

HAZARDOUS WASTE STORAGE FACILITY
PERMIT APPLICATION

SAFETY-KLEEN SYSTEMS, INC. SERVICE CENTER

NORTH LAS VEGAS, NEVADA

4582 North Donovan Way

North Las Vegas, Nevada 89081

NVR 000066837

Original Permit Issuance date

July 18, 2006

Permit Renewal application submitted

January 17, 2011

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CERTIFICATION STATEMENT
Las Vegas Service Center
NVR 000068837

The undersigned, being an authorized representative of Safety-Kleen Systems, Inc. the permit applicant, certifies under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Branch General Manager

3 | 31 | 2011

Date

ATTESTATION

The undersigned, attesting witness to the Certification Statement and this document dated, January 17, 2011 of which this affidavit is a part, states that I am personally responsible for the preparation of the document, that I personally gathered the information contained herein, and further that the information, to the best of my knowledge and belief, is true, accurate and complete.



Gary Olsen
Environmental Compliance Manager

March 31, 2011

Date

— Extra copy —

CERTIFICATION STATEMENT
Las Vegas Service Center
NVR 000066837

The undersigned, being an authorized representative of Safety-Kleen Systems, Inc. the permit applicant, certifies under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and Imprisonment for knowing violations.



Branch General Manager

3/31/2011

Date

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Gary Olsen
Environmental Compliance Manager

March 31, 2011

Date

1. FACILITY DESCRIPTION

ABSTRACT

CORPORATE HEADQUARTERS: Safety-Kleen Systems, Inc
2600 North Central Expressway, Suite 400
Richardson, Texas 75080
(972) 265-2000

FACILITY ADDRESS: Safety-Kleen Systems, Inc
4582 Donovan Way
N. Las Vegas, Nevada 89031

TELEPHONE NUMBER: (702) 657-2300

U.S. EPA I.D. NUMBER: NVR 000066837

GEOGRAPHIC LOCATION: 36° 14.56' 5" N
115° 06' 14" W

OWNER: Pacific Terra Investments, LLC
PO Box 1357
Hollister CA 95024

DATE OPERATIONS BEGAN: May 23, 2001

DESCRIPTION OF ACTIVITIES: This facility is an accumulation point for several spent materials generated by Safety-Kleen customers, the majority of whom are small quantity generators. All materials are ultimately shipped to a Safety-Kleen recycling facility, contract reclaimer or other permitted facility for processing. Most wastes are then returned to the Company's customers as product.

PROPERTY DESCRIPTION:

1.39 acres with the following structures:

- a. one building with offices and a warehouse for container storage;
- b. Three aboveground storage tanks (one for product, one for other non-regulated use, and one for spent solvent) with dual-wall construction to provide secondary containment; and
- c. one loading dock and a solvent return and fill station.

FACILITY TYPE:

Storage in an aboveground tank (S02), containers (S01) and one miscellaneous unit (X02)

STORAGE UNIT	CAPACITY (GAL.)	SECONDARY CONTAINMENT (GAL.)	MATERIAL TO BE STORED
Tank	12,000	12,000	Used Parts Washer Solvents (D001 ¹), and codes listed in the note below) Mineral Spirits, Aqueous cleaners including sludges and tank bottoms
Container Storage	147,430	14,743	Spent Immersion Cleaner ¹ Dry Cleaning Waste (D001, F002 ¹) Sediment from Tank Bottoms and/or Drum Washers (D001 ¹) Paint Wastes (D001, F001, F002 F003, F004 F005 ¹) Photo Imaging Wastes (D011) ²

NOTES:

¹ D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043.

² Photo Imaging Wastes may not be considered a hazardous or solid waste if the hazardous constituent (silver) is reclaimed

SECTION 1

FACILITY DESCRIPTION

1.1 DESCRIPTION OF BUSINESS ACTIVITY

Safety-Kleen Systems, Inc. (Safety-Kleen) is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance and dry cleaning. The company, in operation since 1968, offers solvent collection and reclamation services for its customers. More than 99% generate less than 1000 kilograms (2200 pounds) of hazardous waste per month.

Currently, Safety-Kleen offers services which include the accumulation and storage of several spent materials collected from its customers. These wastes are stored until they are shipped from the Las Vegas service center to one of Safety-Kleen's recycle centers, an independent reclaimer or other permitted treatment or disposal facility. The majority of the spent materials are reclaimed or recycled and are potentially returned to customers as a useable product.

The Las Vegas facility has operated as a branch service center since the facility was constructed in 2001. The facility was initially permitted as a RCRA storage facility effective May 23, 2001. Except for the additional construction of secondary containment for the piping during 2002, no major modifications to the facility have taken place. Since beginning operations in 2001, there have been no reportable spills on the facility premises requiring implementation of the Facility Contingency Plan.

see APP
E-6

The service center operations include distribution of parts washer solvents to customers and collection of spent materials. The used solvents are returned to the facility and temporarily stored in the aboveground storage tank or in the container storage area. Wastes are stored at the facility until they are shipped off-site to a Safety-Kleen recycle center, contract reclaimer, or other permitted treatment/disposal facility. Primarily, spent 150 (flashpoint) mineral spirit solvent is bulked in the waste storage tank. However, the facility is permitted to bulk aqueous parts washer solvents in the tank if needed. The Company ceased offering 105 flashpoint mineral spirit solvent during 2010.

A process flow diagram outlining the recycle center regeneration process is attached in Appendix B. Process flow diagrams describing the parts washer recycling process are also depicted in Appendix B. Examples of the Material Safety Data Sheets (MSDS) describing the core parts washing solvents used by Safety-Kleen, the 150 flash points for mineral spirits, are displayed in Attachment F.

The Part A Application for storage of hazardous wastes is presented in Appendix A-1. A description of typical services Safety-Kleen provides its customers is provided below.

1.1.1 Parts Cleaner Service

The original service offered by the Company in 1968 was the parts cleaner service and it remains the primary business activity. This service involves the leasing of a small parts degreasing unit which consists of a sink affixed to DOT-approved containers containing Safety-Kleen parts washer solvent, one of which is a non-halogenated hydrocarbon mixture (mineral spirits), the other of which is an aqueous-based solvent.

On a regularly scheduled basis, a Safety-Kleen sales representative cleans and inspects the parts washer machine and replaces the drum of used solvent with one of clean product. Each sales representative performs about fifteen of these services per day, collecting the DOT-approved containers of used solvent on a route truck.

If able, at the end of each day, the solvent is transferred from the containers to a storage tank at the service center and containers of product are prepared for the next day's services. Periodically, a tanker truck is dispatched from one of the recycle centers to deliver a load of clean solvent and collect the spent solvent at the service center. Generally, two-thirds of the solvent used by Safety-Kleen customers have been reclaimed with the remainder being purchased from a vendor.

Safety-Kleen has also established a parts cleaner service for users who own their machines. This service, known as the Customer Owned Machine Service, provides a solvent reclamation service to these customers regardless of machine model.

A second type of parts washer, the immersion cleaner, is available for the removal of varnish and gum from such things as carburetors and transmissions. This machine consists of an immersible basket with an agitator affixed to a DOT-approved container of a non-halogenated hydrocarbon mixture. The spent immersion cleaner solvent remains in the container after delivery to the service center where it is stored in the container storage area of the warehouse. Periodically, a box trailer truck is dispatched from a recycle center to deliver containers of fresh solvent and collect the containers of spent immersion cleaner solvent for reclamation.

1.1.2 Dry Cleaner Service

In 1984, Safety-Kleen began offering a service for the collection of filter cartridges and still bottoms contaminated with dry cleaning solvents (usually perchloroethylene). These wastes are drummed on the customer's premises and are periodically collected by a sales representative. The containerized waste is accumulated in the container storage area of the warehouse prior to shipment to a Safety-Kleen recycle center, contract reclaimer or other permitted treatment facility. Containers of dry cleaning wastes are not opened or handled at the service center. Process flow diagrams outlining the management of the Dry Cleaning process at the Branch and Recycle center are contained in Appendix B.

1.1.3 Paint Waste Collection Service

In 1986, a paint waste reclamation program was initiated to service automobile body repair businesses. Waste containing various thinners and paints are collected in DOT-approved containers on the customer's premises. The sales representative collects these containers and stores them in the container storage area of the warehouse. These wastes are periodically transported to a reclaimer and the regenerated solvent is distributed to Safety-Kleen customers for use as product.

1.1.4 Imaging/Photochemical Service

Imaging waste consists typically of three waste streams. Photo fixer solution used to etch photo film during processing. This material is characteristic for silver (D011). Safety-Kleen is able to recover the effects of the photo fixer solution. Photo developer is an aqueous solution used to neutralize the etching effects of the photo fixer. This material exhibits no hazardous characteristics but may not be discharged into public wastewater treatment system in some communities. Silver collection canisters are sent to a recycle center for silver reclamation. These canisters do not meet the definition of a solid waste per 40 ✓ CFR 260.30(c) and are managed as a non-regulated material. (see EPA correspondence response #15 at the end of this sub)

The Imaging/Photochemical wastes are placed in containers at the customer's place of business. Several of these wastes are not considered hazardous or solid wastes because the hazardous constituent may be reclaimed. However, the sales representative collects these containers and stores them in the container storage area of the warehouse. The imaging/photochemical wastes are then re-manifested and periodically sent to a Safety-Kleen recycle center, contract reclaimer or other permitted treatment facility.

1.2 DESCRIPTION OF THE FACILITY

The Las Vegas Service Center has been operating as a storage facility since September 2001. The facility consists of the following structures

- a. a warehouse with offices and a container storage area for storage of containerized wastes;
- b. one tank farm consisting of three double walled aboveground storage tanks: one nominal 12,000-gallon tank for storage of used parts washer solvent, one nominal 12,000-gallon and one nominal 10,000-gallon storage tank for product solvents or other non-regulated activities; and
- c. a solvent return and fill station with a loading dock and two drum washers. Note, the drum washers are connected via piping to the used parts washer storage tank. Used parts washer solvents are pumped from the drum washers into the storage tank.

Descriptions of the surrounding area and of waste management practices at the service center follow. Applicable maps and facility drawings are in Appendix C.

1.2.1 Regional Description

The site for the North Las Vegas, Nevada Service Center is located in Clark County approximately 800 feet north of Craig Road and east of Donovan Way. This area is zoned M-2 for manufacturing use and to the best of Safety-Kleen's knowledge, no easements or title, deed or usage restrictions exist which may be in conflict with operations at this site.

The city of North Las Vegas is located in the Las Vegas Valley, along with Henderson, Las Vegas and Boulder City. The population of this area is approximately 568,000 (2009 Census) and it covers about 740 square miles or 473,391 acres. The majority of the population is employed in industries related to gaming, tourism, wholesale and retail. The Las Vegas Valley has hot summers and mild winters, with average annual high temperatures being 80F and average annual low temperature being 50F (National Weather Service data). The total annual precipitation is approximately 4 inches and thunderstorms occur on about 15 days per year. The prevailing wind is from the southwest at a maximum average of 11 miles per hour.

The Las Vegas Valley is within the southwestern part of the Great Basin which, in turn, is in the Basin and Range Province. The service center is located in the basin floor of this area, which is a low-lying, alluvium filled valley. The elevation at the service center is 1,960 feet above sea level, and is not within a 100-year flood plain.

The soil in the area of the service center is the Glencort silt loam. This is a very deep, well-drained soil on recent alluvial fans. The surface layer is a pale brown silt loam and slope is 0 to 2 percent.

A seismic evaluation completed during December 2000 is included in Appendix E. ✓

The Las Vegas service center receives its water from the City of North Las Vegas. The primary source is Lake Mead, supplemented by wells in western Las Vegas, neither of which is within three miles of the service center. The City of Las Vegas also maintains a sanitary sewer line, which provides service to the North Las Vegas service center site. Surface drainage in this area is by way of drainage ditches.

No known oil or gas wells exist within one quarter mile of the site and it is not located in or near a wetland or critical habitat. No schools, parks or hospitals exist within one-quarter mile of the facility.

✓ The non-building areas of the facility are paved with asphalt or concrete as noted on the site plan in Appendix A. The majority of the vehicular traffic and loading/unloading operations occur at and near the return and fill station, and this area is paved with asphalt and concrete. The entrance to the facility is from Donovan Way, which is the major access road to the facility. Traffic flow patterns within the facility are ✓ shown in Appendix C. The access road was designed in accordance with engineering criteria appropriate for sustaining the traffic volume and loading for the industrial activities anticipated in this area.

1.2.2 Waste Management Practices

✓ The Las Vegas service center was designed to facilitate the handling and storage of the wastes resulting from the services offered by Safety-Kleen. The storage tanks, container storage area and return and fill station are designed to provide secondary containment and the service center has the equipment necessary for employees to safely manage wastes onsite. The site plan showing the location of the waste management units is shown in Appendix C.

Spent mineral spirits from parts washers are accumulated in one 12,000-gallon, double-walled aboveground storage tank via the return and fill station. DOT-approved containers of spent solvent are emptied into the drum washers in the return and fill station, and material in the drum washer is pumped into the 12,000-gallon storage tank for spent solvent. The return and fill station is designed to provide secondary containment in the form of a 30' x 10' x 0.5' (1122 gallons) metal pan at its base. Construction details of the return and fill is located in Appendix E.

The aboveground tanks have been designed in accordance with Underwriters Laboratory 142 and NFPA 30 standards, are of double walled construction, and painted white to reflect sunlight and minimize corrosion. Two tanks with nominal capacities of 12,000 gallons (one for used solvents, the other for product mineral spirits or other non-specified use) and one nominal 10,000 gallon tank for product mineral spirits or other non-specified use, are located northeast of the warehouse. Each tank is equipped with an audible and visual high level alarm.

