Santa Fe Engineering
1995
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GROUP SPCC IMPLEMENTATION PLAN

GSIP

FOR THE TA-60 FUEL FARM

Removed
1/97
MRH

PART OF THE

SPILL PREVENTION CONTROL

& COUNTERMEASURE PLAN

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1. INTRODUCTION

The Los Alamos National Laboratory's Spill Prevention Control and Countermeasure (SPCC) Plan is a comprehensive plan developed to meet the regulatory requirements of the United States Environmental Protection Agency (EPA) that regulate water pollution from oil and toxic chemical spills.

The purpose of the SPCC Plan is to ensure that adequate prevention and response measures are provided to prevent oil spills from reaching navigable waters. Prevention measures include maintenance and inspections of facilities to ensure the integrity of the oil handling equipment, and proper operator training.

According to Title 40 of the Code of Federal Regulations (CFR) 112.7, "The SPCC Plan shall be a carefully thought-out plan, prepared in accordance with good engineering practices, and which has the full approval of management at a level with authority to commit the necessary resources. If the plan calls for additional facilities or procedures, methods or equipment not yet fully operational, these items should be discussed in separate paragraphs..."

Because of the diverse and changing operations at the Laboratory, the development of an SPCC Plan detailing the requirements and operating conditions for each location and operation would be impractical and would require frequent updates and revisions. By using the Group SPCC Implementation Plan (GSIP) approach, the operating conditions for each location are addressed, and as the conditions change, only the individual GSIP will be revised.

In addition, the National Pollutant Discharge Elimination System (NPDES), requires that those facilities that must obtain an NPDES permit and who use, produce or discharge any of the listed toxic or hazardous pollutants must develop and implement a Best Management Practice (BMP) program as required under 40 CFR 125, Subpart K. BMPs are developed for controlling discharges of toxic or hazardous substances into receiving streams from associated or ancillary activities. A comprehensive description of appropriate BMPs for GSIP Locations is provided in Chapter 4 of the SPCC Plan Revision 3.

1.1. SPILL CONTROL COMMITTEE

The Spill Coordinator has identified a committee of individuals responsible for development, implementation, maintenance and revision of the GSIP. These individual members understand that part of their responsibility is to be knowledgeable about spill control and prevention matters. The committee includes the following members:

1. Scott Alexander - Fuel Yard Manager/Spill Coordinator
2. Jeff Carmichael - Environmental Coordinator
3. Robert Georgieff - JCI Environmental

Effective organization of the Spill Control Committee is important in order for the team to be able to accomplish the task of developing and implementing this plan. To ensure that this plan remains effective, the SC must be aware of any changes that are made in plant operations to determine if any changes must be made.

1.2. DEFICIENCY CORRECTION RESPONSIBILITIES

JCI has the responsibility to correct procedural deficiencies identified herein.

- The JCI Spill Coordinator/Environmental Coordinator is responsible for developing written procedures needed to implement corrections of identified deficiencies. The Coordinator will also monitor and document compliance with those procedures.
- The JCI Department Manager will assure that resources needed to accomplish deficiency corrections are made available.

ENG-UPO has the responsibility to generate work orders or otherwise arrange for implementation of deficiency corrections requiring construction, modification, or testing of structures. ENG-UPO will also provide oversight to assure measures taken eliminate deficiencies.

1.3. GSIP PLAN AMENDMENTS

Owners or operators of facilities subject to these requirements shall amend the GSIP Plan in accordance with 40 CFR 112.7 whenever there is a change in facility design, construction, operation or maintenance that materially affects the facility's potential for the discharge of oil or chemicals into or upon the navigable waters of the United States or adjoining shorelines. Such amendments shall be fully implemented as soon as possible, but not later than six months after such change occurs.

If the GSIP calls for additional facilities or procedures, methods, or equipment not yet fully operational, these items will be discussed in separate paragraphs, and the details of installation and operational start-up will be explained separately. At a minimum, the GSIP will be reviewed and updated annually.

1.4. EMPLOYEE TRAINING

Owners or operators are responsible for properly instructing their personnel in the operation and maintenance of equipment to prevent the discharges of oil and applicable pollution control laws, rules and regulations.

The Spill Coordinator is responsible for oil pollution training and reporting status to line management. Training should be scheduled at intervals frequent enough to assure adequate understanding of the GSIP for their facility. The meetings should highlight and describe known spill events or failures, malfunctioning components, precautionary measures and spill kit usage.

1.5 DEFINITIONS

The following definitions are provided as a convenient reference for specific terminology used in this report:

Aboveground Storage Tank or AST is defined as non-drum tanks of any volume. An AST can be located indoors or outdoors and the material stored can be product or waste. Another type of tank considered an AST is a vaulted-tank located below ground-level and enclosed by an open or closed vault top.

Addressed as used in the GSIP Field Data Sheets implies a dutiful and capable response to a deficiency.

Bulk Storage tank means any container used to store oil or chemicals. These tanks are used for the purposes including, but not limited to, the storage of oil or chemicals prior to use, while being used, or prior to further distribution in commerce.

Deficiency as used here suggests an inadequacy or lack of quality with regard to the implementation of the Laboratory's SPCC plan, but does not necessarily imply a required immediate action.

Storage capacity of a tank or container means the total capacity of the tank or container, whether the tank or container is filled with oil or a mixture of oil and other substances.

Underground Storage Tank or UST means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the pipes connected thereto) is 10 percent or more beneath the surface of the ground.

2. FACILITY DESCRIPTION

The TA-60 Fuel Yard has five aboveground storage tanks and two transfer stations. The aboveground fuel storage tanks TA-60-132, 133, 134, 135 and 136 are gravity fed by individual underground pipes from transfer area TA-60-1A, located on the south side of the site. The fuel is then gravity fed from the fuel tanks to transfer area TA-60-1B located on the north side of the location. From there, the fuel is loaded into tanker trucks for delivery to various locations around the Laboratory.

The five fuel storage tanks and associated underground pipes addressed in this report are considered as underground storage tanks (USTs) according to 40 CFR, Part 280, Subpart A. They are required to be addressed under the Laboratory's UST Program administered by ESH-19. As part of the Laboratory's Best Management Practices program, ESH-18 believes they should also be addressed in this report as aboveground storage tanks. A good portion of each tank surface is above grade and any breach of the tanks would result in a spill that would drain to the north to daylight into the earthen containment berm. The containment berm drains into Sandia Canyon by way of storm water drop inlets, piping and valves.

The five fuel storage tanks and the northern most transfer area are all within an earthen and asphaltic containment berm. The southern most transfer area is located on the top of the earthen berm and any fuel spill would flow into a stormwater drainage channel approximately 45 feet away. The total capacity of the five storage tanks equals 100,000 gallons. The containment area capacity is approximately 440,000 gallons.

2.1. GSIP LOCATIONS

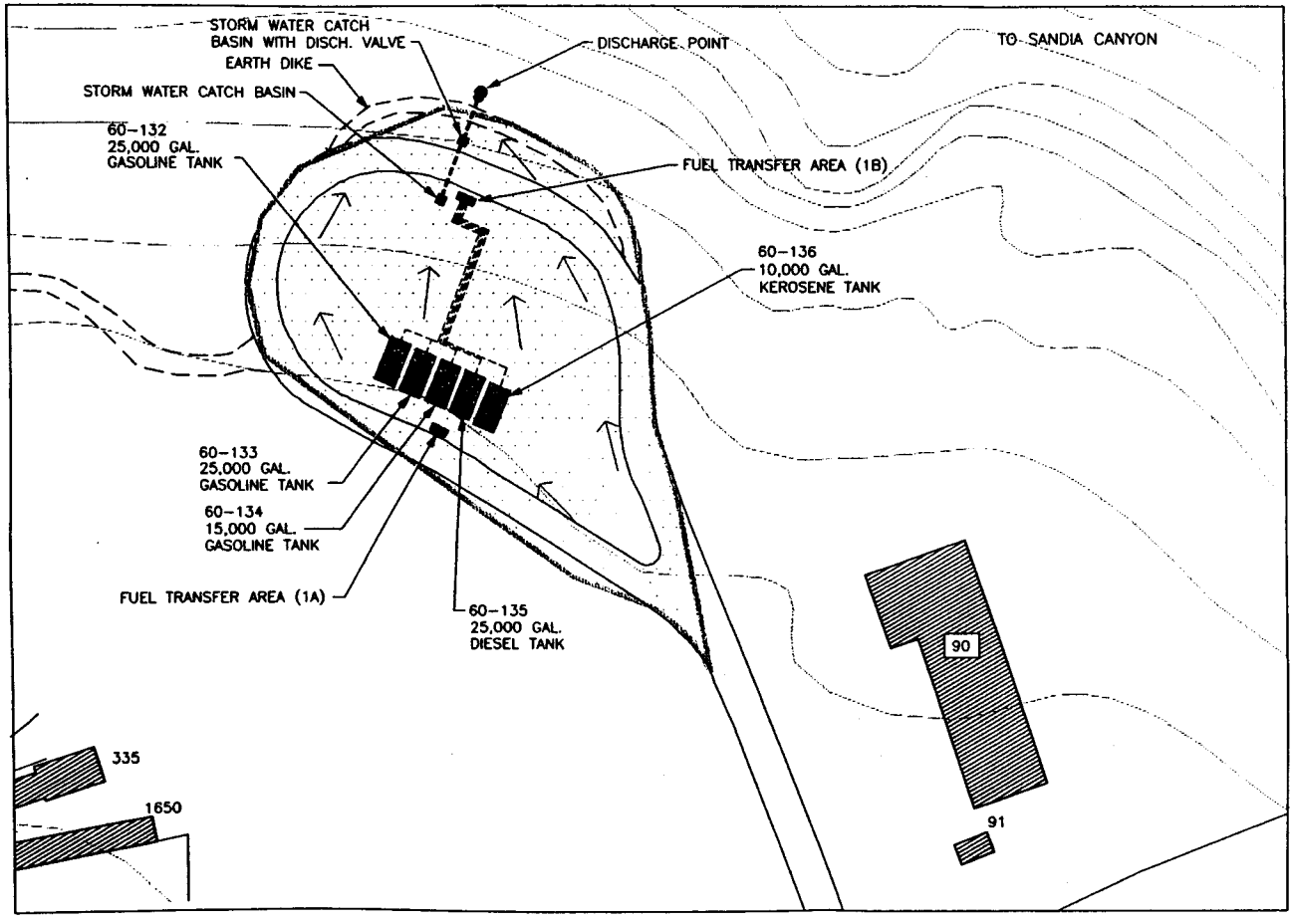
This plan includes a brief but concise description of the GSIP location's function. A major component of this description is a listing of characteristics that qualify areas as GSIP locations. Designating GSIP locations serves the purpose of dividing the Spill Coordinator's total region of responsibility into manageable pieces. This facilitates the preparation of facility site maps. This location includes several structures and one GSIP location.

They are categorized as:

- Two 25,000 gallon above ground storage tanks containing unleaded fuel,
- One 15,000 gallon above ground tank containing unleaded fuel,
- One 25,000 gallon above ground storage tank containing diesel fuel,
- One 10,000 gallon above ground storage tank containing kerosene solvent,
- Two fuel transfer areas.

The following map shows the storm water drainage areas for the storage tanks and the two transfer areas, direction of storm water flow, GSIP locations and other items of concern for this facility. Chapter 4 provides a description of each GSIP location in detail.

TA-60 TANK FARM



N

NOTES:

1. CONTOURS 10-FT. INTERVALS

SYMBOLS LEGEND	
	DIRECTION OF STORM WATER FLOW
	DIRT ROAD
	PAVED ROAD
	EXISTING BUILDING
	DRAINAGE BOUNDARY
	CULVERT
	GSIP LOCATION
	CENTER LINE OF DRAINAGE
	STORM WATER CATCH BASIN
	STORM WATER DISCHARGE POINT

REVISIONS			
NO.	BY	DATE	REMARKS

DRAWN MEW
DESIGNED MEW
CHECKED SJV
APPROVED

SCALE: 1"=60'-0"
PLOT DATE 03/24/95
CREATION DATE 02/01/95
DRAWING FILE NAME 60-FARM.DWG

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Los Alamos, New Mexico 87545

REQUESTING GROUP ESH-18
LAB JOB NO.

TA-60
SPCC SITE PLAN
TANK FARM

NUMBER

SHEET 1 OF 1
REV

3. SPILL IMPACT

Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should include a prediction of the direction, rate of flow, and total quantity of liquid which could be discharged from the facility as a result of each major type of failure.

3.1. DIRECTION AND QUANTITY OF FLOW

The following table and the GSIP Site Map illustrate the predicted direction of flow, receiving canyon, total potential quantity and potential flow rates for a spill at the TA-60 GSIP locations.

GSIP Location	Predicted Direction of Flow	Receiving Canyon	Total Quantity	Potential Flow Rate
TA-60-132-AST	Total earthen berm containment. A total breach would flow to the north.	Sandia Canyon	25,000 gallons	Depend on size of breach. Maximum flow of 25,000 gpm.
TA-60-133-AST	Total earthen dike containment. A total breach would flow to the north.	Sandia Canyon	25,000 gallons	Depend on size of breach. Maximum flow of 25,000 gpm.
TA-60-134-AST	Total earthen berm containment. A total breach would flow to the north.	Sandia Canyon	15,000 gallons	Depend on size of breach. Maximum flow of 15,000 gpm.
TA-60-135-AST	Total earthen berm containment. A total breach would flow to the north.	Sandia Canyon	25,000 gallons	Depend on size of breach. Maximum flow of 25,000 gpm.
TA-60-136-AST	Total earthen berm containment. A total breach would flow to the north.	Sandia Canyon	10,000 gallons	Depend on size of breach. Maximum flow of 10,000 gpm.
TA-60-1A-LUT Transfer Area	Partial earthen berm containment. A tanker truck spill would flow to the south and west.	Sandia Canyon	Dependent on type of equipment malfunction.	Dependent on type of equipment malfunction.
TA-60-1B-LUT Transfer Area	Total earthen berm containment. A spill would drain into the bermed containment area.	Sandia Canyon	Dependent on type of equipment malfunction.	Dependent on type of equipment malfunction.

*The potential flow rate assumes a one minute discharge from the containment structure.

3.2. SPILL HISTORY

Review of spill history is an essential part of the GSIP because the history will indicate repetitive spill problems or any incident that indicates spill potential. The review of the GSIP Location spill history indicated that there were two reported spills, one of gasoline and the other of a combination of kerosene, gasoline and diesel fuel. A chronological list of these spills follows.

SPILL DESCRIPTION: TA-60 TANK FARM

Date: August 2, 1991
What Spilled: A combination of Kerosene, Unleaded Gasoline and Diesel Fuel

Description: Jeff Carmichael of LANL notified the New Mexico Environment Department (NMED) of a suspected petroleum release. The release was discovered at LANL's TA-60 Tank Farm underground storage tank fuel loading station at the south side of the site.

CORRECTIVE ACTION TAKEN

Description: On August 23, 1991, four soil samples were collected to determine the extent of the petroleum contamination. Based on this sampling, LANL was unsuccessful in determining the extent of petroleum contamination.

On August 18, 1992, ten soil samples were collected at four locations at various sampling depths to determine the extent of the contamination. The sampling was conducted by the Environmental Protection Group's Waste Site Studies Section. All soil samples were collected in accordance with Appendix C, Part XII, of the New Mexico UST Regulations, and transported to LANL's Environmental Chemistry Group for analysis. The soil samples were analyzed using EPA SW-846, Analytical Methods 418.1 (Total Petroleum Hydrocarbons) and 8260 (Volatile Organics).

It was discovered from these soil samples that the depth of the contamination was less than thirteen feet below land surface. The lateral extent of the contamination is less than thirty-three feet in all directions from the fuel loading station. Thirteen 55-gallon drums of petroleum contaminated soil was excavated from this in August of 1992. The soil was shipped to TA-54 for land farming. It was determined this localized contamination does not present a threat to any water supply wells or surface waters.

PLANS TO PREVENT RECURRENCE

Description: None

SPILL DESCRIPTION: TA-60 TANK FARM

Date: July 14, 1993
What Spilled: Gasoline

Description: Two MDHE/MDSI employees were filling a gasoline fuel truck at the transfer station on the north side of the site and in the process the tank overflowed and leaked onto the ground in the containment area. A Johnson Controls employee was performing a routine surveillance check at the tank farm when he noticed product, estimated at less than five gallons, floating on a small pool of storm water accumulated in the containment area.

CORRECTIVE ACTION TAKEN

The JCI employee immediately placed sorbent sheets down in the pool of stormwater and product. He then call Mike Alexander of the LANL Environmental Protection Group and informed him of the spill. When the JCI employee returned to the site he placed sorbent material down onto the spill area.

PLANS TO PREVENT RECURRENCE

Description: It was expressed to the fuel truck drivers that they make sure to watch the fuel levels in their tank trucks when refueling.

Table for Tracking Future Spills

Date	Spill Location	What Spilled	Quantity Spilled	Corrective Action Taken	Plans to Prevent Recurrence

4. GSIP LOCATIONS

This chapter includes a brief but concise description of each GSIP location at the TA-60 Fuel Farm. The description of each GSIP location includes a discussion of the following items:

- Location Description and photograph,
- Location Schematic,
- Secondary Containment,
- Spill Controls & Spill Removal,
- Storm Water Considerations (Facility Drainage),
- Other Administrative Controls, and
- Field Data Sheets

The description details adequacies and deficiencies of each of the listed items. Deficiencies are documented on the Field Data Sheets and scheduled for future corrective action.

