

**UNDERGROUND STORAGE TANKS –
SUMMARY OF REGULATORY REQUIREMENTS**

(For assistance, please contact EHS at (402) 472-4925, or visit our web site at <http://ehs.unl.edu/>)

Underground storage tanks (UST) are defined as tanks containing petroleum or other regulated substances in which 10% or more of the volume, including the piping and lines, is below the surface of the ground. At UNL, USTs are used solely for fuel storage. This SOP provides a general overview of regulations that may affect fuel-storage USTs at UNL City and East Campuses. USTs leased and operated by others are beyond the scope of this SOP. Supplemental SOPs and/or other referenced documents provide more details regarding specific requirements/regulations.

Introduction

USTs may be subject to regulatory requirements promulgated by the United States Environmental Protection Agency (EPA), Nebraska Department of Environmental Quality (NDEQ), and/or Nebraska State Fire Marshal (SFM). The regulatory requirements vary depending on a number of UST-specific factors. In general:

- EPA's Spill Prevention Control and Countermeasures (SPCC) regulations apply to USTs (and other oil storage devices) that store oils; **and** which are not fully regulated under Nebraska Title 159; **and** which are located at a site that is subject to SPCC requirements because the aggregate quantity of oil stored exceeds the regulatory threshold. At UNL, SPCC regulations apply to some USTs but not others. USTs that are fully-regulated under Nebraska Title 159 are not subject to SPCC regulations; certain others are also not subject to SPCC (See Table 1).
- EPA also regulates certain aboveground and underground storage tanks at Gasoline Dispensing Facilities (GDF) pursuant to the Clean Air Act (CAA) (40 CFR Part 63 Subpart CCCCCC). As of the date of this SOP, these regulations apply to the gasoline Aboveground (AST) and Underground Storage Tanks located at the East Campus Transportation Services Facility, the gasoline AST located at City Campus Landscape Services, and the USTs located at the City Campus Transportation Services Facility.
- SFM's Rules and Regulations for Underground Storage Tanks (Nebraska Title 159) specify requirements for the design, installation, operation, and closure of UST systems. Title 159 is designed such that some UST systems are entirely exempt; others are subject only to certain provisions of the regulations, while others are subject to all provisions of the regulations (fully-regulated). The SFM also enforces provisions of UST-related National Fire Protection Association (NFPA) codes and standards. Prior to August 2012, the SFM's office must adopt rules and regulations that require operator training and certification.

- NDEQ regulations require reporting of certain releases to the environment from **any** UST system (Nebraska Title 126, *Rules and Regulations Pertaining to the Management of Wastes*; Chapter 18, Releases of Oil or Hazardous Substances) and provide financial assistance for eligible cleanup expenses resulting from petroleum releases (Nebraska Title 200, *Rules and Regulations for Petroleum Release Remediation Action Reimbursement Fund*).

UNL UST Inventory/Cross-Reference of Regulatory Requirements

The following table lists each UST system at UNL City and East Campuses (except those that are leased) and provides a cross-reference of applicable regulatory requirements. An overview of applicable regulations and references to supplemental SOPs are provided in the narrative following the table.

Table 1 – Applicability of Regulations to UST Systems at UNL City and East Campuses

UST Site Location	EPA Regulations		SFM Title 159 Rules and Regulations for Underground Storage Tanks				NDEQ Regulations
	SPCC (See paragraph A)	Air Quality (see paragraph B)	Fully-Regulated (See paragraph C)	Exempt (See paragraph D)	Deferred – Group 1 (See paragraph E)	Deferred – Group 2 (See paragraph E)	Releases (See paragraph F)
Transportation Services		X	X				X
Utility Plant	X				X		X
Manter Hall						X	X
Animal Research Facility						X	X
Cather/Pound/Neihardt				X			X

Group 1: Subject only to provisions of Title 159 requiring reporting of releases to SFM and NDEQ.

Group 2: Subject to all provisions of Title 159, except release detection requirements if monthly tank gauging requirements are met.

A. Summary of EPA SPCC Requirements for Certain USTs

In accordance with SPCC regulations, UNL has developed and implemented Spill Prevention Control and Countermeasures Plans at affected campus facilities (City and East Campus Transportation Services, City and East Campus Utility Plants, East Campus Landscape Services, and East Campus Tractor Test Laboratory). These plans are designed to minimize the potential for oil releases and subsequent adverse environmental impacts. UNL's Plans include provisions for initial employee training and annual refresher training; procedures for loading/unloading of oil to prevent releases; availability of spill response supplies and equipment, and procedures for responses to releases; inspection and/or testing of USTs and loading/unloading areas; and maintenance of records. Refer to UNL's **SPCC Plans** and companion on-line training for more details. The plans are available from EHS, upon request.