The double wall construction of the tanks meets the requirements of 40 CFR 264.193(d) for secondary containment. In addition, the tanks are constructed with appropriate leak detection devices. Ancillary equipment and piping is inspected daily, and constructed in accordance with secondary containment for piping systems specified in 40 CFR 264.193(f).

The container storage area in the warehouse is to be used for the storage of (1) spent immersion cleaner, (2) dry cleaning wastes, (3) paint waste, (4) photo imaging waste, (5) sediment from the bottom of the used parts washer solvent storage tank and/or drum washers, and (6) aqueous parts washer solvent. Non-hazardous material, wastes that are not regulated (including transfer wastes) and Safety-Kleen products may also be stored in this area. The wastes in the container storage area are not handled while on site, and are segregated in properly labeled containers to indicate their contents. Incompatible wastes or materials are not anticipated to be stored in the warehouse container storage area. As shown on the ✓ site plan in Appendix C, ignitable/flammable wastes will be stored at least 50 feet from the property line.

The container storage area consists of a concrete floor approximately 48.5' by 68.3'. Secondary containment is provided by an 8-inch deep recessed floor. The recessed floor is bordered with a six-inch wide by eight-inch high concrete curb. Ramps allow movement of containers to/from the loading dock and the container storage area. Ramps exist at each doorway to facilitate access into the area. The useable floor space approximates 3,330 square feet, which provides a total containment capacity of approximately 14,743 gallons. No more than 147, 743 gallons of materials will be stored in the container storage area at any time.

The containers may be stored in the configuration as shown on the Example pallet layout in Appendix E. These containers may be stacked two levels high. The containers will be placed on pallets

while in the storage area and separated by a pallet when stacked. Two feet of aisle space will be maintained and the drums will be stored no more than seven feet high.

In addition to permitted waste management practices mentioned above, Non RCRA waste management practices are also performed at the facility to include: Used Antifreeze Collection, Used Oil Collection, Used Oil Filter Collection, Used Oil and Nonhazardous Vacuum Truck Waste Storage, and Consolidation and Storage of Nonhazardous Vacuum Truck Solids.

Used Antifreeze Collection: The facility will comply with the Used Antifreeze regulations in accordance with Nevada Revised Code (NAC) 444.8801 through 444.9071 as applicable. Used antifreeze may be collected in containers meeting USDOT specifications from the customer's premises, or it might be collected using a high volume tank truck. The materials are picked up on a periodic basis and transported back to the service center where they may be stored prior to shipment to a recycler. The containerized used antifreeze is collected and transported back to the Service Center where it may be stored prior to shipment to a recycler. Individual containers may be consolidated into the over-the road tank trailer positioned on site. Larger volumes may be collected by a high volume tanker truck. Large volumes are collected from the customers premises and then transported back to the service center where the material is off-loaded into a over-the-road tank trailer positioned onsite – for transport offsite to an offsite recycler.

Used Oil Collection: Used oil collection activities are performed offsite. However, when not in use, all used oil trucks are parked on site. The potential exists that trucks - containing used oil have the potential to be parked on-site for over 24 hours thereby triggering the used oil transfer facility requirements at 40 CFR 279.45. The facility is registered as a Used Oil Transfer Facility as a precaution, and parking area meets the secondary containment requirements found at 40 CFR 279.45 (d).

Used Oil Filter Collection: Containers of used oil filters may be stored on-site prior to shipment to a recycler. Containers may be stored in the permitted storage area or in an area outside the facility.

Used Oil and Nonhazardous Vacuum Truck Waste Storage: Used oil and Nonhazardous Vacuum sludge and liquids are collected using tank trucks. Material is collected from the customer and transported to the service center, when necessary, where the material is off-loaded into separate double walled tanks, such as a frac tank, for storage. Once sufficient volume has accumulated, the material is transferred into an over-the-road tank trailer and shipped to an oil recycler or vacuum sludge treatment facility, respectively.

Consolidation and Storage of Nonhazardous Vacuum Truck Solids: Occasionally a vacuum truck builds up a heel of non-pumpable solids. When this occurs, the heel will be offloaded into a sludge pan and dumped into a rolloff box stored on site. Any excess liquids are solidified with a clay absorbent or similar

material. Once sufficient volume has accumulated in the rolloff box to create a full load the rolloff will be transported offsite for final disposition.

**NATIONAL ASSOCIATION OF PHOTOGRAPHIC MANUFACTURERS, INC.***The Association for Manufacturers of Image Technology Products*

550 Mamaroneck Avenue, Suite 307, Harrison, New York 10528-1612
Tel. 914/698-7603 • Fax 914/698-7609 • Telex 6719986

*John
F. J.*

August 30, 1995

To: NAPM Environmental and Health Committee
Silver Coalition

From: Tom Dufficy

Subject: RCRA Status of Silver Recovery Units (SRUs)

Enclosed are two letters from Mike Petruska, Chief of the Regulatory Development Branch, Office of Solid Waste, U.S. EPA, concerning inquiries made on behalf of the Silver Coalition relating to the regulatory status of silver recovery units (SRUs) under the Resource Conservation and Recovery Act (RCRA).

We are attempting to obtain a "consolidated" letter from EPA that would be addressed to the Silver Coalition in care of NAPM or, in the alternative, a letter from Mr. Petruska to all of the EPA regions which would clearly spell out the regulatory status under RCRA of SRUs used in photoprocessing operations.

I'll keep you informed of our progress. Give me a call if you have any questions.

TJD:jb
Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OCT 11 1994

OCT 5 1994

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. Thomas Dufficy
The Silver Coalition
c/o National Association of Photographic
Manufacturers, Inc.
550 Mamaroneck Avenue
Harrison, New York 10528

Dear Mr. Dufficy:

This responds to a letter dated September 2, 1994, from Mr. Kenneth Kastner on your behalf requesting an interpretation regarding the regulatory status of silver recovery units (SRUs) under the Resource Conservation and Recovery Act (RCRA) regulations. The purpose of Mr. Kastner's letter is to follow-up on a July 13, 1994, meeting with Environmental Protection Agency (EPA) staff on this issue and to obtain written verification of the regulatory interpretations provided at that meeting.

Mr. Kastner first references past EPA correspondence which correctly states that, to the extent that recovery units used to treat wastewater would be defined as a characteristic sludge, they would not be subject to RCRA regulations when sent for reclamation, since they would not be considered a solid waste. 40 CFR §261.2(c)(3). He then asks for confirmation that the exclusion provided at §261.2(c)(3) would apply to characteristic sludges being reclaimed regardless of whether the sludges are produced as a result of required waste-water treatment i.e., whether the treatment is necessary to achieve compliance with a specific discharge limitation or pretreatment requirement.

As we indicated in our recent meeting with Mr. Kastner, the definition of sludge is not limited to materials generated from wastewater treatment undertaken specifically to meet Federal, state or local discharge or pretreatment requirements. Instead, the term applies to materials generated from wastewater treatment regardless of whether such treatment is required by law or regulation.

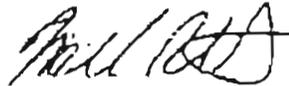
Mr. Kastner also requests confirmation from EPA that 98% pure silver flake material that is recovered from photoprocessing operations and further refined to produce 99.99% pure silver product is not considered to be a RCRA regulated waste. According to Mr. Kastner's letter, the silver flake is

2

essentially "commodity-like" at the point of recovery, i.e., prior to further refining. EPA has stated that metals that are suitable for direct use, or that only have to be refined to be useable, are products, not wastes. 50 FR at 634 (January 4, 1985). Therefore, based on the information provided, the high purity silver flake would be considered a product at the point at which it is recovered from the photoprocessing operation and as such would not be subject to regulation under RCRA.

It is important to note that EPA Regional offices and States authorized to implement the RCRA program make determinations regarding the requirements that apply in specific situations. Also, some States have programs that are more stringent than the Federal hazardous waste program. If you have any further questions on this issue please contact Mitch Kidwell at (202) 260-8551 or Becky Daiss at (202) 260-8718.

Sincerely,



Mike Petruska
Chief
Regulatory Development Branch

cc: Kenneth M. Kastner



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

A18 4 835

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Ms. Orlean Thompson
Senior Environmental Scientist
Corporate Environmental Services
Health, Safety and Environment
Eastman Kodak Company
Rochester, New York 14652-6279

Dear Ms. Thompson:

This is in response to your May 3rd letter to Stephen Bergman of my staff. Both he and Marilyn Goode found the tour that you arranged of the photographic processing facilities at the National Geographic Society to be quite informative.

Based upon past conversations that we have had with you and your attorneys, it appears that it would be useful for me to clarify our policy regarding the regulatory status under the Resource Conservation and Recovery Act (RCRA) of silver recovery units used in photo processing.

A silver recovery unit used to treat photo processing wastewater that exhibits a characteristic is considered to be a characteristic sludge (regardless of whether the sludge is produced as a result of required wastewater treatment) and, as such, is not subject to RCRA regulations when sent for reclamation. A characteristic sludge being reclaimed is not considered a solid waste, according to the provisions of 40 CFR 5261.2(c)(3).

Again, thank you for arranging for my staff to visit a silver recovery operation and for your continued efforts to get us the materials that we needed to make an informed determination. If you have any further questions, please contact Stephen Bergman at (202) 260-5944 or Marilyn Goode at (202) 260-6299.

Sincerely,

Michael Petruska, Chief
Regulatory Development Branch



Recycled Paper
Post-consumer, 100% recycled ink and fiber
contains at least 50% recycled fiber

2. WASTE ANALYSIS PLAN

ABSTRACT

Waste Description	EPA Waste Codes	Facility Capacity	Storage Unit	Estimated Annual Amount
Spent Solvent	D001 ¹	12,000 Gallons	Aboveground storage tanks Drum Washers ⁴	160, 000 Gal 521 Tons
Sediment (Bottom of Tank)	D001 ¹	N/A	Aboveground storage tank	10,000 Gal 45 Tons
Sediment (Drum Washers ⁴)	D001 ¹	N/A	Drum Washers ⁴	5, 500 Gal 25.5 Tons
Spent Immersion Cleaner	D006 ¹	147,430 ²	Container Storage Area	7, 000 Gal 26.25 Tons
Dry Cleaning Wastes	F002, D001 ³	147,430 ²	Container Storage Area	20, 000 Gal 101 Tons
Paint Waste	D001, F001, F002, F003, F004, F005 ¹	147,430 ²	Container Storage Area	15, 000 Gal 51 Tons
Photochemical Waste	D011	147,430 ²	Container Storage Area	5,000 Gal 21 Tons

1 D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D040, D041, D042, D043

2 Total quantity of combined wastes stored in the container storage area will not exceed 147,430 gallons.

3 D001 is added for mineral spirits dry cleaning solvent.

4 The drum washers will not be used for storage. The drum washers transfer used parts washer solvents to the storage tank, and are permitted as miscellaneous units.

SECTION 2

WASTE ANALYSIS PLAN

2.1 INTRODUCTION

In accordance with 40 CFR 264.13, and 40 CFR 270.14(b)(2) this Waste Analysis Plan provides the Safety-Kleen Las Vegas Service Center with the information needed to verify that the waste it receives is the waste described on the manifest and to manage the storage of permitted hazardous wastes. This Waste Analysis Plan meets the requirements of 40 CFR 264.13 and is applicable only to permitted waste streams. This Waste Analysis Plan also conforms to the requirements of U.S. EPA Publication PB94-963603, OSWER 9938.4-03, Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste. It is not written for any waste stream handled by the Safety-Kleen Service Centers on a ten-day transfer basis or for non-hazardous waste.

2.2 ABSTRACT

Safety-Kleen Systems is an international supplier and reclaimer of parts-cleaner solvents known as parts washer solvent and immersion cleaner. Safety-Kleen provides these part-cleaning solvents to businesses engaged in services such as industrial maintenance and automotive repair, where solvents are used to clean oil, grease, and dirt from metal parts. When the solvents become used, they are collected by Safety-Kleen and replaced with clean solvents. The used solvents are brought back to the Safety-Kleen Service Center. Safety-Kleen Service Centers also collect used materials from the dry cleaning industry, photo industry, and industries using paint and lacquer thinners. These materials are routinely picked up from businesses and transported to the Las Vegas Service Center, stored and then ultimately shipped to a Safety-Kleen approved recycling facility. Safety-Kleen also collects and handles hazardous ten-day transfer wastes and other non-hazardous wastes, which are not subject to this Waste Analysis Plan.

The used solvent waste streams are the primary feedstock for the generation of Safety-Kleen solvent products. As a result, quality control of the used solvents is necessary to ensure that reclamation occurs in the safest and most efficient manner possible. The purpose of this Waste Analysis Plan is to provide the information to manage the hazardous wastes at the Las Vegas Service Center by establishing procedures consisting of (1) Qualitative/Visual Waste Analysis, and (2) Quantitative Waste Analysis. The Qualitative/Visual Analysis will be documented.

Safety-Kleen generates drum washer sediment from washing/cleaning drums containing used parts washer solvent (consisting of soils, oils, grease, water, small amounts of solvent, and some metal parts). Safety-Kleen also generates waste solvent tank bottom sediment, personal protective clothing, spill debris, and sampling debris. Characterization of these Safety-Kleen generated wastes is based on knowledge of the waste stream. The drum washer sediment and the tank bottom sediment are derived from the used parts washer solvent. These wastes are hazardous according to the Toxic Characteristic Leaching Procedure (TCLP) because of heavy metals (i.e. lead and cadmium) and other organic TCLP codes. The wastes are also ignitable.

