

FINAL

UST/AST PROGRAM PLAN

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1.0 INTRODUCTION

The Department of Energy, Rocky Flats Field Office (DOE, RFFO) Kaiser-Hill Company, L.L.C. (Kaiser-Hill), its Integrating Management Contractor at the Rocky Flats Environmental Technology Site (Site), and the principal subcontractors who, together with Kaiser-Hill, make up the Kaiser-Hill Team are committed to the protection of public health and the environment through the comprehensive management of underground and aboveground storage tanks containing petroleum products or certain hazardous substances. The purpose of the Site *Underground Storage Tank (UST)/ Aboveground Storage Tank (AST) Program Plan* is to provide the overall framework for UST/AST petroleum and chemical compliance at the Site and to demonstrate the Kaiser-Hill Team's adherence and commitment to the principles of safe tank management. This document references specific program element plans, procedures, and practices that further detail the Site-wide requirements and responsibilities for the operation and management of USTs and ASTs in an environmentally safe manner.

The UST/AST plan is part of a hierarchy of documents that defines and explains the Site UST/AST Program. The plan is based on Kaiser-Hill *Environmental Management Policy* and the *Environmental Management Program Plan*, which reference this document. This plan describes the environmental management system (EMS) elements for the management of storage tanks that make up the International Standards Organization (ISO) 14001 EMS standard.

Note: Tank storage systems used to store Resource Conservation and Recovery Act (RCRA)-defined wastes (6 *Code of Colorado Regulations* [CCR] 1001-7, Parts 261, 264, 265) are addressed in the *RCRA Program Plan*.

2.0 PROGRAM DESCRIPTION AND OBJECTIVES

The Site manages tanks that store petroleum products (e.g., diesel, gasoline), nitric acid, sulfuric acid, and hydrochloric acid. USTs and ASTs must be managed according to federal and state regulations and procedures to protect human health and safety and the environment from the hazards posed by a spill or leak of a substance from these storage tanks. A spill or leak has the potential to impact soil, surface water, and groundwater to varying degrees, depending on the substance spilled or leaked.

The Kaiser-Hill Team provides both the technical and administrative oversight of the UST/AST Program at the Site, with one of its subcontractors assigned the primary responsibility for the day-to-day management and administration of the program. The program is implemented by all departments that own USTs or ASTs. UST/AST management must be handled in accordance with established procedures from the time an UST/AST is opened to its ultimate closure. Owners of USTs/ASTs are responsible for complying to all rules and procedures set forth in federal, state, and Site guidelines and regulations. The DOE, RFFO is the regulatory compliance point of contact for the Site's UST/AST Program with the state of Colorado and ensures that regulatory requirements and certifications are completed in accordance with the regulations in an accurate and timely manner.

3.0 PROGRAM DEFINITION AND ELEMENTS

This section describes the scope and organization of the Site UST/AST Program. Figure 3-1 shows the organizational structure of the UST/AST Program. The UST/AST Program Plan covers two functional areas: USTs containing petroleum products or chemicals and ASTs. UST chemicals covered in this UST/AST Plan are hazardous substances listed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), excluding any substance regulated as a hazardous waste under Subtitle C of RCRA. The requirements, periodic reports, implementing systems, and regulatory drivers of each area are described in the following sections.

3.1 USTs Containing Petroleum Products or Chemicals

The management of USTs that store petroleum products or chemical products is addressed under the Colorado hazardous waste regulations, RCRA regulations, and the National Fire Protection Association (NFPA) regulations. These requirements are summarized below.

Requirements

- Obtain UST permits, register USTs annually, and pay fees.
- Ensure USTs installed after December 22, 1988 meet specified performance and design standards; upgrade or close USTs installed prior to December 22, 1988 by specified deadlines.
- Operate and maintain USTs to prevent releases, report releases, and remediate areas contaminated by releases of regulated substances from USTs.
- Maintain required UST records.
- Close unused UST systems.
- Post applicable warning signs near fill pipes and vent lines.
- Construct and design USTs in accordance with applicable specifications for vent lines, fill pipes, product dispensers, and ancillary equipment.
- For tanks subject to release detection, equip tank dispensing lines with flow meters.
- Operate tank fill pipes with a metal catch pan or other mechanism capable of containing spills resulting from delivery hose connects/disconnects.

- Following operating and tank filling requirements/procedures to prevent spills and overfills.
- Operate, calibrate, and maintain automatic tank gauging systems in accordance with the manufacturer's recommendations.
- Perform all repairs in accordance with applicable codes or practices of nationally recognized associations (e.g., NFPA, American Petroleum Institute, etc.).
- Ensure that repairs to fiberglass reinforced plastic tanks are performed by the manufacturer's authorized representative.
- Immediately repair or replace damaged or leaking equipment.
- Conduct tightness test on all repaired tanks within 30 days of the completion of repair(s).
- Install and inspect cathodic protection systems on steel tanks.
- Maintain adequate records on all tank repairs.
- Perform monthly static tests on the tank to monitor for leaks.
- Perform inspections of USTs at least every 30 days.
- Perform and document inventory reconciliation and leak detection monitoring at least every 30 days.
- Identify and complete any corrective actions necessary to remediate problems or deficiencies.
- Perform inspections, inventory measurements, and calculations during holidays, vacations, and plant shutdowns when necessary to meet the 30 day inspection frequency requirement.
- All records concerning the maintenance and operation of the UST shall be kept indefinitely by the UST Custodian. Minimally, the following records shall be maintained:
 - Product inventory records,
 - Automatic tank gauging system monitoring,
 - Tank tightness testing results,
 - Inspection reports,

- Corrective action plan for UST release remediation, at direction of the Colorado State Inspector of Oils.
- Notification of intent to permanently close USTs or of a change in service.
- Report all spills/overfills that involve greater than 25 gallons of petroleum fuel or any volume that is not cleaned up within 24 hours to the State Inspector of Oils.
- Report all suspected releases within 24 hours of their discovery to the State Inspector of Oils. A suspected release includes any of the following conditions:
 - Discovery of contamination in the environment from a release,
 - The occurrence of unusual operating conditions (e.g., automatic gauging system alarms, loss of inventory, unexplained presence of water in the UST), unless the system is found to be defective but not leaking and is immediately repaired, or
 - Release detection monitoring results indicate a release unless the equipment is found to be defective and is immediately repaired.

