



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

April 23, 1990



Mr. Jack Ellvinger, Chief
Hazardous Waste Section
Groundwater and Hazardous Waste Bureau
Environmental Improvement Division
New Mexico Health and Environment Department
P. O. Box 968
Santa Fe, New Mexico 87504-0968

Dear Mr. Ellvinger:

Enclosed you will find a copy of the following RCRA Facility
Assessment (RFA) report:

° Facility Name: Safety Kleen Corp., Farmington

° EPA ID Number: NMD980698849

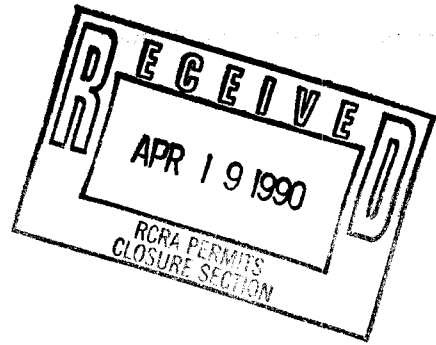
Additional information will be forwarded to you as it becomes
available. If you have any questions, please contact me or have your
staff contact Bill Gallagher at (214) 655-6775.

Sincerely yours,

William K. Honker
Chief
RCRA Permits Branch

Enclosure

*document in magazine file 4/27/90
AEE*



**SAFETY-KLEEN CORPORATION
NMD980698849
FARMINGTON, NEW MEXICO**

RCRA FACILITY ASSESSMENT REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 6
1445 Ross Avenue
Dallas, Texas 75202**

Prepared By:

**PRC Environmental Management, Inc.
350 North St. Paul Street
Suite 2600
Dallas, Texas 75201**

and

**2400 Louisiana Blvd. N.E.
AFC Building 4, Suite 225
Albuquerque, New Mexico 87110**

EPA Contract No. 68-W9-0041

Work Assignment No. R260305

April 18, 1990

**SAFETY-KLEEN CORPORATION
NMD980698849
FARMINGTON, NEW MEXICO
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DISCLAIMER

This report was prepared for the U.S. Environmental Protection Agency (EPA), Region 6, by PRC Environmental Management, Inc., in fulfillment of Contract No. 68-W9-0041, Work Assignment No. R260305. The opinions, findings, and conclusions expressed herein are those of the contractor and not necessarily those of the EPA or other cooperating agencies. Mention of company or product names is not to be considered as an endorsement by the EPA.

This document is intended to assist EPA and State personnel in developing requirements for an owner or operator of a facility regulated by the Resource Conservation and Recovery Act (RCRA) to conduct a RCRA Facility Investigation (RFI) pursuant to 40 CFR 264. EPA will not necessarily limit the RFI or other requirements to those that correspond with the recommendations set forth herein. EPA and State personnel must exercise their technical judgment, as well as other relevant information, in using the RCRA Facility Assessment report to determining what RFI or other requirements to include in a permit or order.

EXECUTIVE SUMMARY

PRC Environmental Management, Inc. conducted a RCRA Facility Assessment (RFA) of Safety-Kleen Corporation's Farmington, New Mexico facility. The RFA had two components: a preliminary document review (PR), followed by a visual site inspection (VSI). The VSI was conducted to determine the current facility operating status, identify existing solid waste management units (SWMUs), assess the regulatory compliance of those units, and assess potential releases to the environment from those units.

Safety-Kleen Corporation is an international company that provides solvent and cleaning products to its customers and reclaims those products for re-use by the same customers. The company transports the products to its customers and picks up the spent materials from them. Solvents are supplied to automobile repair shops, industrial maintenance businesses and dry cleaners. Spent solvent wastes are stored at the Farmington Service Center prior to shipping them to Safety-Kleen Corporation's solvent recycling facility in Denton, Texas. The Farmington Service Center is currently operating under interim status as a hazardous waste storage facility (Safety-Kleen, 1985).

The Farmington Service Center has been in operation at its current location since January 1, 1981. Hazardous wastes received at the Farmington Service Center include: (1) spent petroleum naphtha or mineral spirits (D001); (2) spent immersion cleaner containing chlorinated solvents and cresylic acid (F002, F004); (3) dry cleaning wastes containing perchloroethylene, mineral spirits, and trichlorotrifluoroethane (F002); and (4) dumpster sediments, which exhibit the same characteristics as the mineral spirits (D001) and contain varying quantities of lead and cadmium (D006, D008).

During the PR and VSI, PRC identified three SWMUs; all are presently active. These three SWMUs include (1) a 12,600-gallon aboveground Spent Solvent Storage Tank, (2) a Solvent-Return-and-Fill Station where spent mineral spirits are emptied from 16- and 30-gallon drums into a wet dumpster that drains into the storage tank, and (3) a Container Storage Area where 16- and 30-gallon drums of dumpster sediments and dry cleaning wastes are accumulated.

There is no evidence of past releases from any of the SWMUs; therefore, no RCRA Facility Investigations (RFI) are considered necessary. To prevent future accidental releases of waste, PRC recommends that certain modifications in equipment and waste handling practices be implemented. PRC recommends (1) the spent solvent return pipe be protected from damage; (2) that the hole in the floor adjacent to the Container Storage Area be properly plugged; and (3) that drums in the Container Storage Area be placed so as to minimize the possibility for a spill to escape the secondary containment area.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC) received Work Assignment No. 26, Project No. 39 from the U.S. EPA under Contract No. 68-W9-0041. This work assignment is to provide technical support on a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) of Safety-Kleen Corporation's facility in Farmington, New Mexico (Farmington Service Center).

1.1 PURPOSE OF THE RCRA FACILITY ASSESSMENT

The RFA is designed to identify environmental releases or potential releases from solid waste management units (SWMUs) that may require corrective action. The RFA is the first step in a process for implementing the corrective action provisions in the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA. Specifically, Sections 3004(u), 3004(v), and 3008(h) grant EPA the authority to initiate corrective action for releases of hazardous wastes and constituents from SWMUs at RCRA-regulated facilities. An RFA generally consists of three steps: preliminary review (PR), visual site inspection (VSI), and sampling visit (SV). A sampling visit is only conducted when available information is insufficient to support a recommendation for a RCRA Facility Investigation (RFI). The RFA at Farmington Service Center did not include a sampling visit.

The PR and VSI result in the compilation and evaluation of available information on the facility for the following purposes:

- Evaluate existing information on hazardous waste releases or potential releases.
- Identify all SWMUs and potential release pathways.
- Determine which SWMUs pose no threat to human health or the environment and eliminate those from further investigation.
- Determine the need for further action, such as an RFI.

An RFA is required for facilities that manage hazardous wastes. An RFA was performed at the Farmington Service Center to determine whether there have been, or are likely to be, releases of hazardous wastes or hazardous constituents at the facility that will require further investigation.

1.2 PROCEDURES

The RFA was conducted in accordance with procedures outlined in EPA's RCRA Facility Assessment Guidance document (October 1986). PRC conducted the PR at the New Mexico Environmental Improvement Division (NMEID) in Santa Fe, New Mexico on December 15, 1989, and at the EPA Region 6 office in Dallas, Texas on January 4, 1990.

PRC conducted the VSI on March 6, 1990, at the Farmington Service Center. The VSI provided the additional information needed to make the recommendations presented in this report.

The following personnel were present during the VSI:

- Jay Lanahan Safety-Kleen Corporation
Regional Environmental Engineer
- David Rockwell Safety-Kleen Corporation
Farmington Service Center
Branch Manager
- Lisa Hooper PRC-EMI
- Susan Meadows PRC-EMI

1.3 REPORT FORMAT

This report summarizes the information obtained during the PR and VSI and evaluates the information in terms of the RFA objectives. The facility is described in Section 2.0; its environmental setting is discussed in Section 3.0; the Solid Waste Management Units are identified in Section 4.0; potential human and environmental targets are described in Section 5.0; and conclusions and recommendations are presented in Section 6.0.

2.0 FACILITY DESCRIPTION

The Farmington Service Center facility is a local service branch of Safety-Kleen Corporation (Safety-Kleen) of Elgin, Illinois. Safety-Kleen is an international company offering a leasing service for hydrocarbon and chlorinated solvents and small parts washing equipment, primarily for automotive repair, industrial maintenance businesses, and dry cleaners. The Farmington Service Center is a warehouse for the products and equipment furnished to its

customers. Clean solvents are distributed from the warehouse, and spent solvents are collected and returned to the warehouse.

Both clean and spent solvents are transported between the warehouse and the customer in either 16- or 30-gallon covered drums. Spent mineral spirits are emptied from the drums into a sump (wet dumpster) that drains into an aboveground storage tank. Spent chlorinated solvents are kept in a Container Storage Area within the warehouse. Safety-Kleen Corporation transports both kinds of spent solvent to its own recycling facility in Denton, Texas. The mineral spirits are transported in bulk tank trucks, and the chlorinated solvent is transported in the covered drums.

