

SKFA 2003



OVERNIGHT DELIVERY
RETURN RECEIPT REQUESTED



March 9, 2003

Mr. Steve Pullen
Permits Management Program
State of New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Re: Notices of Deficiency (NOD) for Safety-Kleen Farmington and Safety-Kleen Albuquerque Facilities

Dear Mr. Pullen:

Safety-Kleen Systems, Inc. (S-K) operates service centers in Farmington, New Mexico (4210A Hawkins Road) and Albuquerque (2720 Girard NE) for temporary accumulation and storage of hazardous wastes, prior to transporting offsite for reclamation, treatment or disposal. RCRA Permit Renewal Applications were submitted to the New Mexico Environment Department/Hazardous Waste Bureau (NMED/HWB).

In a letter (Notice of Deficiency) dated November 15, 2002, NMED/HWB required additional information. A response to the NMED/HWB NOD and the required information is provided with this correspondence. Each of the NMED/HWB items is summarized below for convenience. A response providing the supplemental information follows each of the NMED requests.

NMED/HWB (SKFA Specific) Item No. 1.

Section A.1 – The second sentence inaccurately states that the specifications for SKFA's "products" are provided in Attachment A.1.

S-K Response No. 1.

The omission of information about Safety-Kleen products was an oversight. Please find enclosed, MSDSs for the relevant Safety-Kleen parts washer service and paint service products. These MSDSs include more information than required by OSHA (40 CFR 1910.1200).

NMED/HWB (SKFA Specific) Item No. 2.

Section A.1 – The table referenced in Attachment A.1 does not include waste characterization information for wastes resulting from the dry cleaner service for SKFA.

S-K Response No. 2.

It appears to have been an administrative omission, not to include dry cleaner waste characterization data. Please find attached the most recent full waste characterization package with summary tables including dry cleaner data.



NMED/HWB (SKFA Specific) Item No. 3.

Section A.1 – Safety-Kleen must answer the following questions;

- a. Is the attachment meant as an example needed to fulfill the following requirements:
 - i. To repeat analysis to ensure that the analysis is accurate and up to date as required by 40 CFR 264.13(b)(4); and
 - ii. SKFA Operating Permit Condition II.C together with the Waste Analysis Plan (Permit Attachment A), commitment to analyzing each waste type “at least once per year?”
- b. Is Attachment A.1 meant to identify all applicable parameters to be analyzed for each hazardous waste as required by 40 CFR 264.13(b)(1)? Is there a reason why this analysis data does not include other possible hazardous constituents as referenced at 40 CFR 268.40(a)?
- c. SKFA must provide a complete chemical description of all products resulting in wastes stored at the facility, including a description in chemical variability.
- d. The tables demonstrate that for a particular waste type, wastes from different SK service centers had widely ranging hazardous characteristic constituent and other physical property values. Is Safety-Kleen implying that all wastes with hazardous characteristic constituent physical property values that fall within the maximum and minimum values represented in the Tables are the same wastes and can be aggregated or consolidated without requiring a new manifest?
- e. The tables all include a value for the 90th percentile of the upper confidence limit (UCL) for the 50th percentile. SW-846 Chapter 9, Section 9.1.1.1 discusses the use of UCLs to evaluate the degree of sampling accuracy and precision of multiple samples of a single waste stream to determine whether it is hazardous. The tables represent numerous waste streams and thus are something very different than what is discussed in SW-846. SKFA must clarify.
- f. Safety-Kleen must explain the significance of the table notation “non-detect” (ND) when the detection limit of the analysis is significantly higher than the regulatory limit. The inappropriate ND occurs on numerous tables but is a particular problem for waste dry cleaner bottoms – semi-volatile analysis. Safety-Kleen must explain why NMED should not make it a permit requirement that all analysis be performed to ensure that the method detection limit (MDL) be below the applicable regulatory limit, or that Safety-Kleen be required to record one-half the MDL instead of ND.
- g. Safety-Kleen must explain whether the “site” column necessarily indicates the safety-Kleen service centers that shipped wastes to a recycling center and the number of shipments in a particular period.
- h. The tables reference the following 11 different wastes;
 - i. Waste aqueous cleaners
 - ii. Waste dry cleaner filter powder
 - iii. Waste dry cleaner bottoms
 - iv. Waste immersion cleaner
 - v. Paint waste (other)
 - vi. Waste paint gun cleaner
 - vii. Waste parts washer solvent (105)
 - viii. Waste parts washer solvent (150)
 - ix. Waste premium gold parts washer solvent (150)
 - x. Waste parts washer sludge
 - xi. waste parts washer tank bottoms.

Safety-Kleen must explain why all these wastes are not referenced in section A.1 of the WAP.

S-K Response No. 3.