The seven GSIP locations at the TA-60 Fuel Farm are listed below:

4.1 TA-60-132, 60-133 and 60-134 - Unleaded Fuel Storage Tanks

4.2 TA-60-135 - Diesel Fuel Storage Tank

4.3 TA-60-136 - Kerosene Fuel Storage Tank

4.4 TA-60-1A - Fuel Transfer Area

4.5 TA-60-1B - Fuel Transfer Area

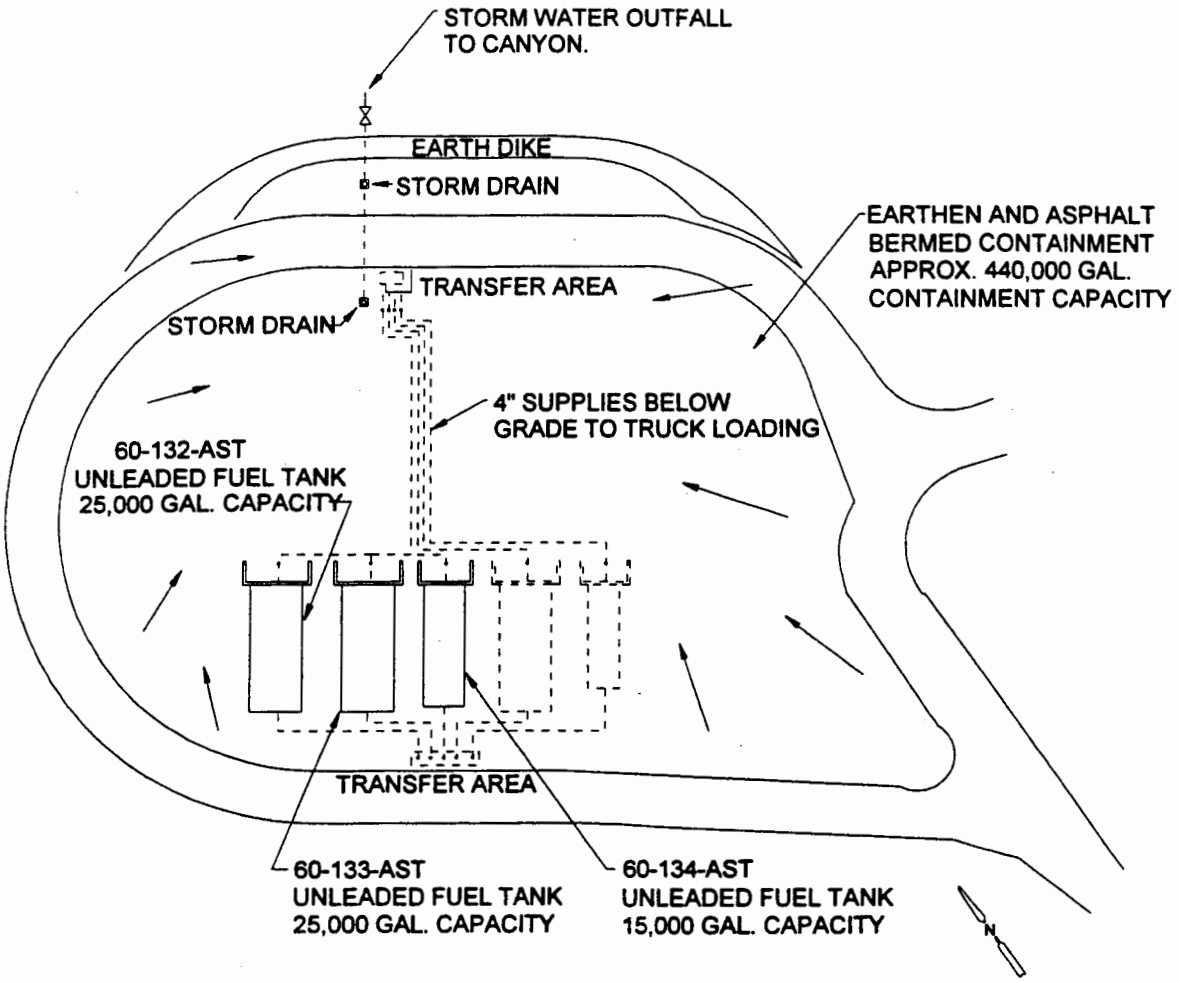
4.1. TA-60-132, 60-133 AND 60-134 UNLEADED FUEL TANKS

Description:

TA-60-132, 60-133 and 60-134 are Unleaded Fuel Storage Tanks. TA-60-132 and 60-133 each have a 25,000 gallon capacity and tank 60-134 has a 15,000 gallon storage capacity. The three storage tanks are each mounted on a concrete saddle and are surrounded by an earthen and asphaltic containment berm to contain spills with a volume of 440,000 gallons. Each tank's supply piping is below ground and connects to a fuel transfer area on the south side of the site. The fuel is supplied to the tanks from this transfer area by gravity feed. The outlet piping from the storage tanks is also below ground, which flows by gravity to a fuel transfer area on the north side of the site. The flow to this transfer area is controlled by way of meters and valves.

4.1.1. Location Schematic

The location schematic shows the three unleaded fuel storage tanks, the tank capacities and the secondary containment capacity.



TA-60-132, 133 & 134
UNLEADED GASOLINE
STORAGE TANKS

4.1.2. Aboveground Storage Tank Requirements

40 CFR 112.7 (e)(2) defines the requirements for developing and implementing SPCC Plans related to onshore bulk storage containers. These requirements are listed below and are followed by a detailed discussion of each:

4.1.2.1. SECONDARY CONTAINMENT

Description

The secondary containment structure for the three Unleaded Fuel Tanks is an earthen and asphaltic containment berm. The volume of the secondary containment system is large enough to contain the volume of the tank plus the volume of storm water produced by a 3-inch rainfall.

The 60-132-AST, 60-133-AST and 60-134-AST Unleaded Fuel Tanks are made from commonly accepted metal and steel alloys used for manufacturing unleaded fuel storage tanks.

Deficiencies

The earthen portion of the containment berm has visible signs of erosion present in the vicinity of the storage tanks. This soil erosion is causing a sediment build-up at the secondary containment stormwater drains. Erosion control should be provided.

Refer to Action Item #1 on page 1 of the Field Data Sheets.

4.1.2.2. SPILL CONTROL & SPILL REMOVAL

Integrity Testing:

Description

The fuel tanks were integrity tested during Oct.-Nov., 1988, using two volumetric testing methods. The tests were inconclusive because each tank is half exposed to the atmosphere which makes them vulnerable to temperature fluctuations.

Deficiencies

None. 40 CFR 280.21 (a)(b)(c)(d) describes upgrading of existing UST systems.

Monitoring:

Description

The three Unleaded Fuel Storage Tanks have a "Veeder-Root" automatic electronic monitoring system in operation. This system monitors liquid level and has a low and high liquid level alarm.

Deficiencies

None.

Spill Control

Description

There is spill control equipment available at the Motor Pool Building, TA-60-1, located approximately 250 yards to the south of this GSIP site. Sorbal, Sorbent sheets and booms are available for use in the event of a spill. There are also two fire extinguishers available in the containment area.

Deficiencies

None.

4.1.2.3. STORM WATER CONSIDERATIONS (FACILITY DRAINAGE)

Description

Storm water and snow melt accumulate in the earthen and asphaltic bermed containment area around the tanks. A portion of the stormwater accumulation will evaporate, however, there is almost always a pond of standing stormwater that remains in the containment area.

Sample tests of the water are taken prior to any stormwater discharge. The actual discharge is authorized and monitored by the LANL Environmental, Safety and Health (ESH-18) Division and JCI Environmental personnel.

Deficiencies

None.

4.1.2.4. OTHER ADMINISTRATIVE CONTROLS

Inspections and Maintenance:

Description

General operator observations are made by all personnel involved in handling materials and operation of the TA-60 Fuel Farm. A walk-around inspection was performed by Santa Fe Engineering in May of 1994. A substantial amount of corrosion is visible on the exterior of each of the storage tanks. This corrosion is in the form of rust and peeling paint. The results of the inspection are included in Appendix B of this GSIP.

Accurate and up-to-date drawings of these tanks and secondary containment are maintained and have been incorporated into this plan. See Location Schematic in Section 4.1.1.

Deficiencies

Two levels of inspection for ASTs are required at this location that include general operator observations and walk-around inspections. These inspections must be signed by the area supervisor or Spill Coordinator. There are no records of any past walk-around inspections at this site. See Appendix A of this GSIP for blank Walk-around Inspection forms for future use.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Labeling:

Description

The three Unleaded Fuel Tanks have proper labeling and MSDSs available at the Control Office.

Deficiencies

None.

Inventory Control:

Description

Inventory control of Unleaded Fuel Tanks 60-132-AST, 60-133-AST and 60-133-AST is accomplished through continual electronic measurement of the liquid level inside the tanks. The measurements are reviewed daily by JCI Environmental personnel. The measured value is then corrected for the temperature of the contents to calculate the volume. If a consistent loss is indicated, an investigation should be conducted to determine if the loss is due to accounting errors or tank leakage.

Inventory reconciliation is also performed as a method of leak detection. Inventory reconciliation includes accurate measurement of the deliveries into the tank, use from the tank, and the remaining inventory. The inventory of the tanks takes into account fluid expansion or contraction from fluid temperature changes.

Deficiencies

None.

Recordkeeping:

Description

This GSIP pulls together the necessary documents related to the three Unleaded Fuel Tanks at TA-60. These documents will be maintained as part of the GSIP for a period of three years.

Deficiencies

Future recordkeeping guidelines should apply to the entire AST system, including the tank, foundation, secondary containment, instrumentation, and piping. This documentation should be incorporated into this plan. Refer to Action Item #6 on page 3 of the Field Data Sheets.

All inspections should be documented and include the following:

- When inspections were done,
- Who conducted inspection,
- What areas were inspected,
- What problems were found,
- Appropriate supervisor signatures,
- What steps were taken to correct problems, and
- Who was notified about any problems found.

Security:

Description

The TA-60 Fuel Farm is not fenced and there is no gate at the main entrance. The transfer lines are capped and the operating valve is locked in the closed position during periods of non-use. Lighting is inadequate for this facility.

Deficiencies

There is no fencing at this Fuel Farm. Adequate fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be provided at this location.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

4.1.2.5. LOCATION FIELD DATA SHEETS

The GSIP Field Data Sheets were used to record pertinent information and to document any action items that may by required. These sheets were used to organize information pertaining to storage capacities, types of materials stored, types of containment, and provide a record of all issues related to this GSIP location.

The following information is included:

- Storage Unit Descriptions,
- Secondary Containment Descriptions,
- Spill Controls and Spill Removal,
- Storm Water Considerations,
- Other Administrative Controls,
- Action Items, and
- GSIP Prioritization Estimate.

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

GROUP SPCC IMPLEMENTATION PLAN FIELD - DATA SHEET -GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	60
2	Structure # (S) =	132, 133 and 134
3	Location Type (L) =	AST
4	GSIP Location Identification # (T+S+L) =	60-132-AST, 60-133-AST and 60-134-AST

Storage Unit Descriptions

5	List type of storage unit:[1]	Aboveground Storage Tank (AST)
6	List material stored in unit:[2]	Unleaded Gasoline
7	List associated Reportable Quantity (RQ):	45 gallons for a .01% concentration of Benzene
8	List the CAS #:	N/A
9	List Capacity in gallons of Storage Unit **(CSU)**:	25,000 gallons for 132 & 133/ 15,000 gallons for 134
10	Describe piping associated with this location:	Aboveground ☐ Belowground ✓ No piping ☐

Secondary Containment Descriptions

11	What type of secondary containment?[3]	EDB, Earthen Berm and ADB, Asphaltic Berm
12	List capacity in gallons of secondary containment: **(SCC)**	440,000 Gallons
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	39,000
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ✓ NO ☐

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Soil erosion is visible on the earthen portion of the containment berm in the vicinity of the storage tanks.

Unleaded Fuel Storage Tanks TA-60-132 and 60-133 each have a 25,000 gallon capacity, Unleaded Fuel Storage Tank TA-60-134 has a 15,000 gallon capacity. All three of the fuel tanks are located within the same containment area.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 1

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ❑ NO ✓ If yes, when:

Action Item #2 *(Integrity Testing)* *If answer on line 15 is **No**, describe as a deficiency refer to Chapter 4 of the SPCC Plan for requirements.*

None, integrity testing is not required at this location.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

16	Is there a method of level indication for the AST?	YES ✓	NO ❑	N/A ❑
17	Is there a liquid level alarm system for the AST?	YES ✓	NO ❑	N/A ❑

Action Item #3 *(Monitoring)* *If answer on line 16 or 17 is **No**, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.*

None

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

18	Is spill control equipment available at this location?[4] 1) Sorbents (SRB) 2) Booms (BMM) 3)	YES ✓ NO ❑ **If yes, identify which types by using the GSIP Abbreviation List on Page 5.**

Action Item #4 *(Spill Control)* *If answer on line 18 is **No**, describe as a deficiency.*

None (spill control kits are located in the adjacent Motor Pool building)

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 2

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) Open Valve Discharge (OVD) 2) Evaporation (EVP) 3) Sorbents (SRB)	YES ✓ NO ❑ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ✓ Unlocked ❑ No discharge valve ❑
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ❑ NO ✓
22	What is the distance to closest storm water culverts or catch basins (in feet)?	0 (catch basin in containment area)
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ❑ NO ✓
24	Name of canyon eventually receiving storm water or spill run-off:	Sandia Canyon

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

There are two stormwater catch basins located at the low point of the containment area. These drains connect into one pipe and discharge to Sandia Canyon when the lockable valve is opened.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ❑ NO ✓
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES ✓ NO ❑
27	Is there a system of inventory control at this site?	YES ✓ NO ❑
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc., been implemented at this GSIP Location?	YES ❑ NO ✓
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ❑ NO ✓

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Two levels of inspections for ASTs are required at this location that include general operator observations and walk-around inspections. Records of these inspections and integrity tests should be maintained at the control office.

Corrosion is present on the storage tank in the form of peeling paint and rust.

Adequate security fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be installed at the site.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 3

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:

Is this an oil storage location with a capacity greater than 660 gallons?	YES ✓	NO ❑
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ✓	NO ❑
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ✓	NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑	NO ✓

If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.

SECOND PRIORITY:

Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon a practicable. Skip the next section.

THIRD PRIORITY:

Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon a practicable.

Comments: In the space provided below, discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

The three Unleaded Fuel Storage Tanks, 60-132-AST, 60-133-AST and 60-134-AST, are all located within the same earthen and asphaltic bermed containment area. The combined capacity of all three tanks equals 65,000 gallons. The containment area has a capacity of approximately 440,000 gallons.

SPCC Form DS-1 Page 4

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

   AST - Aboveground Storage Tank
   CHM - Aboveground Chemical Storage Tank
   PCT - Portable Containers (such as TUFF tank)
   DRM - Drum Storage
   LUT - Loading, Unloading and Transfer
   TRN - Transformers
   HYD - Hydraulic and Oil Containing Equipment
   BAT - Battery Packs
   MRX - Marx Generator
   MIS - Miscellaneous or combined areas

2. Types of Materials Stored

   If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

   EDB - Earthen Diking or Berms
   ERC - Earthen Redirection to other containment
   ADB - Asphaltic Diking or Berms
   ACU - Asphaltic Curbing
   ASU - Asphaltic Sump (or drainage to sump)
   ARC - Asphaltic Redirection to other containment
   CDB - Concrete Diking or Berms
   CCU - Concrete Curbing
   CSU - Concrete Sump (or drainage to sump)
   CRC - Concrete Redirection to other containment
   MOD - Modular Secondary Containment Systems
   PAL - Palletized Secondary Containment
   OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

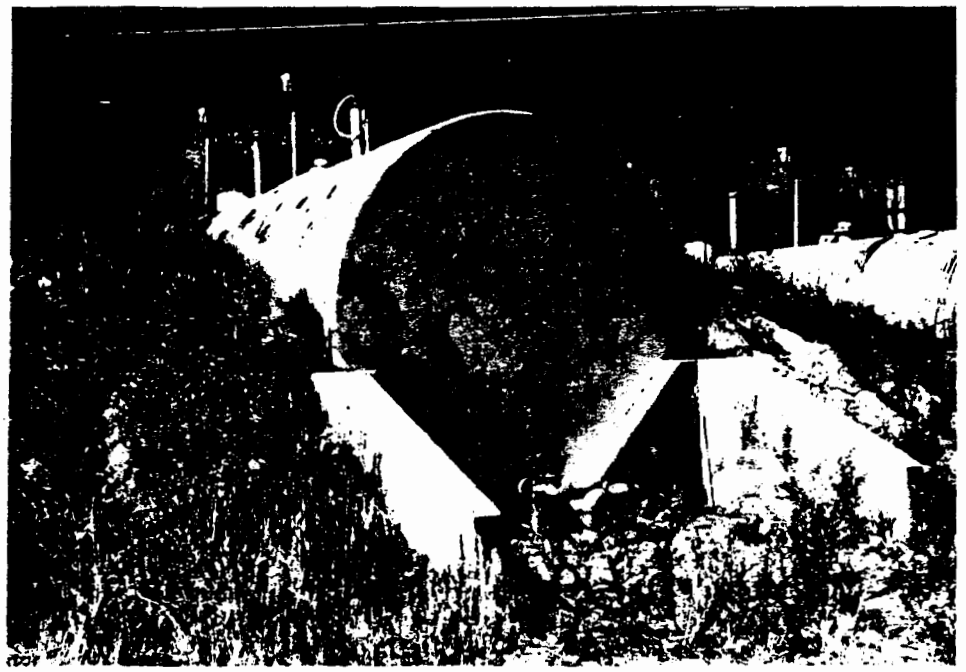
   SRB - Sorbents (granular, fibrous, powders, etc.)
   GEL - Gel Type Immobilization Agents
   BMM - Booms
   DCV - Drain Covers
   NUT - Neutralization (pH adjust for acids or bases)
   SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
   DPN - Drip Pans
   CPP - Cathodic Pipe Protection
   OTR - Other Types (specify)

5. Methods of Storm Water Removal or Spill Removal
   EVP - Evaporation (storm water)
   VAC - Vacuum Truck Removal (off-site treatment)
   SRB - Sorbents (oils and chemicals)
   REC - Recovery for Reuse Methods
   TRT - Treatment (on-site storm water treatment)
   OTR - Other Types of Removal (specify)
   OVD - Open Valve Discharge