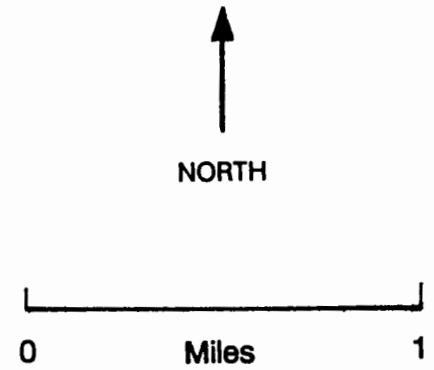
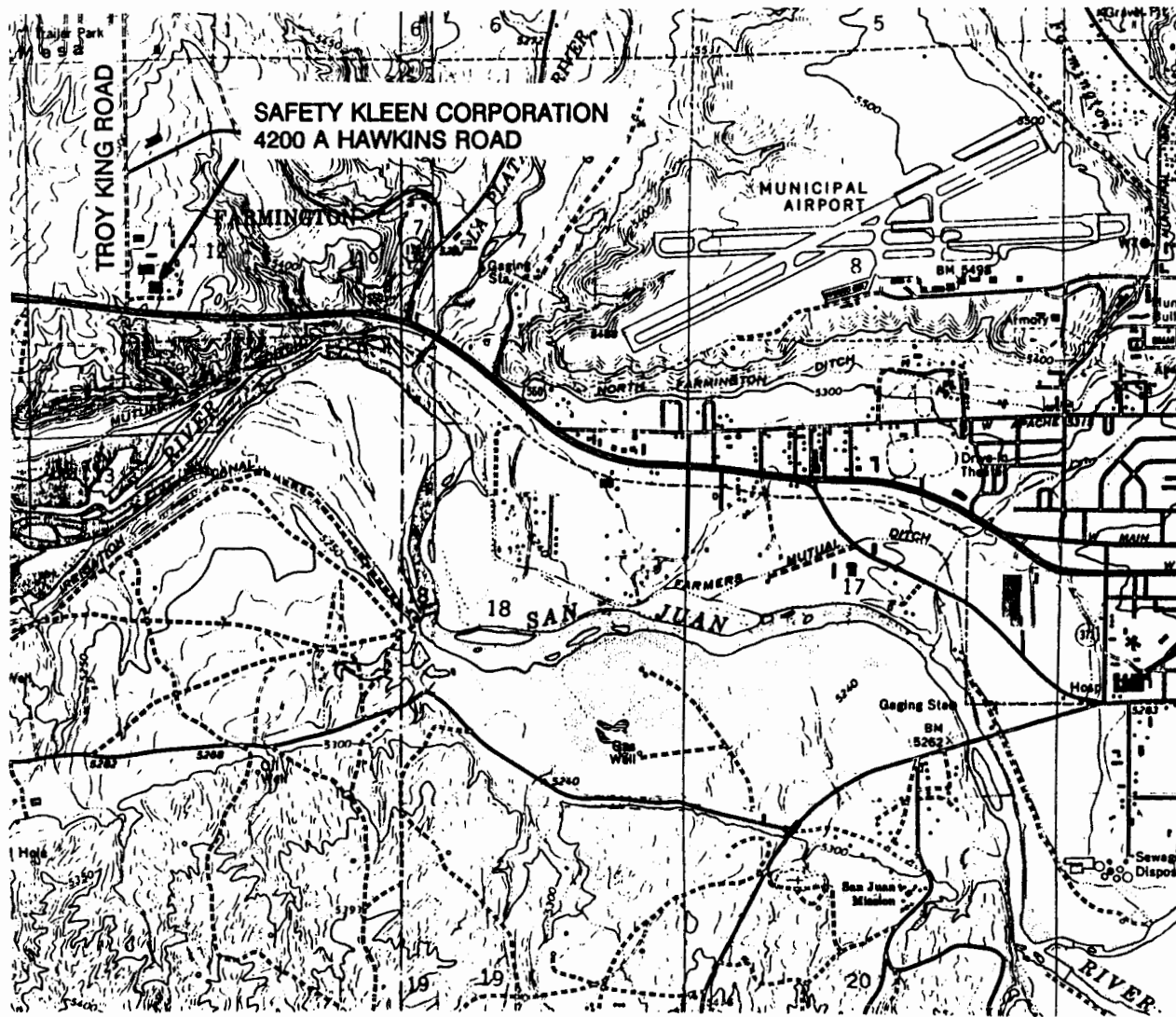
2.1 SITE LOCATION

The Farmington Service Center is located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 12, T. 29 N., R. 14 W., approximately 3 miles west of the City of Farmington, San Juan County, New Mexico, at an elevation of about 5470 feet above sea level (Figure 1). The site is bordered on the south by Hawkins Road, on the west by Troy King Road, and on the north and east by light-industrial buildings. General facility data are provided below.

Facility Address:	Safety-Kleen Corporation 4200-A Hawkins Road Farmington, New Mexico 87401
Facility Contact:	Mr. Jay Lanahan Regional Environmental Engineer Safety-Kleen Corporation 1580 Industrial Drive Missouri City, Texas 77459
Telephone:	(713) 261-0429 (Mr. Lanahan) (505) 327-9070 (Farmington Service Center)
EPA I.D. Number:	NMD980698849

2.2 FACILITY OPERATIONS AND HAZARDOUS WASTE MANAGEMENT

The Farmington Service Center offers three services to its customers: (1) supply and collection of mineral spirits solvent, (2) supply and collection of parts immersion cleaner, and (3) collection of dry cleaning wastes. Five types of hazardous wastes are managed at the Farmington Service Center (Table 1).



**SITE LOCATION MAP
FARMINGTON SERVICE CENTER**

Source: PRC Health and Safety Plan, Jan. 1990
(from U.S.G.S base maps)

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FIGURE 1

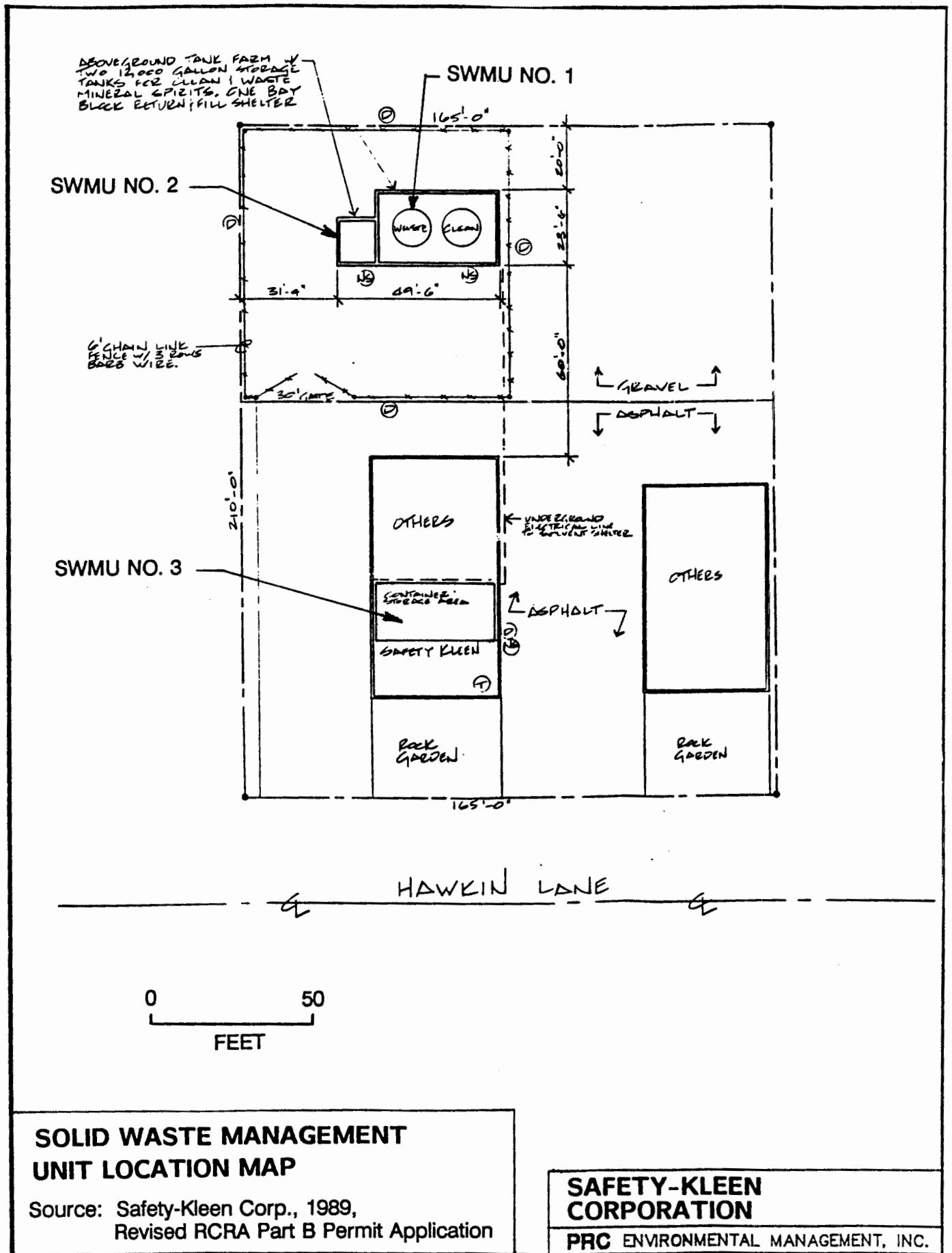
TABLE 1
HAZARDOUS WASTES MANAGED AT THE FARMINGTON SERVICE CENTER

<u>Storage Unit</u>	<u>Waste Material Types</u>	<u>U.S. EPA Hazardous Waste Code</u>
Spent Solvent Storage Tank (SWMU No. 1)	Spent mineral spirits Bottom sediments	D001, D006, D008
Container Storage Area (SWMU No. 3)	Dumpster sediments Spent immersion cleaner Dry cleaning wastes	D001, D006, D008 F002, F004 F002

Spent mineral spirits solvent is collected from the customer's facility in 16- and 30-gallon drums. Because customer cleaning processes differ, the spent mineral spirits accumulate varying quantities of suspended sediments that can contain lead and cadmium (D006 and D008). The drums are transported to the Farmington Service Center and emptied into a dumpster at the Solvent-Return-and-Fill Station (SWMU No. 2). The dumpster then empties into a 12,600-gallon aboveground Spent Solvent Storage Tank (SWMU No 1). Figure 2 shows the locations of the buildings and SWMUs at the facility. These waste handling procedures result in three types of wastes: (1) spent mineral spirits solvent and (2) bottom sediments that accumulate in the aboveground storage tank, and (3) dumpster sediment that accumulates in the wet dumpster.