- a.
 - i. This attachment represents the sampling done in one year to represent waste managed by Safety-Kleen throughout the year. This process is performed to characterize waste managed by Safety-Kleen. When significant process changes occur, analysis will be performed to recharacterize the waste.
 - ii. Safety-Kleen characterizes its wastes at least annually. The attachment represents one year's data. This process is completed each year to on waste streams managed by Safety-Kleen.
- b. The purpose of the attachment is to summarize the data collected to characterize Safety-Kleen's wastes and indicate the waste codes that characterization indicates are appropriate for the waste stream. During the process of characterizing the waste streams, hazardous constituents are also revealed. Hazardous constituents that are expected to occur in the waste streams, based on the same laboratory analyses as the characterization, are then reflected in the Land Disposal Restriction Notifications (LDRs).
- c. It was an error to indicate that waste characterization represents product specification. Please find attached, MSDSs for the relevant Safety-Kleen products. These MSDSs contain information beyond that required by OSHA.
- d. The attachment is not meant to imply that wastes from various sources with varying chemical and physical properties may be aggregated or consolidated without requiring a new manifest. The attachment identifies waste generated with essentially similar raw materials in essentially similar processes. The attachment indicates that there is some variability in the waste generated based on the operator of the process. For example (page 88 of the attached annual characterization package, samples 2015441 and 2015462), an operator in Albuquerque, NM might have used their parts washer more than a operator in Omaha, NE. By using the parts washer more, more oil and grease was added, raising the flash point. In the same example, the operator in Omaha may have cleaned a carburetor in the parts washer, introducing gasoline and thus, benzene. Regardless of day-to-day variations in the use of the parts washers, operators use parts washers to clean automotive parts, essentially the same process with the same raw materials.
- e. Please see "d." above.
- f. Please see "d." above.
- g. The "site" column indicates the Safety-Kleen site whose customer's waste the sample represents. The sampling is not meant to represent each shipment of hazardous waste. For example, spent solvent is removed from the facility storage tank on an as needed basis, perhaps once per month. The tank bottoms samples listed in the annual waste recharacterization table represent a sampling of tank
- h. The entries in the annual waste recharacterization represent wastes handled by Safety-Kleen throughout the country. Not a of these wastes are managed to a significant degree at the Safety-Kleen Farmington facility. For this reason, not all wastes are included in the permit application, and only some of these wastes would be stored at the Safety-Kleen Farmington facility.

NMED/HWB (SKFA Specific) Item No. 9.

Safety-Kleen shall explain why the wastes resulting from parts washer service are not described as carrying a "F" code as the dry cleaner and paint wastes do and why Safety-Kleen should not analyze for all constituents of concern in the F001 – F005 Listed wastes referenced in 40 CFR 268.48.

S-K Response No. 9.

Mr. Steve Pullen

March 9, 2002

Page 4

The description of wastes carrying a "F" code is dependant on the presence in the spent solvent before use of 10 percent or more of any of the constituents listed as constituents of F001 through F005 wastes. The parts washer solvent is less than 10 percent of each and less than ten percent of all those constituents. The case is different with both dry cleaner solvent and with paint waste.

The solvents used in these process are more than ten percent of one or several of the constituents listed as part of F001 through F005. Hazardous waste codes F001 through F005 are not appropriate for parts washer solvent. Please see the attached MSDSs for lacquer thinner and parts washer solvents (Safety-Kleen products).

NMED/HWB (SKFA Specific) Item No. 10.

Why should Safety-Kleen Farmington not manage all wastes at the facility according to 40 CFR Parts 264, 268, and 270 as required by 40 CFR 262.34(b)?

S-K Response No. 10.

The phrase, "transfer basis", may have been misunderstood. All wastes managed by the facility are managed as required by 40 CFR 262.34(b). Some customers generate wastes that Safety-Kleen is not permitted to store. For these wastes, the customer may profile the waste at a TSDF permitted to manage them. Once the waste profile has been approved at the TSDF, Safety-Kleen Farmington may transport that waste to the designated facility, complying with all applicable requirements of 40 CFR 263.

NMED/HWB (SKFA Specific) Item No. 11.

Section A.1.2 – Paragraph 2, sentence 1 refers to the distillation of wastes from dry cleaner service.

Safety-Kleen must explain where such distillation occurs and whether this meets the definition of treatment provided at 40 CFR 260.10, thus requiring a permit.

S-K Response No. 11.

Dry cleaners use solvents rather than water to clean clothes. To be cost effective and protective of the environment, by not wasting resources, dry cleaning equipment typically includes distillation as a part of the cleaning equipment. This activity takes place only at dry cleaners. This activity does not meet the definition of treatment at 40 CFR 260.10 as the material involved is not a solid waste. Please see 40 CFR 261.4(a)(8)

NMED/HWB (SKFA Specific) Item No. 12.

Is Safety-Kleen referencing 40 CFR 261.2(c) in relation to the photofixer solution from which silver may be recovered?

S-K Response No. 12.

No, Safety-Kleen is not referencing 40 CFR 261.2(c) in relation to the photofixer solution from which silver may be recovered. The Safety-Kleen facility transports photo waste some of which is solid waste and not hazardous waste. The photofixer solution is managed as a hazardous waste with waste code D011.

NMED/HWB (SKFA Specific) Item No. 13.

Mr. Steve Pullen

March 9, 2002

Page 5

Please provide a list of all materials (non-products) stored at the facility that might be considered to be hazardous waste subject to the permit and that Safety-Kleen feels are not subject to 40 CFR 264, 268, and 270 permitting conditions. Also, photofixer must be accompanied by a LDR notification.

S-K Response No. 13.

Safety-Kleen may transport some hazardous wastes (as allowed in 40 CFR 263) without otherwise managing these wastes. Safety-kleen believes that an inspector would agree that waste transported to meet the requirements of 40 CFR 263 are not subject to 40 CFR 264, 268, and 270 permitting conditions at the transport facility. Safety-Kleen agrees that photofixer is a hazardous waste and subject to LDR requirements. These requirements will be met.

NMED/HWB (SKFA Specific) Item No. 14.

If Safety-Kleen has additional procedures to verify waste characteristics they must be elaborated on in the WAP.

S-K Response No. 14.

There are no additional procedures in place to verify waste characteristics. However, any information that becomes known to Safety-Kleen that effects the waste characterization information will be considered, regardless of how the information comes to Safety-Kleen.