4.2. TA-60-135 DIESEL FUEL TANK

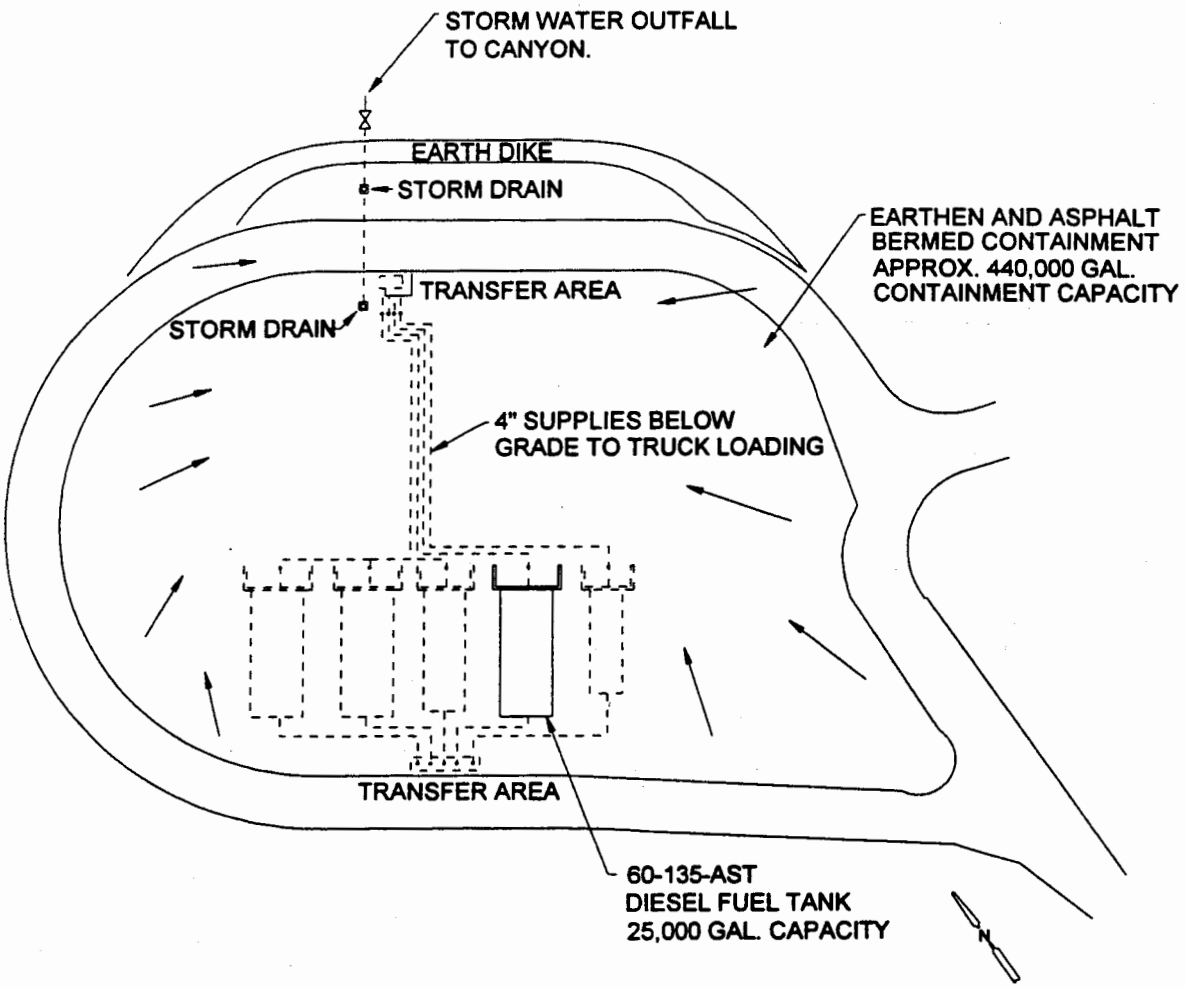
Description:

TA-60-135 is a Diesel Fuel Storage Tank with a 25,000 gallon capacity. The storage tank is mounted on a concrete saddle and is surrounded by an earthen and asphaltic containment berm to contain spills with a volume of 440,000 gallons. The supply piping is below ground and connects to a fuel transfer area on the south side of the site which is at an elevation higher than the tank. The fuel is supplied to the tank from this transfer area by gravity. The outlet piping from the storage tank runs below ground to a fuel transfer area on the north side of the site and is situated at an elevation lower than the tank. The flow to this transfer area is controlled by way of meters and valves.



4.2.1. Location Schematic

The location schematic shows the diesel fuel storage tank, the tank capacity and the secondary containment capacity.



TA-60-135
DIESEL FUEL STORAGE TANK

4.2.2. Aboveground Storage Tank Requirements

40 CFR 112.7 (e)(2) defines the requirements for developing and implementing SPCC Plans related to onshore bulk storage containers. These requirements are listed below and are followed by a detailed discussion of each:

4.2.2.1. SECONDARY CONTAINMENT

Description

The secondary containment structure for the Diesel Fuel Tank is an earthen and asphaltic containment berm. The volume of the secondary containment system is large enough to contain the volume of the tank plus the volume of storm water produced by a 3-inch rainfall.

The 60-135-AST Diesel Fuel Tank is made from commonly accepted metal and steel alloys used for manufacturing diesel fuel storage tanks.

Deficiencies

The earthen portion of the containment berm has visible signs of erosion present in the vicinity of the storage tanks. This soil erosion is causing a sediment build-up at the secondary containment stormwater drains. Erosion control should be provided.

Refer to Action Item #1 on page 1 of the Field Data Sheets.

4.2.2.2. SPILL CONTROL & SPILL REMOVAL

Integrity Testing:

Description

The fuel tanks were integrity tested during Oct.-Nov., 1988, using two volumetric testing methods. The tests were inconclusive because each tank is half exposed to the atmosphere which makes them vulnerable to temperature fluctuations.

Deficiencies

None. 40 CFR 280.21 (a)(b)(c)(d) describes upgrading of existing UST systems.

Monitoring:

Description

The Diesel Fuel Storage Tank has a "Veeder-Root" automatic electronic monitoring system in operation. This system monitors liquid level and has a low and high liquid level alarm.

Deficiencies

None

Spill Control

Description

There is spill control equipment available at the Motor Pool Building, TA-60-1, located approximately 250 yards to the south of this GSIP site. Sorbal, Sorbent sheets and booms are available for use in the event of a spill. There are also two fire extinguishers available in the containment area.

Deficiencies

None.

4.2.2.3. STORM WATER CONSIDERATIONS (FACILITY DRAINAGE)

Description

Storm water and snow melt accumulate in the earthen and asphaltic bermed containment area around the tanks. A portion of the stormwater accumulation will evaporate, however, there is almost always a pond of standing stormwater that remains in the containment area.

Sample tests of the water are taken prior to any stormwater discharge. The actual discharge is authorized and monitored by the LANL Environmental, Safety and Health (ESH-18) Division and JCI Environmental personnel.

Deficiencies

None

4.2.2.4. OTHER ADMINISTRATIVE CONTROLS

Inspections and Maintenance:

Description

General operator observations are made by all personnel involved in handling materials and operation of the TA-60 Fuel Farm. A walk-around inspection was performed by Santa Fe Engineering in May of 1994. A substantial amount of pitting and corrosion is visible on the exterior of the storage tank. This corrosion is in the form of rust and peeling paint. The results of the inspection are included in Appendix B of this GSIP.

Accurate and up-to-date drawings of these tanks and secondary containment are maintained and have been incorporated into this plan. See Location Schematic in Section 4.2.2.

Deficiencies

Two levels of inspection for ASTs are required that include general operator observations and walk-around inspections. These inspections must be signed by the area supervisor or Spill Coordinator. There are no records of any past walk-around inspections at this site. See Appendix A of this GSIP for blank Walk-around Inspection forms for future use.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Labeling:

Description

The Diesel Fuel Tank has proper labeling and MSDSs available at the Control Office.

Deficiencies

None

Inventory Control:

Description

Inventory control of the 60-135-AST Diesel Fuel Tank is accomplished through continual electronic measurement of the liquid level inside the tank. These measurements are reviewed daily by JCI Environmental personnel. The measured value is then corrected for the temperature of the contents to calculate the volume. If a consistent loss is indicated, an investigation should be conducted to determine if the loss is due to accounting errors or tank leakage.

Inventory reconciliation is also performed as a method of leak detection. Inventory reconciliation includes accurate measurement of the deliveries into the tank, use from the tank, and the remaining inventory. The inventory of the tanks takes into account fluid expansion or contraction from fluid temperature changes.

Deficiencies

None

Recordkeeping:

Description

This GSIP pulls together the necessary documents related to the Diesel Fuel Tank at TA-60. These documents will be maintained as part of the GSIP for a period of three years.

Deficiencies

Future recordkeeping guidelines should apply to the entire AST system, including the tank, foundation, secondary containment, instrumentation, and piping. This documentation should be incorporated into this plan.

All inspections should be documented and include the following:

- When inspections were done,
- Who conducted inspection,
- What areas were inspected,
- What problems were found,
- Appropriate supervisor signatures,
- What steps were taken to correct problems, and
- Who was notified about any problems found.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Security:

Description

The TA-60 Fuel Farm is not fenced and there is no gate at the main entrance. The transfer lines are capped and the operating valve is locked in the closed position during periods of non use. Lighting is inadequate for this facility.

Deficiencies

There is no fencing around this Fuel Farm. Adequate fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be provided for this location.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

4.2.2.5. LOCATION FIELD DATA SHEETS

The GSIP Field Data Sheets were used to record pertinent information and to document any action items that may by required. These sheets were used to organize information pertaining to storage capacities, types of materials stored, types of containment, and provide a record of all issues related to this GSIP location.

The following information is included:

- Storage Unit Descriptions,
- Secondary Containment Descriptions,
- Spill Controls and Spill Removal,
- Storm Water Considerations,
- Other Administrative Controls,
- Action Items, and
- GSIP Prioritization Estimate.

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

GROUP SPCC IMPLEMENTATION PLAN FIELD - DATA SHEET -GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	60
2	Structure # (S) =	135
3	Location Type (L) =	AST
4	GSIP Location Identification # (T+S+L) =	60-135-AST

Storage Unit Descriptions

5	List type of storage unit:[1]	Aboveground Storage Tank (AST)
6	List material stored in unit:[2]	Diesel Fuel Oil No. 2-D
7	List associated Reportable Quantity (RQ):	13,646 gallons for a .01% concentration of Benzene
8	List the CAS #:	068 476 346
9	List Capacity in gallons of Storage Unit **(CSU)**:	25,000 gallons
10	Describe piping associated with this location:	Aboveground ☐ Belowground ✓ No piping ☐

Secondary Containment Descriptions

11	What type of secondary containment?[3]	EDB, Earthen Berm and ADB, Asphaltic Berm
12	List capacity in gallons of secondary containment: **(SCC)**	440,000 Gallons
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	39,000
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ✓ NO ☐

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Soil erosion is visible on the earthen portion of the containment berm in the vicinity of the storage tanks.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 1

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ☐	NO ✓	If yes, when:

Action Item #2 *(Integrity Testing)* *If answer on line 15 is **No**, describe as a deficiency refer to Chapter 4 of the SPCC Plan for requirements.*

Integrity testing is not required at this location.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

16	Is there a method of level indication for the AST?	YES ✓	NO ☐	N/A ☐
17	Is there a liquid level alarm system for the AST?	YES ✓	NO ☐	N/A ☐

Action Item #3 *(Monitoring)* *If answer on line 16 or 17 is **No**, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.*

None

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

18	Is spill control equipment available at this location?[4] 1) Sorbents (SRB) 2) Booms (BMM) 3)	YES ✓	NO ☐ **If yes, identify which types by using the GSIP Abbreviation List on Page 5.**

Action Item #4 *(Spill Control)* *If answer on line 18 is **No**, describe as a deficiency.*

None (spill control kits are located in the adjacent Motor Pool building, TA-60-1).

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 2

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) Evaporation (EVP) 2) Open Valve Discharge (OVD) 3) Sorbent (SRB)	YES ✓ NO ❑ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ✓ Unlocked ❑ No discharge valve ❑
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ❑ NO ✓
22	What is the distance to closest storm water culverts or catch basins (in feet)?	0 (catch basin in containment area)
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ❑ NO ✓
24	Name of canyon eventually receiving storm water or spill run-off:	Sandia Canyon

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

There are two stormwater catch basins located at the low point of the containment area. These drains connect into one pipe and discharge to Sandia Canyon when the lockable valve is opened.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ❑ NO √
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES √ NO ❑
27	Is there a system of inventory control at this site?	YES √ NO ❑
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc., been implemented at this GSIP Location?	YES ❑ NO √
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ❑ NO √

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Two levels of inspections for ASTs are required at this location that include general operator observations and walk-around inspections. Adequate records should be kept of these inspections at the control office.

Adequate security fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be installed at the site.

Corrosion is present on the storage tank in the form of rust and peeling paint.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 3

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:

Is this an oil storage location with a capacity greater than 660 gallons?	YES ✓	NO ❑
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ✓	NO ❑
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ✓	NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑	NO ✓

If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.

SECOND PRIORITY:

Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon a practicable. Skip the next section.

THIRD PRIORITY:

Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon a practicable.

Comments: In the space provided below, discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

The Diesel fuel tank, 60-135, is located within the same earthen berm containment as other ASTs. The combined capacity of all tanks equal 100,000 gallons. The containment capacity of the bermed area is 440,000 gallons.

SPCC Form DS-1 Page 4

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

   AST - Aboveground Storage Tank
   CHM - Aboveground Chemical Storage Tank
   PCT - Portable Containers (such as TUFF tank)
   DRM - Drum Storage
   LUT - Loading, Unloading and Transfer
   TRN - Transformers
   HYD - Hydraulic and Oil Containing Equipment
   BAT - Battery Packs
   MRX - Marx Generator
   MIS - Miscellaneous or combined areas

2. Types of Materials Stored

   If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

   EDB - Earthen Diking or Berms
   ERC - Earthen Redirection to other containment
   ADB - Asphaltic Diking or Berms
   ACU - Asphaltic Curbing
   ASU - Asphaltic Sump (or drainage to sump)
   ARC - Asphaltic Redirection to other containment
   CDB - Concrete Diking or Berms
   CCU - Concrete Curbing
   CSU - Concrete Sump (or drainage to sump)
   CRC - Concrete Redirection to other containment
   MOD - Modular Secondary Containment Systems
   PAL - Palletized Secondary Containment
   OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

   SRB - Sorbents (granular, fibrous, powders, etc.)
   GEL - Gel Type Immobilization Agents
   BMM - Booms
   DCV - Drain Covers
   NUT - Neutralization (pH adjust for acids or bases)
   SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
   DPN - Drip Pans
   CPP - Cathodic Pipe Protection
   OTR - Other Types (specify)

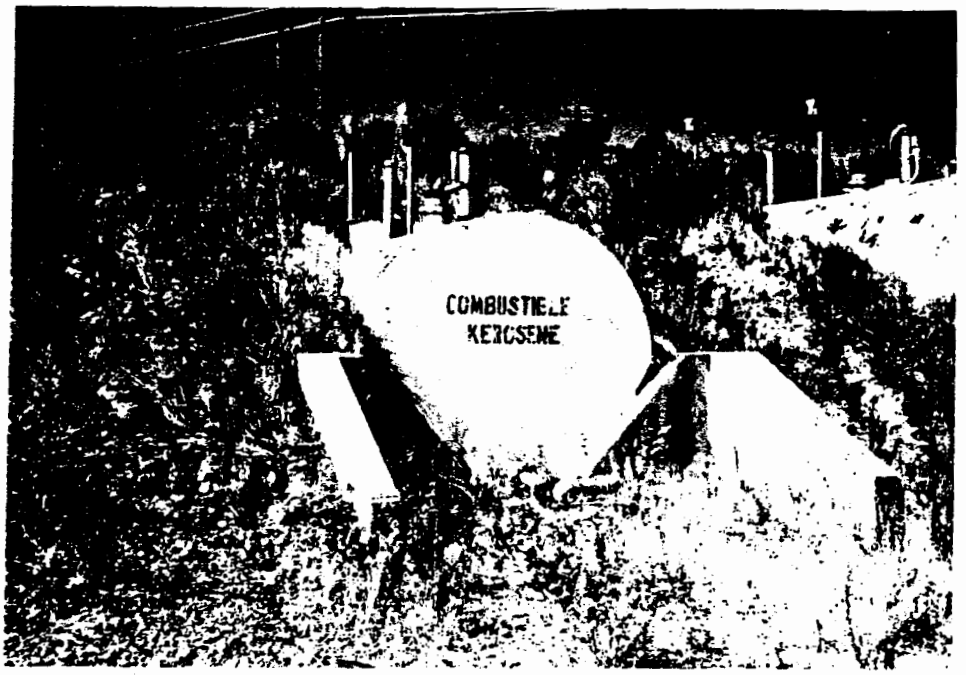
5. Methods of Storm Water Removal or Spill Removal

   EVP - Evaporation (storm water)
   VAC - Vacuum Truck Removal (off-site treatment)
   SRB - Sorbents (oils and chemicals)
   REC - Recovery for Reuse Methods
   TRT - Treatment (on-site storm water treatment)
   OTR - Other Types of Removal (specify)
   OVD - Open Valve Discharge

4.3. TA-60-136 KEROSENE FUEL STORAGE TANK

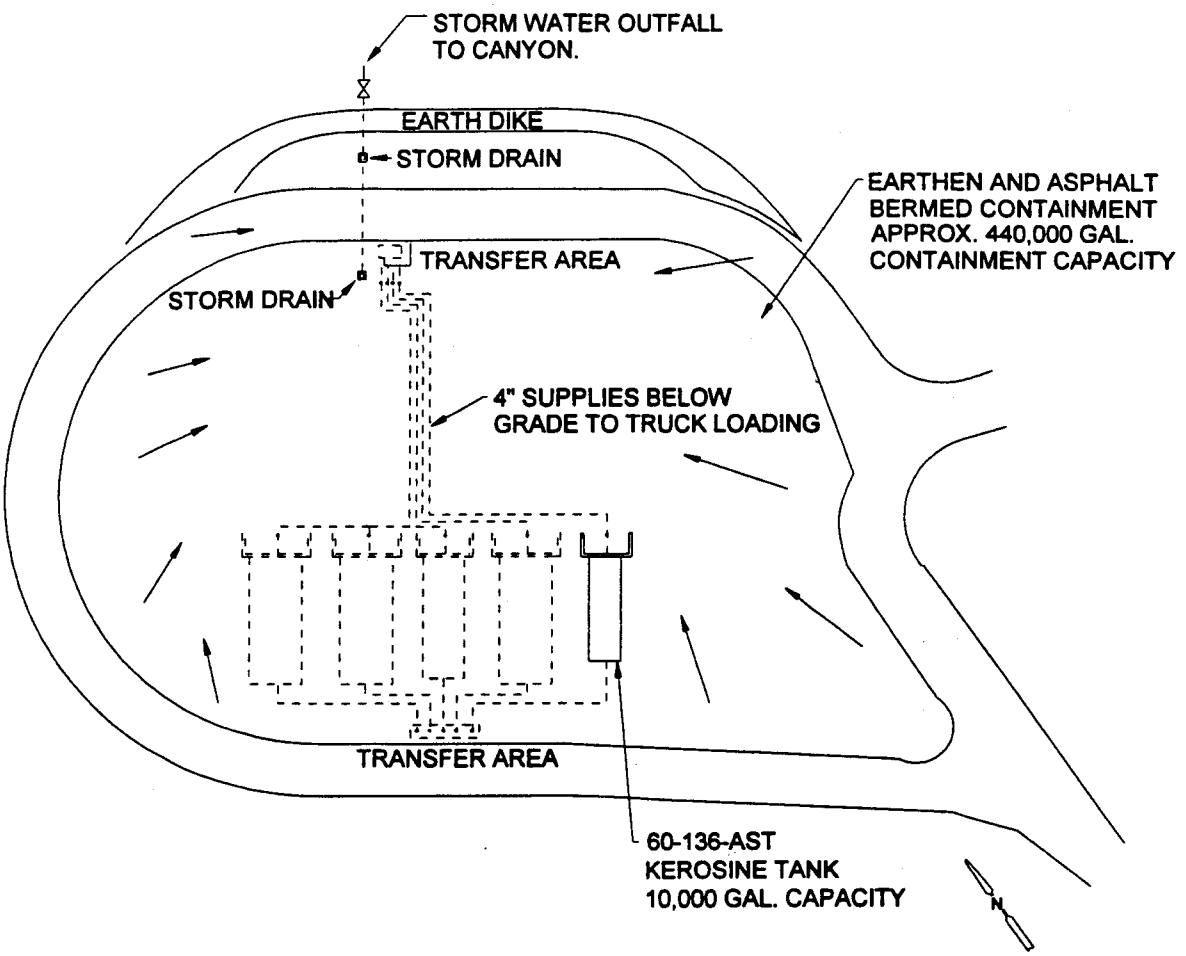
Description:

TA-60-136 is a Kerosene Fuel Storage Tank with a 10,000 gallon capacity. The storage tank is mounted on a concrete saddle and is surrounded by an earthen and asphaltic containment berm to contain spills with a volume of 440,000 gallons. The supply piping is below ground and connects to a fuel transfer area on the south side of the site which is at an elevation higher than the tank. The fuel is supplied to the tank from this transfer area by gravity. The outlet piping from the storage tank runs below ground to a fuel transfer area on the north side of the site and is situated at an elevation lower than the tank. The flow to this transfer area is controlled by way of meters and valves.