Spent immersion cleaner is collected from the customer's facility in gray 16-gallon drums, which are transported to the Farmington Service Center. The immersion cleaner contains chlorinated solvents and cresylic acid. The 16-gallon drums contain about 4.5 gallons of spent solvents (i.e., they are 1/4-full); they are accumulated in the Container Storage Area (SWMU No. 3) in the warehouse.

Dry cleaning wastes are packaged at the customer's facility in black 16-gallon drums and lined boxes. The dry cleaning wastes are in the form of (1) spent filter cartridges, (2) powder residue from diatomaceous or other powder filter systems, and (3) still bottoms. They contain perchloroethylene, mineral spirits, and trichlorotrifluoroethane. The drums and lined boxes are transported to the Farmington Service Center for accumulation in the Container Storage Area. The containers for dry cleaning wastes remain closed until they are delivered to the recycling center.



**SOLID WASTE MANAGEMENT
UNIT LOCATION MAP**

Source: Safety-Kleen Corp., 1989,
Revised RCRA Part B Permit Application

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PRC ENVIRONMENTAL MANAGEMENT, INC.

PROPRIETARY INFORMATION

FIGURE 2

Accumulated wastes are periodically shipped from the Farmington Service Center to Safety-Kleen's recycling center in Denton, Texas.

2.3 REGULATORY HISTORY AND STATUS

On February 15, 1983 Safety-Kleen submitted a Notification of Hazardous Waste Activity to EPA Region 6, classifying the Farmington Service Center as a generator of hazardous waste. On April 3, 1985 Safety-Kleen requested a change in classification to include treatment, storage, disposal, and transport of waste. On May 6, 1985 the NMEID notified Safety-Kleen that, in order to obtain the change of classification, a RCRA Part A permit application must be submitted.

Safety-Kleen submitted the RCRA Part A application to EPA on July 2, 1985. The application listed a 12,600-gallon aboveground storage tank for spent solvent and a Container Storage Area for up to 2,000 gallons of containerized waste. Waste types listed included D001, D008, F002, F003, F004, and F005. On September 14, 1987, Safety-Kleen submitted to NMEID a voluntary RCRA Part B application, which was forwarded to EPA on October 19, 1987.

NMEID conducted a compliance evaluation inspection of the Farmington Service Center on November 4, 1987. The inspectors cited a violation of NMHWMR-3, Section 206.C.4.e, noting that waste drums were placed too close together to permit proper inspection or quick discovery of leaks. The operation reportedly appeared otherwise well-run. Personnel at the Farmington Service Center rearranged the drums, and on March 29, 1988, NMEID informed Safety-Kleen that their response to the Notice of Violation had been adequate, and the Farmington Service Center was considered to be in compliance with regulations.

Safety-Kleen submitted a revised RCRA Part B permit application to NMEID for the Farmington Service Center on November 27, 1989. The Farmington Service Center is currently seeking EPA and NMEID approval for the revised RCRA Part B permit application.

3.0 ENVIRONMENTAL SETTING

This section describes the environmental setting of the Farmington Service Center site, providing a basis for evaluating potential impacts on human health and the environment that might result from existing or potential releases of hazardous materials from the SWMUs identified at the Farmington Service Center. Surface-water hydrology, geology, and ground-water hydrology are each addressed separately.

3.1 SURFACE-WATER HYDROLOGY

The Farmington Service Center facility is located within the San Juan River drainage basin. The site lies on Martin Mesa, approximately 250 feet above and one-half mile north of the San Juan River (Figure 1). The San Juan River flows westward through Farmington to its confluence with the Colorado River at Lake Powell in southeastern Utah. The 14-year average discharge of the San Juan River at Farmington is 2,370 ft³/sec (Stone et al, 1983). Two tributaries to the San Juan River are located in the vicinity of the site. The La Plata River joins the San Juan River approximately 3/4 mile upstream (east) from the Farmington Service Center. A larger tributary, the Animas River, flows into the San Juan River at the southern edge of Farmington, about 3 miles upstream (east) from the site. The Animas River is the source of the municipal water supply for the City of Farmington, with a 38-year average discharge of 909 ft³/sec at its confluence with the San Juan River (Stone et al, 1983). The Farmington Service Center obtains its water supply from the City of Farmington distribution system (Safety-Kleen, 1989).

There are no permanent surface water bodies within the Farmington Service Center facility boundaries, and the site is not located within a 100-year flood plain. Surface water runoff resulting from summer thunderstorms flows into a storm drain that discharges into the San Juan River.

3.2 GEOLOGY

The Farmington Service Center facility is located within the San Juan Basin, a sediment-filled structural depression within the Colorado Plateau physiographic province. The site is underlain by shales and sandstones of the Kirtland Shale (late Cretaceous), capped by a few feet of surficial terrace gravels (USGS, 1955). The Farmington Sandstone Member of the Kirtland Shale is exposed in bluffs on both sides of the San Juan River immediately downstream from Farmington, and has a maximum thickness of about 500 feet (Stone et al, 1983). The Kirtland Shale is conformably underlain by the Fruitland Formation (late Cretaceous), which consists of interbedded shale, sandstone, and coal. The Fruitland Formation is the source of most of the coal mined in the San Juan Basin. The valleys of the San Juan and Animas Rivers contain up to 100 feet of Quaternary alluvium consisting of unconsolidated gravel, sand, and mud overlying the Cretaceous bedrock.

3.3 GROUND-WATER HYDROLOGY

Ground-water resources are very limited in the vicinity of the Farmington Service Center. Nevertheless, ranches and farms outside the service area of the Farmington municipal water system are dependent upon ground-water supplies. The hydrogeologic characteristics of the Kirtland Shale and Fruitland Formation are similar; therefore, the two formations can be considered as a single aquifer. Transmissivities for this aquifer are generally quite low (1-10 ft²/day), but coal beds and coarse sandstones can yield more water, with transmissivities up to 130 ft²/day (Stone et al, 1983). The concentrations of total dissolved solids in ground water from the Kirtland-Fruitland aquifer is often unacceptably high (>2000 mg/L). Domestic wells tapping the saturated valley-fill alluvium generally yield ground water of higher quality and quantity than those drilled into bedrock. The alluvium is present only within the San Juan River Valley, however, and does not directly underlie the Farmington Service Center (Figure 1). Based on the elevation of the facility relative to the San Juan River, the depth to ground water under the site is estimated to be about 200 feet.

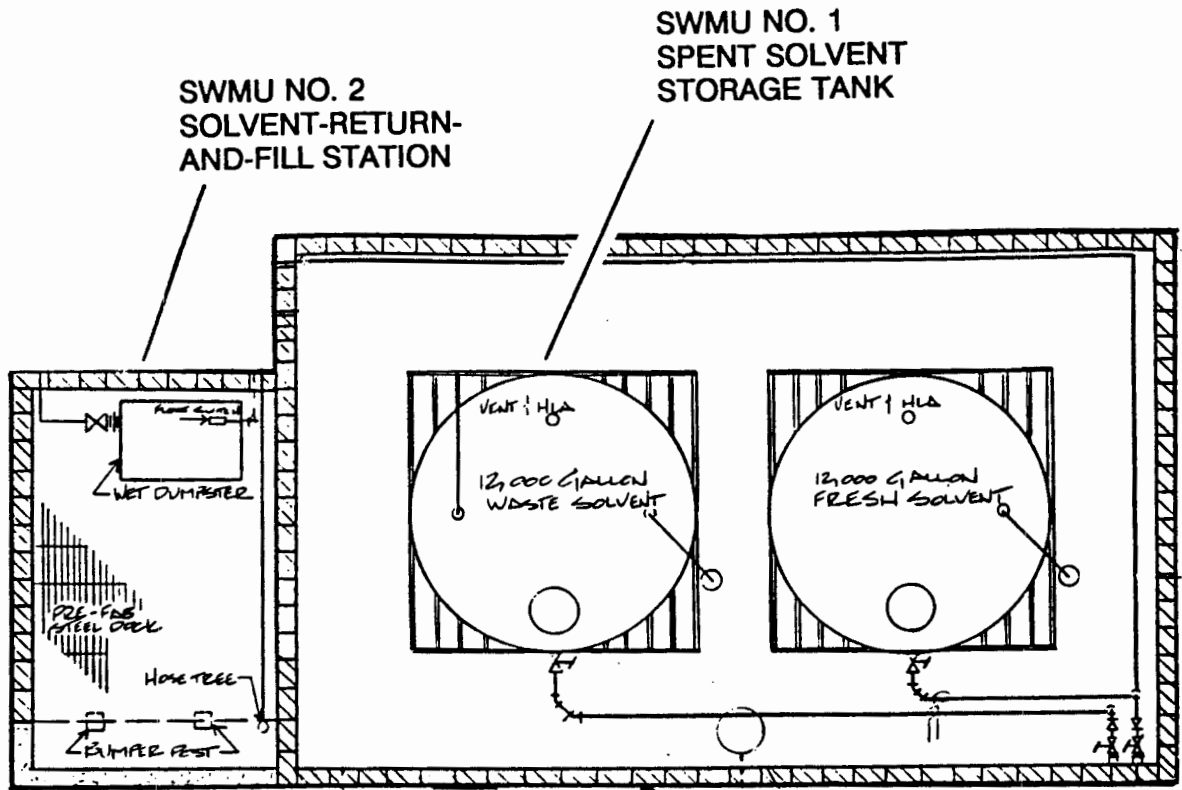
4.0 SOLID WASTE MANAGEMENT UNITS

This section discusses the SWMUs at the Farmington Service Center and evaluates actual or potential releases from those units. PRC identified three SWMUs as a result of the PR and VSI. Solid waste management units are defined as any discernible waste management unit at a RCRA facility from which hazardous constituents might migrate, irrespective of whether the unit was intended for the management of solid and/or hazardous wastes. The SWMU definition includes any areas in which solid wastes have been routinely and systematically released or stored. This definition specifically excludes accidental spill events that are not routine or systematic; it also excludes units that manage hazardous materials that are not wastes. Figure 2 shows the location of the SWMUs identified at the Farmington Service Center. Photographs of the SWMUs are provided in Appendix A.

