 through 340-122-0360, December 2000. See also ODEQ "Quality Assurance Project Plan" (January 2002).

Washington: "Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC" (WDOE Publication 94-06, revised November 2007)

TANK DISPOSAL CONSIDERATIONS: A tank that is empty and cleaned generally is not considered a hazardous waste. It normally can be sold or donated to scrap metal dealers. Uncleaned tanks should not be transported unless they are first inerted to prevent explosions.

Sludge from tanks storing leaded petroleum products may have high lead content and is potentially considered a hazardous waste.

Persons handling and disposing of the sludge should ensure that they understand the hazardous waste regulations. It is the responsibility of the tank handler and owner to make the correct determination of whether a waste is hazardous, based on EPA's hazardous wastes criteria listed in 40 CFR Part 261. Sludge should be tested by a laboratory to see if it fails the Ignitability or Toxicity Characteristic Leaching Procedure criteria for hazardous waste. If the sludge does not qualify as a hazardous waste, it may be disposed at a regulated municipal landfill. If it is a hazardous waste, it must be disposed at an approved hazardous waste facility.

Soil contaminated solely by petroleum products is not considered a hazardous waste under federal law and can sometimes be disposed in regulated municipal landfills. **However, verification with the landfill is needed prior to disposal.** If soil is contaminated by hazardous substances, it must be dealt with on a case-by-case basis, because properties of the chemicals vary so widely. In many cases, it will be considered hazardous waste and must be handled accordingly.

There are many ways to deal with contaminated soil besides digging it up and hauling it to a landfill. When feasible, EPA encourages use of alternative treatment methodologies, including bioremediation (i.e. landfarming), soil vapor extraction, disposal to asphalt batching plants and other methods. Consultation with EPA regarding these methods is recommended.

LOCAL CLOSURE PERMITS: In addition to EPA regulations, there may be requirements for underground storage tank closures in the Uniform Fire Code to protect against explosions and fires. Therefore, depending on your location, you also may need to obtain a closure permit from the local fire chief prior to closure. **Prior to discontinuing use or closing a UST, contact your local fire department.**

SITE ASSESSMENT REPORT FORMAT: EPA will accept work and subsequent reports and forms that would otherwise be acceptable to the state UST program for the state in which the "Indian Land" is located. State publications that describe their respective site assessment requirements are as follows:

Alaska: 18 AAC 78.090 (updated January 30, 2003) and "Underground Storage Tanks Procedures Manual" (ADEC Publication, revised November 7, 2002)

Idaho: No specific report format is recommended by IDEQ, but they reference ASTM Standard Practice E-1527, "Standard Practice of Environmental Site Assessments". Additional information is contained with the IDEQ Voluntary Remediation Program Guidance.

Oregon: No specific report format is recommended by ODEQ. Contact EPA. General report format information is provided in the UST Cleanup Manual (Section 3.2)

Washington: "Guidance for Site Checks and Site Assessments for Underground Storage Tanks" (WDOE Publication 90-52, revised April 2003)

Regulation 40 CFR §280.72(a) provides the only alternative to conducting a site assessment for closure purposes. It allows the use of negative groundwater monitoring or soil vapor monitoring results to document that no contamination has taken place. However, these methods of UST leak detection are rarely used because of their complexity and because site assessment work is required prior to installing these systems. Refer to 40 CFR §280.43(e) and (f) for specific information.

CLOSURE RECORD RETENTION: Owners and operators must maintain a copy of the site assessment required per 40 CFR §280.72 at the site or a readily available alternative site for 3 years after permanent closure or a change-in-service modification. Although the rule only requires record retention for 3 years, EPA strongly recommends that these records be kept indefinitely. Proof of "clean closure" will help you if you wish to sell your property in the future.

CLOSURE COMPLETION CERTIFICATION: Upon completion of the closure action, the owner or the owner's authorized representative must submit the original copy of the "UST Closure Certification" form, a copy of which is attached to this guidance document, along with the original site assessment results to EPA.

