231300 PETROLEUM TANKS

PART 1: GENERAL

1.01 SUMMARY

A. Cornell University’s continual objective of protecting its community and the environment must be adhered to in the design and installation of petroleum tank systems to prevent the contamination of soil and water and to protect human health and safety. Conform to New York State Department of Environmental Conservation (DEC) and Environmental Protection Agency (EPA) regulations for all installations and modifications.

1.02 ENVIRONMENTAL REGULATIONS

A. State Regulations: 6NYCRR PART 613: Petroleum Bulk Storage. Effective October 11, 2015, the prior three-part (Parts 612-614) petroleum bulk storage regulations have been repealed and replaced with this new (consolidated) regulation for all forms of petroleum storage and operations.

B. Federal Regulations (Note: 40CFR 280 and 281 were substantially modified effective October 13, 2015):
   1. 40 CFR 112: Oil Pollution Prevention
   2. 40 CFR 280: Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)
   3. 40 CFR 281: Approval of Underground Storage Tank (UST) Programs

1.03 NOTIFICATION TO DEC

A. After advance coordination with Cornell’s Environmental Health & Safety (EH&S) and as approved by the EH&S Subject Matter Expert (SME), provide notification to the DEC in writing prior to any modification (closure, removal or installation) of a petroleum storage tank in accordance with 6NYCRR Part 613.

B. A copy of all notifications and/or written correspondence to DEC (or EPA, where applicable) regarding any Cornell matter shall be provided to the designated Cornell representative and EH&S SME.

1.04 INSTALLATION

A. All new petroleum tank systems shall be designed for and installed entirely aboveground with provisions for bottom inspection unless specifically approved otherwise.
B. The Environmental Health and Safety (EH&S) office must review requests to have petroleum tank systems installed underground due to specific site constraints or hazards that prevent aboveground storage. Designs will be reviewed by Facilities Engineering in coordination with EH&S and joint approval shall be required for an underground design.

PART 2: ABOVEGROUND PETROLEUM TANK SYSTEM INSTALLATION

2.01 INSTALLATION

A. All installations must follow applicable DEC (6NYCRR Part 613), EPA (40 CFR 112), and other applicable or referenced Codes and Regulations. All tanks must meet these requirements regardless of capacity.

B. A Spill Prevention, Control, and Countermeasure (SPCC) plan must be prepared for any facility that meet the criteria outlined in 40 CFR 112. Since the definition of a “facility” encompasses more than an individual tank, confer with EH&S to determine whether an SPCC is required for a specific project. A copy of the SPCC plan must be provided to EH&S for review, approval, and incorporation into Cornell’s campus-wide SPCC program.

C. Tanks shall be of steel construction with an exterior surface coating system designed to prevent corrosion and deterioration.

D. Secondary containment of steel construction shall have the same surface coating system as the tank to prevent corrosion and deterioration.

E. Corrosion protection for tank bottoms and underground piping, secondary containment, leak monitoring, gauges or high level alarms, and spill/overfill protection must be provided per regulations.

F. A color coded tank label (6NYCRR Part 613) must be attached to the fill port of the tank to identify tank number (to be assigned by Cornell) and design and working capacity of the tank.

G. Tank and associated piping must be pressure tested for tightness and witnessed by a designated Cornell representative as coordinated by EH&S. A forty-eight (48) hour notice of testing must be provided. Provide written certification of system tightness to Maintenance Management and EH&S.

2.02 ACCEPTANCE AND GUARANTEE

A. Acceptance for Cornell of the petroleum storage system must be by Facilities Management and EH&S. Coordinate all approvals through the designated Cornell Project Representative prior to advancing design and construction.
B. Three (3) copies of O & M manuals and as-built drawings must be provided to the Owner (one copy to EH&S).

PART 3: UNDERGROUND PETROLEUM TANK SYSTEM INSTALLATION

3.01 INSTALLATION

A. Where design of an underground installation is specifically approved in advance, all designs and installations must follow applicable DEC (6NYCRR Part 614), EPA (40 CFR 280), and New York State Uniform Fire Prevention and Building Code regulations.

B. New underground petroleum tank systems must consist of corrosion resistant tanks and pipes, secondary containment of tanks and pipes, leak monitoring system, overfill prevention, fill port labels and underground piping access ports.

C. Underground tanks must be of steel construction with Underwriters’ Laboratories® and STI-P3 labels.

D. Secondary containment for the tank shall be provided via double-wall construction and a full 360 degree outer shell.

E. Underground piping must be of non-corroding material as approved by the latest Codes and Regulations or cathodically-protected steel/iron meeting these Codes and Regulations.

F. Secondary containment for all underground piping is required.

G. Tank and associated piping must be pressure tested for tightness and witnessed by an authorized Cornell representative. A forty-eight (48) hour notice of testing must be provided. Written certification of system tightness must be provided to Facilities Management and EH&S.

3.02 ACCEPTANCE AND GUARANTEE

A. Acceptance for Cornell of the petroleum storage system must be by EH&S and Facilities Management. Coordinate all approvals through the designated Cornell Project Representative prior to advancing design and construction.

B. Three (3) copies of O & M manuals and as-built drawings must be provided.