4.1 SWMU NO. 1 - SPENT SOLVENT STORAGE TANK (PHOTOGRAPHS NOS. 1 - 4)

Description

The Spent Solvent Storage Tank is located in a tank farm consisting of two aboveground tanks located in a secondary containment area having a poured concrete slab floor and a sealed concrete block dike wall. The secondary containment is about 23 feet wide, by 37 feet long, and has walls approximately three feet high (Figure 3), with a spill containment volume of 18,266 gallons (Safety-Kleen, 1989). The two 12,600 gallon tanks are about 12 feet in diameter and 15



**TANK FARM PLAN,
SHOWING SWMUs NOS. 1 AND 2**

Source: Safety-Kleen Corp., 1989,
Revised RCRA Part B Permit Application

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PROPRIETARY INFORMATION

FIGURE 3

feet high, constructed of 3/16-inch-thick carbon steel (1/4-inch-thick in lower third of tank). The tanks are painted white on the outside. One tank is used to store product, while the other tank stores spent mineral spirits solvent. Both tanks are connected to the adjacent Solvent-Return-and-Fill Station (SWMU No. 2) by above ground pipes. An orange pipe carries product solvent from the product storage tank to the fill station, and a brown pipe returns spent solvent to the spent solvent storage tank (Photo 5). The Spent Solvent Storage Tank is equipped with a aural (siren) and visual (strobe light) high level alarm system, which will alert employees when the tank is approximately 600 gallons from being full (Safety-Kleen, 1989).

Status

The Farmington Service Center has used the Spent Solvent Storage Tank (SWMU No. 1) since the facility began operations at the current location on January 1, 1981. Only the tank containing spent solvent is subject to 40 Code of Federal Regulations (CFR), Part 265, Subpart J; it is operating under interim status, with a Process Code of S02 for tank storage.

Waste Type

Hazardous materials include spent mineral spirits solvent containing ignitable (D001) and Extraction Procedure (EP) toxic (D006, D008) wastes. The spent mineral spirits contain solids that settle out and collect at the bottom of the tank. These sediments contain the same waste characteristics as the spent solvent.

Waste Management

Spent mineral spirits are drained from the wet dumpster into the Spent Solvent Storage Tank. When the tank reaches its capacity, a Safety-Kleen Corporation tanker truck is dispatched from the Denton, Texas recycling center. The tanker truck withdraws all the spent mineral spirits solvent from the tank, and returns to the recycling center. Once every two years, bottom sediments are removed from the tank by a Safety-Kleen vacuum truck and are taken to the recycling center.

Environmental Releases

There is no documented evidence of a release from this SWMU.

Remedial Action Taken

No remedial action is associated with this SWMU.

Suggested Action

An RFA is not necessary.

Reasons

There is no documented or visual evidence of any release from this SWMU. The tank is located within a diked concrete containment area.

4.2 SWMU NO. 2 - SOLVENT-RETURN-AND-FILL STATION (PHOTOGRAPHS NOS. 3 - 6)

Description

The Solvent-Return-and-Fill Station is located north of the warehouse and west of the storage tanks, as shown in Figure 2. This SWMU consists of a steel sump (wet dumpster), an elevated steel grate that serves as a working platform, and an underlying curbed concrete secondary containment pan with a volume of 730 gallons (Safety-Kleen, 1989). The SWMU is partially enclosed by a shed constructed of three concrete block walls, and a corrugated metal roof. The entrance to the SWMU has a 4-inch high concrete curb.

Status

The Farmington Service Center began operating the Solvent-Return-and-Fill Station on January 1, 1981.

Waste Type

Hazardous materials managed at this SWMU include spent mineral spirits solvent containing ignitable (D001) and EP toxic (D006, D008) waste. Sediments in the spent solvent settle out in the bottom of the wet dumpster. The sediments exhibit waste characteristics similar to that of the spent solvent (Safety-Kleen, 1989).

Waste Management

Farmington Service Center employees pour the spent solvent from the drums into the wet dumpster. The fluid portion of the waste drains through the wet dumpster into a sump and is then pumped into the Spent Solvent Storage Tank. Sediments that accumulate in the wet dumpster are shoveled into 16-gallon drums, and stored in the Container Storage Area (SWMU No. 3) to await shipment to the recycling center in Denton, Texas.

Environmental Releases

There is no documented or visual evidence of a release from this SWMU.

Remedial Action Taken

No remedial action has been necessary since operations began.

Suggested Action

An RFA is not necessary.

Reasons

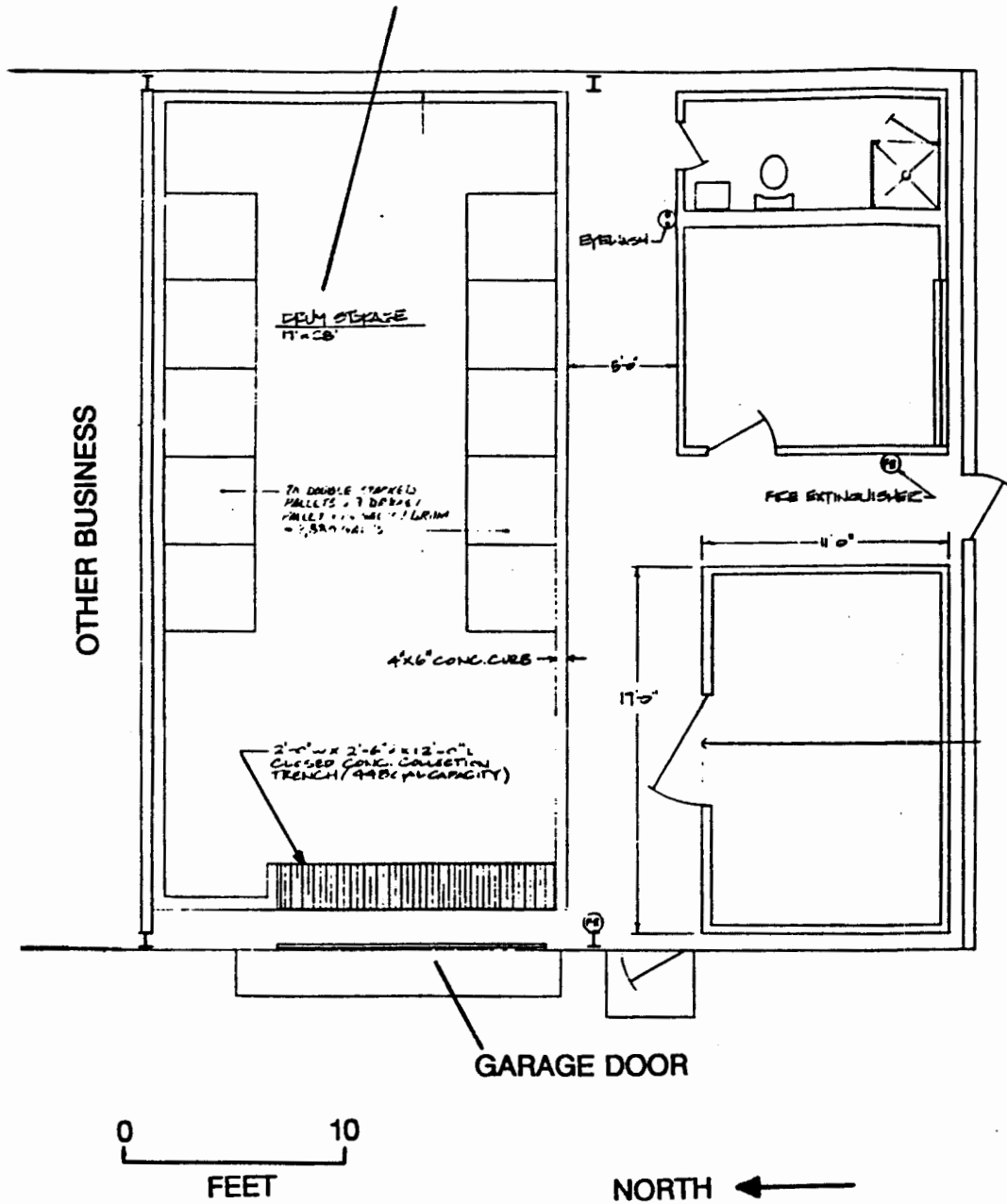
There is no documented or visual evidence of a release from this SWMU. Spill will be contained within a curbed concrete pan and flow into the below grade sump. During the VSI, the sump is almost dry and appears to be structural sound and without any cracks.