Safety-Kleen also generates gloves, rags, used sampling equipment and occasional spill debris from product lines. The characterization of these generated wastes is based on knowledge of the waste stream that generates the used gloves, rags, and spill debris. All waste generated by Safety-Kleen on site is stored less than 90 days and is therefore not a subject of this Waste Analysis Plan.

As described above, Safety-Kleen has extensive knowledge of the waste streams it accepts. This knowledge of these waste streams is the basis for this Waste Analysis Plan. This knowledge is confirmed by fingerprint analysis (Qualitative/Visual Waste Analysis) where appropriate, and further confirmed by annual confirmation analysis (Quantitative Waste Analysis). The following sections of this Waste Analysis Plan provide Waste Management Procedures, and include sections on Quality Control Procedures as well as a description of the wastes, and Waste Analysis Procedures.

WASTE MANAGEMENT/QUALITY CONTROL PROCEDURES

As discussed earlier in the Facility Description Section 1.0 of this Permit, the materials collected at the service centers are typically collected from generators that use a single process. Safety-Kleen services approximately 500,000 customers nation wide and has operated for over 30 years. As such, the composition and quality of these materials are well known, and the Company's operating experiences have shown that the used materials collected rarely deviate from Company specifications. The used materials managed at the Las Vegas Service Center are the primary feedstock for the generation of Safety-Kleen products. As a result, control of the used materials is necessary to ensure that reclamation occurs in the safest and most efficient manner possible. Safety-Kleen controls the use and management of its solvent by:

- Limiting the solvents stored to those compatible with one another and their containers

- Limiting the uses of each type of solvent (for example, dry cleaner waste is only collected from dry cleaners)
- Determining the customer's type of business, the purpose for which he will use the machine, and recording this information on the placement document
- Training the customer to use the machine properly
- Training employees to inspect used solvent and determine whether or not it is acceptable (Qualitative/Visual Waste Analysis)
- Indicating on the service document, every time a waste is collected, whether the used solvent meets Safety-Kleen's acceptance criteria
- Marking each container with the customer's name, address, and EPA ID number (if required)
- Keeping a record of each incoming and outgoing shipment in the operating log of each facility
- Not combining the containers of spent immersion cleaner, dry cleaning, paint waste/lacquer thinner, photo chemical waste with other containers of waste. Wastes are stored and transported in the original containers in which they are collected
- Informing customers of their responsibilities for proper waste management by requiring each customer to sign a service document containing the following information:
 - a) Name, address, and EPA ID number of the facility to which the waste is being shipped
 - b) Name and title of the owner/operator
 - c) Generator status (CESQG, SQG, LQG)
 - d) Customer's name, address, and EPA ID number (if required); and
 - e) Description and amount of waste generated.

2.3 DESCRIPTION OF WASTES

The Safety-Kleen Las Vegas Service Center operates as a permitted hazardous waste storage facility. The hazardous properties of the wastes have been determined by Safety-Kleen's extensive experience in handling these waste streams, knowledge of the processes that produce each waste and extensive analytical data derived from the Annual Recharacterization, a thorough statistical analysis of the permitted core waste streams managed by the company. Several types of waste result from the servicing of Safety-Kleen customers and the maintenance of the service center. Example analytical data for the wastes and specifications for the products are in Appendix D (Annual Recharacterization data) and qualitative descriptions follow. Permitted core waste streams are the predominant four waste streams received at the Safety-Kleen facility; used parts washer solvent, used immersion cleaner, used dry cleaner materials and paint waste/lacquer thinner waste. These waste streams are industry specific and

consistent. Analytical data regarding the Permitted core waste streams is derived from the Annual Recharacterization following methods specified in the most current edition of EPA SW- 846.

2.3.1 Wastes Resulting From the Parts Washer Service

Spent parts washer solvent is accumulated in a 12,000-gallon aboveground storage tank via the return and fill station. Containers of used mineral spirits solvent, are poured into a drum washer at the return and fill station which in turn empties into the tank. This waste handling method generally results in three types of solvent waste:

- a. Spent mineral spirits solvent—The spent solvent is removed from the tank by a tanker truck on a scheduled basis. About 6,000-7,000 gallons are generally removed. This waste is ignitable (D001) or potentially toxic according to the toxicity characteristic leaching procedure for the following waste codes, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. Based on bi-annual waste reports in year 2008, approximately 160,000 gallons of spent mineral spirits are anticipated to be shipped to Safety-Kleen recycle centers annually.

- b. Bottom sediment in the tank—Approximately once every two years, it is necessary to remove sediment and other heavy material from the bottom of the tank. A vacuum truck is generally used for this purpose and collects this waste for reclamation. The sediment is ignitable (D001), and may exhibit the hazardous characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. The waste sediment will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

- c. Drum Washer sediment — Sediment also accumulates in the bottom of the drum washing units located in the return and fill station. This sediment is manually removed, containerized and temporarily stored in the container storage area as branch generated waste. The chemical composition of this waste is analogous to that of the bottom sediment from the tank. The waste sediment will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

Other types of parts washer solvents typically managed at Safety-Kleen facilities include immersion cleaner and aqueous-based solvents. The immersion cleaner is a non-halogenated

hydrocarbon mixture and may exhibit the toxicity characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043. Immersion cleaner remains in the container in which it was originally used and stored in the container storage area of the warehouse. The containers of immersion cleaner are not opened or otherwise managed while on-site. Containers of spent immersion cleaner may be stacked two-high in the container storage area of the warehouse. The waste solutions will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

Aqueous-based parts washer solvents may be placed in the used parts washer solvent tank, or either bulked on-site in larger DOT-approved containers, or remain in the container in which it was originally used and stored in the container storage area. The aqueous parts washer solvent may exhibit the toxicity characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043. Hazardous aqueous parts cleaner waste will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

2.3.2 Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of spent filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are packaged on the customer's premises. The containers are then palletized and placed in the drum storage area of the warehouse. While approximately 90% of the dry cleaning solvent waste generated is spent perchloroethylene (F002) and hazardous according to the toxicity characteristic leaching procedure (D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043), 5% is spent trichlorotrifluoroethane (F002) and hazardous according to the toxicity characteristic leaching procedure (D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043), 5% is spent mineral spirits dry cleaning solvent which would add waste code D001. The waste dry cleaning material will be transported to a Safety-Kleen Recycle Center or other properly permitted facility

2.3.3 Paint Waste Service

Paint waste consists of various lacquer thinners (D001, F001, F002, F003, F004 and F005) and paints. Paint wastes may also be toxic for waste codes D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. The waste is collected in DOT-approved

containers at the customer's place of business. The containers are then transported to the service center where they are palletized and stored in the container storage area of the warehouse. The waste remains in the container in which it was originally packaged until it is received at a Safety-Kleen Recycle Center or other properly permitted facility.

2.3.4 Imaging/Photochemical Waste

Some imaging/photochemical wastes managed by the facility are not solid wastes per 40 CFR 261.2(c) because their hazardous constituent is reclaimed. Others are managed under the provisions of Subpart F of 40 CFR 266 (Recyclable Materials Utilized for Precious Metals Recovery). Imaging waste consists typically of photo fixer solution (this material may be characteristic for silver (D011)), used Photo Developer, silver, film negatives and other associated photographic solutions. Silver collection canisters are sent to a recycle center for reclamation. These canisters do not meet the definition of a hazardous waste per 40 CFR 260.30(c) and are managed as a non-regulated material.

2.4 QUALITY CONTROL PROCEDURES

The used solvents are the primary feedstocks for the generation of Safety-Kleen solvent products. As a result, quality control of the spent materials is necessary to ensure that reclamation occurs in the safest and most efficient manner possible. The service center collects spent solvents from customers, most of whom are small quantity generators, and containers of recoverable solvents are returned to the service center each year for shipment to a reclaimer. With such large numbers of waste generators and waste shipments, performing detailed analyses at the service center is economically and logistically infeasible.

Furthermore, as discussed earlier in the Facility Description, most of the materials collected at the service center are managed at all times in the closed loop system and are usually collected from a company with a single process. The composition and quality of these materials are known and Safety-Kleen's operating experiences have shown that the collected materials rarely deviate from company specifications. As an additional safeguard, Safety-Kleen personnel are instructed to inspect materials before returning them to the service centers. This mode of operation has been proven to safeguard the recycling process and maintain a quality product.

In accordance with 40 CFR 264.13, however, Safety-Kleen will perform physical and chemical analysis of a waste stream when it is notified or has reason to believe that the process or operation

generating the waste has changed, or when the result of inspection indicates that the waste collected does not match that designated on the manifest or shipping documents. It is Safety-Kleen's practice that suspected non-conforming material must not be accepted until a full analysis has been done or the material must be rejected. Procedures to verify waste characteristics occur at several check points in the management of the solvent, as described below.

2.4.1 Parts Washer Service

Prior to leasing a parts cleaning machine, the customer's business activity is reviewed. Where the possibility exists for contamination of the parts washer solvents (e.g., pesticide, herbicide or pharmaceutical operations), the process is reviewed to insure that the solvent is protected from the sources of contamination.

Sales representatives are instructed to visually examine the spent solvents when the machines are serviced, noting the quantity, odor and appearance of the material recovered as follows:

- a. The quantity of used solvent in the containers—Normally the 16-gallon containers of spent mineral spirits contains approximately nine gallons of liquid, the 30-gallon drum about nineteen gallons and the 16-gallon containers of spent immersion cleaner about four and one-half gallons. When the amount of liquid is substantially different from the expected quantity, an inquiry of the customer's operation and handling procedures is made. Contingent on the customer's responses, the solvent is accepted or left with the customer until analysis is completed to determine its acceptability.
- b. The odor of the liquid in the container—Should the odor of the liquid in the drum be different from that of the mineral spirits or immersion cleaner, the container is set aside for further action as described in item 'a'.
- c. The appearance of the liquid in the container—The used mineral spirits should always be a clear or greenish-brown to black tint, and float on water. The immersion cleaner is a single-phase liquid, which is dark brown to black in color. Spent aqueous solvent is also typically dark brown in color. Liquids in the containers which deviate from the above descriptions, or which contain substantial amounts of water, high density solvent and/or oil at the bottom should be set aside for further action as described in item 'a'.

At the service center, the sales representative or the warehouseman again observes the quantity, odor and appearance of the solvent prior to emptying the solvent into the wet drum washer. Containers with questionable contents are set aside and the customer is questioned. Pending their response, the drum is accepted, returned to the customer, or properly disposed of at the customer's expense. The immersion cleaner containers are never opened at the service center, so additional verification is not possible until it reaches the recycle center.

2.4.2 Dry Cleaner Waste Collection Service

The dry cleaning wastes are collected from facilities where one process is managed and the possibility of cross-contamination from other chemicals or wastes is minimal. The containers are picked up by the sales representative and delivered to the service center and stored in the container storage area. The containers are not reopened until they reach the recycle center.

2.5 WASTE ANALYSES AT THE RECYCLE CENTER

Analyses performed at the Safety-Kleen recycle centers are undertaken to safeguard the recycling process and to assure the product quality. The following tables summarize a typical waste analysis plan practiced at the recycle centers for the hazardous materials returned from the service center:

Table 2-1	Parameters and Rationale for Hazardous Waste Analyses
Table 2-2	Parameters and Test Methods
Table 2-3	Methods Used to Sample Hazardous Wastes
Table 2-4	Frequency of Analysis

These tables are included at the end of this waste analysis plan.

2.6 WASTE ANALYSIS PLAN UPDATE

This waste analysis plan will be modified when a new waste product is collected or when sampling and material management methods change.

2.7 LAND BAN NOTIFICATION/CERTIFICATION FORMS

In accordance with 40 CFR 268.7, Safety-Kleen will provide notification/certification for wastes banned from landfills as follows:

- a. Printing the Notice language on the manifests - such as for core-business customers to branch shipments; or
- b. Special forms for each regularly handled waste type (e.g., MS, IC, perc.); or
- c. A general form that must be completed for unique or non-standard waste streams. These wastes will only be handled on a transfer basis, in accordance with 40 CFR 263.12.

The Notice is required paperwork for all Safety-Kleen waste types. Shipments lacking the proper Notice will not be accepted by any Safety-Kleen facility. When a shipment with the proper Notice is received, the Notice is kept in the files of the receiving facility with the manifest or with the pre-print if a manifest is not used.

2.8 WASTE DETERMINATION FOR SUBPART BB AND CC COMPLIANCE

For purposes of waste determination, this facility utilizes knowledge of the wastes described in Sections 2.3.1 through 2.3.4 above. For those hazardous wastes which are managed on a transfer basis, the Subpart CC regulation does not apply. However, the owner/operator may use knowledge of the waste based on information included in manifests, shipping papers, or waste certification notices to confirm waste determination for the generator or the ultimate receiving facility.

Based upon this knowledge, it has been determined that all wastes managed in tanks or containers at this facility may display an average volatile organic concentration of greater than 500 ppm at the point of waste origination. Documentation of this knowledge is provided in Appendix D (waste characterization analytical results). Therefore, Hazardous wastes managed in tanks or containers at this facility shall be managed in accordance with the applicable Subpart CC Standards.

Table 2-1

Parameters and Rationale for Hazardous Waste Analysis

Hazardous Waste	Parameter*	Rationale
1. Spent Mineral Spirits	Flash Point	Ignitable Characteristic (D001)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
2. Mineral Spirits Tank Bottoms	Same as number 1	Same as number 1
3. Used Immersion Cleaner	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
4. Dry Cleaning Wastes	Perchloroethylene, 1,1,2-trichloro-1,1,2,2-trifluoroethane	Contains this ingredient (F002)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Flash Point	Ignitable Characteristic (D001)
5. Paint Wastes	Flash Point	Contains components which exceed the limits listed in 40 CFR 261.24
	TCLP	Ignitable Characteristic (D001)

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

* Earlier sample analyses indicated the parameters listed are the only ones of concern.