OBTAINING PERMANENT CLOSURE: Once received, reviewed and if all is found to be in order, EPA will officially close the file and send you a closure letter. If either the certification form or the site assessment report is unclear or incomplete, EPA will contact you for additional information. It is important to ensure that the form and the site assessment report are accurate and complete so

that you can receive a "clean closure" letter promptly. **Failure to conduct a site assessment is considered a major violation of the UST regulations, and owners who do not conduct a site assessment at closure will be subject to EPA enforcement action.**

Please submit the original site assessment report and closure certification form for UST closures on Indian Lands in Alaska, Idaho, Oregon and Washington to:

U.S. EPA Region 10
Attention: Rob Rau, UST Program
1200 6th Avenue, Suite 900 (OCE-082)
Seattle, WA 98101
Telephone: (206)553-6285 or (800)424-4372, ext. 6285
Fax: (206)553-0151
e-mail: rau.rob@epa.gov

ADDITIONAL EPA CONTACTS: To discuss technical issues such as UST closures, leak / spill reporting or other site-specific matters, please contact either Rob Rau or the Indian Lands Team members listed below:

Carlo Bertani
1200 6th Avenue, Suite 900 (OCE-082)
Seattle, WA 98101
Telephone: (206)553-0702 or (800)424-4372, ext. 0702
Fax: (206)553-0151
e-mail: bertani.carlo@epa.gov

Phil Nenninger
1200 6th Avenue, Suite 900 (OCE-164)
Seattle, WA 98101
Telephone: (206)553-4012 or (800)424-4372, ext. 4012
Fax: (206)553-7176
e-mail: nenninger.philip@epa.gov

ATTACHMENTS



**CERTIFICATION OF COMPLETED CLOSURE
For Underground Storage Tanks (USTs) on Indian Lands
EPA, Region 10 (Alaska, Idaho, Oregon and Washington)**

TYPE (check those that apply): EPA UST Facility No.: _____

- Permanent:
- Tank Removal or Closure-in-Place
- Temporary (Request for extension beyond 1 year)
- Change-in-Service (Going from a regulated use to an unregulated use (e.g. from storing diesel fuel to storing water))

WAS CLOSURE WORK WITNESSED BY EPA, TRIBAL, OR OTHER LOCAL UST OFFICIAL:	
<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, who and what organization?	
DATES(S) FOR CLOSURE WORK:	
FACILITY NAME:	
Address:	Phone No.:
On-Site Contact:	
TANKS INVOLVED:	
Tank Number	Volume (gals) Substance(s) Stored Throughout Tank Use
CONTAMINATION FOUND ABOVE STATE CLEAN-UP LEVELS? <input type="checkbox"/> No <input type="checkbox"/> Yes	
If Yes, was groundwater contamination also found? <input type="checkbox"/> No <input type="checkbox"/> Yes	
If any contamination was found, when was EPA notified?	
and by whom?	
THIS NOTIFICATION SUBMITTED BY (check one):	
<input type="checkbox"/> Owner/Operator <input type="checkbox"/> Owner <input type="checkbox"/> Owner's authorized representative	
Name (printed):	Phone No.:
Signature:	Date:

Send this notice and an original of the site assessment report to:

USEPA Region 10
UST Program (OCE-082)
1200 6th Avenue, Suite 900
Seattle, WA 98101

NOTE: If during the closure work, contamination or evidence of a release to the environment (vapors, free product, etc.) from an UST system is found, it must be reported to EPA within **24 hours** of its discovery (40 CFR '280.50), and subsequent action taken according to 40 CFR Subparts E and F. **However, if the contamination is confined to soils (i.e. no groundwater contamination), and it is less than 10 cubic yards (CYs) in volume, and it is completely removed during the closure operations, and it is properly disposed in a licensed treatment/disposal site, then EPA will accept this form and consider the contamination found during closure as incidental.**