4.3 SWMU NO. 3 - CONTAINER STORAGE AREA (PHOTOGRAPHS NOS. 7 - 14)

Description

The Container Storage Area occupies the northern portion of the Farmington Service Center's warehouse, as shown in Figure 4. The warehouse is a fully enclosed, 3080-square-foot sheet-metal building, of which Safety-Kleen occupies the southern portion (Figure 4). The northern half of the building, which was not inspected during the VSI, is leased to another business unrelated to Safety-Kleen.

SWMU NO. 3
CONTAINER STORAGE AREA



**CONTAINER STORAGE
AREA FLOOR PLAN**

Source: Safety-Kleen Corp., 1989,
Revised RCRA Part B Permit Application

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CORPORATION**

PRC ENVIRONMENTAL MANAGEMENT, INC.

PROPRIETARY INFORMATION

FIGURE 4

The Container Storage Area consists of a 770-square-foot room, which has secondary containment in the form of a 6-inch-high, 4-inch-wide concrete curb and a 12-foot-long, 2-foot-wide, and 2.5-foot-deep, 448-gallon collection trench.

Status

The Farmington Service Center began operating this SWMU on January 1, 1981. In accordance with 40 CFR 265, Subpart I, this SWMU is a RCRA-regulated unit currently under interim status and operating under Process Code S01 for container storage.

Waste Type

Hazardous materials stored in the Container Storage Area include: (1) dumpster sediments (D001, D006, and D008), (2) spent immersion cleaners (F002, F004), and (3) dry cleaning wastes (F002).

Waste Management

The design capacity of the Container Storage Area is 2080 gallons. Wastes are stored in 5-gallon, 16-gallon, and 30-gallon drums. The drums are stacked two high on wooden pallets. The wastes are shipped to the recycling center in Denton, Texas.

Environmental Releases

There is no documented release or visual evidence of release from this SWMU.

Remedial Action Taken

No remedial action is associated with this SWMU.

Suggested Action

An RFI is not necessary.

Reasons

There is no record or evidence of a release from this SWMU. All containers are stored within an enclosed area of the warehouse having secondary containment in the form of curbed concrete flooring with a collection trench.

5.0 HUMAN AND ENVIRONMENTAL TARGETS

This section discusses the potential human and environmental targets of a hazardous material release from the Farmington Service Center facility. The 1980 population of Farmington was 31,222 (Stone et al, 1983). Potential contaminant pathways include surface and ground water.

5.1 AIR

The wastes handled at the Farmington Service Center are ignitable and volatile. There is a potential for air emissions resulting from a spill or fire at the facility. The potential for air emissions occurs during the process of emptying spent solvent into the wet dumpster and filling drums with clean solvent. The potential for a release of airborne contaminants from routine facility operations that would pose a significant health threat to either Farmington Service Center employees or surrounding businesses is low for the following reasons: (1) the volume of wastes handled during these operations does not exceed 30 gallons at a time, and (2) the secondary containment system at the Solvent-Return-and-Fill Station drains spilled materials into the Spent Solvent Storage Tank.

5.2 SURFACE WATER

As determined during the VSI, there is no surface drainage from the facility, except during heavy thunderstorms. The only surface water body that could be affected is the San Juan River. Because the SWMUs are equipped with secondary containment, the potential for release of wastes to the San Juan River is very low.

5.3 GROUND WATER

The potential for ground-water contamination resulting from a leak is low to moderate (depending on the magnitude of the leak). The unsaturated zone is composed of a thin layer of surficial gravelly soil, underlain by interbedded shale and sandstone (Kirtland Shale Formation). The depth to ground water is estimated to be about 200 feet. If a release of waste were to occur, the low permeability of the shale units would impede vertical migration of contaminants.

5.4 SOIL

Potential pathways for soil contamination include: (1) a spill resulting from waste handling activities, such as during transfer of spent solvent from the Spent Solvent Storage Tank to the tanker truck, and (2) a release resulting from a leak in the spent solvent return pipe behind the Solvent-Return-and-Fill Station.

At SWMU No.1, the Spent Solvent Storage Tank drain valve is located directly above the Tank Farm secondary containment wall (Photo 1). The tank is drained by gravity through this valve into a tanker truck. The proximity of the drain valve to the secondary containment wall would allow leaks or spills to contaminate the underlying soil. A potential for release exists when the tank is emptied. If proper waste handling procedures are followed, the potential for soil contamination during waste transfer is low.

At SWMU No. 2 (Solvent-Return-and-Fill Station), the spent solvent return pipe exits the back wall of the Solvent-Return-and-Fill Station and continues above ground to the Spent Solvent Storage Tank. The pipe is unsecured and unprotected (Photo 5). The return pipe has welded joints, but it was not confirmed during the VSI whether a visual inspection of the piping is conducted daily, as required by 40 CFR Subpart J, 265.193(f). The potential exists for soil contamination from the return pipe if a leak or rupture should occur from physical impact or deterioration of the pipe. The potential for a release due to rupture of the pipe is moderate.

At SWMU No. 3 (Container Storage Area), waste storage drums are stacked two high on pallets; in some cases, overhanging the secondary containment floor grate adjacent to the garage door. There is a potential for the drums to topple beyond the secondary containment grate and to release wastes to the soil in front of the garage door. Another potential release route exists near the south side of the Container Storage Area. There is an open hole in the concrete floor about 1.5 feet outside the secondary containment curb (Photos 13 and 14). Although there is no evidence that releases have occurred in the past, it could be possible for stacked waste containers to topple over the curb, releasing waste liquids to the soil through the open hole.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Three active SWMUs were identified at the Farmington Service Center during the PR and VSI. Specific operational information concerning waste type, waste management, releases, pathways, and remedial actions for the three SWMUs is provided in Table 2.

TABLE 2
SOLID WASTE MANAGEMENT UNIT SUMMARY

	SWMU No. 1	SWMU No. 2	SWMU No. 3
NAME	SPENT SOLVENT STORAGE TANK	SOLVENT-RETURN-AND-FILL STATION	CONTAINER STORAGE AREA
DESCRIPTION	12,600-gallon, single-wall steel aboveground tank, with overflow protection	Partially enclosed concrete structure housing wet dumpster (sump), equipped with secondary containment system that includes concrete catchment	770-square-foot room in service center warehouse, equipped with secondary containment in the form of 6-inch-high concrete curbing and collection trench
OPERATING STATUS	Active	Active	Active
REGULATORY STATUS	RCRA-regulated under 40 CFR 265, Subpart J, operating under interim status	RCRA-regulated under 40 CFR 265, Subpart I, operating under interim status	RCRA-regulated under 40 CFR 265, Subpart I, operating under interim status
WASTE TYPE	Spent mineral spirits (petroleum naphtha) containing ignitable (D001) and EP toxic (D006, D008) wastes	Spent mineral spirits (petroleum naphtha) containing ignitable (D001) and EP toxic (D006, D008) wastes	Dumpster sediments (D001, D006, and D008), spent immersion cleaner (F002, F004), and dry cleaning wastes (F002)
WASTE MANAGEMENT	Storage of spent solvents	Sump for transfer of spent solvent to storage tank and collection of sediment	Storage for containerized wastes
RELEASE HISTORY	No documented release or visual evidence of a release	No documented release or visual evidence of a release	No documented release or visual evidence of a release
POTENTIAL RELEASE MEDIUM	Soil	Soil and air	Soil and air
REMEDIAL ACTION	None	Spent solvent return pipe should be protected to avoid potential release	Stacked drums should be rearranged to prevent toppling beyond containment area
RELEASE POTENTIAL	Moderate at present; low after spent solvent return pipe has been protected per recommendations	Moderate at present; low after spent solvent return pipe has been protected per recommendations	Low
POTENTIAL RELEASE PATHWAY	Soil contamination from leak in piping or during transfer of solvent to tanker truck	Soil contamination and air emission from pipe rupture or spill; air emission from fire or during transfer	Air emission from spill or fire
NEED FOR RFI	No	No	No

PRC recommends that the following changes be made at the Farmington Service Center to minimize the potential of waste release.

- (1) The brown waste solvent return pipe leading from the Solvent-Return-and-Fill Station to the Spent Solvent Storage Tank should be protected from accidental damage. At a minimum, barrier posts should be installed to prevent rupture of the pipe through collision with a vehicle, and the pipe should be secured or supported to prevent flexing of the joints. Daily inspection of the pipe is required.
- (2) The hole in the concrete floor adjacent to the Container Storage Area (SWMU No. 3) should be plugged to prevent release of spilled solvents to the soil.
- (3) Drums and other containers in the Container Storage Area should be stacked in such a manner that, if tipped, the contents could not spill outside the secondary containment. Containers should not overlap the concrete containment curbs or floor grates, as they were observed to do during the VSI.