4.3.1. Location Schematic

The location schematic shows the kerosene fuel storage tank, the tank capacity and the secondary containment capacity.



TA-60-136
KEROSENE FUEL STORAGE TANK

4.3.2. Aboveground Storage Tank Requirements

40 CFR 112.7 (e)(2) defines the requirements for developing and implementing SPCC Plans related to onshore bulk storage containers. These requirements are listed below and are followed by a detailed discussion of each:

4.3.2.1. SECONDARY CONTAINMENT

Description

The secondary containment structure for the Kerosene Fuel Tank is an earthen and asphaltic containment berm. The volume of the secondary containment system is large enough to contain the volume of the tank plus the volume of storm water produced by a 3-inch rainfall.

The 60-136-AST Kerosene Fuel Tank is made from commonly accepted metal and steel alloys used for manufacturing kerosene fuel storage tanks.

Deficiencies

The earthen portion of the containment berm has visible signs of erosion present in the vicinity of the storage tanks. This soil erosion is causing a sediment build-up at the secondary containment stormwater drains. Erosion control should be provided.

Refer to Action Item #1 on page 1 of the Field Data Sheets.

4.3.2.2. SPILL CONTROL & SPILL REMOVAL

Integrity Testing:

Description

The fuel tanks were integrity tested during Oct.-Nov., 1988, using two volumetric testing methods. The tests were inconclusive because each tank is half exposed to the atmosphere which makes them vulnerable to temperature fluctuations.

Deficiencies

None (40 CFR 280.21 (a)(b)(c)(d) describes upgrading of existing UST systems).

Monitoring:

Description

The Kerosene Fuel Storage Tank has a "Veeder-Root" automatic electronic monitoring system in operation. This system monitors liquid level and has a low and high liquid level alarm.

Deficiencies

None.

Spill Control

Description

There is spill control equipment available at the Motor Pool Building, TA-60-1, located approximately 250 yards to the south of this GSIP site. Sorbal, Sorbent sheets and booms are available for use in the event of a spill. There are also two fire extinguishers available in the containment area.

Deficiencies

None.

4.3.2.3. STORM WATER CONSIDERATIONS (FACILITY DRAINAGE)

Description

Storm water and snow melt accumulate in the earthen and asphaltic bermed containment area around the tanks. A portion of the stormwater accumulation will evaporate, however, there is almost always a pond of standing stormwater that remains in the containment area.

Sample tests of the water are taken prior to any stormwater discharge. The actual discharge is authorized and monitored by LANL Environmental Safety and Health (ESH-18) Group and JCI Environmental personnel.

Deficiencies

None.

4.3.2.4. OTHER ADMINISTRATIVE CONTROLS

Inspections and Maintenance:

Description

General operator observations are made by all personnel involved in handling materials and operation of the TA-60 Fuel Farm. A walk-around inspection was performed by Santa Fe Engineering in May of 1994. A substantial amount of corrosion is visible on the exterior of the storage tank. This corrosion is in the form of rust and peeling paint. The results of the inspection are included in Appendix B of this GSIP.

Accurate and up-to-date drawings of these tanks and secondary containment are maintained and have been incorporated into this plan. See Location Schematic in Section 4.3.1.

Deficiencies

Two levels of inspection for ASTs are required at this location that include general operator observations and walk-around inspections. These inspections must be signed by the area supervisor or Spill Coordinator. There are no records of any past walk-around inspections at this site. See Appendix A of this GSIP for blank Walk-around Inspection forms for future use.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Labeling:

Description

The Kerosene Fuel Tank has proper labeling. MSDSs from October of 1981 are available at the Control Office.

Deficiencies

Current MSDSs should be made available at the Control Office

Inventory Control:

Description

Inventory control of the 60-136-AST Kerosene Fuel Tank is accomplished through continual electronic measurement of the liquid level inside the tank. These measurements are reviewed daily by JCI Environmental personnel. The measured value is then corrected for the temperature of the contents to calculate the volume. If a consistent loss is indicated, an investigation should be conducted to determine if the loss is due to accounting errors or tank leakage.

Inventory reconciliation is also performed as a method of leak detection. Inventory reconciliation includes accurate measurement of the deliveries into the tank, use from the tank, and the remaining inventory. The inventory of the tanks takes into account fluid expansion or contraction from fluid temperature changes.

Deficiencies

None.

Recordkeeping:

Description

This GSIP pulls together the necessary documents related to the Kerosene Fuel Tank at TA-60. These documents will be maintained as part of the GSIP for a period of three years.

Deficiencies

Future recordkeeping guidelines should apply to the entire AST system, including the tank, foundation, secondary containment, instrumentation, and piping. This documentation should be incorporated into this plan.

All inspections should be documented and include the following:

- When inspections were done,
- Who conducted inspection,
- What areas were inspected,
- What problems were found,
- Appropriate supervisor signatures,
- What steps were taken to correct problems, and
- Who was notified about any problems found.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Security:

Description

The TA-60 Fuel Farm is not fenced and there is no gate at the main entrance. The transfer lines are capped and the operating valve is locked in the closed position during periods of non-use. Lighting is inadequate for this facility.

Deficiencies

There is no fencing around the Fuel Farm. Adequate fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be provided for the location.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

4.3.2.5. LOCATION FIELD DATA SHEETS

The GSIP Field Data Sheets were used to record pertinent information and to document any action items that may by required. These sheets were used to organize information pertaining to storage capacities, types of materials stored, types of containment, and provide a record of all issues related to this GSIP location.

The following information is included:

- Storage Unit Descriptions,
- Secondary Containment Descriptions,
- Spill Controls and Spill Removal,
- Storm Water Considerations,
- Other Administrative Controls,
- Action Items, and
- GSIP Prioritization Estimate.

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GROUP SPCC IMPLEMENTATION PLAN
FIELD - DATA SHEET
-GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	60
2	Structure # (S) =	136
3	Location Type (L) =	AST
4	GSIP Location Identification # (T+S+L) =	60-136-AST

Storage Unit Descriptions

5	List type of storage unit:[1]	Aboveground Storage Tank (AST)
6	List material stored in unit:[2]	Kerosene
7	List associated Reportable Quantity (RQ):	N/A
8	List the CAS #:	008 008 206
9	List Capacity in gallons of Storage Unit **(CSU)**:	10,000 gallons
10	Describe piping associated with this location:	Aboveground ☐ Belowground ✓ No piping ☐

Secondary Containment Descriptions

11	What type of secondary containment?[3]	EDB, Earthen Berm and ADB, Asphaltic Berm
12	List capacity in gallons of secondary containment: **(SCC)**	440,000 Gallons
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	39,000
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ✓ NO ☐

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Soil erosion is visible on the earthen portion of the containment berm in the vicinity of the storage tanks.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 1

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ☐ NO ✓ If yes, when:

Action Item #2 *(Integrity Testing)* *If answer on line 15 is **No**, describe as a deficiency refer to Chapter 4 of the SPCC Plan for requirements.*

None, integrity testing is not required at this location.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

16	Is there a method of level indication for the AST?	YES ✓ NO ☐ N/A ☐
17	Is there a liquid level alarm system for the AST?	YES ✓ NO ☐ N/A ☐

Action Item #3 *(Monitoring)* *If answer on line 16 or 17 is **No**, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.*

None

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

18	Is spill control equipment available at this location?[4] 1) Sorbents (SRB) 2) Booms (BMM) 3)	YES ✓ NO ☐ **If yes, identify which types by using the GSIP Abbreviation List on Page 5.**

Action Item #4 *(Spill Control)* *If answer on line 18 is **No**, describe as a deficiency.*

None. Spill kits are located in the adjacent Motor Pool building.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) Evaporation (EVP) 2) Open Valve Discharge (OVD) 3) Sorbents (SRB)	YES ✓ NO ❑ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ✓ Unlocked ❑ No discharge valve ❑
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ❑ NO ✓
22	What is the distance to closest storm water culverts or catch basins (in feet)?	0 (catch basin is in containment area)
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ✓ NO ❑
24	Name of canyon eventually receiving storm water or spill run-off:	Sandia Canyon

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

There are two stormwater catch basins located at the low point of the containment area. These drains connect into one pipe and discharge to Sandia Canyon when the lockable valve is opened.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ❑ NO ✓
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES ✓ NO ❑
27	Is there a system of inventory control at this site?	YES ✓ NO ❑
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc., been implemented at this GSIP Location?	YES ❑ NO ✓
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ❑ NO ✓

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Two levels of inspections for ASTs are required at this location that include general operator observations and walk-around inspections. Adequate records should be kept of these inspections at the control office.

Adequate security fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site. Adequate lighting should be installed at the site.

Corrosion is present on the storage tank in the form of rust and peeling paint.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:

Is this an oil storage location with a capacity greater than 660 gallons?	YES ✓	NO ❑
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ✓	NO ❑
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ✓	NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑	NO ✓

If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.

SECOND PRIORITY:

Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon a practicable. Skip the next section.

THIRD PRIORITY:

Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon a practicable.

Comments: In the space provided below,.discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

The Kerosene fuel storage tank, 60-136, is located within the same earthen berm containment as other ASTs. The combined capacity of all tanks equal 100,000 gallons. The containment capacity of the bermed area is 440,000 gallons.

SPCC Form DS-1 Page 4

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

AST - Aboveground Storage Tank
CHM - Aboveground Chemical Storage Tank
PCT - Portable Containers (such as TUFF tank)
DRM - Drum Storage
LUT - Loading, Unloading and Transfer
TRN - Transformers
HYD - Hydraulic and Oil Containing Equipment
BAT - Battery Packs
BAT - Battery Packs
MRX - Marx Generator
MIS - Miscellaneous or combined areas

2. Types of Materials Stored

If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

EDB - Earthen Diking or Berms
ERC - Earthen Redirection to other containment
ADB - Asphaltic Diking or Berms
ACU - Asphaltic Curbing
ASU - Asphaltic Sump (or drainage to sump)
ARC - Asphaltic Redirection to other containment
CDB - Concrete Diking or Berms
CCU - Concrete Curbing
CSU - Concrete Sump (or drainage to sump)
CRC - Concrete Redirection to other containment
MOD - Modular Secondary Containment Systems
PAL - Palletized Secondary Containment
OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

SRB - Sorbents (granular, fibrous, powders, etc.)
GEL - Gel Type Immobilization Agents
BMM - Booms
DCV - Drain Covers
NUT - Neutralization (pH adjust for acids or bases)
SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
DPN - Drip Pans
CPP - Cathodic Pipe Protection
OTR - Other Types (specify)

5. Methods of Storm Water Removal or Spill Removal

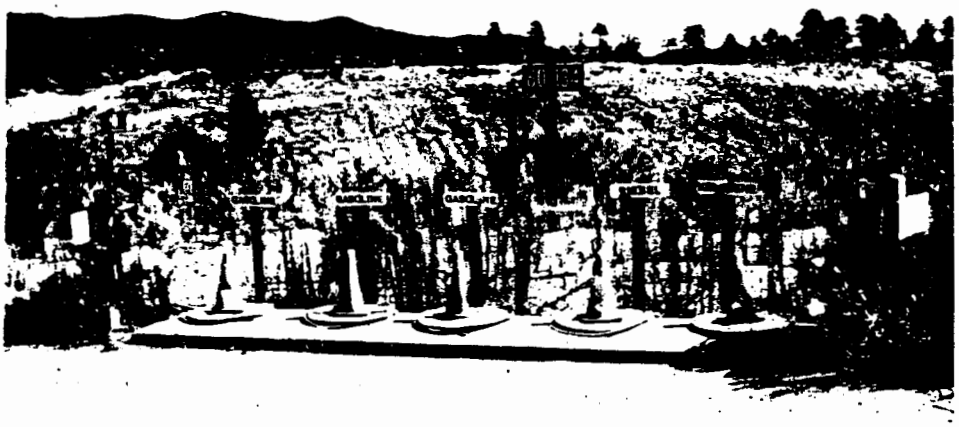
EVP - Evaporation (storm water)
VAC - Vacuum Truck Removal (off-site treatment)
SRB - Sorbents (oils and chemicals)
REC - Recovery for Reuse Methods
TRT - Treatment (on-site storm water treatment)
OTR - Other Types of Removal (specify)
OVD - Open Valve Discharge

SPCC FORM DS-1 Page 5

4.4. TA-60-1A FUEL TRANSFER AREA

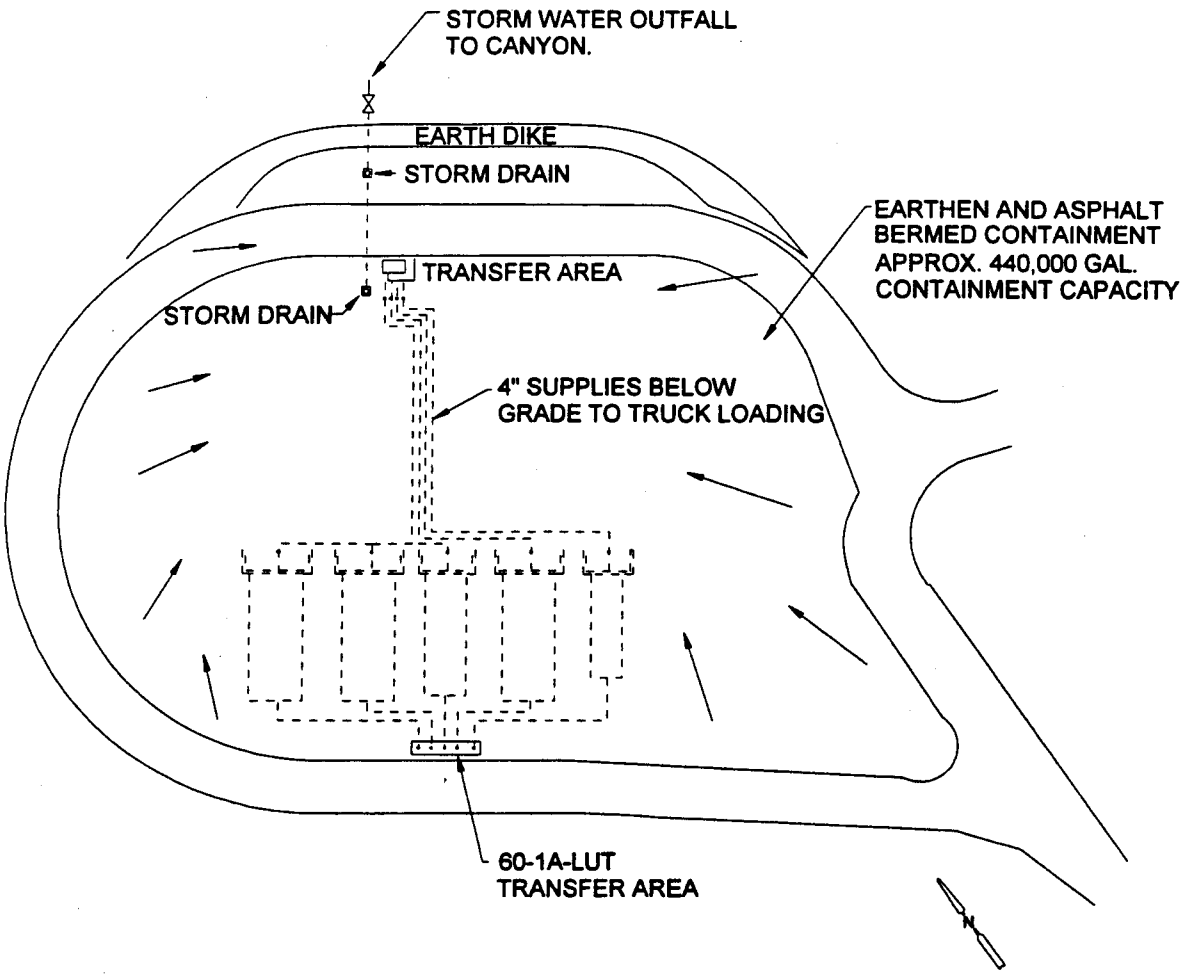
Description:

Transfer Area 60-1A-LUT is located on the south side of the GSIP site at an elevation higher than the storage tanks. The transfer area has one inlet pipe connection for each of the five storage tanks at grade which are capped when not being used. The fuel is loaded into the various storage tanks at this point by a tanker truck. The tanker truck fuel line is connected to the appropriate coupling at the transfer station and product is allowed into the line utilizing gate valves. The fuel flows by gravity to the appropriate storage tank. Any release from the transfer area would be directed to the east or west along the paved road and into the earthen containment area



4.4.1. Location Schematic

The location schematic shows the transfer area location and the secondary containment capacity.



60-1A-LUT
TRANSFER AREA

4.4.2. Transfer Area Requirements

40 CFR 112.7 (e)(2) defines the requirements for developing and implementing SPCC Plans related to onshore bulk storage containers and transfer areas. These requirements are listed below and are followed by a detailed discussion of each:

4.4.2.1. SECONDARY CONTAINMENT

Description

A concrete pad houses the five pipe inlets at the transfer area (60-1A-LUT). Each inlet has a concrete lip around it with a removable cover and a containment capacity of approximately 1-2 gallons. If a release of a greater capacity were to occur, the liquid would flow to the either the east or west into erosion gullies paralleling the road which leads into the earthen and asphaltic containment area for the five fuel storage tanks.