Table 2-2
Parameters and Test Methods

<u>Parameter</u>	<u>Test Method</u>	<u>Reference</u>
Flash Point	Setaflash closed cup tester	U.S. EPA SW 846, Third Ed., Method 1020 (ASTM Method D327-78) or an equivalent method.
Hydrocarbons, Volatile and Semivolatile Organic Compounds	Gas Chromatography (GC) and/or Mass Spectroscopy	U.S. EPA Methods 8010, 8015, 8020, 8120, 8240, and/or 8270 or equivalent methods.
Toxicity Characteristics	TCLP	40 CFR 261, Appendix II; 55 FR 11798 (March 29, 1990)

Table 2-3
Methods to Sample Hazardous Wastes

<u>Hazardous Waste</u>	<u>Reference for Sampling</u>	<u>Description of Sampling Method</u>	<u>Sampler</u>
1. Spent Mineral Spirits	Sampling a tank "Samples & Sampling Procedures for Hazardous Waste Streams" EPA - 600/2-80-018	Test Methods for the Evaluation of Solid Waste Physical/ Chemical Methods, SW846, U.S. EPA Section 1.2.1.1	For tanks - Coliwasa Tube
2. Mineral Spirits Tank Bottoms	Same as number 1	Same as number 1	Same as number 1
3. Spent Immersion Cleaner	Same as number 1	Same as number 1	Same as number 1
4. Dry Cleaning Wastes	Same as number 1	Same as number 1	Same as number 1
5. Paint Wastes	Same as number 1	Same as number 1	Same as number 1

Table 2-4
Frequency of Analysis

<u>Hazardous Waste</u>	<u>Analysis*</u>	<u>Frequency</u>
1. Spent Mineral Spirits	Flash Point	At least annually
	TCLP	At least annually
2. Mineral Spirits Tank Bottoms	Flash Point	At least annually
	TCLP	At least annually
3. Used Immersion Cleaner	TCLP	At least annually
4. Dry Cleaning Wastes	Perchloroethylene, 1,1,2-trichloro-1,1,2,2-trifluoroethane	At least annually
		At least annually
	TCLP	At least annually
	Flash Point	At least annually
5. Paint Wastes	Flash Point	At least annually
	TCLP	At least annually

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

* Past analyses have indicated the parameters listed are the only ones of concern.

SECTION 2

WASTE ANALYSIS PLAN

2.1 INTRODUCTION

In accordance with 40 CFR 264.13, and 40 CFR 270.14(b)(2) this Waste Analysis Plan provides the Safety-Kleen Las Vegas Service Center with the information needed to verify that the waste it receives is the waste described on the manifest and to manage the storage of permitted hazardous wastes. This Waste Analysis Plan meets the requirements of 40 CFR 264.13 and is applicable only to permitted waste streams. This Waste Analysis Plan also conforms to the requirements of U.S. EPA Publication PB94-963603, OSWER 9938.4-03, Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste. It is not written for any waste stream handled by the Safety-Kleen Service Centers on a ten-day transfer basis or for non-hazardous waste.

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Safety-Kleen also generates gloves, rags, used sampling equipment and occasional spill debris from product lines. The characterization of these generated wastes is based on knowledge of the waste stream that generates the used gloves, rags, and spill debris. All waste generated by Safety-Kleen on site is stored less than 90 days and is therefore not a subject of this Waste Analysis Plan.

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- Training the customer to use the machine properly
- Training employees to inspect used solvent and determine whether or not it is acceptable (Qualitative/Visual Waste Analysis)
- Indicating on the service document, every time a waste is collected, whether the used solvent meets Safety-Kleen's acceptance criteria
- Marking each container with the customer's name, address, and EPA ID number (if required)
- Keeping a record of each incoming and outgoing shipment in the operating log of each facility
- Not combining the containers of spent immersion cleaner, dry cleaning, paint waste/lacquer thinner, photo chemical waste with other containers of waste. Wastes are stored and transported in the original containers in which they are collected
- Informing customers of their responsibilities for proper waste management by requiring each customer to sign a service document containing the following information:
 - a) Name, address, and EPA ID number of the facility to which the waste is being shipped
 - b) Name and title of the owner/operator
 - c) Generator status (CESQG,SQG,LQG)
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Spent parts washer solvent is accumulated in a 12,000-gallon aboveground storage tank via the return and fill station. Containers of used mineral spirits solvent, are poured into a drum washer at the return and fill station which in turn empties into the tank. This waste handling method generally results in three types of solvent waste:

- a. Spent mineral spirits solvent—The spent solvent is removed from the tank by a tanker truck on a scheduled basis. About 6,000-7,000 gallons are generally removed. This waste is ignitable (D001) or potentially toxic according to the toxicity characteristic leaching procedure for the following waste codes, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. Based on bi-annual waste reports in year 2008, approximately 160,000 gallons of spent mineral spirits are anticipated to be shipped to Safety-Kleen recycle centers annually.
- b. Bottom sediment in the tank—Approximately once every two years, it is necessary to remove sediment and other heavy material from the bottom of the tank. A vacuum truck is generally used for this purpose and collects this waste for reclamation. The sediment is ignitable (D001), and may exhibit the hazardous characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. The waste sediment will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.
- c. Drum Washer sediment – Sediment also accumulates in the bottom of the drum washing units located in the return and fill station. This sediment is manually removed, containerized and temporarily stored in the container storage area as branch generated waste. The chemical composition of this waste is analogous to that of the bottom sediment from the tank. The waste sediment will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

Other types of parts washer solvents typically managed at Safety-Kleen facilities include immersion cleaner and aqueous-based solvents. The immersion cleaner is a non-halogenated

hydrocarbon mixture and may exhibit the toxicity characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043. Immersion cleaner remains in the container in which it was originally used and stored in the container storage area of the warehouse. The containers of immersion cleaner are not opened or otherwise managed while on-site. Containers of spent immersion cleaner may be stacked two-high in the container storage area of the warehouse. The waste solutions will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

Aqueous-based parts washer solvents may be placed in the used parts washer solvent tank, or either bulked on-site in larger DOT-approved containers, or remain in the container in which it was originally used and stored in the container storage area. The aqueous parts washer solvent may exhibit the toxicity characteristics of D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043. Hazardous aqueous parts cleaner waste will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

2.3.2 Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of spent filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are packaged on the customer's premises. The containers are then palletized and placed in the drum storage area of the warehouse. While approximately 90% of the dry cleaning solvent waste generated is spent perchloroethylene (F002) and hazardous according to the toxicity characteristic leaching procedure (D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043), 5% is spent trichlorotrifluoroethane (F002) and hazardous according to the toxicity characteristic leaching procedure (D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043), 5% is spent mineral spirits dry cleaning solvent which would add waste code D001. The waste dry cleaning material will be transported to a Safety-Kleen Recycle Center or other properly permitted facility.

2.3.3 Paint Waste Service

Paint waste consists of various lacquer thinners (D001, F001, F002, F003, F004 and F005) and paints. Paint wastes may also be toxic for waste codes D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043. The waste is collected in DOT-approved

containers at the

customer's place of business. The containers are then transported to the service center where they are palletized and stored in the container storage area of the warehouse. The waste remains in the container in which it was originally packaged until it is received at a Safety-Kleen Recycle Center or other properly permitted facility.

2.3.4 Imaging/Photochemical Waste

Some imaging/photochemical wastes managed by the facility are not solid wastes per 40 CFR 261.2(c) because their hazardous constituent is reclaimed. Others are managed under the provisions of Subpart F of 40 CFR 266 (Recyclable Materials Utilized for Precious Metals Recovery). Imaging waste consists typically of photo fixer solution (this material may be characteristic for silver (D011)), used Photo Developer, silver, film negatives and other associated photographic solutions. Silver collection canisters are sent to a recycle center for reclamation. These canisters do not meet the definition of a hazardous waste per 40 CFR 260.30(c) and are managed as a non-regulated material. See RU: 1.2.6.3 Q2

2.4 QUALITY CONTROL PROCEDURES

The used solvents are the primary feedstocks for the generation of Safety-Kleen solvent products. As a result, quality control of the spent materials is necessary to ensure that reclamation occurs in the safest and most efficient manner possible. The service center collects spent solvents from customers, most of whom are small quantity generators, and containers of recoverable solvents are returned to the service center each year for shipment to a reclaimer. With such large numbers of waste generators and waste shipments, performing detailed analyses at the service center is economically and logistically infeasible. 2

Furthermore, as discussed earlier in the Facility Description, most of the materials collected at the service center are managed at all times in the closed loop system and are usually collected from a company with a single process. The composition and quality of these materials are known and Safety-Kleen's operating experiences have shown that the collected materials rarely deviate from company specifications. As an additional safeguard, Safety-Kleen personnel are instructed to inspect materials before returning them to the service centers. This mode of operation has been proven to safeguard the recycling process and maintain a quality product.

In accordance with 40 CFR 264.13, however, Safety-Kleen will perform physical and chemical analysis of a waste stream when it is notified or has reason to believe that the process or operation

generating the waste has changed, or when the result of inspection indicates that the waste collected does not match that designated on the manifest or shipping documents. It is Safety-Kleen's practice that suspected non-conforming material must not be accepted until a full analysis has been done or the material must be rejected. Procedures to verify waste characteristics occur at several check points in the management of the solvent, as described below.

2.4.1 Parts Washer Service

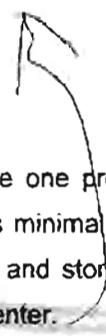
Prior to leasing a parts cleaning machine, the customer's business activity is reviewed. Where the possibility exists for contamination of the parts washer solvents (e.g., pesticide, herbicide or pharmaceutical operations), the process is reviewed to insure that the solvent is protected from the sources of contamination.

Sales representatives are instructed to visually examine the spent solvents when the machines are serviced, noting the quantity, odor and appearance of the material recovered as follows:

- a. The quantity of used solvent in the containers—Normally the 16-gallon containers of spent mineral spirits contains approximately nine gallons of liquid, the 30-gallon drum about nineteen gallons and the 16-gallon containers of spent immersion cleaner about four and one-half gallons. When the amount of liquid is substantially different from the expected quantity, an inquiry of the customer's operation and handling procedures is made. Contingent on the customer's responses, the solvent is accepted or left with the customer until analysis is completed to determine its acceptability.
- b. The odor of the liquid in the container—Should the odor of the liquid in the drum be different from that of the mineral spirits or immersion cleaner, the container is set aside for further action as described in item 'a'.
- c. The appearance of the liquid in the container—The used mineral spirits should always be a clear or greenish-brown to black tint, and float on water. The immersion cleaner is a single-phase liquid, which is dark brown to black in color. Spent aqueous solvent is also typically dark brown in color. Liquids in the containers which deviate from the above descriptions, or which contain substantial amounts of water, high density solvent and/or oil at the bottom should be set aside for further action as described in item 'a'.

At the service center, the sales representative or the warehouseman again observes the quantity, odor and appearance of the solvent prior to emptying the solvent into the wet drum washer. Containers with questionable contents are set aside and the customer is questioned. Pending their response, the drum is accepted, returned to the customer, or properly disposed of at the customer's expense. The immersion cleaner containers are never opened at the service center, so additional verification is not possible until it reaches the recycle center.

why?



2.4.2 Dry Cleaner Waste Collection Service

The dry cleaning wastes are collected from facilities where one process is managed and the possibility of cross-contamination from other chemicals or wastes is minimal. The containers are picked up by the sales representative and delivered to the service center and stored in the container storage area. The containers are not reopened until they reach the recycle center.

2.5 WASTE ANALYSES AT THE RECYCLE CENTER

Analyses performed at the Safety-Kleen recycle centers are undertaken to safeguard the recycling process and to assure the product quality. The following tables summarize a typical waste analysis plan practiced at the recycle centers for the hazardous materials returned from the service center:

Table 2-1	Parameters and Rationale for Hazardous Waste Analyses
Table 2-2	Parameters and Test Methods
Table 2-3	Methods Used to Sample Hazardous Wastes
Table 2-4	Frequency of Analysis

These tables are included at the end of this waste analysis plan.

2.6 WASTE ANALYSIS PLAN UPDATE

This waste analysis plan will be modified when a new waste product is collected or when sampling and material management methods change.

2.7 LAND BAN NOTIFICATION/CERTIFICATION FORMS

In accordance with 40 CFR 268.7, Safety-Kleen will provide notification/certification for wastes banned from landfills as follows:

- a. Printing the Notice language on the manifests - such as for core-business customers to branch shipments; or
- b. Special forms for each regularly handled waste type (e.g., MS, IC, perc.); or
- c. A general form that must be completed for unique or non-standard waste streams. These wastes will only be handled on a transfer basis, in accordance with 40 CFR 263.12.

The Notice is required paperwork for all Safety-Kleen waste types. Shipments lacking the proper Notice will not be accepted by any Safety-Kleen facility. When a shipment with the proper Notice is received, the Notice is kept in the files of the receiving facility with the manifest or with the pre-print if a manifest is not used.

2.8 WASTE DETERMINATION FOR SUBPART BB AND CC COMPLIANCE

For purposes of waste determination, this facility utilizes knowledge of the wastes described in Sections 2.3.1 through 2.3.4 above. For those hazardous wastes which are managed on a transfer basis, the Subpart CC regulation does not apply. However, the owner/operator may use knowledge of the waste based on information included in manifests, shipping papers, or waste certification notices to confirm waste determination for the generator or the ultimate receiving facility.

Based upon this knowledge, it has been determined that all wastes managed in tanks or containers at this facility may display an average volatile organic concentration of greater than 500 ppm at the point of waste origination. Documentation of this knowledge is provided in Appendix D (waste characterization analytical results). Therefore, Hazardous wastes managed in tanks or containers at this facility shall be managed in accordance with the applicable Subpart CC Standards.