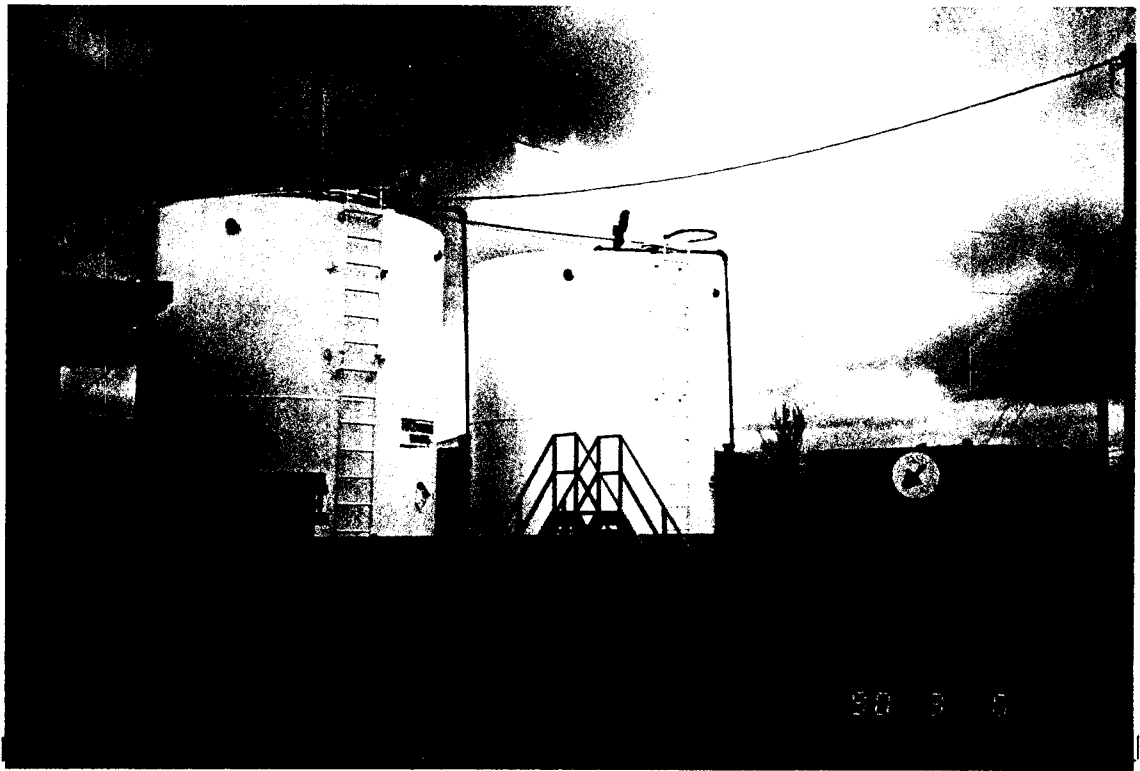
There is no evidence of past waste releases from the Farmington Service Center; therefore no RFI is necessary.

REFERENCES

- Stone, W.J., F.P. Lyford, P.F. Frenzel, N.H. Mizell, and E. T. Padgett, 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6, 70 p.
- New Mexico Environmental Improvement Division (NMEID), 1987, Hazardous Waste Compliance Inspection Report, November, 1987.
- Safety-Kleen Corporation, 1985, RCRA Part A Permit Application, July 2, 1985.
- Safety-Kleen Corporation, 1987, RCRA Part B Permit Application, September 14, 1987.
- Safety-Kleen Corporation, 1989, Revised RCRA Part B Permit Application, November 27, 1989.
- U.S. Geological Survey (USGS), 1955, Preliminary Geologic Map of the Kirtland Quadrangle, San Juan County, New Mexico, Coal Investigations Map C-32.

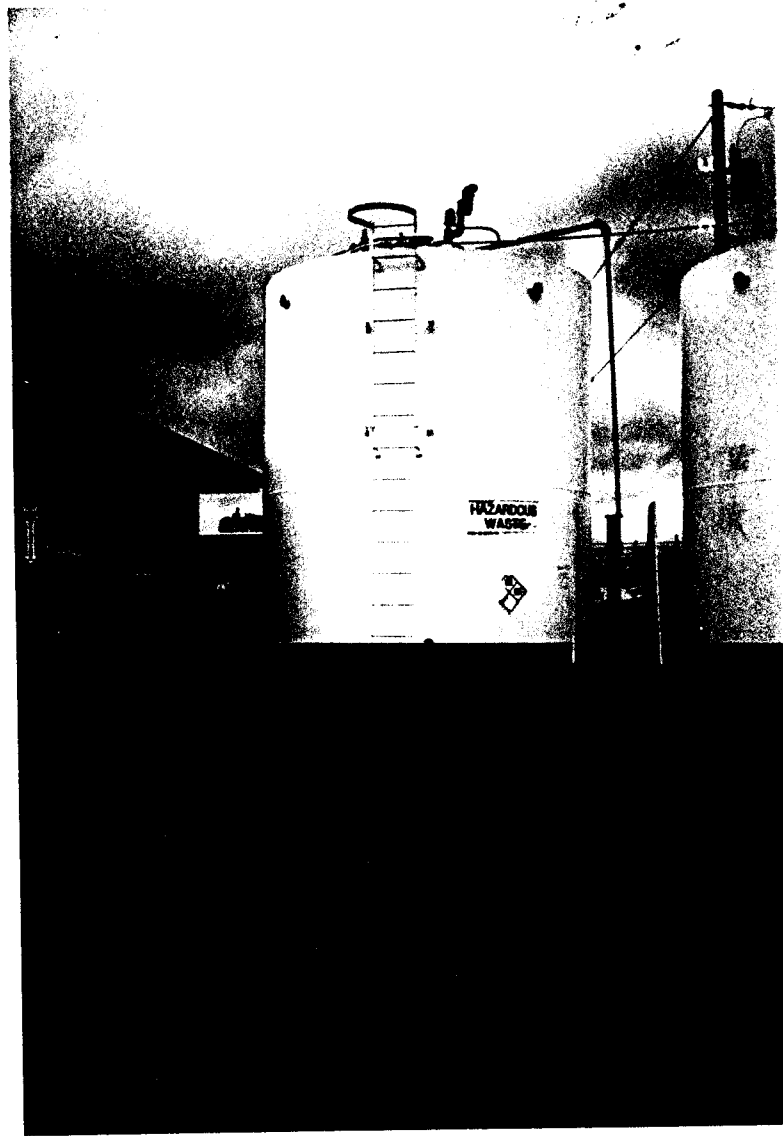
APPENDIX A
VISUAL SITE INSPECTION (VSI) PHOTOGRAPHS

PHOTOGRAPH NO. 1 (SWMU NO. 1)



Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** Northeast
Photo Description: Spent Solvent Storage Tank (SWMU No. 1) and Product Storage Tank (left to right). Note drain valve located at the southeast corner of the containment area (arrow at right hand side of picture).

PHOTOGRAPH NO. 2 (SWMU NO. 1)



Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** North
Photo Description: Spent Solvent Storage Tank

PHOTOGRAPH NO. 3 (SWMUs NOs.1 and 2)



Date: 3-6-90

Picture Taken By: Lisa Z. Hooper Direction Facing: North

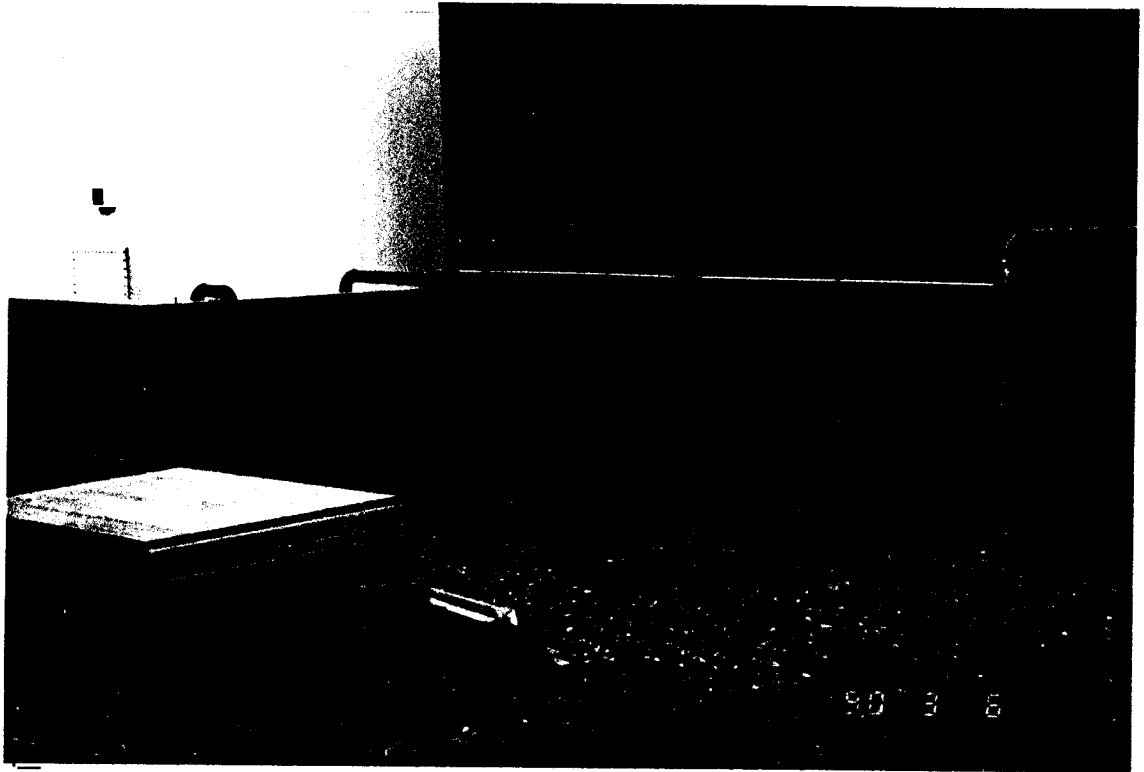
Photo Description: Solvent-Return-and-Fill Station and Spent Solvent Storage Tank

PHOTOGRAPH NO. 4 (SWMUs NOs. 1 and 2)