Deficiencies

There is not adequate secondary containment for the release of fuel at the transfer area. An asphaltic containment berm should be constructed around this transfer area to channel any spill into the large containment area immediately to the north.

Refer to Action Item #1 on page 1 of the Field Data Sheets.

4.4.2.2. SPILL CONTROL & SPILL REMOVAL

Integrity Testing:

Description

Integrity testing of the underground fuel piping was performed on July 1, 1994. The results of those tests are located in the Past Inspection Forms Appendix of this report.

Deficiencies

None.

Monitoring:

Description

The transfer of fuel to the storage tank is constantly monitored by tanker truck personnel. All other monitoring is visual in nature. The "Veeder Root" monitoring system at the Tank Farm which measures liquid level inside the tanks and has a high and low level liquid alarm.

There is an operational procedure in place for the unloading of fuel from the tanker trucks at the transfer area.

Deficiencies

None.

Spill Control

Description

There is a report of a spill on record that pertains to the transfer area. See Section 3.1 of this report for details. There is spill control equipment available at the Motor Pool building, TA-60-1, located approximately 250 yards to the south of this GSIP site. Sorbal, sorbent sheets and booms are available for use in the event of a spill. There are also two fire extinguishers located at Transfer Area 60-1A-LUT.

Deficiencies

None.

4.4.2.3. STORM WATER CONSIDERATIONS (FACILITY DRAINAGE)

Description

There is no stormwater accumulation around transfer area 60-1A-LUT. The transfer area does not have secondary containment. Observation of stormwater movement during a precipitation event shows that the drainage from the transfer area enters either the west or east erosion gullies paralleling the road which enters into the containment area for the storage tanks.

Deficiencies

None. Covering the transfer area would negate any potential for contaminated runoff from this location.

4.4.2.4. OTHER ADMINISTRATIVE CONTROLS

Inspections and Maintenance:

Description

General operator observations are made by all personnel involved in handling materials and operation of the 60-1A-LUT transfer area. A walk-around inspection was performed by Santa Fe Engineering in May of 1994. The results of the inspection are included in Appendix B of this GSIP.

Accurate and up-to-date drawings of these tanks and secondary containment are maintained and have been incorporated into this plan. See Location Schematic in Section 4.4.1.

Deficiencies

Three levels of inspection for Transfer Areas are required that include general operator observations, walk-around inspections and integrity inspections. These inspections must be signed by the area supervisor or Spill Coordinator. There are no records of any past walk-around or integrity testing at this site . See Section 4.4.2.2. regarding Integrity Testing at this location and Appendix A of this GSIP for blank Walk-around Inspection forms for future use.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Labeling:

Description

The 60-1A-LUT Transfer Area has proper labeling and MSDSs available at the Control Office. Updated MSDSs should be kept at the Motor Pool building, TA-60-1.

Deficiencies

None.

Inventory Control:

Description

Inventory reconciliation at the transfer area is performed as a method of leak detection. Inventory reconciliation includes accurate measurement of the deliveries into the tanks, use from the tanks, and the remaining inventory. The inventory of the tanks takes into account fluid expansion or contraction from fluid temperature changes.

Deficiencies

None.

Recordkeeping:

Description

This GSIP pulls together the necessary documents related to the 60-1A-LUT Transfer Area. These documents will be maintained as part of the GSIP for a period of three years.

Deficiencies

Future recordkeeping guidelines should apply to the entire transfer area system, including the transfer nozzles, couplings, foundation, platform, secondary containment, instrumentation, and piping. This documentation should be incorporated into this plan.

All inspections should be documented and include the following:

- When inspections were done,
- Who conducted inspection,
- What areas were inspected,
- What problems were found,
- Appropriate supervisor signatures,
- What steps were taken to correct problems, and
- Who was notified about any problems found.

See action Item #6 on page 3 of the Field Data Sheets.

Security:

Description

The TA-60 Fuel Farm is not fenced and there is no gate at the main entrance. The transfer lines are capped and locked during periods of non-use. Lighting in inadequate for this facility.

Deficiencies

There is no security fencing at this Fuel Farm. Adequate fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the main entrance to the site.

Adequate lighting should be installed.

See action Item #6 on page 3 of the Field Data Sheets.

4.4.2.5. LOCATION FIELD DATA SHEETS

The GSIP Field Data Sheets were used to record pertinent information and to document any action items that may by required. These sheets were used to organize information pertaining to storage capacities, types of materials stored, types of containment, and provide a record of all issues related to this GSIP location.

The following information is included:

- Storage Unit Descriptions,
- Secondary Containment Descriptions,
- Spill Controls and Spill Removal,
- Storm Water Considerations,
- Other Administrative Controls,
- Action Items, and
- GSIP Prioritization Estimate.

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GROUP SPCC IMPLEMENTATION PLAN FIELD - DATA SHEET -GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	60
2	Structure # (S) =	1A
3	Location Type (L) =	LUT
4	GSIP Location Identification # (T+S+L) =	60-1A-LUT

Storage Unit Descriptions

5	List type of storage unit:[1]	Loading, Unloading and Transfer (LUT)
6	List material stored in unit:[2]	Unleaded, Diesel & Kerosene Fuel is transferred
7	List associated Reportable Quantity (RQ):	N/A
8	List the CAS #:	N/A Unlead./068476346 Diesel/008008206 Kerosene
9	List Capacity in gallons of Storage Unit **(CSU)**:	N/A (tanker trucks have a 3,000 gallon capacity
10	Describe piping associated with this location:	Aboveground ☐ Belowground ✓ No piping ☐

Secondary Containment Descriptions

11	What type of secondary containment?[3]	Earthen Containment Berm, EDB
12	List capacity in gallons of secondary containment: **(SCC)**	440,000 gallons
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	600 ft^2
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ☐ NO ✓

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

There is not adequate secondary containment for the release of fuel at this transfer area. An asphaltic containment berm should be constructed around this transfer area to channel any spill into the large containment area immediately to the north.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 1

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ✓	NO ☐	If yes, when: July 1994	

Action Item #2 *(Integrity Testing)* *If answer on line 15 is **No**, describe as a deficiency refer to Chapter 4 of the SPCC Plan for requirements.*

None (integrity test results are available in the Past Inspection Forms section of this report).

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

16	Is there a method of level indication for the AST?	YES ☐	NO ✓	N/A ☐
17	Is there a liquid level alarm system for the AST?	YES ☐	NO ✓	N/A ☐

Action Item #3 *(Monitoring)* *If answer on line 16 or 17 is **No**, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.*

A visual liquid level indicator, level alarm system or some type of monitoring device should be installed for the transfer area.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

18	Is spill control equipment available at this location?[4] 1) Sorbents (SRB) 2) Booms (BMM) 3)	YES ✓ NO ☐ If yes, identify which types by using the GSIP Abbreviation List on Page 5.

Action Item #4 *(Spill Control)* *If answer on line 18 is **No**, describe as a deficiency.*

None (spill control kits are located in the adjacent Motor Pool building, TA-60-1).

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 2

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) Evaporation (EVP) 2) Open Valve Discharge (OVD) 3) Sorbents (SRB)	YES ✓ NO ☐ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ✓ Unlocked ☐ No discharge valve ☐
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ☐ NO ✓
22	What is the distance to closest storm water culverts or catch basins (in feet)?	45
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ✓ NO ☐
24	Name of canyon eventually receiving storm water or spill run-off:	Sandia Canyon

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

None. Covering the transfer area would prohibit rainfall from transporting potentially contaminated runoff into Sandia Canyon.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ☐ NO ✓
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES ✓ NO ☐
27	Is there a system of inventory control at this site?	YES ✓ NO ☐
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc., been implemented at this GSIP Location?	YES ☐ NO ✓
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ☐ NO ✓

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Three levels of inspections for Transfer Areas are required that include general operator observations, walk-around inspections and integrity testing. Adequate records should be kept of these inspections and integrity tests at the control office.

Adequate security fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site.

Adequate lighting should be installed at the site.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 3

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:

Is this an oil storage location with a capacity greater than 660 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ❑	NO ✓
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ✓	NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑	NO ✓

If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.

SECOND PRIORITY:

Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon a practicable. Skip the next section.

THIRD PRIORITY:

Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon a practicable.

Comments: In the space provided below, discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

There is a Spill Response Plan under the Utilities Operating Instructions (UOI) No. 66-20-055

There is an SPCC Plan under the Standard Practice Instructions (SPI) No. 12-04-015

Fuel tanker truck volumes are typically 3,000 gallons. Spills from leaking or disconnected hoses from tank trucks would flow to the east and west into a erosion gullies paralleling the road and into the earthen containment area. Sorbents are currently used to clean up any residual fuels left on the transfer area pad.

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

   AST - Aboveground Storage Tank
   CHM - Aboveground Chemical Storage Tank
   PCT - Portable Containers (such as TUFF tank)
   DRM - Drum Storage
   LUT - Loading, Unloading and Transfer
   TRN - Transformers
   HYD - Hydraulic and Oil Containing Equipment
   BAT - Battery Packs

2. Types of Materials Stored

   If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

   EDB - Earthen Diking or Berms
   ERC - Earthen Redirection to other containment
   ADB - Asphaltic Diking or Berms
   ACU - Asphaltic Curbing
   ASU - Asphaltic Sump (or drainage to sump)
   ARC - Asphaltic Redirection to other containment
   CDB - Concrete Diking or Berms
   CCU - Concrete Curbing
   CSU - Concrete Sump (or drainage to sump)
   CRC - Concrete Redirection to other containment
   MOD - Modular Secondary Containment Systems
   PAL - Palletized Secondary Containment
   OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

   SRB - Sorbents (granular, fibrous, powders, etc.)
   GEL - Gel Type Immobilization Agents
   BMM - Booms
   DCV - Drain Covers
   NUT - Neutralization (pH adjust for acids or bases)
   SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
   DPN - Drip Pans
   CPP - Cathodic Pipe Protection
   OTR - Other Types (specify)

5. Methods of Storm Water Removal or Spill Removal

   EVP - Evaporation (storm water)
   VAC - Vacuum Truck Removal (off-site treatment)
   SRB - Sorbents (oils and chemicals)
   REC - Recovery for Reuse Methods
   TRT - Treatment (on-site storm water treatment)
   OTR - Other Types of Removal (specify)
   OVD - Open Valve Discharge

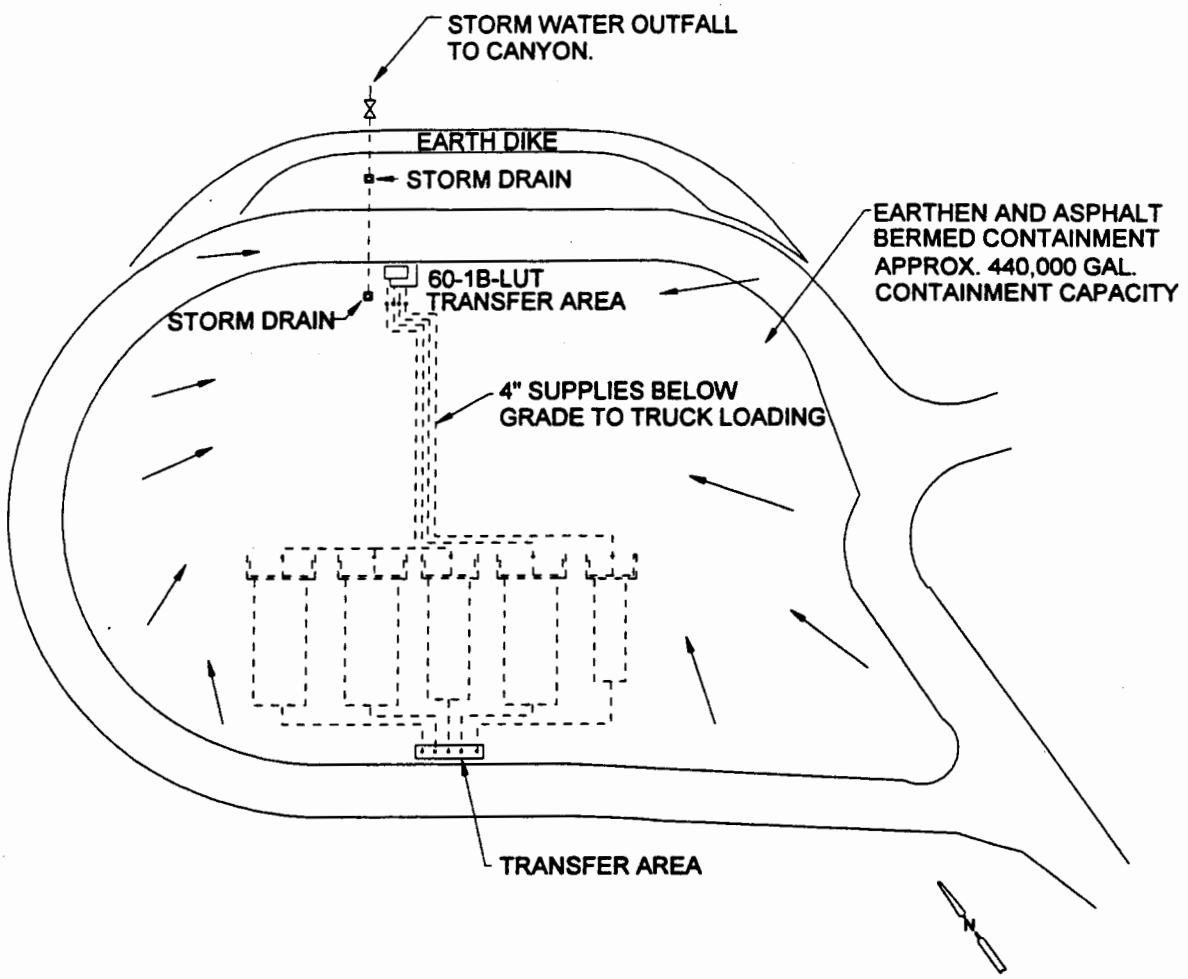
4.5. TA-60-1B FUEL TRANSFER AREA

Description:

A Fuel Transfer Area is located below the five storage tanks and interconnected by means of valves, underground and above ground piping. The flow of fuel to the transfer area is accomplished by gravity. The Transfer Area (60-1B-LUT) is set on a platform at a point lower than the tanks but at an elevation higher than the tanker fuel ports. Product selection and dispensing is accomplished with gate valves and flow meters. The Transfer Area platform is located within the secondary containment berm alongside the paved ingress and egress road.

4.5.1. Location Schematic

The location schematic shows the transfer area location and the secondary containment capacity.



60-1B-LUT
TRANSFER AREA

4.5.2. Transfer Area Requirements

40 CFR 112.7 (e)(2) defines the requirements for developing and implementing SPCC Plans related to onshore bulk storage containers and transfer areas. These requirements are listed below and are followed by a detailed discussion of each:

4.5.2.1. SECONDARY CONTAINMENT

Description

The secondary containment structure for the Fuel Transfer Area is an earthen and asphaltic containment berm. The volume of the secondary containment system is large enough to contain any volume of spill at the site plus the volume of storm water produced by a 3-inch rainfall.

Deficiencies

The earthen portion of the containment berm has visible signs of erosion present in the vicinity of the storage tanks. The soil erosion is causing a sediment build-up at the secondary containment stormwater drains. Erosion control should be provided.

Refer to Action Item #1 on page 1 of the Field Data Sheets.

4.5.2.2. SPILL CONTROL & SPILL REMOVAL

Integrity Testing:

Description

Integrity testing of the underground fuel piping was performed on July 1, 1994. The results of those tests are located in the Past Inspection Forms Appendix of this report.

Deficiencies

None.

Monitoring:

Description

Flow rates are determined by gauges measuring gpm. These gauges (one for each type of fuel) are mounted on the transfer area platform in plain view. All other monitoring is visual in nature.

Deficiencies

Consideration should be given to installing one or more of the following monitoring devices.

- High liquid level pump cutoff devices set to stop flow at a predetermined tank content level,
- Direct audible or code signal communication between tank gauger and the pumping station,
- Pressure-drop devices,
- Valve positioning indicators,
- Equipment operational lights,

- Devices for weighing vehicles or containers, or
- Instruments used to determine rate of flow during loading and unloading.

Refer to Action Item #3 on page 2 of the Field Data Sheets

Spill Control

Description

There is spill control equipment available at the Motor Pool building, TA-60-1, located approximately 250 yards to the south of this GSIP site. Sorbal, sorbent sheets and booms are available for use in the event of a spill. There are also two fire extinguishers located at site.

Deficiencies

None.

4.5.2.3. STORM WATER CONSIDERATIONS (FACILITY DRAINAGE)

Description

Storm water and snow melt accumulate in the earthen and asphaltic bermed containment area around the tanks. A portion of the stormwater accumulation will evaporate, however, there is almost always a pond of standing stormwater that remains in the containment area.

Sample tests of the water are taken prior to any stormwater discharge. The actual discharge is authorized and monitored by the LANL Environmental, Safety and Health (ESH-18) Division and JCI Environmental personnel.

Deficiencies

This transfer area is situated at a low point in elevation within the secondary containment berm where stormwater runoff accumulates. Subsequently this stormwater has the potential to become contaminated with fuel products by ingress and egress of vehicles and operational procedures.

Refer to Action Item #5 on page 3 of the Field Data Sheets.

4.5.2.4. OTHER ADMINISTRATIVE CONTROLS

Inspections and Maintenance:

Description

General operator observations are made by all personnel involved in handling materials and operation of the 60-1B-LUT transfer area. There is a report of a spill on record that pertains to the transfer area. See Section 3.1 of this report for details. A walk-around inspection was performed by Santa Fe Engineering in May of 1994. The results of the inspection are included in Appendix B of this GSIP.

Accurate and up-to-date drawings of these tanks and secondary containment are maintained and have been incorporated into this plan. See Location Schematic in Section 4.5.1.

Deficiencies

Three levels of inspection for ASTs are required that include general operator observations, walk-around inspections and integrity inspections. These inspections must be signed by the area supervisor or Spill Coordinator. There are no records of any past walk-around inspections at this site . See Section 4.5.2.2. regarding Integrity Testing at this location and Appendix A of this GSIP for blank Walk-around Inspection forms for future use.

Refer to Action Item #6 on page 3 of the Field Data Sheets.

Labeling:

Description

The 60-1B-LUT Transfer Area has proper labeling and MSDSs available at the Control Office. Updated MSDSs should be kept at the Motor Pool building (TA-60-1).