Table 2-1

Parameters and Rationale for Hazardous Waste Analysis

Hazardous Waste	Parameter*	Rationale
1. Spent Mineral Spirits	Flash Point	Ignitable Characteristic (D001)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24 ✓
2. Mineral Spirits Tank Bottoms	Same as number 1	Same as number 1
3. Used Immersion Cleaner	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
4. Dry Cleaning Wastes	Perchloroethylene, 1,1,2-trichloro-1,1,2,2-trifluoroethane	Contains this ingredient (F002)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Flash Point	Ignitable Characteristic (D001)
5. Paint Wastes	Flash Point	Contains components which exceed the limits listed in 40 CFR 261.24
	TCLP	Ignitable Characteristic (D001)

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

* Earlier sample analyses indicated the parameters listed are the only ones of concern

Table 2-2
Parameters and Test Methods

<u>Parameter</u>	<u>Test Method</u>	<u>Reference</u>
Flash Point	Setaflash closed cup tester	U.S. EPA SW 846, Third Ed., Method 1020 (ASTM Method D327-78) or an equivalent method.
Hydrocarbons, Volatile and Semivolatile Organic Compounds	Gas Chromatography (GC) and/or Mass Spectroscopy	U.S. EPA Methods 8010, 8015, 8020, 8120, 8240, and/or 8270 or equivalent methods.
Toxicity Characteristics	TCLP	40 CFR 261, Appendix II; 55 FR 11798 (March 29, 1990)

Table 2-3

Methods to Sample Hazardous Wastes

<u>Hazardous Waste</u>	<u>Reference for Sampling</u>	<u>Description of Sampling Method</u>	<u>Sampler</u>
1. Spent Mineral Spirits	Sampling a tank "Samples & Sampling Procedures for Hazardous Waste Streams" EPA - 600/2-80-018	Test Methods for the Evaluation of Solid Waste Physical/ Chemical Methods, SW846, U.S. EPA Section 1.2.1.1	For tanks - Coliwasa Tube
2. Mineral Spirlls Tank Bottoms	Same as number 1	Same as number 1	Same as number 1
3. Spent Immersion Cleaner	Same as number 1	Same as number 1	Same as number 1
4. Dry Cleaning Wastes	Same as number 1	Same as number 1	Same as number 1
5. Paint Wastes	Same as number 1	Same as number 1	Same as number 1

Table 2-4
Frequency of Analysis

<u>Hazardous Waste</u>	<u>Analysis*</u>	<u>Frequency</u>
1. Spent Mineral Spirits	Flash Point	At least annually
	TCLP	At least annually
2. Mineral Spirits Tank Bottoms	Flash Point	At least annually
	TCLP	At least annually
3. Used Immersion Cleaner	TCLP	At least annually
4. Dry Cleaning Wastes	Perchloroethylene, 1,1,2-trichloro-1,1,2,2-trifluoroethane	At least annually
	TCLP	At least annually
	Flash Point	At least annually
5. Paint Wastes	Flash Point	At least annually
	TCLP	At least annually

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

* Past analyses have indicated the parameters listed are the only ones of concern.

3. HAZARD PREPAREDNESS AND PREVENTION PLAN

ABSTRACT

SECURITY MEASURES—The site is secured as follows:

- a. A chain link fence with three strands of barbed wire around the facility.
- b. Warning signs are posted at all entrances.
- c. Locks are on all entrances to the warehouse.
- d. Remote controls for all tank operations are inside a secured area.
- e. Twenty-four hour outdoor lighting.

INSPECTION PROCEDURES: See Appendix E for a copy of the Facility Inspection Record.

REQUIRED EQUIPMENT—The emergency equipment requirement is met with the following:

- a. Internal communications will be by voice or loudspeaker/paging system.
- b. Telephones are available in the office and the warehouse.
- c. Fire extinguishers are available next to exits in the warehouse.
- d. Water is available from the City of North Las Vegas.

SECTION 3

HAZARD PREVENTION AND INSPECTION PLAN

3.1 SECURITY MEASURES

The facility is secured with a chain link fence, approximately six-feet high topped by three strands of barbed wire. All access gates are locked when the facility is unoccupied and warning signs stating "Danger - Unauthorized Personnel Keep Out" which are visible from twenty-five feet are posted at the entrances. In addition, there is outdoor lighting.

The office/warehouse building is secured with locks on all doors and warning signs are posted at all entrances to work and waste storage areas.

The tanks are inaccessible in that material can not be added to or removed from them without activating the pumps, the controls for which are inside a lockable box. The pumps are not activated unless mineral spirits product or waste is being added to or removed from the tanks by Safety-Kleen personnel. In addition, warning signs are posted on the return and fill station.

3.2 INSPECTION PROCEDURES

The branch (i.e., service center) manager or his designate is responsible for carrying out and documenting the facility inspection (example inspection forms are in Appendix E) on a daily basis. The example inspection forms include typical equipment that is checked daily and whether maintenance is required. The example inspection forms are designed to standardize inspection procedures. Items to be inspected are documented on the checklist when confirmed to be in proper working condition, or any necessary repairs are documented on the form. The branch manager (or designate) is responsible for assuring that necessary repairs are completed. If the branch manager or designate cannot carry out the repairs, he/she must notify the Safety-Kleen Technical Services Department for assistance. Completion of repairs must also be noted on the Facility Inspection Record.

The facility inspection includes the following:

- a. Tank inspections—At a minimum, the tanks holding the solvent product and that holding the spent solvent are inspected daily. Daily shall mean only those days which Safety

Kleen considers to be regular workdays. The inspections include checks of the high level alarm and of the volume held in the tank. Evidence of leaks and deviations in the solvent volumes will be investigated and their causes determined. If necessary, repairs must be initiated immediately. When the tank used to store spent solvent is approximately 85% full, a pickup is scheduled with the Corporate Dispatch Department. The solvent must not exceed 95% of the tank volume at any time. The tanks are also inspected to comply with Subpart CC requirements, as discussed in sections 3.6 and 6.4.

- b. Solvent dispensing equipment—The solvent dispensing hose, connections and valves must be inspected for damage (such as cracks or leaks) and proper functioning. The pumps, pipes and fittings must also be checked for damage and proper functioning. Any damage to the solvent dispensing equipment must be noted and repaired. The solvent dispensing equipment is also inspected to comply with Subpart BB requirements, as discussed in sections 3.7 and 6.5.
- c. Container storage area—The container storage area is inspected daily and the number and condition of the drums noted. The total volume of the spent solvent held in the container storage area must not exceed ten times the amount that can be collected in the secondary containment system. The contents of any leaking or suspect drums must be placed in a drum of adequate integrity. Finally, the drums must be properly labeled and marked in accordance with DOT and Nevada hazardous waste regulations. The secondary containment system must be inspected for deterioration or failure. If cracks or leaks are detected, they must be repaired immediately. Containers are also inspected to comply with Subpart CC requirements, as discussed in sections 3.6 and 6.4.
- d. Route vehicles—The necessary safety equipment must be on board and may include: sorbents, fire extinguisher, eye wash, first aid kit, reflector kits, rubber gloves, and safety glasses.
- e. Drum Washers—The drum washers (in the return and fill station) must be inspected daily for leaks and sediment buildup. Any leaks must be noted and repaired immediately and excess sediment must be removed from the drum washers. The secondary containment pans of the return and fill must also be inspected, and repaired as necessary. The dry (trash) dumpster must be inspected to insure that no liquids are being placed in it.
- f. Safety Equipment/Personal Protective Equipment—The fire extinguishers must be checked to insure that the units are charged and accessible. In addition, the operation of

the eyewash must be confirmed and the first aid kit and sorbents must be inspected for adequate content and accessibility. Maintenance will be performed to safety equipment as necessary to insure proper operation in case of an emergency, in accordance with 40 CFR 264.33. A list of required emergency and personal protective equipment used to prevent undue exposure to hazardous waste to personal is located in Appendix F.

- g. Security—The operation of each gate and lock must be checked weekly. In addition, the fence must be inspected for deterioration on a weekly basis.

3.3 FACILITY DESIGN

The Las Vegas service center has been designed to minimize the possibility of spills or fires and to minimize the effects of any accidents that may occur. Typical specifications for the storage facilities, secondary containment and other equipment are in Appendix E and descriptions follow.

3.3.1 Tank Storage

Each tank is equipped with an audible (siren) and visual (strobe light) high-level alarm system, which will alert employees when the tank reaches 95 % capacity. Additional tank design details are included in Section 6 and Appendix E.

The return and fill station is a sheet steel structure as are the drum washer and the secondary containment. The drum washers are tight-piped to the tank. Typical return and fill and drum washer details are included in Section 6 and Appendix E.

3.3.2 Container Storage

The slab for the hazardous materials storage area in the warehouse is made of steel-reinforced concrete. The container storage area is designed so that secondary containment is provided in the form of a recessed floor. Ramps are constructed within the containment area to facilitate the movement of containers into and out of the recessed storage area.

The wastes stored in the container storage area are compatible with the container in which they are stored. Containers will be palletized whenever possible to facilitate shipping. The pallets may be stacked (no more than 2 high) while in storage. Pallets of containerized waste will have a minimum 2-foot aisle space between rows.

3.4. PLANT OPERATIONS--POTENTIAL SPILL AND FIRE SOURCES AND CONTROL PROCEDURES

Employees must perform their duties in the safest, most efficient manner possible and the service center has been equipped to facilitate these activities. Drums and boxes will be moved using a handcart or placed on pallets and moved using a forklift or pallet jack. If able, upon arrival at the service center, containers of spent solvent must immediately be added to the storage tank or placed in the container storage area. Open drums of solvent must not be left unattended. Below are descriptions of situations that can result in accidents and the precautions taken to prevent occurrences of this type.

3.4.1 Potential Minor Spill Sources

The following is a list of activities that have the potential for a minor (one that can be remediated without assistance from a clean up contractor) pollution incident:

- a. Pouring of drummed solvent into the drum washer—As the containers are poured into the drum washer, waste can splash out. Employee training emphasizes the importance of taking care in emptying the containers. The return and fill station is underlain by a metal pan to collect small splashes. This design will contain this type of spill.
- b. Filling of containers with solvent product—A low-pressure hose with an automatic shut-off valve, similar to those used at automotive service stations, is used to fill the drums with clean solvent. Leaking fittings, a damaged hose or carelessness could lead to the

discharge of solvent outside of the drum. Manual emergency shut-off valves are on each hose, should the equipment not function properly. In addition, employee training emphasizes the importance of inspection, maintenance and reporting of conditions with pollution incident potential

- c. Moving of containers--When a container is moved, a potential exists for it to tip over. To minimize the potential for spillage of waste, all containers must be maintained in an upright position and remain tightly covered while in storage or in transit.
- d. Delivery truck transfers--The cargo should be secured in the route vehicle with straps before transport. Individual containers of waste can tip over or be dropped when being moved on or off a delivery truck so transfers will be made using a handcart and a hoist, if necessary.

If a spill does occur, the amount of solvent in the containers is normally a quantity which can be collected with sorbent or pads. Any contaminated soil that results (if applicable) will be removed and transported to an appropriate facility for proper processing.

3.4.2 Potential Major Spill Sources

The following activities have the potential for a major (one for which remedial action will require assistance) pollution incident:

- a. Overfilling of storage tanks--Both product and spent solvent tanks can be overfilled with a resulting discharge of solvent. A high level alarm and daily checks of tank volumes will prevent this type of incident.
- b. Leaking pipelines--The pipelines and other equipment present a potential for leaks and resultant pollution. Regular inspection of this equipment and the solvent inventory will detect any leaks. In addition, materials flow through pipes only when Safety-Kleen personnel are present. If a failure occurs, the failure would be immediately noticed, and steps could be quickly taken to minimize the release.

3.4.3 Potential Fire Sources

The following is a list of fire prevention and minimization measures:

- a. All wastes and products are kept away from ignitable sources—Personnel must confine smoking and open flames to designated areas (e.g., the fire hydrant located at the front of the facility). The mineral spirits handling area and the storage tanks are separated from the warehouse building area to minimize the potential for a fire to spread or injury to personnel to occur

- b. Ignitable wastes are handled so that they do not:
 1. become subject to extreme heat or pressure, fire or explosion, or a violent reaction—The solvent waste is stored in a tank which is not near sources of extreme heat, fire, potential explosion sources or subject to violent reactions.

 2. produce uncontrolled toxic mists, fumes, dusts or gases in quantities sufficient to threaten human health—The vapor pressure of mineral spirits is low (2 mm Hg at 68 °F) and it is reactive with strong oxidizers only. Toxic mists, fumes, dusts or gases will not form in quantities sufficient to threaten human health since strong oxidizers are not handled at this facility and the solvent vaporization will be minimal under normal working conditions.

 3. produce uncontrolled fires or gases in quantities sufficient to pose a risk of fire or explosion—See 'a' above and 'c' below.

 4. damage the structural integrity of the Safety-Kleen facility—The mineral spirits will not cause deterioration of the tank or other structural components of the facility.

- c. Adequate aisle space is maintained to allow the unobstructed movement of personnel, fire protection equipment, and decontamination equipment to any area of the facility operation in an emergency.

- d. "No Smoking" signs are posted in areas where solvents are handled or stored.

- e. Fire extinguishers must be checked once per week and tested by the fire extinguisher company once per year.

3.4.4 Tank Evaluation and Repair Plan

The product stored in the tanks at this facility is mineral spirits or other Safety-Kleen parts washer solvents, which are compatible with the carbon steel structure; in fact, mineral spirits is often used as a light hydrocarbon coating to prevent rusting of metal parts.