NMED/HWB (SKFA Specific) Item No. 15.

Section A.2 – Paragraph 3, first sentence, references HWMR 206.B.3 inappropriately. NMED believes the appropriate and applicable reference is 20.4.1.500 NMAC (incorporating 40 CFR 264.13(a)(3)(I)).

S-K Response No. 15.

Safety-Kleen agrees that the regulatory cite is in error. The reference has been corrected.

NMED/HWB (SKFA Specific) Item No. 16.

Section A.2 – The SKAL permit application contains several commitments that should be included in the SKFA application.

S-K Response No. 16.

Safety-Kleen agrees. Those same commitments have been included in the SKFA permit application, specifically in the WAP, enclosed.

NMED/HWB (SKFA Specific) Item No. 17.

Safety-Kleen shall include in the record all specific acceptable knowledge (AK) documentation assembled and used in the AK process, whether or not it supports the decision to use AK.

S-K Response No. 17.

Mr. Steve Pullen

March 9, 2002

Page 6

Safety does use knowledge of the raw materials and processes that create hazardous wastes as a starting point in understanding the nature of the hazardous waste. However, analytical testing is used to determine waste codes and hazardous constituents in the waste.

NMED/HWB (SKFA Specific) Item No. 18.

Safety-Kleen must commit to include a record of the visual examination of wastes prior to recovery made by Safety-Kleen sales representatives.

S-K Response No. 18.

Safety-Kleen does make a record of this visual inspection of wastes and commits to continue to do so.

NMED/HWB (SKFA Specific) Item No. 19.

Safety-Kleen must elaborate on the sampling technique(s) used to determine whether the contents of a waste drum deviate from the description in the section. Safety-Kleen shall also describe the sampling techniques used to characterize waste at the service center as referenced in the last paragraph of Section A.2.1.c.

S-K Response No. 19.

This section has been modified. These modifications along with previously submitted characterization procedures describe in more detail the sampling techniques used to determine the acceptability of the material.

NMED/HWB (SKFA Specific) Item No. 20.

Does Safety-Kleen manage abrasive blasting media?

S-K Response No. 20.

Safety-Kleen does not manage abrasive blasting media as one of its core waste streams. However, if a customer properly profiles abrasive blasting media waste at a disposal facility, Safety-Kleen may act as a transporter only, transporting the properly manifested waste to a designated facility.

NMED/HWB (SKFA Specific) Item No. 21.

Section A.3 – This section shall be amended with a description of the quality assurance procedures to be used when performing laboratory analyses. The section must also be amended with a commitment to ensure those procedures are adhered to and documented in the both of SKFA and SKAL operating record.

S-K Response No. 21.

Neither Safety-Kleen Farmington, nor Safety-Kleen Albuquerque operate a laboratory. All analyses are performed by contract laboratories following EPA protocol.

NMED/HWB (SKFA Specific) Item No. 22.

Mr. Steve Pullen

March 9, 2002

Page 7

Section A.3, Table A-1 inappropriately lists TCLP as a parameter. The SKAL permit application Section A.3 has a preferable discussion of the waste parameters.

S-K Response No. 22.

As it is Safety-Kleen's intention to operate all facilities to the same standard, the SKAL discussion has been included in the SKFA permit application. See the SKFA WAP, attached.

NMED/HWB (SKFA Specific) Item No. 23.

Safety_Kleen must include parameter and rationale to determine waste LDR status.

S-K Response No. 23.

Tables A-1 and A-2 have been updated to meet this requirement.

NMED/HWB (SKFA Specific) Item No. 24.

Safety_Kleen must identify TCLP as a sample preparation method, not an analytical method.

S-K Response No. 24.

Table A-2 has been updated to meet this requirement.

NMED/HWB (SKFA Specific) Item No. 25.

Please reference the current section of SW-846 for Sample Collection. Also, provide detailed information about sampling procedures and techniques.

S-K Response No. 25.

Table A.3 has been modified to meet this requirement. Also, Safety-Kleen training course, ET-143 "Sampling Hazardous Materials and Wastes" is attached.

NMED/HWB (SKFA Specific) Item No. 26.

Safety_Kleen must explain how effective the Coliwasa is at sampling tank bottoms.

S-K Response No. 26.

The Coliwasa may not be the most effective means of sampling tank bottoms. Please see Safety-Kleen training course ET-143, "Sampling Hazardous Materials and Wastes", attached. Employees are required to adhere to training provided.

NMED/HWB (SKFA Specific) Item No. 27.

If it is in fact standard Safety-Kleen procedure to sample every load at the recycle center, the WAP shall so.

S-K Response No. 27.

Mr. Steve Pullen
March 9, 2002
Page 8

While it is standard procedure to sample every load at the recycle center, it may be inappropriate to describe that procedure in the branch (service center) WAPs as the WAPs at the recycle centers (i.e. SK-Denton, TX, SK-Reedley, CA, etc.) are controlled at those site and by those states' regulatory agencies.

NMED/HWB (SKFA Specific) Item No. 28.

Section A.4 must recognize and reference 20.4.1.900 NMAC (incorporating 40 CFR 270.42).

S-K Response No. 28.

This change has been made to Section A.4.

NMED/HWB (SKFA Specific) Item No. 29.

Safety-Kleen must commit that all wastes stored at the facility are characterized for applicable LDR notification requirements.

S-K Response No. 29.

This change has been made to Section A.5.

NMED/HWB (SKFA Specific) Item No. 30.