Deficiencies

None.

Inventory Control:

Description

Inventory reconciliation at the transfer area is performed as a method of leak detection. Inventory reconciliation includes accurate measurement of the deliveries into the tanks, use from the tanks, and the remaining inventory. The inventory of the tanks takes into account fluid expansion or contraction from fluid temperature changes.

Deficiencies

None.

Recordkeeping:

Description

This GSIP pulls together the necessary documents related to the 60-1B-LUT Transfer Area. These documents will be maintained as part of the GSIP for a period of three years.

Deficiencies

Future recordkeeping guidelines should apply to the entire transfer area system, including the transfer nozzles, couplings, foundation, platform, secondary containment, instrumentation, and piping. This documentation should be incorporated into this plan.

All inspections should be documented and include the following:

- When inspections were done,
- Who conducted inspection,
- What areas were inspected,
- What problems were found,

- Appropriate supervisor signatures,
- What steps were taken to correct problems, and
- Who was notified about any problems found.

See action Item #6 on page 3 of the Field Data Sheets.

Security:

Description

The TA-60 Fuel Farm is not fenced and there is no gate at the main entrance. The operating valves for the three transfer lines are locked during periods of non-use and the containment drainage operating valve is also locked during periods of non-use. Lighting in inadequate for this facility.

Deficiencies

There is no security fencing at this Fuel Farm. Adequate fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the main entrance to the site. Adequate lighting should be provided for the location.

See action Item #6 on page 3 of the Field Data Sheets.

4.5.2.5. LOCATION FIELD DATA SHEETS

The GSIP Field Data Sheets were used to record pertinent information and to document any action items that may by required. These sheets were used to organize information pertaining to storage capacities, types of materials stored, types of containment, and provide a record of all issues related to this GSIP location.

The following information is included:

- Storage Unit Descriptions,
- Secondary Containment Descriptions,
- Spill Controls and Spill Removal,
- Storm Water Considerations,
- Other Administrative Controls,
- Action Items, and
- GSIP Prioritization Estimate.

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GROUP SPCC IMPLEMENTATION PLAN FIELD - DATA SHEET -GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	60
2	Structure # (S) =	1B
3	Location Type (L) =	LUT
4	GSIP Location Identification # (T+S+L) =	60-1B-LUT

Storage Unit Descriptions

5	List type of storage unit:[1]	Loading, Unloading and Transfer (LUT)
6	List material stored in unit:[2]	Unleaded, Diesel & Kerosene Fuel is transfered
7	List associated Reportable Quantity (RQ):	N/A
8	List the CAS #:	NA Unlead./068476346 Diesel/008008206 Kerosene
9	List Capacity in gallons of Storage Unit **(CSU)**:	N/A (tanker trucks have a max 3,000 gallon capacity)
10	Describe piping associated with this location:	Aboveground ✓ Belowground ✓ No piping ☐

Secondary Containment Descriptions

11	What type of secondary containment?[3]	EDB, Earthen Berm and ADB, Asphaltic Berm
12	List capacity in gallons of secondary containment: **(SCC)**	440,000 Gallons
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	39,000
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ✓ NO ☐

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Soil erosion is visible on the earthen portion of the containment berm in the vicinity of the storage tanks.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 1

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ✓	NO ☐	If yes, when: July 1994

Action Item #2 *(Integrity Testing)* ***If answer on line 15 is No, describe as a deficiency refer to Chapter 4 of the SPCC Plan for requirements.***

None. Integrity testing results are available in the Past Inspection Forms Appendix of this report.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

16	Is there a method of level indication for the AST?	YES ☐	NO ✓	N/A ☐
17	Is there a liquid level alarm system for the AST?	YES ☐	NO ✓	N/A ☐

Action Item #3 *(Monitoring)* ***If answer on line 16 or 17 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.***

A visual tanker truck liquid level indicator, level alarm system or some type of monitoring device should be installed for the transfer area.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

18	Is spill control equipment available at this location?[4] 1) Sorbents (SRB) 2) Booms (BMM) 3)	YES √	NO ☐ **If yes, identify which types by using the GSIP Abbreviation List on Page 5.**

Action Item #4 *(Spill Control)* ***If answer on line 18 is No, describe as a deficiency.***

None. Spill control kits are available at the adjacent Motor Pool building, TA-60-1.

Date Deficiency Noted:	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 2

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) Evaporation (EVP) 2) Open Valve Discharge (OVD) 3) Sorbents (SRB)	YES ✓ NO ❑ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ✓ Unlocked ❑ No discharge valve ❑
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ❑ NO ✓
22	What is the distance to closest storm water culverts or catch basins (in feet)?	0 (catch basin in containment area)
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ❑ NO ✓
24	Name of canyon eventually receiving storm water or spill run-off:	Sandia Canyon

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

There are two stormwater catch basins located at the low point of the containment area near this transfer area. These drains connect into one pipe and discharge to Sandia Canyon when the lockable valve is opened.

Date Deficiency Noted:May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ❑ NO ✓
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES ✓ NO ❑
27	Is there a system of inventory control at this site?	YES ✓ NO ❑
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc., been implemented at this GSIP Location?	YES ❑ NO ✓
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ❑ NO ✓

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Three levels of inspections for Transfer Areas are required that include general operator observations, walk-around inspections and integrity testing. Adequate records should be kept of these inspections and integrity tests at the control office.

Adequate security fencing should be installed to enclose the complete tank farm and a lockable gate should be installed at the entrance to the site.

Adequate lighting should be installed at the site.

Date Deficiency Noted: May 5, 1994	Name and Signature:
Date Action Item Completed:	Name and Signature:

SPCC Form DS-1 Page 3

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:

Is this an oil storage location with a capacity greater than 660 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑	NO ✓
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ❑	NO ✓
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ✓	NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑	NO ✓

If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.

SECOND PRIORITY:

Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon a practicable. Skip the next section.

THIRD PRIORITY:

Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑	NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑	NO ❑

If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon a practicable.

Comments: In the space provided below, discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

There is a Spill Response Plan under the Utilities Operating Instructions (UOI) No. 66-20-055

There is an SPCC Plan under the Standard Practice Instructions (SPI) No. 12-04-015

This transfer area is located below the fuel storage tanks at the low-point of the containment area for 60-132-AST. Fuel tanker truck volumes are typically 3,000 gallons or less. Spills from leaking or disconnected hoses from tank trucks would be contained in the bermed containment area.

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

AST - Aboveground Storage Tank
CHM - Aboveground Chemical Storage Tank
PCT - Portable Containers (such as TUFF tank)
DRM - Drum Storage
LUT - Loading, Unloading and Transfer
TRN - Transformers
HYD - Hydraulic and Oil Containing Equipment
BAT - Battery Packs
MRX - Marx Generator
MIS - Miscellaneous or combined areas

2. Types of Materials Stored

If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

EDB - Earthen Diking or Berms
ERC - Earthen Redirection to other containment
ADB - Asphaltic Diking or Berms
ACU - Asphaltic Curbing
ASU - Asphaltic Sump (or drainage to sump)
ARC - Asphaltic Redirection to other containment
CDB - Concrete Diking or Berms
CCU - Concrete Curbing
CSU - Concrete Sump (or drainage to sump)
CRC - Concrete Redirection to other containment
MOD - Modular Secondary Containment Systems
PAL - Palletized Secondary Containment
OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

SRB - Sorbents (granular, fibrous, powders, etc.)
GEL - Gel Type Immobilization Agents
BMM - Booms
DCV - Drain Covers
NUT - Neutralization (pH adjust for acids or bases)
SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
DPN - Drip Pans
CPP - Cathodic Pipe Protection
OTR - Other Types (specify)

5. Methods of Storm Water Removal or Spill Removal

EVP - Evaporation (storm water)
VAC - Vacuum Truck Removal (off-site treatment)
SRB - Sorbents (oils and chemicals)
REC - Recovery for Reuse Methods
TRT - Treatment (on-site storm water treatment)
OTR - Other Types of Removal (specify)
OVD - Open Valve Discharge

5. APPENDICES

Appendix A contains copies of blank inspection checklists, integrity testing forms, secondary containment drainage forms and spill report forms.

Appendix B contains completed inspection forms and should be used as a file for future inspections.

A. BLANK FORMS

Checklists for Detailed Aboveground Storage Tank Inspections Based on API Standard 653 SPCC FORM CHK-1 is a checklist for tank components and auxiliary items that are considered for internal and external inspection of tanks. The checklist facilitates the recording of inspection findings.	
SPCC FORM CHK-1	AST In-Service Integrity Inspection Checklist

Checklist Forms for Walk-Around Inspections	
SPCC FORM CHK-3	Aboveground Tank and Associated Piping
SPCC FORM CHK-4	Oil or Chemical Drum Storage Area
SPCC FORM CHK-5	Oil or Chemical Drum Dispensing Station
SPCC FORM CHK-6	Transformers and Associated Secondary Containment
SPCC FORM CHK-7	Aboveground Ancillary Source and Associated Piping

Secondary Containment Drains and Drainage Activity	
SPCC FORM Drain-1	Record of Drainage from Secondary Containment Structures
SPCC FORM Drain-2	Decision Diagram for Secondary Containment Requirements for Indoor Storage or Use of Oil, Chemicals or Hazardous Materials

Spill Reporting Forms	
HS Form Number 9-4A	Spill Report
SPCC FORM Spill-1	Spill Coordinator's Spill Information Form

GSIP Field Data Sheets	
SPCC FORM DS-1 Page 1	GSIP Description and Action Items
SPCC FORM DS-1 Page 2	GSIP Action Items
SPCC FORM DS-1 Page 3	GSIP Action Items
SPCC FORM DS-1 Page 4	GSIP Prioritization and Impact Estimate
SPCC FORM DS-1 Page 5	GSIP Abbreviation List

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TANK IN-SERVICE INTEGRITY INSPECTION CHECKLIST

Based on API Standard 653

INSPECTOR SIGNATURE: _____ **DATE:** _____

1.1 FOUNDATION

- ☐ Measure foundation bottom elevation and check to see if level.

1.1.1 Concrete Ring

- ☐ Inspect for broken concrete, spalling and cracks, particularly under backup bars used in welding butt welded annular rings under the shell.
- ☐ Inspect drain openings in ring, back of water draw basins and top surface of ring for indications of bottom leakage.
- ☐ Inspect for cavities under foundation and vegetation against bottom of tank.
- ☐ Check that runoff rainwater from the shell drains away from tank.
- ☐ Check for settlement around perimeter of tank.

1.1.2 Asphalt

- ☐ Check for settling of tank into asphalt base that would direct runoff rain water under the tank instead of away from it.
- ☐ Look for area where leaching of oil has left rock filler exposed, which indicates hydrocarbon leakage.

1.1.3 Oiled Dirt or Sand

- ☐ Check for settlement into the base that would direct runoff rain water under the tank rather than away from it.

1.1.4 Rock

- ☐ Presence of crushed rock under the steel bottom usually results in severe underside corrosion. Make a note to do additional bottom plate examination (ultrasonic, hammer testing or turning of coupons) when the tank is out of service.

1.1.5 Site Drainage

- ☐ Check site for drainage away from the tank and associated piping and manifolds.
- ☐ Check operating condition of dike drains.

1.1.6 Housekeeping

- ☐ Inspect the area for buildup of trash, vegetation, and other inflammables buildup.

Foundation Inspection Notes:

1.2 SHELLS

1.2.1 External Visual Inspection

- ☐ Visually inspect for paint failures, pitting, and corrosion.
- ☐ Clean off the bottom angle area and inspect for corrosion and thinning on plate and weld.
- ☐ Inspect the bottom-to-foundation seal, if any.

Shell Inspection Notes:

1.3 SHELL APPURTENANCES

1.3.1 Manways and Nozzles

- ☐ Inspect for cracks or signs of leakage, on weld joints at nozzles, manways, and reinforcing plates. Inspect for shell plate dimpling around nozzles, caused by excessive pipe deflection. Inspect for flange leaks and leaks around bolts. Inspect sealing of insulation around manways and nozzles. Check for inadequate manway flange and cover thickness on mixer manways.

1.3.2 Tank Piping

- ☐ Inspect manifold piping, flanges, and valves for leaks. Inspect fire fighting system components. Check for anchored piping that would be hazardous to the tank shell or bottom connections during earth movement. Check for adequate thermal pressure relief of piping to the tank. Check operation of regulators for tanks with purge gas systems. Check sample connections for leaks and for proper valve operation. Check for damage and test the accuracy of temperature indicators. Check welds on shell-mounted davit clips above valves 6 inches and larger.

1.3.3 Auto Gauge System

- ☐ Inspect auto gauge tape guide and lower sheave of housing (floating swings) for leaks.
- ☐ Inspect auto gauge head for damage.
- ☐ Bump the checker on auto gauge head for proper movement of tap.
- ☐ Identify size and construction material of auto gauge tape guide (floating roof tanks).
- ☐ Compare actual product level to the reading on the auto gauge (maximum variation is 2 inches).
- ☐ Inspect condition of board and legibility of board-type auto gauges.
- ☐ Test freedom of movement of marker and float.

1.3.4 Shell-Mounted Sample Station

- ☐ Inspect sample lines for function of valves and plugging of lines, including drain or return to tank line.
- ☐ Check circulation pump for leaks and operating problems.
- ☐ Test bracing and supports of sample system lines and equipment.

1.3.5 Heater (Shell Manway Mounted)

- ☐ Inspect condensate drain for presence of oil indicating leakage.

1.3.6 Mixer

- ☐ Inspect for proper mounting flange and support.
- ☐ Inspect for leakage.
- ☐ Inspect condition of power lines and connections to mixer.

1.3.7 Swing Line: Winch Operation

- ☐ Raise, then lower the swing line with the winch, and check for cable tightness to confirm that swing line lowered properly.
- ☐ Check that the indicator moves in the proper direction: Floating swing line indicators show a lower level as cable is wound up on the winch. Non-floating swing line indicators show the opposite.

1.3.8 Swing Line: External Guide System

- ☐ Check for leaks at threaded and flanged joints.

1.3.9 Swing Line: Identify Ballast Varying Need

- ☐ Check for significant difference in stock specific gravity.

1.3.10 Swing Lines: Cable Material and Condition

- ☐ For non-stainless steel cable, check for corrosion over entire length.
- ☐ All cable: check for wear or fraying.

1.3.11 Swing Line: Product Sample Comparison

- ☐ Check for water or gravity differences that would indicate a leaking swing joint.

1.3.12 Swing Line: Target

- ☐ Target should indicate direction of swing opening (up or down) and height above bottom where suction will be lost with swing on bottom support.

Shell Appurtenances Inspection Notes:

1.4 ROOFS

1.4.1 Deck Plate Internal Corrosion

- ☐ For safety, before accessing the roof, check with ultrasonic instrument or lightly use a ball peen hammer to test the deck plate near the edge of the roof for thinning (Corrosion normally attacks the deck plate at the edge of a fixed roof and at the rafters in the center of the roof first.)

1.4.2 Deck Plate External Corrosion

- ☐ Visually inspect for paint failure, holes, pitting, and corrosion product on the roof deck.

1.4.3 Roof Deck Drainage

- ☐ Look for indication of standing water. (Significant sagging of roof deck indicates potential rafter failure.)

1.4.5 Gas Test: Internal Floating Roof

- ☐ Test for explosive gas on top of the internal floating roof. Readings could indicate a leaking roof, leaking seal system, or inadequate ventilation of the area above the internal floating roof.

1.4.6 Roof Insulation

- ☐ Visually inspect for cracks or leaks in the insulation weather coat where runoff rain water could penetrate the insulation.
- ☐ Inspect for wet insulation under the weather coat.
- ☐ Remove small test sections of insulation and check roof deck for corrosion and holes near the edge of the insulated area.

Roof Inspection Notes:

1.5 ROOF APPURTENANCES

1.5.1 Sample Hatch

- ☐ Inspect condition and functioning of sample hatch cover.
- ☐ On tanks governed by Air Quality Monitoring District rules, check for the condition of seal inside hatch cover.
- ☐ Check for corrosion and plugging on thief and gauge hatch cover.
- ☐ Where sample hatch is used to reel stock level gauge, check for marker and tab stating hold off distance.
- ☐ Check for reinforcing pad where sample hatch pipe penetrates the roof deck.
- ☐ Test operation of system.
- ☐ On ultra clean stocks such as JP4, check for presence and condition of protective coating or liner inside sample hatch (preventing rust from pipe getting into sample).

1.5.2 Gauge Well

- ☐ Inspect visible portion of the gauge well for thinning, size of slots, and cover condition.
- ☐ Check for a hold off distance marker and tab with hold off distance (legible).
- ☐ If accessible, check the distance from the gauge well pipe to the tank shell at different levels.
- ☐ If tank has a gauge well washer, check valve for leakage and for presence of a bull plug or blind flange.

1.5.3 Fixed Roof Scaffold Support

- ☐ Inspect scaffold support for corrosion, wear, and structural soundness.

1.5.4 Auto Gauge: Inspection Hatch and Guides (Fixed Roof)

- ☐ Check the hatch for corrosion and missing bolts.
- ☐ Look for corrosion on the tape guide's and float guide's wire anchors.

1.5.5 Auto Gauge: Float Well Cover

- ☐ Inspect for corrosion.
- ☐ Check tape cable for wear or fraying caused by rubbing on the cover.

1.5.6 Sample Hatch (Internal Floating Roof)

- ☐ Check overall conditions.
- ☐ When equipped with a fabric seal, check for automatic sealing after sampling.
- ☐ When equipped with a recoil reel opening device, check for proper operation.

1.5.7 Roof-Mounted Vents (Internal Floating Roof)

- ☐ Check condition of screens, locking and pivot pins.

1.5.8 Gauging Platform Drip Ring

- ☐ On fixed roof tanks with drip rings under the gauging platform or sampling area, inspect for plugged drain return to the tank.

1.5.9 Emergency Roof Drains

- ☐ Inspect vapor plugs for emergency drain: that seal fabric discs are slightly smaller than the pipe ID and that fabric seal is above the liquid level.

1.5.10 Removable Roof Leg Racks

- ☐ Check for leg racks on roof.

1.5.11 Vacuum Breakers

- ☐ Report size, numbers and type of vacuum breakers. Inspect vacuum breakers. If high legs are set, check for setting of mechanical vacuum breaker in high leg position.

1.5.12 Rim Vents

- ☐ Check condition of the screen on the rim vent cover.
- ☐ Check for plating off or removal of rim vents where jurisdictional rules do not permit removal.