If corrosion is noted, but is significant and localized, the tank will be immediately taken out of service and repaired. Should the corrosion of the vessel be extensive or if the tank is found to be leaking, the vessel will be immediately taken out of service and repaired in accordance with 40 CFR 264.196 or replaced.

3.4.5 External Factors

The design of the installation is such that a harmful spill is highly unlikely to occur from most external factors. The storage tanks are accessible only to Safety-Kleen personnel. Also, the container storage area is in a building, which is only accessible to authorized personnel.

- a. Vandalism - Only extreme vandalism would result in a solvent spill or fire. Responses to spills and fires are described in the contingency plan.
- b. Strikes - A strike would not result in a solvent spill or fire.
- c. Power failure - A power failure would not result in a spill or fire. Should a power failure occur, all activities requiring electricity, such as pumping waste or product solvent to/from storage tanks, will cease.
- d. Flooding - The site elevation is above the projected 100-year flood plain; therefore, a 100-year flood will not affect the facility.
- e. Storms or Cold Weather. The solvent return and fill station and container storage areas are roofed to eliminate the possibility of precipitation run-on. Therefore, the operation of the facility will not be effected by rainstorms, snow or other precipitation. The potential for extreme cold weather at the facility is minimal due to the mild Nevada winters. Should the

tanks or ancillary pipes freeze due to extreme cold weather, all operations involving the tank (e.g. filling or emptying tanks or containers) will cease. Extreme cold weather would not result in a spill or fire. Any ice or snow that accumulates in the secondary containment will be removed within 24 hours after melting using equipment on site.

- f. Earth Quakes. The tanks were installed in accordance to engineering standards as prescribed in the Uniform Building Codes. A seismic study is included in Appendix E. The potential for damage from earth quakes is minimal.

3.5 INTERNAL AND EXTERNAL COMMUNICATIONS AND ALARM SYSTEMS

Internal communication within the building and the solvent return/fill area is accomplished by voice or by using the telephone or loudspeaker/paging system. Telephones will be used to report a spill or a fire and to summon assistance from local and state emergency response agencies. Emergency phone numbers of local and state emergency response teams are posted by each phone located in the sales office. Included in these phone numbers is the 24-hour telephone number, which can be used to contact the Safety-Kleen Emergency Response Coordinators.

3.6 SUBPART CC COMPLIANCE

Safety-Kleen has developed a Subpart CC Compliance Plan which details procedures to achieve compliance with Subpart CC requirements. The plan includes provisions for an annual visual tank inspection of the waste solvent storage tank and vent system, as well as container inspections upon arrival at the facility and proper container management. A copy of the Subpart CC Compliance Plan is included in Appendix E.

3.7 SUBPART BB COMPLIANCE

Safety-Kleen complies with Subpart BB requirements by inspecting the process piping and equipment daily. Each valve, joint, flange, pressure relief device, pump, etc. is inspected to insure the equipment is not leaking and is functioning properly. Open-ended pipes are capped when not in use. A diagram of the facility's piping and equipment is contained in Appendix E. Process equipment is also included on the facility's daily inspection record.

4. CONTINGENCY PLAN

ABSTRACT

PURPOSE: This plan describes the proper action to be taken by employees during an emergency.

RESPONSIBILITIES: The emergency coordinator or alternate is responsible for implementing the plan during an emergency.

EMERGENCY COORDINATOR: The branch manager is the emergency coordinator. The alternate emergency coordinator is a trained employee designated to this position by the emergency coordinator.

EMERGENCY NOTIFICATIONS:

N. Las Vegas Police Department

Emergency	911
Non-emergency	(702) 649-9111

N. Las Vegas Fire Department

Emergency	911
Non-emergency	(702) 633-1102

North Vista Medical Center (Hospital)	(702) 649-7711
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Safety-Kleen Internal 24 hour emergency response	(800) 468-1760
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North LV Office of Emergency Management	(702) 633-1125 (8 – 5)
	(702) 303-0315 (Nights/Weekends)

National Response Center (NRC)	(800) 424-8802
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SECTION 4

CONTINGENCY PLAN

4.1 PURPOSE

The contingency plan describes the actions to be taken by each employee in the event of a spill, fire or other emergency. It includes the information necessary to address emergency situations efficiently and in such a manner as to prevent or minimize hazards to human health or the environment due to fire, explosion, or any other release of hazardous materials to the air, soil, surface water, or ground water.

The contingency plan is to be implemented whenever there is a release of hazardous material, which could threaten human health or the environment. It must be kept on file at the service center, in the office area. The service center manager must insure that the contingency plan is updated as necessary.

4.2 EMERGENCY COORDINATOR RESPONSIBILITIES

The emergency coordinator is responsible for implementing the contingency plan during an emergency; however, all employees must be familiar with the procedures in this plan and are responsible for proper implementation of the plan should the emergency coordinator or alternate be unavailable.

The emergency coordinator or the alternate emergency coordinators must be familiar with all aspects of this contingency plan, the operations and activities at the facility, the location and characteristics of materials handled, the location of all records within the facility and the facility layout. In addition, these coordinators have the authority to commit the resources necessary to carry out the contingency plan. Listed in Appendix F are the home addresses and telephone numbers, as well as office telephone number. At least one employee will be at the facility or on call to respond to an emergency situation.

4.2.1 Responsibilities During an Emergency

Whenever there is an imminent or actual emergency situation, that requires implementation of the contingency plan, the emergency coordinator (or his alternate when the emergency coordinator is not available) must immediately:

- a. activate the internal facility communication system to notify all facility personnel;

- b. notify Safety-Kleen's Emergency Response Coordinator using the 24-hour telephone number 800/468-1760; and
- c. notify appropriate state or local agencies with designated response roles, if necessary.

Whenever there is a release, fire, or explosion, the emergency coordinator must immediately try to identify the character, exact source, amount, and extent of any contamination. Because of the limited number of materials being handled at the facility, he or she may do this by observation or by review of facility records. If necessary, outside laboratories may be contacted to perform chemical analysis.

Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous run-off).

During an emergency, the emergency coordinator must take all measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

4.2.2 Remedial Action Responsibilities

If the environment has been contaminated or there is a potential for contamination as a result of a fire, explosion, or spill, the emergency coordinator must contact the North Las Vegas Office of Emergency Management and Safety-Kleen's Emergency Response Coordinators to report the incident. The treatment, storage and/or disposal of the recovered waste, contaminated soil or surface water that results must be arranged by Safety-Kleen and carried out as expeditiously as possible.

The emergency coordinator must ensure that, in the affected area(s) of the facility:

- a. no substance that may be incompatible with the released material is brought on site until cleanup procedures are completed; and
- b. emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

4.2.3 Reporting Responsibilities

If the emergency coordinator determines that the facility has had a release that could threaten human health or the environment, the coordinator must report those findings as follows:

- a. If the assessment indicates that evacuation of local areas may be advisable, the coordinator must immediately notify appropriate authorities.
- b. The coordinator must immediately notify the Safety-Kleen 24-hour Emergency Response Coordinators and the North Las Vegas Office of Emergency Management with the:
 - (1) name and telephone number of notifier;
 - (2) name and address of facility;
 - (3) time and type of incident (e.g., release, fire)
 - (4) name and quantity of material(s) involved, to the extent known;
 - (5) the extent of injuries, if any; and
 - (6) the possible hazards to human health, or the environment outside the facility.

In addition, the North Las Vegas Office of Emergency Management (702) 633-1125 (8-5 M thru F) or (702) 303-0315 (after hours) must be notified within 24 hours.

Safety-Kleen will notify the appropriate state and local authorities that the facility is in compliance with section 4.2.2 before operations are resumed in the affected area(s) of the facility.

The emergency coordinator must document the time, date, and details of any incident that requires the implementation of the contingency plan. Within 30 days of the incident, Safety-Kleen will submit a written report on the incident to the North Las Vegas Office of Emergency Management. Copies must also be sent to the Nevada Division of Environmental Protection. The report must include:

- a. name, address, and telephone number of the owner or operator;

- b. name, address, and telephone number of the facility;
- c. date, time, and type of incident (e.g., fire, explosion)
- d. name and quantity of material(s) involved;
- e. the extent of injuries, if any;
- f. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- g. estimated quantity and disposition of recovered material that results from the incident.
- h. Likely route of migration of the release.
- i. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate).
- j. Results of any monitoring or sampling conducted in connection with the release (if available within 30 days, these data must be submitted to the regional Administrator as soon as they become available.
- k. Proximity to downgradient drinking water, surface water, and populated areas.
- l. Description of response actions taken or planned.

4.2.4 Chain of Command

Based on the emergency response procedures described above, the chain of command during an emergency is as follows:

- a. The person who discovers/causes the spill reports to the emergency coordinator.
- b. The emergency coordinator contacts Safety-Kleen's Emergency Response Coordinators and the North Las Vegas Office of Emergency Management

4.2.5. Government Agencies and Local Authorities to Be Notified

During an emergency, the following government agencies and local authorities may be contacted:

Agency or Authority Rationale

Police Department	Notify if there is imminent danger to human health
Fire Department	Notify if there is a fire, uncontrolled spill, or other imminent danger.
Hospital	Notify if there are any injuries.
North LV Office of Emergency Management	Report releases and fires.
Emergency Response Contractor	Call to assist with remedial action after a release

Arrangements will be made to familiarize the police department, fire department and local emergency response teams with the layout of the facility, the properties of hazardous materials handled and associated hazards, locations where facility personnel normally work, entrances to and roads inside the facility, and possible evacuation routes. Arrangements have also been made to familiarize the local hospital with the types of injuries or illnesses, which could result from fires, explosions, or releases at the facility. An example letter that will be sent to the local police department, fire department and hospital is in Appendix F.

4.3 EMERGENCY RESPONSE PROCEDURES

Response actions to be taken in specific emergency situations are described in the sections which follow.

4.3.1 Minor Spills

If a spill should occur while pouring spent solvent into a drum washer or filling drums with solvent product at the return and fill station, and it is contained in the secondary containment at the base of the return and fill station, remedial action will not be necessary. Should the spill occur outside the containment, different actions must be taken depending on whether the spill occurs on a paved or unpaved area:

- a. If the solvent spills on a paved area, it must be collected with sorbent material. The sorbents will be collected, drummed and shipped to the Safety-Kleen recycle center for proper disposal.
- b. If the solvent is spilled into the storage area, it will be collected with sorbent material. The removal of any spilled solvent must take place immediately.
- c. If the solvent spills on an unpaved area, the free solvent must be collected with sorbent material. The sorbent material and any contaminated soil must be collected, drummed and shipped to a Safety-Kleen recycle center for proper disposal.

If a spill occurs while moving or delivering drums outside of the storage area, the response actions described in 'a' and 'c' above must be followed. Spills inside the storage area will be prevented from contaminating the environment by the recessed concrete floor, which provides secondary containment. In the event of a spill indoors, the doors and windows should be opened to improve the ventilation in the confined area. If solvent is spilled in a non-explosion rated area or is flowing in such, insure that all sources of ignition (e.g., thermostats or light switches) are left in the same position (either on or off) as at the time of the spill. Then, following the instructions of the appropriate Material Safety Data Sheet, the worker will enter the area wearing rubber gloves, aprons, safety glasses, and/or a respirator, collect the liquid, as described in "b" above, drum it and return it to storage.

Cleanups are completed only when the workers have cleaned themselves and the emergency equipment with soap and water. All minor spills must be reported to the Safety-Kleen's Environmental Response Coordinators and the coordinator will contact the North Las Vegas Office of Emergency Management if required.

4.3.2 Major Spills

Any spill which can not be completely remediated using the methods described in 'a', 'b', and 'c' of section 4.3.1 is a major spill. A major spill is usually the result of a vehicular accident, tank overfilling, equipment failure or a fire. Spilled material, which escapes collection can contaminate soil, surface water, ground water, sanitary sewer systems and storm sewer systems. Emergency response to this type of spill should be as follows:

- a. Assist any injured people

- b. Stop the flow of material , if possible.
- c. Retain, contain or slow the flow of the material if it can not be stopped.
- d. If the material escapes containment efforts, immediately call the local Fire Department, and report to the emergency coordinator and Safety-Kleen's Emergency Response Coordinators .
- e. Immediately recover the spilled solvent to reduce property and environmental damage. Start recovery operations immediately.

The emergency coordinator shall report any incident as soon as possible to the Safety-Kleen's Emergency Response Coordinators using the 24-hour telephone number. The emergency coordinator shall call an emergency cleanup response contractor, if it is deemed necessary, and report the incident to the National Response Center and the North Las Vegas Office of Emergency Management 24-hour number. Safety-Kleen's Emergency Response Coordinator may also contact the proper authorities.

The person reporting a spill should be prepared to give his name, position, company name, address, and telephone number. The person reporting should also describe the material spilled and, if possible, some estimate of the amount, and the containment status and specify any equipment needed. Contaminated material resulting from remedial actions for major spills, will be disposed of at a properly permitted treatment or disposal facility.

Every spill must be recorded using a Spill Report Form (Appendix F – Example) and reviewed with branch personnel to prevent similar spills from occurring in the future. A copy of this report is sent to the corporate or regional safety officers.

4.3.3 Provisions for Secondary Containment Repair or Closure

After a release or spill to secondary containment, the area shall be repaired (e.g. 40 CFR 264.196 (e) & (f) and inspected as required.

4.3.4 Fire Control Procedures

If a fire occurs, personnel must act quickly with the fire extinguisher to put out the fire before it spreads, where possible, without undue threat to personal safety. It is Safety-Kleen policy that personnel

only respond to incipient fires. That is, those which can immediately be extinguished using a fire extinguisher. Any fire which cannot be brought under control immediately or which has the potential to become uncontrollable warrants implementation of the evacuation plan.