Safety-Kleen must commit to maintaining the LDR notice in the facility record. Also, Safety-Kleen should explain what is meant by "receiving facility" in the last paragraph of Section A.5

S-K Response No. 30.

This change has been made to Section A.5. "Receiving facility" means, "designated facility" as defined in 40 CFR 260.10.

NMED/HWB (SKFA Specific) Item No. 31.

Safety-Kleen must elaborate on the meaning of the abbreviations, "MS" and "IC", in the WAP

S-K Response No. 31.

"MS" means mineral spirits and "IC" means immersion cleaner. These abbreviations have been removed from the WAP.

NMED/HWB (SKFA Specific) Item No. 32.

Safety-Kleen must relocate non-waste characterizations items for the facility record elsewhere in the permit application.

S-K Response No. 32.

Safety-Kleen believes the information is appropriately listed here as the record includes information related to the proper storage of the waste. Safety-Keen will move the information to whichever section(s) NMED desires. Safety-Kleen will maintain the required records regardless of the section of the permit application they appear in.

Mr. Steve Pullen
March 9, 2002
Page 9

NMED/HWB (SKFA Specific) Item No. 33.

Section A.6 inappropriately references "Pt. V. sec. 264, Appendix I". Also, Safety-Kleen must commit to characterize the waste generating process as outlined at Appendix II (sic).

S-K Response No. 33.

This inappropriate reference has been corrected and now appropriately commits to this requirement.

NMED/HWB (SKFA Specific) Item No. 34.

Section A.6, Item 10 stated that LDR notifications will be maintained at the "branch manager's office". NMED requires that LDR records be maintained at the facility for inspection purposes.

S-K Response No. 34.

Section A.6, Item 10 has been restated to clarify this commitment.

NMED/HWB (SKFA Specific) Item No. 35.

Safety-Kleen must characterize wastes for Subpart BB applicability.

S-K Response No. 35.

The WAP has been modified to meet this requirement.

If you have any questions, comments, or concerns, please contact me (602-821-2422) or Mike Crawford (505-884-2277).

Sincerely,

David Ashley
EHS Manager
Safety-Kleen Corporation

Enclosures

cc: File
Steve LuQuire, Safety-Kleen

WASTE ANALYSIS PLAN

ABSTRACT

Waste Description	EPA Waste Code No.	Facility Capacity ¹ (gallons)	Annual Amount ²
Spent Solvents	D001 ³	12,000	50
Bottom Sediment From the Tank and Ancillary Equipment	D001 ³	N/A	2
Spent Immersion Cleaner	D001 ³	4,464	3
Dry Cleaning Waste	D001, F002 ³	6	
Paint Waste	F003, F005, D001 ³	4,464	
Photo Chemical Wastes	D011	4,464	

NOTES: 1 The facility capacity is in gallons.

2 The annual amount is in thousands of gallons.

3 and may also include 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

4 The total amount of drummed waste stored in the warehouse will not exceed 3,820 gallons.

The Facility shall store only wastes it is authorized to store. That is, Safety-Kleen will only store wastes included in Part A of the application for hazardous waste permit and not otherwise prohibited by the permit. Safety-Kleen will not store any hazardous waste for more than one year.

These waste streams are characterized annually as described in the "Statistical Analysis of Annual Waste Characterization Data", attached and incorporated herein by reference. (The most recent data are also included.) The testing and sampling methodology is as described in A.3, below. The data generated in this process is used to assign waste codes, if any, for each waste stream. The data generated in the annual recharacterization (AR) is also used to assist recycle centers in recycling or treating the waste streams. Recycle centers also rely on their own waste analysis plans to generate data to recycle materials and or dispose of waste. If while providing service to a customer if there is suspicion that the waste does not meet the acceptance criteria, the waste will not be picked up and the customer must provide information explaining what is in the waste and how the waste was adulterated. Please see the text below in this waste analysis plan.

Providing service to Safety-Kleen customers is dependent on a review of the customer business. If the business is a typical generator of that waste stream (for example, a garage generating parts washer waste), then limited review is performed. If the business is not a typical generator of that waste stream or if the business has other processes on site, a more detailed review of the business is performed and a certification from the customer is required stating the waste will be as described without adulterants. For example, laboratory analysis of that customer's waste may be required.

In this AR process, regulated hazardous constituents and reasonably expected underlying hazardous constituents (UHC)s are also discovered. UHC which is discovered in the annual recharacterisation will be assumed to expected throughout the waste stream. The applicable constituent concentration or technology based treatment standards for the wastes and / or individual hazardous constituents will be identified, if required by regulation, on the LDR

generated from this data. The LDRs generated in this process also identify whether the waste must be treated before being land disposed when required by regulation.

AR data is used to update subpart BB and Subpart CC plans (see these plans elsewhere in this permit application). It is anticipated that minor changes in the waste streams are unlikely to significantly change in air emissions.

Recycle centers test every shipment of waste for PCBs. If a shipment is discovered to contain PCBs, the source of the PCBs is traced and appropriate 40 CFR 761 requirements are implemented. Any equipment contaminated by PCBs is removed from service decontaminated cleaned before being put into service.

The Safety-Kleen transportation department is responsible for selecting packaging for Safety-Kleen waste streams, in addition to their responsibility for company compliance with Federal, State, and local transportation regulations and rules. The transportation department has selected packaging based on past waste recharacterizations and continue to review AR and other data to maintain compliance with material packaging requirements.

A.1 DESCRIPTION OF WASTES

Several types of waste result from the servicing of Safety-Kleen customers and the maintenance of the service center. It should be noted that the solvents managed at this facility are incompatible with strong oxidizers and reactive metals, none of which are present in the containers, container storage area, or the concrete sealant. The solvents are also compatible with one another. Analytical data for the wastes and specifications for the products are in Attachment A-1 and qualitative descriptions follow.