B. Summary of EPA Air Regulations for Gasoline Dispensing Facilities

Any Gasoline Dispensing Facility (GDFs) must be able to produce records of average monthly throughput (fuel received or dispensed). This is the extent of

regulatory obligation for those facilities that are below the monthly throughput regulatory threshold of 10,000 gallons per month. Average monthly throughput is calculated as fuel received (or dispensed) during the past 365 days divided by 12. These records must be available for the past 3 years.

Those GDFs that exceed the regulatory throughput threshold have additional regulatory obligations. At UNL, these include the GDFs located at UNL City and East Campuses, which must adhere to management practices that minimize vapor releases to the atmosphere, including the following:

- Minimizing gasoline spills.
- Cleaning up spills as expeditiously as practicable.
- Covering all open gasoline containers and all gasoline storage tank fill-pipes with gasketed seals when not in use.

In addition, since City Campus Transportation Services is above the 10,000 gallon throughput threshold, the gasoline USTs located at this site must employ submerged fill technology.

C. Summary of SFM Title 159 Regulations for Fully-Regulated USTs

An UST system is “fully-regulated” if it is not specifically exempt or deferred. If an UST is fully-regulated:

- Installation must be conducted only by a certified tank installer (following issuance of an installation permit by the SFM).
- The tank and associated piping must meet certain design standards, including corrosion protection, spill control, overfill control, and release detection. These types of systems are subject to periodic testing and maintenance with associated records.
- The UST must be operated in accordance with conditions in the operating permit and registered with the SFM on an annual basis (with payment of associated fees).
- Temporary closure requires certain steps to be taken (i.e., emptying the contents of the tank, etc.). Permanent closure or abandonment in place requires closure permits and certain other steps (i.e., investigation for past leaks, etc.). All closures (temporary and permanent) must be conducted by a certified tank closure contractor with oversight by UNL FMP and EHS.
- Releases from the UST system must be reported to the SFM and NDEQ.

See the following supplemental EHS SOPs for more detail regarding regulatory requirements for fully-regulated tanks:

- ***Underground Storage Tanks – Installation Requirements and Summary of Recommended Design Features***
- ***Underground Storage Tanks - Registrations, Permits, Notifications and Fees***
- ***Underground Storage Tanks - Closure Requirements***
- ***Underground Storage Tanks – Automatic Tank Gauging***

- ***Underground Storage Tanks – Petroleum Release Requirements***
- ***Underground Storage Tanks – Summary of Recordkeeping Requirements***

D. Summary of USTs Excluded from Title 159

The following types of UST systems are **completely excluded** from Nebraska Title 159:

- Wastewater treatment tanks that are part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act.
- Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment.
- Any UST system with a capacity of 110 gallons or less. [e.g., At UNL, the Cather/Pound/Neihardt emergency generator UST has a capacity of less than 110 gallons and is therefore excluded completely from Nebraska Title 159 requirements, including registration.]
- Any UST system that contains a *de minimus* concentration of regulated substances.
- Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

Similarly, several other types of tanks are **excepted** from the definition of a tank and are therefore not subject to any provisions of Nebraska Title 159.

- Septic tanks.
- Tanks situated in an underground area such as a basement, cellar, mine, drift, shaft, or tunnel if the tank is situated on or above the surface of the floor.
- Pipeline facilities and gathering lines subject to certain other regulatory requirements.
- Surface impoundments, pits, ponds, or lagoons.
- Flow-through process tanks.
- Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations.
- Storm water or wastewater collection systems.

E. Summary of USTs Deferred from Some SFM Title 159 Regulatory Requirements

There are two groups of **deferred** tank systems, which are subject only to portions of Nebraska Title 159. Because the tanks at the City Campus Utility Plant are not fully regulated under Nebraska Title 159 and they are located at a site that exceeds the SPCC storage threshold, they are subject to SPCC regulations.

- Group 1: These USTs are subject only to that part of the SFM's regulations which requires reporting of confirmed or suspected releases to both NDEQ and the SFM's Office.
 - Wastewater treatment tank systems.