1.5.13 Pontoon Inspection Hatches

- ☐ Open pontoon inspection hatch covers and visually check inside for pontoon leakage.
- ☐ Test for explosive gas (an indicator of vapor space leaks).
- ☐ If pontoon hatches are equipped with locked down covers, check for vent tubes. Check that vent tubes are not plugged up. Inspect lock down devices for condition and operation.

Roof Appurtenances Inspection Notes:

1.6 ACCESSWAYS

1.6.1 Handrails

- ☐ Identify and report type (steel pipe, galvanized pipe square tube, angle) and size of handrails. Inspect for pitting and holes, paint failure.
- ☐ Inspect attachment welds.
- ☐ Identify cold joints and sharp edges. Inspect the handrails and midrails.
- ☐ Inspect safety drop bar (or safety chain) for corrosion, functioning, and length.
- ☐ Inspect the handrail between the rolling ladder and the gauging platform for a hazardous opening when the floating roof is at its lowest level.

1.6.2 Platform Frame

- ☐ Inspect frame for corrosion and paint failure.
- ☐ Inspect the attachment of frame to supports and supports to tank: for corrosion and weld failure.
- ☐ Check reinforcing pads where supports are attached to shell or roof.
- ☐ Inspect the surface that deck plate or grating rests on, for thinning and holes.
- ☐ Check that flat-surface to flat-surface junctures are seal welded.

1.6.3 Deck Plate and Grating

- ☐ Inspect deck plate for corrosion-caused thinning or holes (not drain holes) and paint failure.
- ☐ Inspect plate-to-frame weld for rust scale buildup.
- ☐ Inspect grating for corrosion-caused thinning of bars and failure of welds.
- ☐ Check grating tie down clips. Where grating has been retrofitted to replace plate, measure the rise of the step below and above the grating surface and compare with other risers on the stairway.

1.6.4 Stairway Stringers

- ☐ Inspect spiral stairway stringers for corrosion, paint failure, and weld failure. Inspect attachment of stairway treads to stringer.
- ☐ Inspect stairway supports to shell welds and reinforcing pads.
- ☐ Inspect steel support attachment to concrete base for corrosion.

1.6.5 Rolling Ladder

- ☐ Inspect rolling ladder stringers for corrosion.
- ☐ Identify and inspect ladder fixed rungs (square bar, round bar, angles) for weld attachment to stringers and corrosion, particularly where angle rungs are welded to stringers.
- ☐ Check for wear and corrosion where rolling ladder attaches to gauging platform.
- ☐ Inspect pivot bar for wear and secureness.
- ☐ Inspect operation of self-leveling stairway treads.
- ☐ Inspect for corrosion and wear on moving parts.
- ☐ Inspect rolling ladder wheels for freedom of movement, flat spots, and wear on axle.
- ☐ Inspect alignment of rolling ladder with roof rack.
- ☐ Inspect top surface of rolling ladder track for wear by wheels to assure at least 18 inches of unworn track (track long enough).
- ☐ Inspect rolling ladder track welds for corrosion.
- ☐ Inspect track supports on roof for reinforcing pads seal welded to deck plate.
- ☐ Check by dimensioning, the maximum angle of the rolling ladder when the roof is on low legs. Maximum angle: _____
- ☐ If rolling ladder track extends to within five feet of the edge of the roof on the far side, check for a handrail on the top of the shell.

Accessways Inspection Notes:

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WALK-AROUND INSPECTION FORM

ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =		Inspection date:	
Structure # (S) =		Inspector:	
Location Type (L) =		Tank temperature:	
GSIP Location Identification # (T+S+L) =		Tank contents:	
Water content (for oil tanks):		Tank inventory (gauge or gallons):	
Adequate lighting:	Yes ☐ No ☐	Is facility fenced?	Yes ☐ No ☐

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	
Tank contents labels:	Adequate ☐ Inadequate ☐
Grounding wires:	Adequate ☐ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ☐
Liquid level alarm system:	Adequate ☐ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ☐
Flanges, nozzles and piping:	Good ☐ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ☐
Transfer pump:	Good ☐ Poor ☐ N/A ☐

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, cracks, leaks, gopher holes, weed growth, etc.):	
Storm water discharge valve:	Locked ☐ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ☐
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ☐
Oil accumulation in dike or collection sump:	Yes ☐ No ☐

Comments:

Items requiring corrective actions:

Corrective actions taken (give dates):

Inspectors signature:

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WALK-AROUND INSPECTION FORM

OIL OR CHEMICAL DRUM STORAGE AREA

General Site Information

Technical Area (T) =		Inspection date:	
Structure # (S) =		Inspector:	
Location Type (L) =		Room number if indoors:	
GSIP Location Identification # (T+S+L) =		Area description:	
Adequate lighting:	Yes ☐ No ☐	Is facility fenced?	Yes ☐ No ☐

Inventory

Contents:	No. of Drums:	Contents:	No. of Drums:

Site condition

Describe general condition (cleanliness, signs of leaks, condition of drums, condition of secondary containment):	
Access around drums:	Adequate ☐ Inadequate ☐
Leaking drums:	Yes ☐ No ☐
Rusting drums:	Yes ☐ No ☐
Bulging drums:	Yes ☐ No ☐
Proper labeling:	Yes ☐ No ☐
Water accumulation (around or on drums):	Yes ☐ No ☐
Spill kit or sorbents on hand (inventory, condition):	
Spill booms (inventory, condition):	
Fire extinguishers:	Yes ☐ No ☐
Support rack condition (horizontal storage):	Good ☐ Poor ☐ N/A ☐
Describe weather protection:	

Comments:

Items requiring corrective action:

Corrective action taken (give dates):

Inspectors signature:

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WALK-AROUND INSPECTION FORM

OIL OR CHEMICAL DRUM DISPENSING STATION

General Site Information

Technical Area (T) =		Inspection date:	
Structure # (S) =		Inspector:	
Location Type (L) =		Room number if indoors:	
GSIP location identification # (T+S+L) =		Area description:	
Adequate lighting:	Yes ☐ No ☐	Is facility fenced?	Yes ☐ No ☐

Inventory:

DRUMS TAPPED FOR DISPENSING:		DRUMS STORED:	
Contents:	No. of Drums:	Contents:	No. of Drums:
No. of Empty Drums:			

Site Condition

Describe general condition (cleanliness, signs of leaks, condition of drums, condition of secondary containment):	
Access around drums:	Adequate ☐ Inadequate ☐
Leaking drums:	Yes ☐ No ☐
Rusting drums:	Yes ☐ No ☐
Bulging drums:	Yes ☐ No ☐
Proper labeling:	Yes ☐ No ☐
Condition of labels:	Good ☐ Poor ☐ N/A ☐
Water accumulation (around or on drums):	Yes ☐ No ☐
Rack grounding:	Yes ☐ No ☐
Drum grounding:	Yes ☐ No ☐
Bond wire available:	Yes ☐ No ☐
Drum flame arrestors/vents:	Yes ☐ No ☐
Describe spigot condition (leaks, etc.):	
Hand pump condition:	Good ☐ Poor ☐ N/A ☐
Drip pans (in place, clean, accumulation of liquids):	
Spill kit or sorbents on hand (inventory, condition):	
Spill booms (inventory, condition):	
Fire extinguishers:	Yes ☐ No ☐
Support rack condition (horizontal storage):	Good ☐ Poor ☐ N/A ☐
Describe weather protection:	
Room ventilation:	Good ☐ Poor ☐ N/A ☐

Are there any paths for spills to reach the environment (open drains, sewers, etc.):
Items requiring corrective action:
Corrective action taken (give dates):
Inspectors Signature:

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WALK-AROUND INSPECTION FORM

TRANSFORMERS AND ASSOCIATED SECONDARY CONTAINMENT

General Site Information

Technical Area (T) =		Inspection date:	
Structure # (S) =		Inspector:	
Location Type (L) =		Transformer temperature:	
GSIP Location Identification # (T+S+L) =		Inventory volume (gauge or gallons):	
Transformer contents:		High voltage Rating	
Adequate lighting:	Yes ☐ No ☐	Is facility fenced?	Yes ☐ No ☐

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	
Describe condition of content labels:	
Grounding wires:	Adequate ☐ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ☐
Other items of concern:	

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, cracks, leaks, gopher holes, weed growth, etc.):	
Storm water discharge valve:	Locked ☐ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below)	Yes ☐ No ☐
Oil accumulation in dike or collection sump:	Yes ☐ No ☐

Comments:

Items requiring corrective actions:

Corrective actions taken (give dates):

Inspectors signature:

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WALK-AROUND INSPECTION FORM
ABOVEGROUND ANCILLARY SOURCE AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =		Inspection date:	
Structure # (S) =		Inspector:	
Location Type (L) =		Equipment temperature:	
GSIP Location Identification # (T+S+L) =		Equipment contents:	
Water content (for oil tanks):		Equipment inventory (gauge or gallons):	
Adequate lighting:	Yes ☐ No ☐	Is facility fenced?	Yes ☐ No ☐

Equipment Condition

Describe general condition (signs of rust, leaking or deterioration):	
Equipment contents labels:	Adequate ☐ Inadequate ☐
Grounding wires:	Adequate ☐ Inadequate ☐ N/A ☐
Level gauge:	Adequate ☐ Inadequate ☐
Liquid level alarm system:	Adequate ☐ Inadequate ☐ N/A ☐
Foundation seal:	Good ☐ Poor ☐ N/A ☐
Flanges, nozzles and piping:	Good ☐ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ☐
Transfer pump:	Good ☐ Poor ☐ N/A ☐

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, cracks, leaks, weed growth, etc.):	
Storm water discharge valve:	Locked ☐ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ☐
Oil accumulation in dike or collection sump:	Yes ☐ No ☐ No liner ☐
Unique characteristics of this type of containment:	

Comments:

Items requiring corrective actions:

Corrective actions taken (give dates):

Inspectors signature:

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Record of Drainage from Secondary Containment Structures

Complete a separate form each time a secondary containment area is drained.
See back of form for Information.

SPCC Location

Technical Area # = _____ (T) (Use 99 for non-TA assigned areas)
Structure # = _____ (S) (Use unique number associated with structure)
Location Type ID = _____ (L) (Use GSIP location type from Facility Site Map)
Identification # = T_____S_____L_____

Facility Type:

Type of Storage Used:

- Aboveground storage tank ☐
- Transformer ☐
- Belowground storage tank ☐
- Oil Containing Equipment ☐
- Drum Storage Area ☐
- Other: _____ ☐

Materials Stored in Area: _____

Storage Equipment Condition Inspection:

Does Storage Equipment Show any Signs of Leaks, Seepage, Incipient Failure, Deterioration, etc.?

Valves?	YES ☐	NO ☐	NA ☐
Connections?	YES ☐	NO ☐	NA ☐
Tanks, Drums...?	YES ☐	NO ☐	NA ☐
Piping, Hoses...?	YES ☐	NO ☐	NA ☐

Does Secondary Containment Show any Signs of Leaks, Deterioration, etc.? YES ☐ NO ☐

Secondary Containment Contents Description:

Does Liquid in Secondary Containment have any of these Characteristics? (Elaborate below)

Any reason to believe that liquid contains any contaminant?	YES ☐	NO ☐
Does liquid surface appear to have a sheen or film?	YES ☐	NO ☐
Are there any odors associated with liquid?	YES ☐	NO ☐
Any reason to believe that liquid contains anything other than storm water or melted snow?	YES ☐	NO ☐

If YES to any above question, please explain: _____

Secondary Containment Contents Disposal Description:

Describe Where the Accumulated Liquid is to be Disposed: _____

Describe Method to be used to Dispose or Drain Accumulated Liquid: _____

Itemize any Analyses of Liquid: _____

Operator In Charge: _____	Date: _____
Responsible Spill Coordinator: _____	Date: _____
ESH-18 Representative Approval:	Date:

Statement of SPCC Secondary Containment Drainage Form Usage Intent:
Organizations and individuals should recognize that they own their storage equipment and the contents of that equipment. Any non-permitted discharge to the environment is not legal since it might exceed the terms of the Laboratory's NPDES Permit or other applicable regulation. **Contact ESH-18 for inspection and direction for any contemplated discharge action.** The person conducting the drainage is responsible for insuring that it is done in an environmentally and personally safe manner. The operator must remain at the site and observe the process until completion. After the operation is completed, they should verify that any outlets from the secondary containment are closed and locked if so provided. Submittal of this form to ESH-18 (Mike Alexander, MS-K497) should be as soon as practicable.

For any questions about the completion of this form, call the Environmental Protection Group (ESH-18) @ 665-0453.

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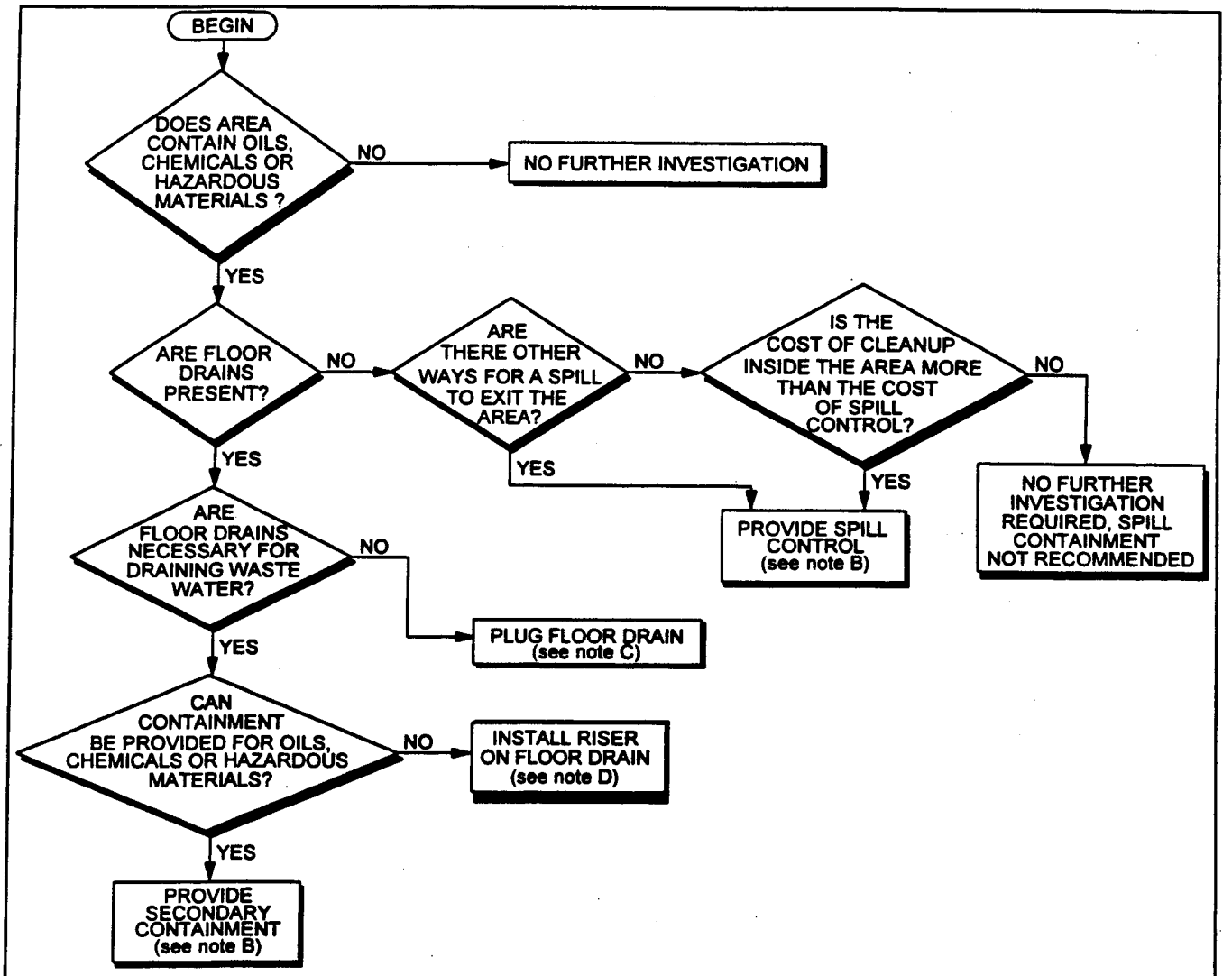
Decision Diagram for Secondary Containment Requirements for Indoor Storage or Use of Oil, Chemicals or Hazardous Materials



TA= _____ Building= _____ Location= _____ Room= _____

INSPECTOR: _____

Complete this decision diagram for each area or drain encountered by circling action taken, retain a copy for GSIP records section and forward a copy to ESH-18, MS K497

NOTE A: Hazardous Chemicals are EPA Regulated Chemicals (see Appendix D).

NOTE B: Containment can consist of Secondary Containment Cabinets, Pallets or Containment Structures such as Curbing that will Prevent Migration of Spillage.

NOTE C: Floor Drains should be Plugged Permanently.

NOTE D: Install Riser in Floor Drain to Allow Waste Water to Drain and Still Provide Containment in Case of Spill.

SPCC FORM Drain-2

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SPILL REPORT

Spill Coordinator	Telephone	Mail Stop	Division	Group

SPILL INFORMATION

Date of Spill	Time of Spill	Location

Amount of Spilled Material	Type of Spilled Material

Basis of Estimate ❑ Inventory ❑ Visual Estimate ❑ Recovered Volume ❑ Other

Cause ***(Describe events leading up to the spill, if applicable.)***

Injuries or Exposure? ❑ Yes ❑ No *(If yes, please describe.)*

Did evacuation occur?	❑ Yes ❑ No	**Were facilities or equipment damaged?**	❑ Yes ❑ No
Did fire/explosion occur?	❑ Yes ❑ No	**Was there a potential for fire/explosion?**	❑ Yes ❑ No

Did the spill enter sewer drains, streams, or stream beds? ❑ Yes ❑ No *(If yes, give location and ultimate drainage.)*

Who discovered the Spill?

SPILL INFORMATION

Describe the spill response, in chronological order. Include a call-out of response personnel, steps taken to contain the spill, and steps taken to clean it up. Also describe spill control equipment used.

HS Form Number 9-4A (3/93)

Send original to ESH-18, MS K497

Estimate the quantity of waste generated by the spill cleanup procedures, how that waste is packaged, and the current disposition of wastes.	
Describe any sampling performed during spill cleanup and attach analytical results to this form.	
Describe current status of the spill site and the need for further cleanup or monitoring activities.	
	Cost Center
	Program Code
Describe actions taken to prevent recurrence of such a spill.	

