



FA PROCEDURE:

Underground Storage Tank (UST) Fuel Fill Operating Procedure for Building 2 and Building 85 (Tanks TK-3-2, TK-4-2, and TK-1-85)

Effective Date: May 1, 2019
Document Number: MA.MG.PRC.358
Revision Number: 0
Next Review Date: May 1, 2020

1.0 PROCEDURE PURPOSE

This document describes the process for filling Underground Storage Tanks (USTs) at Buildings 2 and 85 (TK-3-2, TK-4-2, and TK-1-85) with Diesel (only) fuel from the LBNL Facilities diesel tanker to prevent overflow of tank.

The subject tanks may not be filled with more than 24 gallons of diesel fuel at one time. In addition, a commercial tanker truck may not be used to fill the subject tanks. The LBNL diesel tanker truck has a maximum capacity of 600 gallons and uses a pump driven operated nozzle. Typically, these engine generators use 40-50 gallons of diesel fuel per year.

Note: *On Nov 26, 2018, LBNL received a Notice of Violation from the City of Berkeley for failure to inspect the overfill protection equipment on several USTs. The corrective actions specific to the 3 tanks identified above for this NOV include (1) LBNL submittal of a waiver for overfill protection equipment and (2) implementation of this procedure limiting the filling of these tanks to 25 gallons at any one fill. Any revision to this procedure must be reviewed by the Facility Operations Manager and the EHS Environmental subject matter expert.*

2.0 APPLICABILITY

This procedure applies to Facilities personnel involved in the filling of Underground Storage Tanks at Buildings 2 and 85 (TK-3-2, TK-4-2, and TK-1-85).

3.0 PREREQUISITES

3.1 Knowledge and Training

- 3.1.1** Maintenance personnel performing diesel filling operations must be trained and knowledgeable on the safe handling of diesel fuel and the associated Safety Data Sheet.
- 3.1.2** Maintenance personnel performing diesel filling operations must have knowledge of each UST overfill monitoring device.
- 3.1.3** Maintenance personnel performing diesel filling operations must have a



FA PROCEDURE:

Underground Storage Tank (UST) Fuel Fill Operating Procedure for Building 2 and Building 85 (Tanks TK-3-2, TK-4-2, and TK-1-85)

working knowledge of the VEEDER-ROOT 300 monitoring and leak detection systems and emergency response procedures.

3.2 Personal Protective Equipment

3.2.1 Safety glasses and rubber gloves are required during filling operations.

4.0 INSTRUCTIONS

4.1 Emergency Response

In the event of a spill, take the following actions:

4.1.1 Large Spill (>5 gallons):

- a. Notify the Fire Department (7911)
- b. Notify the Plant Maintenance Shift Desk (5481).

4.1.2 Small Spill (<5 gallons):

- a. Notify the Plant Maintenance Shift Desk (5481).
- b. Notify the LBNL Blackberry Gate Security Operations Center (x6999)
- c. Use a spill kit (on truck) to mitigate and contain spills.

Follow S.W.I.M.S. as described in the LBNL Emergency Response Guide:

- Stop and Think
- Warn Others
- Isolate Area
- Monitor yourself carefully and completely
- Stay in the area until help arrives



FA PROCEDURE:

Underground Storage Tank (UST) Fuel Fill Operating Procedure for Building 2 and Building 85 (Tanks TK-3-2, TK-4-2, and TK-1-85)

4.2 Filling Operations

Note 1: *The filling operation requires two maintenance technicians for the full duration of the activity. The technicians will maintain radio contact. One technician will fill the tank at fill port and one technician will monitor the gallons delivered from the fuel truck.*

Note 2: *The filling operation must be performed using the LBNL Facilities diesel tanker. A commercial tanker truck may not be used to fill the subject tanks unless a variance is received from the City of Berkeley. Contact EH&S, Environmental Services Group if a variance is needed from the City of Berkeley.*

4.2.1 Maintenance Technician:

- 4.2.1.1** Check the monitoring panel for volume of fuel in the UST. VEEDER-ROOT 300 Panel will alarm at 90% full.
- 4.2.1.2** Prior to dispensing fuel, record the delivery truck fuel meter reading (number of gallons in the truck tank) on the "Diesel Fuel Log" in the truck.
- 4.2.1.3** Using the fuel pump gauge on the fuel truck to monitor the volume, deliver no more than 24 gallons of fuel into the tank.
- 4.2.1.4** Record the date, time, number of gallons dispensed, and the ending fuel meter reading from the delivery truck on the "Diesel Fuel Log" in the truck.

5.0 DEFINITIONS

TERM	DEFINITION
None	



FA PROCEDURE:

Underground Storage Tank (UST) Fuel Fill Operating Procedure for Building 2 and Building 85 (Tanks TK-3-2, TK-4-2, and TK-1-85)

6.0 REFERENCES

6.1 Source Requirements Documents

Requirement ID	City of Berkeley Inspection Report, November 26, 2018, Inspection No. DA1WG913E, Record ID PR0001031, UST Facility
----------------	--------------------------------------------------------------------------------------------------------------------

6.2 Related Implementing Documents

Document Number	Title
-----------------	-------

7.0 PROCESS MAP

NA

8.0 METRICS

None

9.0 CONTACT

Questions on this procedure should be directed to:
Facilities Operations Manager

10.0 REVISION HISTORY LOG

REVISION NUMBER	REVISION DATE	BRIEF DESCRIPTION OF CHANGES MADE	NAME OF PERSON MAKING CHANGE
0	4/26/19	Initial document	



FA PROCEDURE:

Underground Storage Tank (UST) Fuel Fill Operating Procedure for Building 2 and Building 85 (Tanks TK-3-2, TK-4-2, and TK-1-85)

11.0 PROCEDURE APPROVALS

REVIEWER APPROVER AUTHOR	TITLE	NAME	SIGNATURE	DATE
Author	FA Operations Manager	Beth Streeper		5/8/19
Reviewer	PMT Lead	Mike Botello		5/8/19
Reviewer	PMT Supervisor	Larry Begley		5/8/19
Reviewer	ESG Environmental Protection Team Manager	Robert Fox		5/8/19
Approver	FA Operations Manager	Beth Streeper		5/8/19