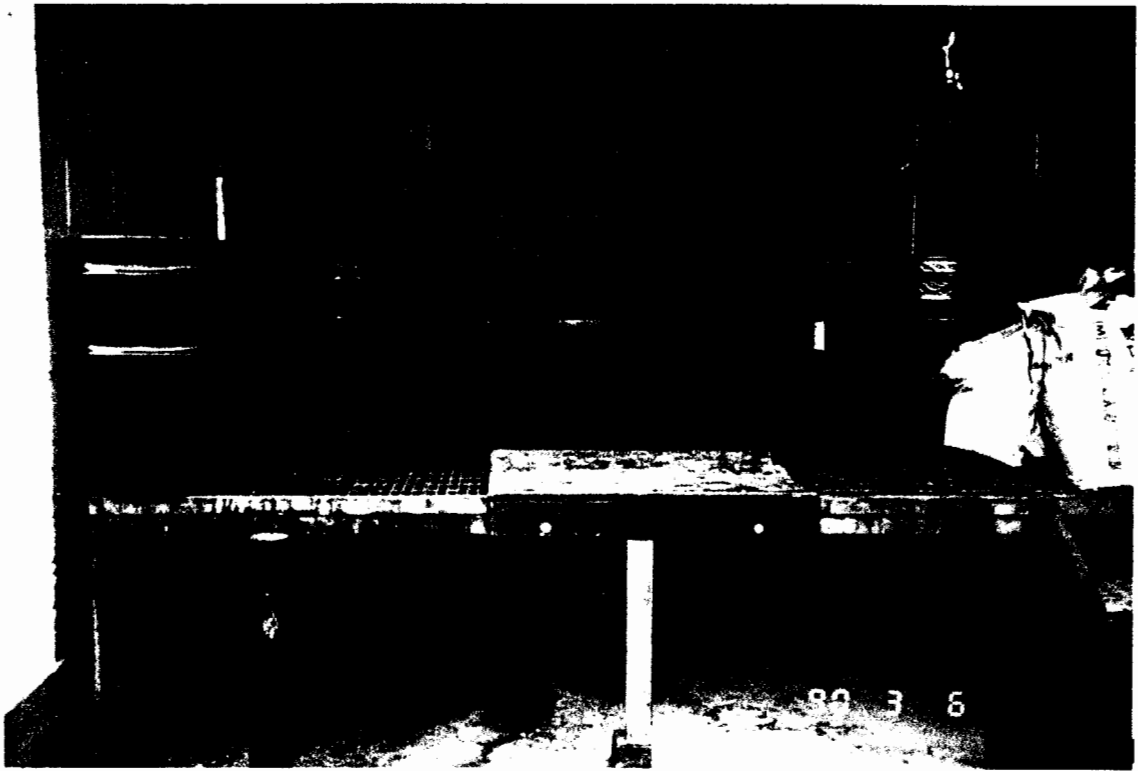
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** Southeast
Photo Description: Rear view of Solvent-Return-and-Fill Station and Tank Farm

PHOTOGRAPH NO. 5 (SWMU NO. 2)



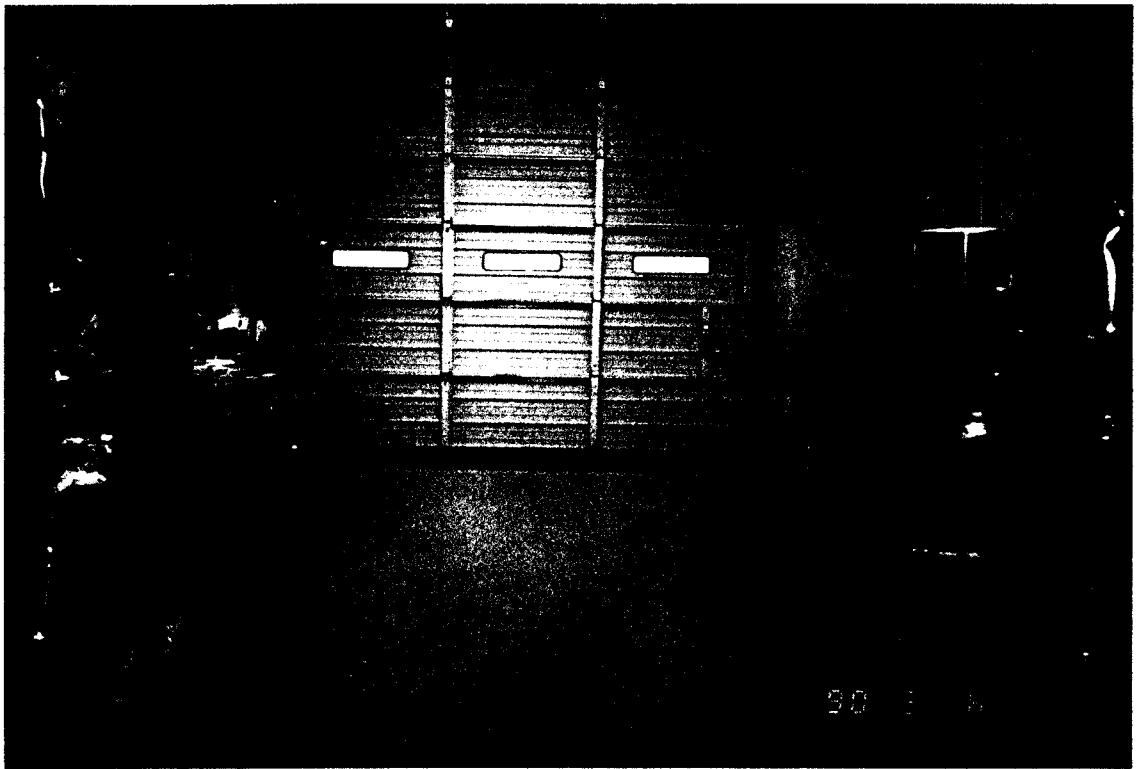
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** Southeast
Photo Description: Unsecured waste return pipe located behind Solvent-Return-and-Fill Station.

PHOTOGRAPH NO. 6 (SWMU NO. 2)



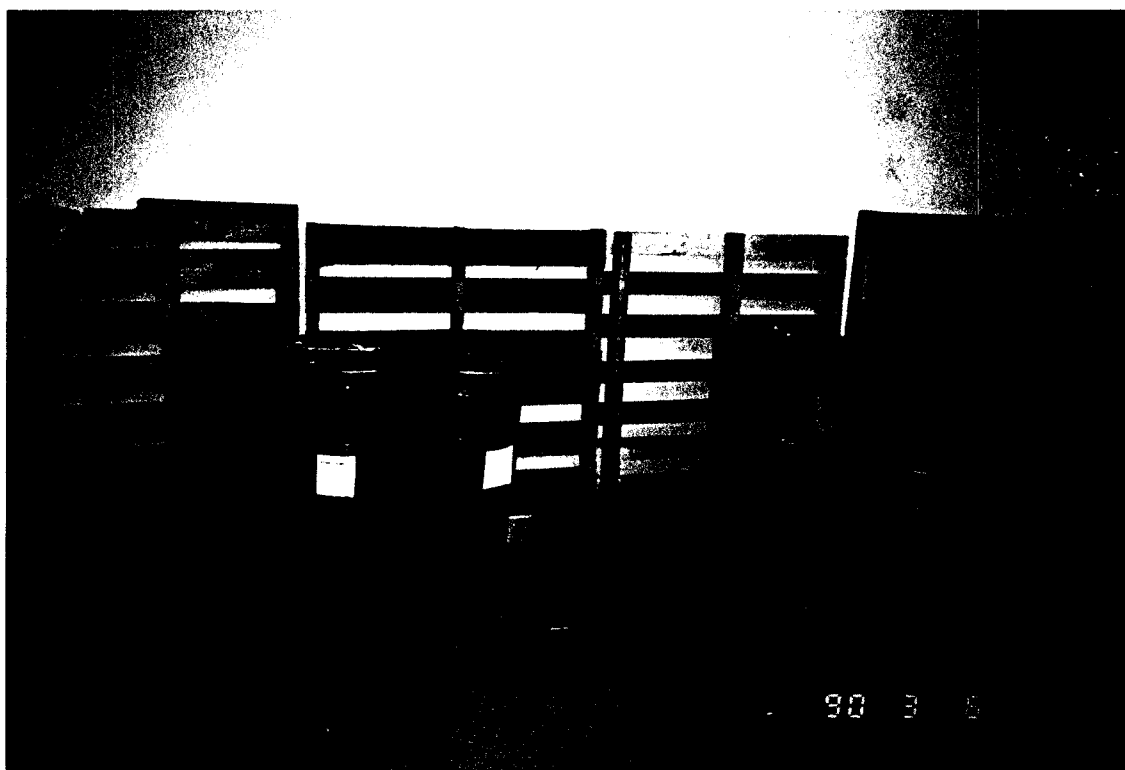
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** North
Photo Description: Interior of Solvent-Return-and-Fill Station

PHOTOGRAPH NO. 7 (SWMU NO. 3)