- Any UST systems containing radioactive materials that are regulated under the Atomic Energy Act of 1954.
- Any UST system that is part of an emergency generator system at nuclear power generating facilities regulated by the Nuclear Regulatory Commission under 10 CFR 50 Appendix A.
- Airport hydraulic fuel distribution systems.
- UST systems with field-constructed tanks. [e.g., City Campus Utility Plant underground concrete oil storage vaults]

See the following supplemental EHS documents for more details regarding regulatory requirements for the types of deferred tanks listed above:

- EHS SOP, ***Underground Storage Tanks – Petroleum Release Requirements***
 - EHS SOP, ***Underground Storage Tanks – Summary of Recordkeeping Requirements*** [Section dealing with SPCC recordkeeping requirements]
 - UNL's ***SPCC Plan*** (City Campus Utility Plant only)
- Group 2: These tanks are subject to all requirements of Nebraska Title 159 except release detection requirements so long as monthly tank gauging is conducted.
 - UST systems used to store fuel solely for use by emergency power generators. [e.g., Animal Research Facility generator UST, Manter Hall generator UST]
 - UST systems that are larger than 1100 gallons and are used to store heating oil.

See the following supplemental EHS documents for more detail regarding regulatory requirements for the types of deferred tanks listed above:

- EHS SOP, ***Underground Storage Tanks – Installation and Summary of Recommended Design Features*** (except tank and piping release detection provisions)
- EHS SOP, ***Underground Storage Tanks – Petroleum Release Requirements***
- EHS SOP, ***Underground Storage Tanks - Registrations, Permits, Notifications and Fees***
- EHS SOP, ***Underground Storage Tanks – Automatic Tank Gauging***
- EHS SOP, ***Underground Storage Tanks – Summary of Recordkeeping Requirements***
- EHS SOP, ***Underground Storage Tanks - Closure Requirements***

- There is another group of UST systems that are excepted from the definition of a tank and are therefore relieved of all requirements of Nebraska Title 159 except reporting of confirmed or suspected releases to both NDEQ and the SFM's Office and one-time registration. These types of tanks, although not present on UNL City and East Campuses include:
 - Farm or residential tanks with a storage capacity of 1100 gallons or less that are used for storing motor fuel for consumptive use on the premises where stored.
 - Tanks with a storage capacity of 1100 gallons or less that are used for storing heating oil for consumptive use on the premises where stored.

F. Summary of Release Regulations (NE Title 126)

Spill reporting requirements are contained in both the SFM's Title 159 regulations and NDEQ's Title 126 regulations. Under both Titles, any confirmed or suspected leak, spill, or release from an UST below the surface of the ground must be immediately reported to the SFM and NDEQ. Spills or releases to the surface of the land which cannot be cleaned up within 24 hours, or exceed certain threshold quantities (25 gallons) or characteristics (e.g., have or may impact waters of the State) are also reportable to the SFM and NDEQ. In addition, some releases may be reportable to the National Response Center (NRC) per EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

EHS is responsible to make notifications to regulatory authorities (NDEQ, SFM, NRC/EPA), as appropriate, but operators or any other person that discovers a leak from a UNL UST must report the situation to EHS immediately. Remedial activities undertaken to reduce or eliminate contamination resulting from the release must be conducted with NDEQ oversight and in a specific manner to retain eligibility for Title 200 reimbursement. Therefore, EHS and FMP are responsible for coordinating, developing, implementing, and overseeing all remedial activities.

Regulatory Inspections

EPA, NDEQ, and/or the SFM may have regulatory authority over any given UST. The SFM typically inspects fully-regulated and deferred tanks on an annual basis. EPA and NDEQ do not maintain a regular schedule for inspections related to SPCC, CAA, or other regulatory requirements. In the event a SFM, NDEQ, or EPA inspector makes contact announcing their intention to conduct a compliance inspection or if they make an unannounced appearance, notify EHS immediately. After contacting EHS, inform the inspector that an EHS representative is on the way and will be there shortly to assist in their inspection. If unable to reach an EHS representative, continue trying but let the inspector proceed with the inspection. If EHS is not in attendance, inform EHS of the outcome as soon as possible following the inspection. As with any regulatory inspection:

- Answer only the question that is asked.
- Answer succinctly and precisely.
- Do not “guess.” If you are not absolutely sure of an answer to an inspector’s question, reply that you don’t know, but that you can find someone who might know. Then seek assistance from an authority that can answer the question.
- Provide only written documentation and records that the inspector asks for.

Advise the inspector to direct compliance inspection reports to the Director for EHS. EHS will formulate and submit all formal responses to regulatory authorities.