A.1.1 Wastes Resulting From the Parts of Washer Service

Used solvents from parts washers is accumulated in a 12,000 gallon aboveground, storage tank via the return and fill station. Containers of used material are poured into a dumpster at the return and fill station which in turn empties into the tank. This waste handling method results in several types of solvent waste:

- a. Used solvent - The used solvent is removed from the tank by a tanker truck on a scheduled basis. About 5,000 gallons are removed every month. This waste is ignitable (D001) and may exhibit the toxicity characteristic 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, and D043.
- 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 Safety-Kleen vacuum truck is generally used for this purpose. The sediment is ignitable (D001) and may exhibit the toxicity characteristic 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, and D043.
- c. Dumpster Sediment - Sediment may also accumulate in the drum washers in the return/fill station. The sediment is manually removed and placed in containers. The dumpster sediment is representative of the waste codes described in items a and b above.
- d. Used Aqueous Parts Cleaning Solvent - may be bulked at the service center into containers that meet DOT specifications or may be co-mingled with the other solvent into the used solvent tank. It may be toxic using the toxicity characteristic 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, and D043.
- e. Immersion Cleaner - is a different type of solvent that is not placed in the aboveground storage tank. Containers of immersion cleaner typically remain in the drum in which it was originally used until it is received at the recycle center. Drums are placed in the drum storage area of the warehouse and are stacked no more than two-high in the drum storage area of the warehouse.

The immersion cleaner is a non-halogenated hydrocarbon mixture and may exhibit the toxic 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, and D043.

A.1.2 Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of used filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are packaged on the customer's premises in containers meeting DOT specifications. The containers are then palletized, stacked two-high and placed in the container storage area of the warehouse. Approximately 95% of the dry cleaning solvent used is perchloroethylene (F002 and 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) and the remaining 5% is trichloro-trifluoroethane (F002) and toxic using the 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, and D043).

A.1.3 Wastes Resulting From the Paint Service

Paint wastes consist of various lacquer thinners (D001, F003, and F005) and may be toxic as per the 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, and D043). The wastes are collected in containers which meet DOT requirements at the customer's place of business and containers are then palletized and stored in an enclosed concrete masonry building (the H-3 Flammable Storage Building).

A.1.4 Photographic/Imaging Wastes

Some photographic imaging 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 three waste streams. Photo fixer solution is an aqueous solution used to etch photo film during processing. This material is characteristic for silver (D011). Safety-Kleen is able to recover the silver from the solution. Used Photo developer is an aqueous solution that exhibits no hazardous waste characteristics but may not be allowed to discharge into public wastewater treatment systems in some communities. Silver collection canisters are sent to a recycle center for reclamation. These canisters do not meet the definition of a hazardous waste as per 40 CFR 260.30(c) and are managed as a non-regulated material.

A.2 QUALITY CONTROL PROCEDURES

The used solvents are the primary feed stocks 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 service center collects used solvents from approximately 1,100 customers, most of who are small quantity generators, and an estimated 14,000 drums containing 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, all the materials collected at the service center are managed at all times in a 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 all materials before returning them to the service centers as described in Section A.2.1. This mode of operation has been proven to safeguard the recycling process and maintain a quality product.

However, in accordance with 20.4.1.500 NMAC (incorporating 40 CFR (a)(3)(i)), 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. It is Safety-Kleen's practice that suspected non-conforming material must not be

accepted until a full analysis has been conducted. If a container with questionable contents is returned to the service center, a sample will be taken and analysis will be performed at the recycling center, Safety-Kleen Tech Center (Elk Grove Village, Illinois) or other qualified lab according to the procedures outlined in Section A.3 of this attachment. The Branch Manager will be notified of any contamination that may have occurred.

Safety-Kleen trains personnel to verify the physical characteristics of the wastes at several points in the management of the solvent. These procedures are described briefly below.

Safety-Kleen controls the use and management of its solvents by:

1. Limiting the solvents stored to those compatible with one another and their containers;
2. Limiting the uses of each type of solvent for (example, dry cleaning waste is only collected from dry cleaner shops);
3. Determining the customer's type of business (i.e., the SIC code is recorded) and the purpose for which the customer will use the machine;
4. Training customers to use the machines properly;
5. Training employees to inspect the physical characteristics of used solvent and determine whether it is acceptable;
6. When waste is collected from a customer, indicate on the service document whether the used solvent meets Safety-Kleen's acceptance criteria;
7. Marking each container with the customer's name, address, and EPA I.D. number (if available). This information remains on containerized waste until it is accepted at the reclamation facility;
8. Keeping a record of each incoming and outgoing shipment in the operating log; and

Safety-Kleen's customers sign a service document containing the following information:

- a. the name, address and EPA I.D. number of the facility to which the waste is being shipped;
- b. the customer's name, address and EPA I.D. number (if available); and
- c. the description and amount of Safety-Kleen solvent waste generated.

In addition, each incoming and outgoing shipment is recorded in the facility's operating log.

If a waste is rejected at the time of service, the customer will be given a choice as to whether he will dispose of the waste himself or require Safety-Kleen's assistance. If he requests Safety-Kleen's assistance, a sample will be drawn using a Coli-wasa tube or similar sampling device to ensure representative samples. The sample will be analyzed for flash point and volatile organic compounds. If this analysis does not adequately define the constituents, additional analyses will be performed as necessary (e.g., semi-volatile organic compounds, PCBs, etc.).