ADDITIONAL INFORMATION

Spill Coordinator *(Signature)*	**Date**

REGULATORY CONCERNS

(To Be Completed BY ESH-18)	
ESH-18 *(Signature)*	**Date**

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SPILL COORDINATOR'S SPILL INFORMATION FORM

Spill Coordinator	Telephone	Mail Stop	Division	Group
Responsible Facility/User Group				
Contact Person	Telephone	Mail Stop	Pager#	

Spill Location	Date of Spill	Time of Spill	Date Discovered	Time Discovered

Date Spill Stopped	Time Spill Stopped	Method used to Stop Spill

Actions taken to Mitigate Damage

Nearest Water Course Affected? ☐ Yes ☐ No ☐ NA *(If yes, please describe.)*

Source and Cause of Spill *(pipeline, tank, truck, overflow, etc.)*

Materials Spilled

Estimated Amount of Material Spilled

Cleanup Started? ☐ Yes ☐ No	Date Started	Time Started	
Cleanup Finished? ☐ Yes ☐ No	Date Finished	Time Finished	

Cleanup Method

Weather Conditions

Comments

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GROUP SPCC IMPLEMENTATION PLAN
FIELD - DATA SHEET
-GSIP-

Date:	SC Name and Signature:

Superscripts refer to SPCC DS-1 Page-5, GSIP Abbreviation List

1	Technical Area (T) =	
2	Structure # (S) =	
3	Location Type (L) =	
4	GSIP Location Identification # (T+S+L) =	

Storage Unit Descriptions

5	List type of storage unit:[1]	
6	List material stored in unit:[2]	
7	List associated Reportable Quantity (RQ):	
8	List the CAS #:	
9	List Capacity in gallons of Storage Unit **(CSU)**:	
10	Describe piping associated with this location:	Aboveground ☐ Belowground ☐ No piping

Secondary Containment Descriptions

11	What type of secondary containment?[3]	
12	List capacity in gallons of secondary containment: **(SCC)**	
13	What is the drainage area (ft^2) that can contribute to run-on into the secondary containment **(DA)**?	
14	Is the (SCC) > (CSU) + 1.875 x (DA)? Note: 1.875 is the storm water conversion factor for a 25-yr/24-hr rainfall:	YES ☐ NO ☐

Action Item #1 *(Secondary Containment)* ***If answer on line 14 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

Spill Controls & Spill Removal

15	Has the system been integrity tested?	YES ☐ NO ☐ If yes, when:

Action Item #2 *(Integrity Testing)* ***If answer on line 15 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

16	Is there a method of level indication for the AST?	YES ☐ NO ☐ N/A ☐
17	Is there a liquid level alarm system for the AST?	YES ☐ NO ☐ N/A ☐

Action Item #3 *(Monitoring)* ***If answer on line 16 or 17 is No, describe as a deficiency and refer to Chapter 4 of the SPCC Plan for requirements. Check N/A if location is not an aboveground storage tank.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

18	Is spill control equipment available at this location?[4] 1) 2) 3)	YES ☐ NO ☐ **If yes, identify which types by using the GSIP Abbreviation List on Page 5.**

Action Item #4 *(Spill Control)* ***If answer on line 18 is No, describe as a deficiency.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

Storm Water Considerations

19	Are methods for removing storm water or spills from secondary containment areas available?[5] 1) 2) 3)	YES ☐ NO ☐ If yes, identify which methods by using the GSIP Abbreviation List on Page 5.
20	Is there a storm water discharge valve and lock?	Locked ☐ Unlocked ☐ No discharge valve ☐
21	Are best management practices such as covering, run-on diversion, etc. being used?	YES ☐ NO ☐
22	What is the distance to closest storm water culverts or catch basins (in feet)?	
23	Would a spill be isolated from these storm water culverts or catch basins?	YES ☐ NO ☐
24	Name of canyon eventually receiving storm water or spill run-off:	

Action Item #5 *(Storm Water)* ***If answer on lines 19 or 23 is No, describe as a deficiency. If line 20 is answered "unlocked" or "no discharge valve", describe as a deficiency. If answer on line 21 is No, explain why.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

Other Administrative Controls

25	Is there an Inspection & Maintenance Program in place at this GSIP Location?	YES ☐ NO ☐
26	Are aboveground storage tanks, transfer areas, drums or other ancillary sources properly labeled?	YES ☐ NO ☐
27	Is there a system of inventory control at this site?	YES ☐ NO ☐
28	Has an appropriate recordkeeping system (documenting inventory controls, past inspections, testing, etc.), been implemented at this GSIP Location?	YES ☐ NO ☐
29	Is security at this location adequate? (e.g., lighting, fencing, locked gates and valves)	YES ☐ NO ☐

Action Item #6 *(Administrative Controls)* ***If answer on lines 25 through 29 is No, describe as a deficiency. Refer to Chapter 4 of SPCC Plan for requirements.***

Date Deficiency Noted:	SC Name and Signature:
Date Action Item Completed:	SC Name and Signature:

GSIP PRIORITIZATION and IMPACT ESTIMATE

FIRST PRIORITY:	
Is this an oil storage location with a capacity greater than 660 gallons?	YES ❑ NO ❑
Is this a chemical or waste storage location with a capacity greater than 220 gallons?	YES ❑ NO ❑
Is this a chemical or waste storage location in which any individual hazardous chemical RQ is exceeded?	YES ❑ NO ❑
Is this a storage location in close proximity to a canyon rim, a storm water discharge point, floor drains, etc.?	YES ❑ NO ❑
Could an oil or chemical spill at this location enter a collection system for an NPDES permitted outfall?	YES ❑ NO ❑
If YES on any question above, the area should be considered first priority. Action items listed above should be addressed immediately. Skip next two sections.	

SECOND PRIORITY:	
Is this an oil storage location with a capacity greater than 220 gallons?	YES ❑ NO ❑
Is this a chemical or waste storage location with a capacity greater than 55 gallons?	YES ❑ NO ❑
If YES on either question above, the area should be considered second priority. Action items listed above should be addressed within 6 months or as soon as practicable. Skip the next section.	

THIRD PRIORITY:	
Is this an oil storage location with a capacity between zero and 220 gallons?	YES ❑ NO ❑
Is this a chemical or waste storage area with a capacity between zero and 55 gallons?	YES ❑ NO ❑
If YES on either question above, the area should be considered third priority. Action items listed above should be addressed as soon as practicable.	

Comments: In the space provided below, discuss any additional concerns related to the description of the Storage Unit, Secondary Containment, Spill Controls & Removal, Storm Water Considerations, Administrative Controls and GSIP Prioritization.

GSIP ABBREVIATION LIST

NOTES: CHOICES INCLUDE:

1. Types of Storage Units

AST - Aboveground Storage Tank
CHM - Aboveground Chemical Storage Tank
PCT - Portable Containers (such as TUFF tank)
DRM - Drum Storage
LUT - Loading, Unloading and Transfer
TRN - Transformers
HYD - Hydraulic and Oil Containing Equipment
BAT - Battery Packs
MRX - Marx Generators
MIS - Miscellaneous or combined areas

2. Types of Materials Stored

If oil, grease or fuel indicate as such. If chemicals in drums, use common chemical name with CAS#. Use separate sheet if list of chemicals is long. If in small containers, list as general chemical storage.

3. Types of Secondary Containment

EDB - Earthen Diking or Berms
ERC - Earthen Redirection to other containment
ADB - Asphaltic Diking or Berms
ACU - Asphaltic Curbing
ASU - Asphaltic Sump (or drainage to sump)
ARC - Asphaltic Redirection to other containment
CDB - Concrete Diking or Berms
CCU - Concrete Curbing
CSU - Concrete Sump (or drainage to sump)
CRC - Concrete Redirection to other containment
MOD - Modular Secondary Containment Systems
PAL - Palletized Secondary Containment
OTR - Other Types of Secondary Containment (specify)

4. Types of Spill Control Equipment

SRB - Sorbents (granular, fibrous, powders, etc.)
GEL - Gel Type Immobilization Agents
DCV - Drain Covers
NUT - Neutralization (pH adjust for acids or bases)
SPC - Specialized Control Kits (Hg, HF, Strong Oxidizers, etc.)
DPN - Drip Pans
CPP - Cathodic Pipe Protection
OTR - Other Types (specify)

5. Methods of Storm Water Removal or Spill Removal

EVP - Evaporation (storm water)
VAC - Vacuum Truck Removal (off-site treatment)
SRB - Sorbents (oils and chemicals)
REC - Recovery for Reuse Methods
TRT - Treatment (on-site storm water treatment)
OTR - Other Types of Removal (specify)
OVD - Open Valve Discharge

B. PAST INSPECTION FORMS

Type of Inspection	Date of Inspection	Who performed Inspection	GSIP Location	Deficiencies Noted
Walk Around Inspection	08/10/93	Jim Dick/Joe Herrera JCI	60-132-AST 60-133-AST 60-134-AST 60-135-AST 60-136-AST 60-1A-LUT 60-1B-LUT	Ponding of stormwater present east of the ASTs in the containment area.
Walk Around Inspection	05/04/94	Santa Fe Engineering	60-132-AST 60-133-AST 60-134-AST 60-135-AST 60-136-AST 60-1B-LUT	Corrosion is present on the storage tanks in the form of peeling paint and rust. Stormwater erosion of the earthen portion of the containment berm. No security fencing or lighting for the site. Stormwater ponding in the containment area covers a portion of the ingress and egress road.
Walk Around Inspection	05/04/94	Santa Fe Engineering	60-1A-LUT	Inadequate secondary containment

Use this sheet to track your inspection history. After completing the inspection, place a copy in this Appendix for future reference.

Type of Inspection	Date of Inspection	Who performed Inspection	GSIP Location	Deficiencies Noted

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WALK-AROUND INSPECTION FORM
ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	132	Inspector:	M. Wendt/SFE
Location Type (L) =	AST	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-132-AST	Tank contents:	Unleaded Gasoline
Water content (for oil tanks):	Minor Condensate	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	Tank painted coating is peeling and rust is present.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ✓ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ✓ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	Stormwater erosion of the earthen containment is visible. Stormwater accumulation in the containment area at the transfer area ingress & egress road.
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
Erosion of the earthen portion of the containment berm was visible in the vicinity of the storage tank.
Stormwater ponding (approx. 12 inches deep) was present in the containment area at the ingress and egress road at transfer station 60-1B-LUT.
No visual liquid level gauge on the tank. Liquid level is monitored electronically by JCI Environmental.

Items requiring corrective actions:
Erosion protection for the earthen containment berm is recommended.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

SPCC Form CHK-3 (Rev. 3)

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WALK-AROUND INSPECTION FORM
ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	133	Inspector:	M. Wendt/SFE
Location Type (L) =	AST	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-133-AST	Tank contents:	Unleaded Gasoline
Water content (for oil tanks):	Minor Condensate	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	Tank painted coating is peeling and rust is present.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ✓ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ✓ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	Stormwater erosion of the earthen containment is visible. Stormwater accumulation in the containment area at the transfer area ingress & egress road.
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
Erosion of the earthen portion of the containment berm was visible in the vicinity of the storage tank.
Stormwater ponding (approx. 12 inches deep) was present in the containment area at the ingress and egress road at transfer station 60-1B-LUT.
No visual liquid level gauge on the tank. Liquid level is monitored electronically by JCI Environmental.

Items requiring corrective actions:
Erosion protection of the earthen containment berm is recommended.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

SPCC Form CHK-3 (Rev. 3)

Los Alamos

Los Alamos National Laboratory

Los Alamos, New Mexico 87545

WALK-AROUND INSPECTION FORM

ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	134	Inspector:	M. Wendt/SFE
Location Type (L) =	AST	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-134-AST	Tank contents:	Unleaded Gasoline
Water content (for oil tanks):	Minor Condensate	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	Tank painted coating is peeling and rust is present.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ✓ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ✓ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	Stormwater erosion of the earthen containment is visible. Stormwater accumulation in the containment area at the transfer area ingress & egress road.
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
Erosion of the earthen portion of the containment berm was visible in the vicinity of the storage tank.
Stormwater ponding (approx. 12 inches deep) was present in the containment area at the ingress and egress road at transfer station 60-1B-LUT.
No visual liquid level gauge on the tank. Liquid level is monitored electronically by JCI Environmental.

Items requiring corrective actions:
Erosion protection of the earthen containment berm is recommended.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

Los Alamos

Los Alamos National Laboratory

Los Alamos, New Mexico 87545

WALK-AROUND INSPECTION FORM

ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	135	Inspector:	M. Wendt/SFE
Location Type (L) =	AST	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-135-AST	Tank contents:	Diesel Fuel Oil No. 2-D
Water content (for oil tanks):	Minor Condensate	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	Tank painted coating is peeling and rust is present.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ✓ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ✓ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	Stormwater erosion of the earthen containment is visible. Stormwater accumulation in the containment area at the transfer area ingress & egress road.
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
Erosion of the earthen portion of the containment berm was visible in the vicinity of the storage tank.
Stormwater ponding (approx. 12 inches deep) was present in the containment area at the ingress and egress road at transfer station 60-1B-LUT.
No visual liquid level gauge on the tank. Liquid level is monitored electronically by JCI Environmental.

Items requiring corrective actions:
Erosion protection for the earthen containment berm is recommended.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

WALK-AROUND INSPECTION FORM
ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	136	Inspector:	M. Wendt/SFE
Location Type (L) =	AST	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-136-AST	Tank contents:	Kerosene Fuel
Water content (for oil tanks):	Minor Condensate	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	Tank painted coating is peeling and rust is present.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ✓ Inadequate ☐
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ✓ Inadequate ☐
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	Stormwater erosion of the earthen containment is visible. Stormwater accumulation in the containment area at the transfer area ingress & egress road.
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
Erosion of the earthen portion of the containment berm was visible in the vicinity of the storage tank.
Stormwater ponding (approx. 12 inches deep) was present in the containment area at the ingress and egress road at transfer station 60-1B-LUT.
No visual liquid level gauge on the tank. Liquid level is monitored electronically by JCI Environmental.

Items requiring corrective actions:
Erosion protection for the earthen containment berm is recommended.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

WALK-AROUND INSPECTION FORM
ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	1A	Inspector:	M. Wendt/SFE
Location Type (L) =	LUT	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-1A-LUT	Tank contents:	N/A
Water content (for oil tanks):	N/A	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	This transfer area is in good condition.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ☐ Inadequate ☐ N/A ✓
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ☐ Inadequate ✓
Foundation seal:	Good ✓ Poor ☐ N/A ☐
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ☐ Poor ☐ N/A ✓
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	The transfer area does not have any secondary containment. A fuel spill would flow to the south & west into a stormwater drainage channel.
Storm water discharge valve:	Locked ☐ Unlocked ☐ No valve ✓
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
No leakage observed.
No secondary containment.

Items requiring corrective actions:
A secondary containment berm should be constructed around the transfer area.
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

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Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

WALK-AROUND INSPECTION FORM
ABOVEGROUND TANK AND ASSOCIATED PIPING

General Site Information

Technical Area (T) =	60	Inspection date:	05/04/94
Structure # (S) =	1B	Inspector:	M. Wendt/SFE
Location Type (L) =	LUT	Tank temperature:	N/A
GSIP Location Identification # (T+S+L) =	60-1B-LUT	Tank contents:	N/A
Water content (for oil tanks):	N/A	Tank inventory (gauge or gallons):	N/A
Adequate lighting:	Yes ☐ No ✓	Is facility fenced?	Yes ☐ No ✓

Storage Unit Condition

Describe general condition (signs of rust, leaking or deterioration):	This transfer area is in good condition.
Tank contents labels:	Adequate ✓ Inadequate ☐
Grounding wires:	Adequate ☐ Inadequate ☐ N/A ✓
Level gauge:	Adequate ☐ Inadequate ✓
Liquid level alarm system:	Adequate ☐ Inadequate ✓
Foundation seal:	Good ☐ Poor ☐ N/A ✓
Flanges, nozzles and piping:	Good ✓ Poor ☐ N/A ☐
Ladders or stairs:	Good ✓ Poor ☐ N/A ☐
Transfer pump:	Good ☐ Poor ☐ N/A ✓

Secondary Containment Condition

Describe general condition (storm water accumulation, presence of oil, signs of erosion, crack,. leaks, gopher holes, weed growth, etc.):	The transfer area is located on a platform inside of the containment area at the lowest point. Stormwater accumulation is present (approx. 12 inches deep).
Storm water discharge valve:	Locked ✓ Unlocked ☐ No valve ☐
Is there a Sump? (if yes, describe in comments section below):	Yes ☐ No ✓
Containment liner (for earthen berms):	Good ☐ Poor ☐ No liner ✓
Oil accumulation in dike or collection sump:	Yes ☐ No ✓

Comments:
No leakage observed.

Items requiring corrective actions:
Adequate security fencing and lighting should be installed at the site.

Corrective actions taken (give dates):

Inspectors signature: Mark Wendt

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BENCHMARK
ENVIRONMENTAL CORPORATION

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To MARK WENDT	From DK GEORGIEFF
Co. SANTA FE ENG	Co. JCI
Dept. ENV	Phone # 667-0104
Fax # 983-5608	Fax # 665-0915

August 12, 1994

Project No. 5019.06
Subcontract No. 9-XV2-Q2747
Document No. L-5364

Mr. Jeff Carmichael
Los Alamos National Laboratory
P.O. Box 1663, MS-K490
Los Alamos, New Mexico 87545

Underground Storage Tank and Piping Testing Final Report

Dear Mr. Carmichael:

The enclosed final report entitled "Underground Storage Tank and Piping Testing Performed at Los Alamos National Laboratory" documents that all underground storage tanks and piping systems passed integrity testing performed in June and July of 1994 using the Tracer Tight® method. The following is a summary of our findings.

System	Tank	Line
TA-2-1, Diesel Tank	Pass	Pass
TA-3, SM-36-2, Unleaded Fuel Tank Pass	Pass	Pass
TA-3, SM-36-2162, Unleaded Fuel Tank	Pass	Pass
TA-16, S-1488, Unleaded Fuel Tank	Not Required	Pass
TA-21, DP-158, Diesel Tank	Not Required	Pass
TA-41, W-2, Diesel Tank	Pass	Pass
TA-60, MP-1, Diesel Tank	Not Required	Pass
TA-3, TF-1, Kerosene Tank	Not Required	Pass
TA-3, TF-2, Diesel Tank	Not Required	Pass
TA-3, TF-3, Unleaded Tank	Not Required	Pass
TA-3, TF-4, Unleaded Tank	Not Required	Pass
TA-3, TF-5, Unleaded Tank	Not Required	Pass

If you have any questions regarding the contents of the report, please do not hesitate to call me.

Sincerely,

Herb Grover
Principal Investigator

HG/SB

cc: Christine Othart, BUS-5-3, MS P274
Central Files, Albuquerque
White Rock Files

4501 Indian School Road N.E., Suite 105 Albuquerque, New Mexico 87110 (505) 262-2694 FAX 505-262-26

TOTAL P.01