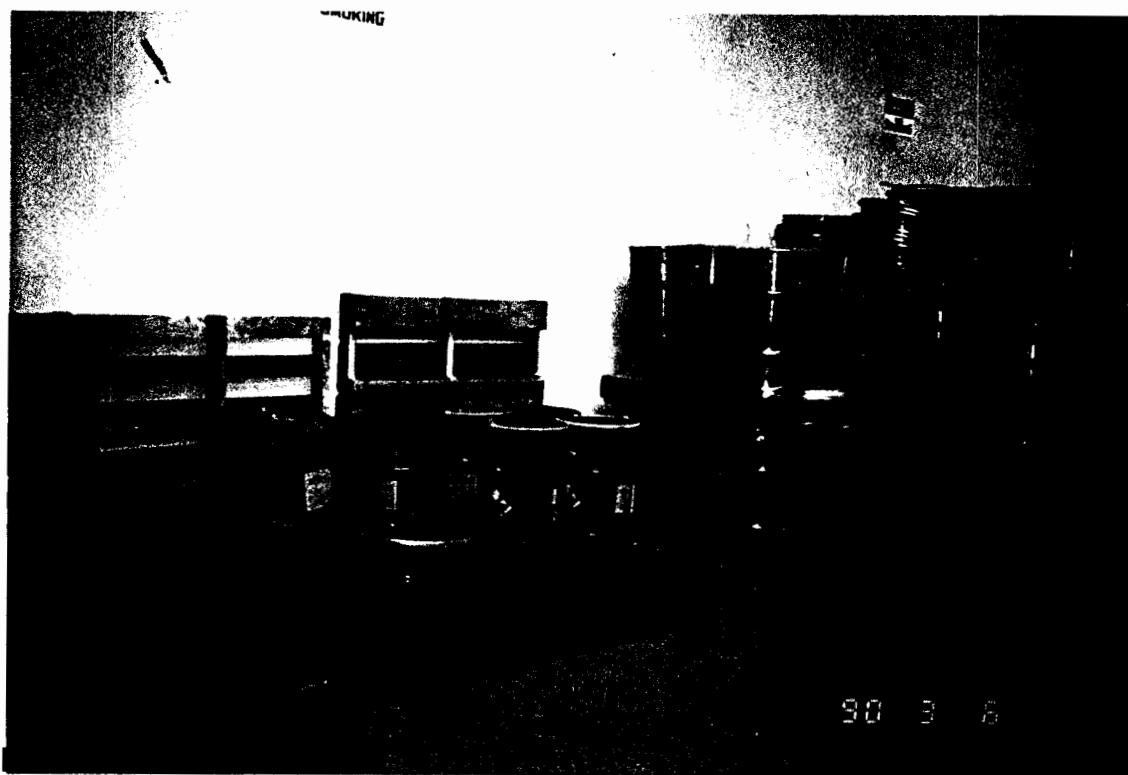
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** West
Photo Description: Interior of Container Storage Area

PHOTOGRAPH NO. 8 (SWMU NO. 3)



Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** North
Photo Description: Interior north wall of Container Storage Area, with hazardous waste containers on pallets

PHOTOGRAPH NO. 9 (SWMU NO. 3)



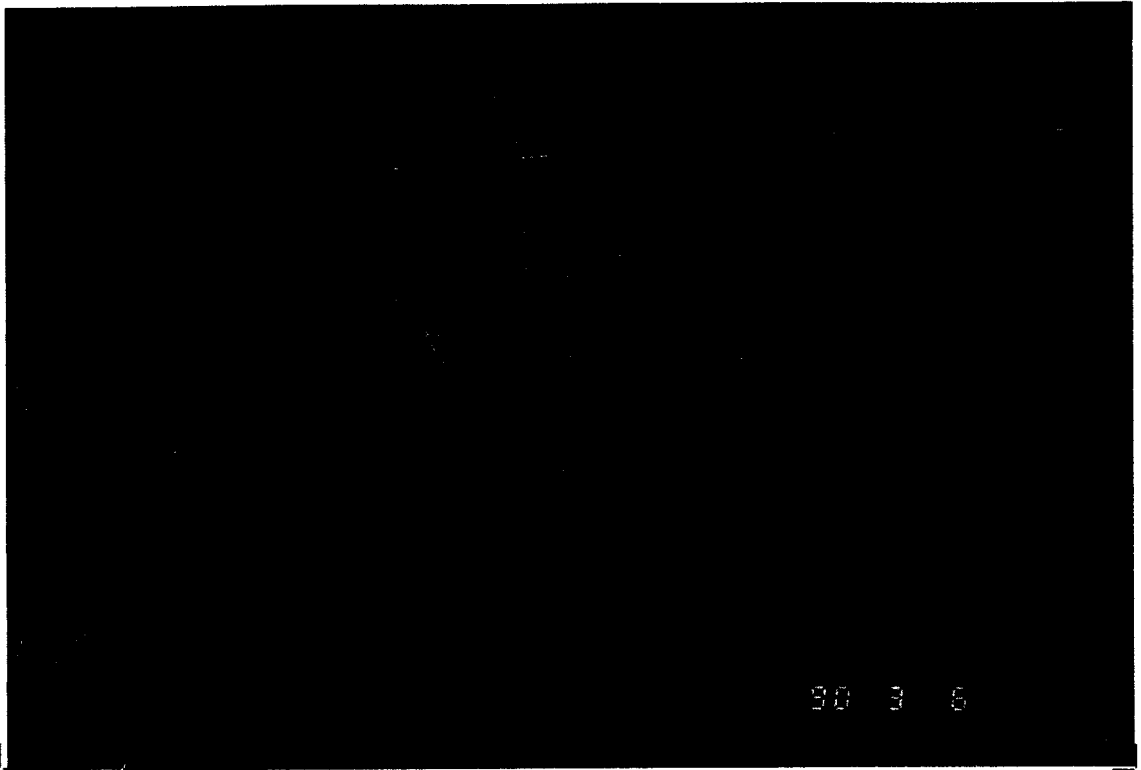
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** Northeast
Photo Description: Interior north wall of Container Storage Area, with hazardous waste containers on pallets

PHOTOGRAPH NO. 10 (SWMU NO. 3)



Date: 3-6-90 **Picture Taken By: Lisa Z. Hooper** **Direction Facing: Southeast**
Photo Description: South interior wall of Container Storage Area, adjacent office and product storage area (brown boxes behind wire); containers on pallets hold product

PHOTOGRAPH NO. 11 (SWMU NO. 3)



Date: 3-6-90 **Picture Taken By:** Lisa A. Hooper **Direction Facing:** Up
Photo Description: Air vent in ceiling of Container Storage Area

PHOTOGRAPH NO. 12 (SWMU NO. 3)



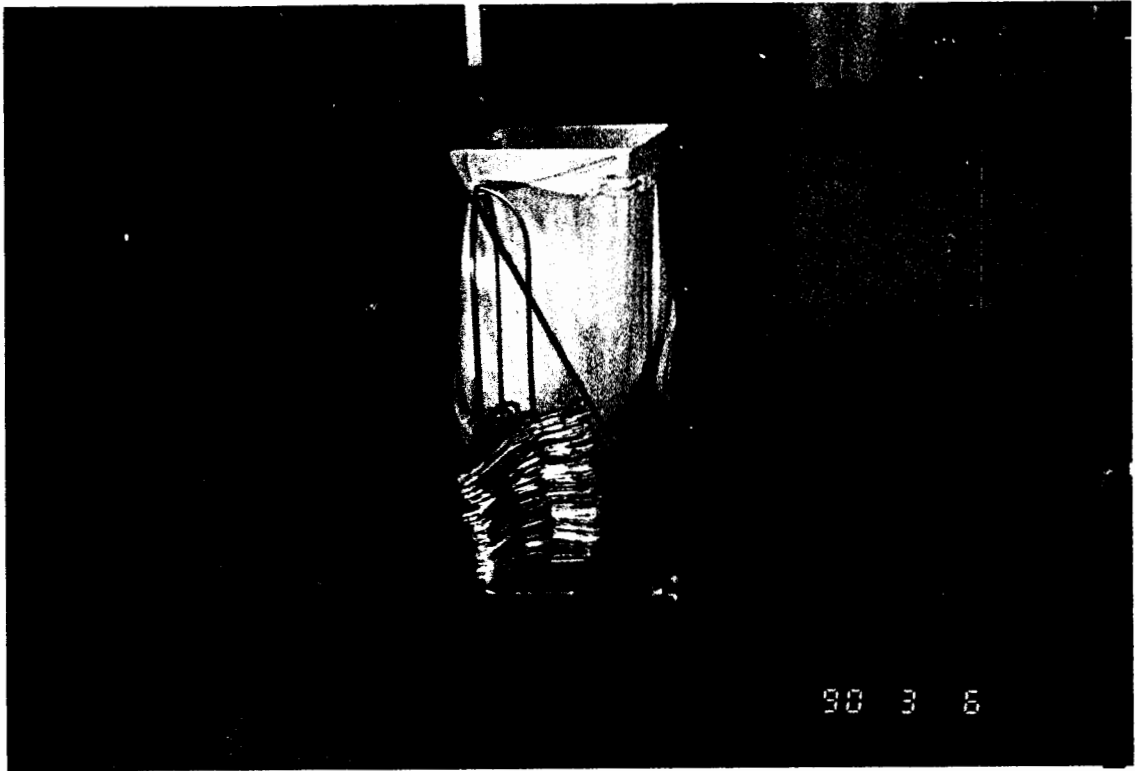
Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** North
Photo Description: View of containment grate and waste containers located near Container Storage Area garage door

PHOTOGRAPH NO. 14 (SWMU NO. 3)



Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** Down
Photo Description: Hole through cement slab floor adjacent to the Container Storage Area dike wall; bottom of hole is unprotected soil

PHOTOGRAPH NO. 13 (SWMU NO. 3)



Date: 3-6-90 **Picture Taken By:** Lisa Z. Hooper **Direction Facing:** East
Photo Description: South wall of cement dike in the Container Storage Area. Note hole through cement slab floor in front of stacked white hangers.