The laboratory sends waste analyses results to the service center. If through the additional analysis the waste is determined to be acceptable at the branch, it will be relabeled, manifested and then managed with the other wastes. If it is determined through the additional analysis to not be acceptable, the waste will either be: (a) managed at the Service Center on a 10 day transfer basis and manifested to a properly permitted reclamation or disposal facility, or (b) manifested and shipped directly to a properly permitted reclamation or disposal facility. The analytical results from the additional characterization analysis will be used to appropriately manage the waste. The Branch Manager has the right to refuse any further service to a business which has returned waste that does not meet acceptable criteria.

A.2.1 Qualitative Waste Analysis

a. General Inspection Procedures:

Safety-Kleen visually inspects each drum of waste when it is collected at the customer's location. Safety-Kleen examines the waste for volume, appearance, consistency and odor and is intimately familiar with the characteristics of the waste it receives. Based on the known waste characteristics, Safety-Kleen has established the specific acceptance criteria set forth below, to be used by Safety-Kleen personnel in their visual inspections. These inspection procedures allow Safety-Kleen to ensure that the waste being picked up meets appropriate acceptance criteria.

If a particular drum of waste does not meet the acceptance criteria, the Safety-Kleen service representative will either (1) sample the waste for testing at a Safety-Kleen laboratory to determine whether the waste has been contaminated; or (2) reject the waste. In the event the waste is not sampled, Safety-Kleen will notify the generator's State Agency that is authorized to implement the RCRA hazardous waste management program (or EPA if the RCRA program has not been delegated to the State).

If the waste is sampled for further analysis, the service representative will collect a sample, then seal the drum and label it as hazardous waste. The drum is left with the customer pending the results of the laboratory tests. The laboratory testing initially involves analyzing the suspect waste for flash-point and the presence of volatile organic compounds. Pending those results, additional constituents may also be analyzed. The costs of any sampling and testing performed as a result of the waste failing to meet the acceptance criteria, will be borne by the customer.

If the laboratory analysis reveals that the sampled waste is not contaminated, Safety-Kleen will accept the waste from the customer. If the laboratory confirms that the waste is contaminated, the generator will be responsible for securing an alternate means of disposal or they may contract with Safety-Kleen to handle the waste on a ten-day transfer basis.

b. Waste Specific Criteria:

The following is a description of the specific acceptance criteria for each waste stream.

1. Used solvent:

The acceptance criteria for determining by visual inspection whether used solvent has been contaminated are volume, odor and color, the most significant of which is volume. If the volume of waste in a given drum exceeds the specified level, the Safety-Kleen service representative will conduct an inquiry of the customer's operation and handling procedures. Contingent on the customer's responses, the solvent may be accepted, a sample of the waste may be collected for laboratory testing as described above, or the waste may be rejected.

In addition to the volume criterion, the odor of the used solvent may typically indicate whether the waste has been contaminated. Used solvent has a distinctive odor. The service representatives are expressly instructed not to deliberately sniff the waste. However, if the solvent has been contaminated the service representative may notice a difference in the odor when he services the machine.

The used solvent is also visually inspected for its color. Unused solvent typically has a clear or greenish tint. As the solvent is used, it turns brown in color. The more it is used, the darker brown it becomes, until it is almost black. In the case of a print shop, the solvent may be clear, green, brown, black, or many colors. Therefore, if the used solvent does not appear to be the expected color, the service representative will sample the waste for possible contamination as described above, or will reject the waste.

2. Immersion Cleaner:

The criteria for the inspection of used immersion cleaner are volume and color. If the volume of waste exceeds the specified level a sample will be tested for contamination following the procedures described above or the waste will be rejected.

Unused immersion cleaner is amber in color. As the solvent is used, it turns brown in color. The more it is used, the darker brown it becomes, until it is almost black. If the used immersion cleaner does not appear to be the expected color, the service representative will either sample the waste for possible contamination as described above, or reject the drum of waste.

3. Dry Cleaner Wastes:

Dry cleaner wastes normally consist of used filter cartridges, powder residue, and still bottoms.

a. Used Filter Cartridges:

Used filter cartridges are placed in containers meeting DOT specifications. It is obvious to the service representative whether the items in the drums are filter cartridges. The drums may also contain approximately one inch of liquid which should either be clear or have a light brownish tint. If the amount of the liquid is greater than approximately one inch or if the liquid is a color other than light brown, the service representative will sample the waste for contamination in accordance with the procedures described above, or will reject the waste.

b. Powder Residue:

The criteria for the acceptance of powder residue are consistency and color, the former being the more significant criterion of the two. A drum of powder residue should not contain any liquid. As the name implies, it will be dry or "powdery". If there is any liquid in the drum, the waste will be sampled for contamination in accordance with the procedures described above, or the waste will be rejected.

The powder residue is also inspected for color and should appear to be grayish-black. If the residue is not grayish-black in color, the service representative will sample the waste for contamination in accordance with the procedures described above, or will reject the waste.

- c. **Still Bottoms:**
The criteria for the acceptance of dry cleaning still bottoms are consistency and color. The waste should have a highly viscous, tar-like consistency. If the consistency of the waste is too thin or if there is more than one inch of free liquid in the drum, the waste will be sampled for contamination in accordance with the procedures described above, or will be rejected.

In addition to consistency, the still bottom waste is inspected for color. The waste should appear dark brown or black in color. If the waste is a different color, a service representative will sample the waste for contamination in accordance with the procedures described above, or will reject the waste.