Implementing Systems and Controlling Documents

- *Operation of Petroleum Underground Storage Tanks*, 1-10000-HWRM,13.0.
- *Health and Safety Practices Manual* (1-N08-HSP-2104).

Regulatory Drivers

- Federal regulations: 40 *Code of Federal Regulations* (CFR) 280.
- Colorado regulations: 6 CCR 1007-5, Part 280, 7 CCR 1101-14.
- NFPA 30.
- *Rocky Flats Cleanup Agreement* (RFCA) 6.50(g), 8.66, 24.271, and Attachment 13.

3.2 ASTs

The management of AST is regulated by the state regulations and NFPA 30. Requirements from those regulations are summarized below.

- Repair or replace all damaged or leaking equipment in accordance with applicable codes or practices developed by nationally recognized associations (e.g., NFPA, American Petroleum Institute, etc.).
- Inspect ASTs and associated systems at least once per month to detect any leakage from tank or pipe seams, connections, and fittings.
- Owners/operators must maintain the following records for an AST site as applicable:
 - Any AST permits that have been issued over the last five years,
 - Tank registration records or record of the facility identification number,
 - Records of repairs that have been performed within the last five years,
 - Monthly visual inspections records that have been performed within the last year,
 - Records of underground piping precision tests,
 - Records of spill release and response events that have occurred within the last five years, and
 - Records of operation documenting the history of the AST and any changes in status of AST.
- Records must be maintained at the AST site or available for inspection by the State Inspector of Oils or at a readily available alternative site.

Reports and Submittals

- Report, investigate, and clean up any spills and overfills in accordance with state regulations.

Implementing Systems and Controlling Documents

- *Operation of Aboveground Storage Tanks*, 1-10000-HWRM, Draft.
- *Health and Safety Practices Manual* (1-N08-HSP-21.04).

Regulatory Drivers

- Colorado regulations: 7 CCR 1101-14.
- NFPA 30.

4.0 ROLES AND RESPONSIBILITIES

This section identifies the roles and responsibilities of various organizations at the Site as they relate to the management of USTs containing petroleum products or chemicals and ASTs.

4.1 DOE, RFFO

- Ensure that adequate budget and resources are available to maintain compliance with requirements, to reduce the threat to worker and public health and safety, and to minimize potential impact on the environment.
- Perform or participate in audits and assessments of Site operations to ensure compliance with UST/AST management requirements.
- Provide a DOE agency contact for UST/AST management.

4.2 Kaiser-Hill

- Act as point of contact with regulatory agencies.
- Integrate all activities between the Site and DOE, Colorado Department of Public Health and Environment (CDPHE), and U.S. Environmental Protection Agency (EPA) regarding the Site's UST/AST Program.
- Perform or participate in audits and assessments of Site operations to ensure cost-effective compliance with regulatory requirements.
- Work with DOE to ensure that adequate budget and resources are available to maintain compliance with requirements, to reduce the threat to worker and public health and safety, and to minimize potential impact on the environment.
- Ensure contractor performance in the management of tanks.
- Immediately notify DOE of any non-compliance.

4.3 Kaiser-Hill UST/AST Subcontractor

- Support Site operations by providing technical and regulatory guidance, and defining necessary compliance actions.
- Perform or participate in audits and assessments of Site operations to ensure compliance with UST/AST management requirements.

5.0 DOCUMENT HIERARCHY

5.1 Higher Tier Documents

- Oil Pollution Act, 33 USC 2701 to 2761.
- Resource Conservation and Recovery Act, 42 USC 6901 to 6922k.
- Colorado Hazardous Waste Act, 25-15-101 et seq., CRS.
- Colorado Department of Public Health and Environment, Hazardous Waste Regulations.
- Colorado Department of Transportation, Pet. UST Regs.
- *Rocky Flats Cleanup Agreement (RFCA)* 6.50(g), 8.66, 24.271, and Attachment 13.

5.2 Lower Tier Documents

- *Hazardous Waste Requirements Manual*, 1-MAN-XXX-HWRM.
- *Operation of Petroleum Underground Storage Tanks* (future edition), 1-10000-HWRM, Section 13.0.
- *Operation of Aboveground Storage Tanks*, 1-10000-HWRM, Draft.
- *Health and Safety Practices Manual* (1-N08-HSP-2104).
- *Standard for Inspection of Tanks or Piping Systems, Pressure Vessels and Safety Relief Devices*, SM-137.
- *Control of Nonconforming Items*, 1-A65-ADM-15.01.
- *Standard for Tanks Containing Regulated Substances*, Site Standard SM—136.
- *The Spill Prevention Control and Countermeasures/Best Management Practice Plan for the Rocky Flats Plant*.

6.0 PROGRAM DIRECTION

The management of USTs and ASTs will continue at the Site to ensure conformity with all applicable state, federal, and Site requirements.

Tanks will have to be closed out through deactivation and decommissioning activities in accordance with the Site's *2006 Plan*. Through these activities, both USTs and ASTs will be closed out in accordance with RCRA requirements or requirements set forth in 7 CCR 1101-14.