Vapors of mineral spirits exposed to a spark or open flame can flash at temperatures over 105° F. A mineral spirits fire can best be extinguished with foam. If foam is not available, sweeping the fire with water fog can cool it, directing the water spray to push the flames into a confined area, if possible. The flame should not be extinguished until the flow of the solvent has been stopped. Then attention should be directed immediately to extinguishing the flame.

Chlorinated solvents (Dry cleaning wastes) are not flammable, but can produce toxic substances at very high temperatures (about 1200° F). Immersion cleaner can generate carbon monoxide and other poisonous gases when exposed to heat. The potential for the materials reaching a decomposition state is minimal; however, branch personnel and local authorities must be aware of the proper response, should a fire affect the drum storage areas, for example:

- a. Isolate the hazard area and deny entry to unauthorized personnel.
- b. Stay upwind; keep out of low areas.
- c. Ventilate closed spaces before entering them.
- d. Wear positive pressure breathing apparatus and protective clothing.
- e. Evacuate a 600-foot radius area if there is the potential for the release of gas.

A fire in the container storage area can best be extinguished by foam, water fog, or water spray.

4.4 EVACUATION PLAN

Exits are clearly marked in the warehouse and office area and employees are trained to be aware of all potential escape routes. The Site Evacuation Plan is shown in Appendix F.

When an uncontrolled fire or release has occurred, all personnel are to be evacuated from the area and assemble in front of the office building to assure that all personnel are accounted for and out of the hazardous area. The signal for evacuation will be a verbal cry, indicating the nature of the emergency and the need for evacuation. The loudspeaker system may be used to broadcast the signal. The fire

department must be notified at the time of evacuation either from a safe on-site building or from a neighboring facility.

4.5 ARRANGEMENT WITH EMERGENCY RESPONSE CONTRACTORS

An emergency response contractor is identified on the Emergency Information sheet (Appendix F). This contractor will provide emergency assistance during a release and/or cleanup.

4.6 IMPLEMENTATION SCHEDULE

Where a hazard is imminent or an accident has already occurred, remedial action must be taken immediately. The branch manager has the overall responsibility for remediating any discrepancies found during a routine inspection, and will consult with the corporate environmental and engineering staffs to design an implementation schedule.

4.7 AVAILABILITY AND REVISION OF THE CONTINGENCY PLAN

This plan and all revisions to the plan are kept at the facility and regularly updated throughout the operating life of the facility. Copies of this document are provided to local authorities and organizations listed on the Emergency Information sheet (Appendix F) and they may be called upon to provide emergency services. In addition, this plan and all revisions to the plan are made readily available to employees working at the facility.

The plan is reviewed and updated, if necessary, whenever:

- a. the facility permit is modified to allow new process wastes to be stored or treated, or applicable regulations are revised;
- b. the list or location of emergency equipment changes;
- c. the facility changes in its design, construction, operation maintenance, or other circumstances in a way that:
 - (1) increases the potential for fires, explosions, or releases of hazardous constituents, or

- (2) changes the response necessary in an emergency;
- d. the names, addresses, or phone numbers of emergency coordinators change;
- e. the employee assigned to each emergency task changes; or
- f. the plan fails when implemented in an emergency.

5. PERSONNEL TRAINING

ABSTRACT

OBJECTIVE: The purpose of training is to familiarize employees with environmental regulations, records and emergency procedures so they can perform their jobs in the safest and most efficient manner possible. The program is designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems.

TIME OF TRAINING

JOB TITLE	Prior to Starting Work	On the Job	Annually	When Regs and/or Procedures Change
Branch Manager	X	X	X	X
Branch Middle Manager	X	X	X	X
Branch Secretary		X	X	X
Sales Representative	X	X	X	X
Warehouse Person	X	X	X	X

SECTION 5

PERSONNEL TRAINING

5.1 OUTLINE OF TRAINING PROGRAM

Each employee is trained to operate and maintain the facility safely, and to understand hazards unique to his/her job assignment. The training is designed to meet Federal regulations and requirements. New branch managers must complete an introductory training program before starting their jobs, with annual review and update thereafter. Appendix G contains information on service center personnel to include job descriptions and training outlines.

5.2 ORGANIZATION STRUCTURE AND JOB DESCRIPTIONS

Environmental compliance and training of branch employees is the responsibility of the branch manager. The Safety-Kleen corporate office provides a training program to be executed annually. The training program is directed by personnel trained in hazardous waste management procedures and includes instruction on hazardous waste management for facility personnel in accordance with 40 CFR 264.16(a)(2). Job descriptions for branch personnel are in Appendix G. In accordance with 40 CFR 264.16(d)(1), a list of employees, their job titles, and job functions will be maintained at the facility.

5.2.1 Branch Manager

The branch manager is ultimately responsible for the business and operations at the service center. The sales representatives, secretary and warehouseman report to the branch manager. The branch manager provides the training and materials necessary for the branch employees to execute their duties. With respect to environmental compliance, he must:

- a. keep the service center clean and orderly;
- b. execute or designate an employee to execute the daily inspection, keep a written log and remediate any problems;
- c. know the potential hazards of the material and wastes handled on site;

- d. identify potential spill and fire sources and be able to execute the contingency plan;
- e. inform all employees of their environmental responsibilities;
- f. act as emergency coordinator and notify the proper authorities during an emergency, remediate the situation to the best of his abilities, and submit necessary reports to the corporate office; and
- g. maintain all environmental records (such as manifests, training records and spill reports) at the service center.

5.2.2 Corporate Compliance Department

Safety-Kleen's Corporate Compliance Department has personnel on staff who provide guidance to divisional and regional personnel for training, permitting and other compliance issues for the service centers in a geographic area of the country.

5.3 DESCRIPTION OF THE TRAINING PROGRAM

Employee training may be accomplished using classroom, videotape, written and on-the-job methods. The regional/corporate offices prepare a training program for employees, and documents that the program has been executed.

An employee is trained prior to starting or as soon as he/she begins working (depending on the specific position), and annually thereafter. Safety-Kleen ensures that the Branch Manager has received adequate training and that he trains all branch personnel. Appendix G contains an example outline of the training program, which demonstrates that facility personnel are trained in Hazardous Waste Management procedures.

5.3.1 Training of New Branch Managers

New managers may be trained before they begin their new positions. This training occurs both onsite, on the job, and during offsite classroom training. Training may occur at a designated "training facility", where the new manager reviews all environmental records and learns the recordkeeping

requirements. These records include manifests, personnel records, training records, facility inspection records, and spill reports.

The training culminates with additional training at the branch manager's new facility at the direction of an environmental professional. This training includes, at a minimum, a review of the facility permit, including all aspects of the Waste Analysis Plan, Preparedness and Prevention Plan, Contingency Plan, Training Plan and Closure Plan. Appendix G contains an example outline of the training program. Additional time is spent reviewing past environmental compliance at the branch manager's facility and regulations unique to the state are discussed as well.

5.3.2 Training of New Branch Secretaries

Branch secretaries are trained in the proper recordkeeping procedures as soon as they begin working for Safety-Kleen. While they are not usually responsible for preparing the documentation, they must check it for accuracy and completeness and then process or file it as required. . Additional site specific training to include emergency procedures/spill response training is performed by the Branch Manager or designate within the first few days. Additional training is overseen by the branch manager and is done within six months of starting.

5.3.3 Training of Middle Managers and New Sales Representatives

New sales representatives are trained in regulatory issues, manifests, facility inspection records and training records. A sales representative may also be trained as the designate for performing the facility inspection. Additional training is in the form of videotape presentations and a review of the contingency plan. The contingency plan must be reviewed with the branch manager before the middle manager or sales representative formally begins his new position and annually thereafter. All items listed in the Training Plan Outline (Appendix G) must be explained within six months of starting.

5.3.4 Training of New Warehouse Persons

A warehouse person is trained to maintain the service center and assist the other branch employees in their tasks. He may be a designate for the facility inspection and may be trained by the branch manager as such. Within two weeks of the warehouse person's starting, the branch manager must review the contingency plan with him, and within six months he must review the items listed in the example Training Plan Outline (Appendix G).

5.3.5 Annual Training

On an annual basis, employees are trained using a program prepared and updated by the Safety-Kleen Regional and/or Corporate Compliance Offices and Safety Department offices. It includes updates on environmental regulations, an in-depth review of the contingency plan and a review of RCRA inspection criteria.

All service center employees must annually review training items such as those listed in the Example Training Plan Outline. This review may be in the form of videotapes and/or a review and discussion of the storage facility permit application. In addition, periodic memoranda on changes in environmental regulations are issued by regional and/or corporate offices and must be read and discussed by branch personnel.

5.4 TRAINING RECORDS

Employee training will be documented. Employees complete a written examination at the conclusion of training. Training records will be maintained onsite.

6. SPECIFIC FACILITY INFORMATION

ABSTRACT

FACILITY DESCRIPTION: 1.39-acre facility with the following hazardous waste management units:

- a. one loading dock and a solvent return and fill station;
- b. One above ground tank containing spent solvent with dual wall construction to provide secondary containment; and
- c. one container storage area.

FACILITY TYPE: Storage in an aboveground tanks and containers

SECTION 6

SPECIFIC FACILITY INFORMATION

6.1 PURPOSE

The purpose of this section is to provide information for equipment or typical construction details of the hazardous waste management units, normally used at Safety-Kleen service centers. A brief description of each hazardous waste management unit and waste management practices is described below. Construction drawings are provided in Appendix E.

6.2 DESCRIPTION OF THE HAZARDOUS WASTE MANAGEMENT UNITS

As described in Section 1, Safety-Kleen operations consist of the following structures/hazardous waste management units:

- a. a solvent return and fill station with a loading dock and two drum washers. Note the drum washers are connected via piping to the used parts washer storage tank. Used parts washer solvents are pumped from the drum washers into the storage tank.
- b. one tank farm consisting of three double walled aboveground storage tanks: one nominal 12,000-gallon tank for storage of used parts washer solvent, one nominal 12,000-gallon and one nominal 10,000-gallon storage tanks for product solvents or non regulated use; and
- c. a warehouse with offices and a container storage area for storage of containerized wastes;

The Las Vegas service center was designed to facilitate the handling and storage of the wastes resulting from the services offered by Safety-Kleen. The storage tanks, container storage area and return and fill station are designed to provide secondary containment and the service center has the equipment necessary for employees to safely manage wastes onsite.

6.3 Waste Management Practices

Spent mineral spirits from parts washers is to be accumulated in one 12,000-gallon, double-walled aboveground storage tank via the return and fill station. DOT-approved containers of spent solvent are emptied into the drum washers in the return and fill station, and material in the drum washer is pumped into the spent solvent 12,000-gallon storage tank. System components of the return and fill station and tank systems are discussed in subsections below.

Other regulated wastes, as well as non-regulated wastes and products are managed in DOT-approved containers, and stored in the container storage area of the warehouse. The containerized wastes are not opened, or otherwise handled in the container storage area. These wastes are accumulated and ultimately transported to a permitted facility for processing or recycling. Construction details of the container storage area are discussed in a subsection below.

6.3.1 Return and Fill Station Components

The return and fill station is designed to facilitate transfer of used parts washer solvents to the used parts washer solvent storage tank, rinse the containers of used solvents, and fill with clean solvent product for the next days services. The return and fill station consists of an elevated dock structure with roof, and bays to facilitate movement of containers from the route trucks. Containers of used parts washer solvents are emptied into drum washers (2), which are connected via piping to the used parts washer solvent tank.

The return and fill station and associated components, are designed to transfer wastes to the used parts washer solvent storage tank and shall be permitted as miscellaneous units (40 CFR 264 Subpart X). The return and fill station and associated components are an integral part of the waste management operations associated with the used parts washer solvent storage tank and are designed, constructed, operated, maintained and closed in accordance with the applicable requirements of 40 CFR 264.

Secondary containment for the return and fill station is provided by a 30' x 10' x 0.5' (1122 gallons) metal pan at its base. Typical construction diagrams of a return and fill station, piping diagrams, and drum washer details are provided in Appendix E.

6.3.2 Aboveground Storage Tank Components

The aboveground tanks are designed to meet applicable industry standards for design and construction of tanks and the applicable requirements of 40 CFR 264.192 and 270.16. An assessment of the tank(s) is provided in Appendix E to demonstrate compliance with 40 CFR 264.192 and 270.16(a). The assessment documents that the storage tank is suitable for storage of parts washer solvents. In addition, an integrity assessment of the tanks is also included in Appendix E.

The tanks are of double walled construction, and painted white to reflect sunlight and minimize corrosion [270.16(e)]. Two tanks with nominal capacities of 12,000 gallons (one for used solvents, the other for product mineral spirits) and one nominal 10,000 gallon tank for unspecified non-regulated use are located northeast of the warehouse. The tanks are located on a concrete slab and properly anchored. Manufacturer specifications that show the dimensions and capacity of the tanks, as well as anchors, piping diagram, pumps, vents, etc. for the tank systems are provided in Appendix E to demonstrate compliance with 40 CFR 270.16 (b-d).

The double wall construction of the tanks meets the requirements of 40 CFR 264.193(d) for secondary containment [40 CFR 270.16(g)]. In addition, the tanks are constructed with appropriate leak detection devices. Ancillary equipment and piping consists of welded seams, and is inspected daily, in accordance with secondary containment for piping systems specified in 40 CFR 264.193(f) and (1).

Each tank is equipped with a high level alarm, pressure relief valves and volume gauges. Manufacturer specifications or typical construction diagrams for each of these safety devices are included in Appendix E.