4. **Paint Wastes:**

Safety-Kleen handles both lacquer thinner waste generated from the paint gun cleaning process and paint waste.

- a. **Lacquer Thinner Waste:**
The significant criterion for determining whether lacquer thinner waste will be accepted is volume. The solvent is provided to customers in pails which meet DOT requirements. The paint gun cleaning machine operates as a closed system where by there should never be a combined volume of more than the expected amount of solvent in the two collection pails. The solvent is pumped from a tube in a left hand pail (facing the machine) through the machine into the right hand pail. The left hand pail starts with clean solvent which will be pumped out as the machine is used to clean the spray guns. If a service representative discovers more than the expected amount of solvent in the two pails, or there is an overfill from the right hand pail, the waste will be sampled for contamination in accordance with the procedures described above, or the waste will be rejected.

- b. **Paint Waste:**

- b.1 **Liquid**

- The significant criterion for the inspection of paint waste is consistency. The waste should contain no more than 30 percent solids. The service representative will insert a Colliwasa or similar sampling device into the drum. The sampling device should glide easily down to the bottom of the drum. The service representative will handle this waste as a Class 3 flammable waste. If there is resistance to the insertion of the glass tube, it is assumed that the level of solids is in excess of 30 percent and the service representative will reject the waste.

- The contents of the glass tube are also visually examined for consistency and water content. The material should be a "free flowing" liquid, but should not contain a significant amount of water. If there is more than approximately 10 inches of water in the 3 foot tube (the water and paint will separate in the tube and thus can be measured) the waste will be rejected.

- b.2 **Solid:**

- For waste containing more than 30 percent solids the service representative will handle the waste as a Class 4 flammable waste.

5. **Photographic/Imaging Waste**

Photographic/Imaging waste is collected from facilities where one process is managed and the possibility of cross contamination is minimal. The sales representative inspects

the contents of the containers of photographic/imaging waste when the sales representative services the customer. The pH and silver content of the waste is checked at the time of service, and the waste is also inspected visually.

A.3 WASTE ANALYSES AT THE RECYCLE CENTER OR QUALIFIED LABORATORY

Analyses performed at the Safety-Kleen recycle centers are undertaken to safeguard the recycling process and to assure a product quality. The following section summarizes the waste analyses practiced at the recycle center for the hazardous materials returned from the Albuquerque branch. For each waste type stored at the branch, at least the following analyses must be performed annually (annual re-characterization analysis). If a particular waste stream is not managed at the service center during the previous year, no re-characterization analysis is performed. Copies of the results for the annual analyses must be maintained at the branch office for the life of the permit. A copy of the most recent re-characterization analysis is contained in Attachment A-1.

A.3.1 Solvents

- Flash point (must be greater than 90°F).

If the flashpoint is unacceptable, the Albuquerque Branch Manager will be notified immediately and the load will receive appropriate special handling. If the results are acceptable, the following tests will be performed:

- Volatile Organic Analysis, using EPA Methods 8015, 8021, 8260, or approved equivalents.
- Physical appearance, including bottom sediment and water content
- Specific gravity
- pH
- Distillation performance

If any of these tests yield unacceptable results or indicate solvent contamination outside the normal range, the Branch Manager will be notified immediately.

In addition to the tests listed above, which will be performed on a representative sample from every load received at the recycle center from the Albuquerque service center, a full Toxicology Characteristic Leaching Procedure (TCLP) analysis for all 40 constituents, (except for pesticides and herbicides) will be performed at least once each calendar year.

A.3.2 Solvent Tank Bottom Sludge and Free Water

- Flash point (Must be greater than 90°F).
- Analysis for content of lead, cadmium, and chromium.
- pH

As described above for solvent, a full TCLP analysis (except for the pesticides and herbicides) will be performed on a representative sample at least once each calendar year.

A.3.3 Immersion Cleaner Solvent

Containers of waste immersion cleaner are typically characterized at the recycle center using the following criteria:

- Flash point
- Physical appearance
- Specific gravity
- Percent water
- Volatile Organic Analysis (using EPA methods 8015, 8021, 8260 or approved equivalents)

If any of these tests yield unacceptable results or indicate solvent contamination outside the normal range, the Branch Manager will be notified immediately. As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of immersion cleaner at least once each calendar year.

A.3.4 Dry Cleaning Solvent/Still Bottoms

- Physical appearance
- Volatile Organic Analysis for Perchloroethylene (using EPA methods 8015, 8021, 8260 or approved equivalents)
- Specific gravity

If any of these tests yield unacceptable results or indicate contamination outside the normal range, the Branch Manager will be notified immediately.

As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of dry cleaning waste at least once each calendar year.

A.3.5 Paint Waste

Paint wastes are generally characterized at the recycle center using the following criteria:

- Metals
- Flash points
- Physical appearance
- Specific gravity
- Percent water
- Volatile organic analysis (using EPA methods 8015, 8021, 8260, or approved equivalents)

As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of paint waste at least once each calendar year.

A.4 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. Revision of the plan is typically the responsibility of the Safety-Kleen corporate or regional compliance offices. Any revision to this plan will be in accordance with 20.4.1.900 NMAC (incorporating 40 CFR 270.42)

A.5 LAND BAN NOTIFICATION/CERTIFICATION FORMS

In accordance with 40 CFR 268.7(a)(2), Safety-Kleen provides a one time written notice for wastes banned for land disposal with the initial shipment. No further notification is necessary unless the waste changes. Safety-Kleen will provide the written notice for wastes banned from landfills as follows:

1. Printing the Notice language on manifests - such as for core-business customers to branch shipments; or
2. Special forms for each regularly handled waste types (e.g., parts washer solvents, immersion cleaner, dry cleaning wastes, etc); or
3. 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. Further, all wastes stored at the facility will have been characterized and appropriate notification made of LDR requirements, regardless of where the waste was generated and a copy of the required notice maintained in the facility record. 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.