Annual inspections of the tank system are conducted in accordance with Subpart CC regulations. Safety-Kleen's standardized Subpart CC Compliance Plan is included in Appendix E. The wastes associated with the used parts washer solvents are characterized as heavy organic liquid (greater than 10 percent organics by weight) as discussed in Section 2.8. The tank system piping, pumps, valves, etc. are inspected daily in accordance with Subpart BB requirements. A piping diagram, showing each flange, valve, gauge, pump, etc., is included in attachment E. The diagram will be used in conjunction with an inspection checklist to document that the piping and equipment is in proper working condition. Repairs will be implemented as necessary.

Tanker trucks will periodically be dispatched to the service center to remove the used parts washer solvents from the storage tank, and/or deliver product mineral spirits. The tanker loading/unloading area is to the north of the tankfarm area. The tanker loading/unloading area is paved

with concrete, which slopes toward a sump. The sloped concrete and sump are designed to contain a spill while transferring wastes or products. Bollard posts installed around the tankfarm perimeter minimize the potential for damage to the tanks from vehicular traffic.

6.3.3 Container Storage Area Details

The container storage area is located in the service center warehouse. Building plans and typical construction details are provided in Appendix E, which shows where the containers subject to the requirements of 40 CFR 264 Subpart CC are kept [270.27(2)]. The container storage area consists of a concrete floor approximately 49.5 feet by 69.25 feet. An 8-inch deep recessed floor provides secondary containment in accordance with 40 CFR 264.175 and 270.15(a). Ramps allow movement of containers to/from trucks at the loading dock and the container storage area. Ramps are also placed at each walk-through doorway to facilitate access into the area. Containers will be placed on pallets within the container storage area. Should a release occur, the pallets will prevent contact of containers with the free liquids [40 CFR 270.15(a)(2)]. The container storage area is located within the warehouse building; therefore, run-on during precipitation events, will be prevented by the warehouse roof [40 CFR 270.15(a)(4)].

The useable floor space of the container storage area is approximately 3,344 square feet, which will provide a total containment capacity of approximately 14,743 gallons. Secondary containment calculations are provided at Appendix E-13. In accordance with 40 CFR 264.175, no more than 10 times the actual secondary containment capacity will be stored in the container storage area at any time.

The containers may be stored in the example configuration shown in Appendix E. The containers may also be stacked two levels high. The containers will be placed on pallets while in the storage area and separated by a pallet when stacked. A minimum two feet of aisle space will be maintained and the drums will be stored no more than seven feet high.

6.4 SUBPART CC COMPLIANCE

Safety-Kleen has developed a Subpart CC Compliance Plan, which details procedures to achieve compliance with Subpart CC requirements. The plan includes provisions for an annual visual tank inspection of the waste solvent storage tank and vent system, as well as container inspections upon arrival at the facility and proper container management. A copy of the Subpart CC Compliance Plan is included in Appendix E.

6.5 SUBPART BB COMPLIANCE

Safety-Kleen complies with Subpart BB requirements by inspecting the process piping and equipment daily. Each valve, joint, flange, pressure relief device, pump, etc. is inspected to insure the equipment is not leaking and is functioning properly. Open-ended pipes are capped when not in use. A diagram of the facility's piping and equipment is contained in Appendix E. Process equipment is also included on the facility's daily inspection record.

7 CLOSURE PLAN

ABSTRACT

LOCATION ADDRESS: Safety-Kleen Systems, Inc.
Approx. 800 feet North of Craig Road and East of Donovan Way
N, Las Vegas, Nevada 89031

U.S. EPA I.D. NO: NVR000066837

WASTE UNITS TO UNDERGO CLOSURE:

- a. Tank Storage - one dual-walled 12,000 gallon (nominal) aboveground storage tank
- b. Container Storage Area - one area of about 3,500 square feet with a storage capacity of 147, 430 gallons.
- c. Return and Fill Station - one return and fill dock structure with secondary containment and two drum washers.

SECTION 7

CLOSURE PLAN

7.1. PURPOSE

The North Las Vegas service center operates as a storage facility for hazardous wastes. The hazardous waste management units (HWMUs) must be closed in accordance with the closure requirements of 40 CFR 264.110 through 40 CFR 264.115. Closure of the facility HWMUs will be carried out in accordance with this plan. An itemized schedule for closure plus the closure cost estimate is included in Appendix H. Safety-Kleen will remediate any hazardous wastes from the facility to a level that is protective of human health and the environment. Upon completion of closure activities, the need for further maintenance will be minimized or eliminated. The facility is expected to close in the year 2050.

The HWMUs, which are subject to closure, are described in the Closure Plan Abstract. The units include one aboveground storage tank system, a return and fill station with two drum washers (permitted as miscellaneous units) and a container storage area. This closure plan identifies steps necessary to conduct facility closure, or closure of a unit (partial closure) at any point during its intended operation life.

7.2 ABOVEGROUND TANKS AND ASSOCIATED PIPING

To safely clean and decontaminate the aboveground storage tank (one 12,000-gallon used parts washer solvent tank), the following activities will be performed during partial or final closure (as appropriate):

- a. Remove the remaining material from the tank and send the materials to a recycle center, reclaimer or other permitted treatment/disposal facility.
- b. Provide access to the tank undergoing closure or decontamination.
- c. Pressure wash with detergent solution, scrape, squeegee (if necessary) and triple rinse the tank interior, removing all residual waste material and rinsate.
- d. Decontaminate appurtenant piping and pumping equipment.
- e. Visually inspect the tank and appurtenant piping, equipment or underlying surfaces for evidence of leakage (i.e., staining and residue).

- f. Remove tank, piping and appurtenant equipment for offsite reuse or sell as scrap. The tank may also remain onsite for reuse (if applicable for partial closure).
- g. Transport and properly dispose or treat waste material generated during closure

During closure of the tank system, Safety-Kleen will remove or decontaminate waste residues, contaminated system components, contaminated soils, structures and equipment contaminated with waste, and manage these materials as hazardous waste, unless determined to be non-hazardous. The procedures for tank decontamination and/or partial or final closure are described below.

7.2.1 Removal of Waste Material and Opening of the Tank

The contents of the tank must be removed using a pump, vacuum or similar equipment and then shipped to a recycle center, reclaimer or other permitted treatment/disposal facility. To gain access, the manway at the top or side of the tank will be used. Depending on the type of opening and the condition of the equipment, a variety of tools may be used to open the manway. Care must be exercised to minimize spark generation when working on the tank.

Prior to entering the tank, personnel should have appropriate protective respiratory protective equipment and protective clothing. Once the tank has been opened, it must be provided with positive ventilation. The tank will then be inspected to determine the approximate quantity and physical conditions of any residual waste material, as well as the integrity of the tank system.

Procedures for purging or venting tanks are described in API, RP1604 "Removal and Disposal of Used Petroleum Storage Tanks" and OSHA "Permit Required Confined Spaces" (29 CFR 1910.146). The contractor will monitor vapors to ensure the tank atmosphere has combustible gas concentrations of less than 10% of the lower explosive limit (LEL).

7.2.2 Removal of Residual Waste and Cleaning of Tank

The method used to remove the residual waste material from the tank will depend on the physical properties and quantities of that material. Prior to any person entering the tank, an effort will be made to remove as much liquid and sediment as possible (see section 7.2.1).

Subsequent to removing the majority of the material from the tank, the tank interior will be washed using a high-pressure wash system and a detergent-water solution to decontaminate the walls, roof, and floor of the tank. The tank interior will then be rinsed with tap water. The wash/rinse water will be collected and shipped to a recycle center, reclaimer or other permitted treatment/disposal facility. The quantity of wash/rinse water will be kept to a minimum to limit the amount of waste material.

Similar procedures will be implemented to remove residual wastes and decontaminate the tank piping and ancillary equipment. The piping will be decontaminated with a detergent-water solution, rinsed with tap water, and either reused or removed and cut into manageable sized pieces for disposal as scrap.

Storage tanks are considered confined spaces (i.e. spaces open or closed having a limited means of egress in which poisonous gases or flammable vapors might accumulate or an oxygen deficiency might occur), and confined space entry requires special procedures. Confined space entry will be conducted in accordance with 29 CFR 1910.146. Tank entry procedures will be specified in the site health and safety plan. In all cases, personnel performing closure activities must have completed 40-hour OSHA hazardous waste training requirements (29 CFR 1910.120).

7.2.3 Removal of the Tank

Following removal of wastes and decontamination activities, the tank may be reused onsite or at an offsite location, or scrapped. If the tank is to be transported offsite or scrapped, the following procedures will be observed to safely remove the tank:

- a. Disconnect all appurtenant piping.
- b. Disconnect all appurtenant pumping equipment.
- c. If the tank is to be scrapped, the tanks and equipment will be removed and recycled in accordance with 40 CFR 261.1(c)(6) and (7). Verification of destruction will be provided by the contractor or scrap metal facility.

- d. If the tank is to be reused following decontamination, the final rinsate will be sampled. The rinsate sample will be analyzed for volatile organic compounds. If the total volatile organic compound concentration is less than 1mg/L, the tank will be considered properly decontaminated. If the results are greater than 1 mg/L, the decontamination procedures will be re-performed.

Following decontamination and removal of the dual-walled aboveground tanks, the concrete slab will be inspected by an independent registered Professional Engineer (or designate). The inspection will document whether any waste related staining or lapses in the tank secondary containment system (dual-wall construction) exist that may have allowed the potential for waste to migrate to underlying soils and/or groundwater. In the absence of waste related staining and/or lapses of integrity, further evaluation of the potential for wastes to impact human health or the environment will not be considered necessary to complete closure.

7.3 CONTAINER STORAGE AREA

The container storage area is used for the storage of containers of used materials (e.g. used immersion cleaner, dry cleaning waste, tank or drum washer sediment, paint waste, or other non-regulated wastes or products). At closure, all the contents of the containers will be removed and transported to an appropriate permitted hazardous waste management facility after proper packaging, labeling and manifesting.

The recessed concrete floor, which provides spill containment will be high-pressure cleaned with a detergent-water solution and triple rinsed with tap water. The final rinsate will be sampled and analyzed for volatile organic compounds to determine the effectiveness of the cleaning. If the total volatile organic compound level is less than 1 mg/L, the container storage area will be considered properly decontaminated. If the results are greater than 1 mg/L, the decontamination procedures will be re-performed. All rinsate wastes from the container storage area closure process will be reclaimed or properly treated at a permitted facility.

Following decontamination of the container storage area, the containment area will be inspected by an independent registered Professional Engineer (or designate). The inspection will document any potential lapses of integrity that may have allowed potential migration of wastes outside the containment area. In the absence of any waste related staining and/or lapses of integrity, further evaluation of the potential for wastes to impact human health or the environment will not be necessary.

7.4 SOLVENT RETURN AND FILL STATION

The return and fill station is used to collect and return the used mineral spirits to the waste storage tank and to dispense clean solvents into containers. At closure, the sediment in the drum washer(s) will be removed, containerized, labeled, and manifested for proper treatment and/or disposal through a Safety-Kleen Recycling Center, reclaimer or other treatment/disposal facility.

The drum washer(s), containment pans and the dock area will be washed with a detergent solution and rinsed. The rinsate may either be discharged through the appurtenant piping system into the storage tank (prior to cleaning and removing the storage tank), or contained within separate containers, vacuum truck or other appropriate storage device. The clean drum washer(s) and dock structure will be staged for reuse or scrapped. Wastes generated during closure of the return and fill structure will be transported to a permitted hazardous waste facility.

If the return and fill dock structure/containment pans or drum washers will be reused, a sample will be collected of the final rinsate. The rinsate sample(s) will be analyzed for volatile organic compounds. If the total volatile organic compound concentration is less than 1 mg/L, the components will be considered properly decontaminated. If the results are greater than 1 mg/L, the decontamination procedures will be re-performed. If the return and fill station and/or components will be scrapped during closure, rinsate samples will not be collected.

Following decontamination, the secondary containment structure will be inspected by an independent registered Professional Engineer (or designate). The inspection will document any potential lapses of integrity that may have allowed potential migration of wastes outside the containment area. In the absence of waste related staining and/or lapses of integrity, further evaluation of the potential for wastes to impact human health or the environment will not be necessary.

7.5 SOIL SAMPLING

If the results of the inspections for the HWMUs indicate lapses of integrity exist in the secondary containment system(s) that may have allowed the potential for waste to migrate to underlying soils, soil samples may be collected. If the inspection indicates no lapses of integrity, soil samples will not be necessary to complete closure.

If determined to be necessary based on the inspections of the HWMUs, soil samples will be collected from immediately beneath the concrete slab or containment area. Soil samples will be analyzed for volatile organic compounds, semivolatile organic compounds and metals (cadmium, chromium and

lead). If constituents are detected, the concentrations may be compared to appropriate risk-based screening levels to determine whether the HWMU(s) may be closed.

7.6 FACILITY CLOSURE SCHEDULE AND CERTIFICATION

Within 90 days of receiving the final volume of hazardous wastes, Safety-Kleen will remove all hazardous wastes from the site in accordance with the approved closure plan. The Nevada Department of Conservation and Natural Resources/Division of Environmental Protection (NDEP) may approve a longer period if Safety-Kleen demonstrates that the activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete or the following requirements are met:

- a. the facility has the capacity to receive additional wastes;
- b. there is a likelihood that a person other than Safety-Kleen will recommence operation of the site; and/or
- c. closure of the facility is incompatible with continued operation of the site. In this case, Safety-Kleen will take all steps necessary to prevent threats to human health and the environment.

Safety-Kleen will complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes. When closure is completed, Safety-Kleen shall submit to NDEP certification, both by the operator and by an independent registered professional engineer, that the facility has been closed in accordance with the approved closure plan and 40 CFR 264.115.