A.6 OPERATING LOG RECORD

Safety-Kleen maintains an operating log record on site which includes the following information as it becomes available:

1. A description and the quantity of each hazardous waste received, and the method and date of its storage as required by Pt. V. Sec. 264, Appendix I;
2. The location of hazardous waste within the facility and quantity;
3. Records and results of waste analyses performed;
4. Summary reports and details of all incidents that require implementing the contingency plan;
5. Records and results of inspections;
6. Monitoring, testing or analytical data and corrective action where required;
7. For off-site facilities, Notices to generators as specified in 264.12(b);
8. Closure and post-closure cost estimates;
9. A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste; and
10. The land ban notices and requirements. These records are kept on file at the facility.

A.7 WASTE DETERMINATION FOR SUBPART BB AND CC COMPLIANCE

For purposes of waste determination, this facility utilizes knowledge of the wastes described in Section A.1, A.2 and A.3 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 ppmw at the point of waste origination. Documentation of this knowledge is provided in Attachment A-1 (waste characterization analytical results), as required in 40 CFR 264.1063(d) and 264.1083. Therefore, hazardous wastes managed in tanks or containers at this facility shall be managed in accordance with the applicable Subpart CC standards.

Table A-1

Parameters And Rationale For Hazardous Waste Analysis

Hazardous Waste	Parameter*	Rationale
1. Spent Solvents	Flash Point	Ignitable Characteristic (D001)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
2. Solvent Tank Bottoms	Same as number 1	Same as number 1
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
3. Used Immersion Cleaner	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
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)
	Hazardous Constituent Concentration	Determination of Waste's LDR Status

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

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

Table A-2

Parameters And Test Methods

Parameter	Test Method	Reference
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 LDR Constituents	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 if necessary, followed by 1310 or (3010, 7760) then 6010 and 1310 then 7470.	40 CFR 261, Appendix II; 55 FR 11798 (March 29, 1990)

Table A-3

Methods To Sample Hazardous Wastes

Hazardous Waste	Reference for Sampling	Description of Sampling Method	Sampler
1. Spent Solvents	Sampling a tank "Samples & Sampling Procedures for Hazardous Waste Streams" EPA – 600/2-80-018 and Safety-Kleen training, ET-143, "Sampling Hazardous Materials and Wastes".	Test Methods for the Evaluation of Solid Waste Physical/ Chemical Methods, SW846, U.S. EPA Chapter One. et. seq. And Safety-Kleen Training ET-143, "Sampling Hazardous Materials and Wastes"	Coli-wasa Tube, Weighted Bottle Sampler, Pond Sampler, Trier, Large Trier, Auger, Grain Thief, or Scoop as appropriate.
2. Solvent 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

Table A-4
Frequency of Analysis

Hazardous Waste	Analysis*	Frequency
1. Spent Solvents	Flash Point	At least annually
	TCLP	At least annually
2. Solvent 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

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

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

WASTE ANALYSIS PLAN

ABSTRACT

Waste Description	EPA Waste Code No.	Facility Capacity ¹ (gallons)	Annual Amount ²
Used Solvents	D001 ³	12,000	143
Tank/Dumpster Bottom Sediment	D001 ³	N/A	3
Used Immersion Cleaner	See Below ³	6,990	3
Dry Cleaning Waste	F002 ³	Included with Used Immersion Cleaner	6
Used Solvent (aqueous)	See Below ³	Included with Used Immersion Cleaner	3
Paint Waste	D001, F003, F005 ³	9,650	14
Photo Chemical Wastes	D011	Included with Used Immersion Cleaner	3

¹ The facility capacity is in gallons.

² The annual amount is in thousands of gallons.

³ and may include D004, D005, 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 Facility shall store only wastes it is authorized to store. That is, Safety-Kleen will only store wastes included in Part A of the application for hazardous waste permit and not otherwise prohibited by the permit. Safety-Kleen will not store any hazardous waste for more than one year.

These waste streams are characterized annually as described in the "Statistical Analysis of Annual Waste Characterization Data", attached and incorporated herein by reference. (The most recent data are also included.)

The testing and sampling methodology is as described in A.3, below. The data generated in this process is used to assign waste codes, if any, for each waste stream. The data generated in the annual recharacterization (AR) is also used to assist recycle centers in recycling or treating the waste streams. Recycle centers also rely on their own waste analysis plans to generate data to recycle materials and or dispose of waste. If while providing service to a customer if there is suspicion that the waste does not meet the acceptance criteria, the waste will not be picked up and the customer must provide information explaining what is in the waste and how the waste was adulterated. Please see the text below in this waste analysis plan.

Providing service to Safety-Kleen customers is dependent on a review of the customer business. If the business is a typical generator of that waste stream (for example, a garage generating parts washer waste), then limited review is performed. If the business is not a typical generator of that waste stream or if the business has other processes on site, a more detailed review of the business is performed and a certification from the customer is required stating the waste will be as described without adulterants. For example, laboratory analysis of that customer's waste may be required.

In this AR process, regulated hazardous constituents and reasonably expected underlying hazardous constituents (UHC)s are also discovered. UHC which is discovered in the annual recharacterisation will be assumed to expected throughout the waste stream. The applicable constituent concentration or technology based treatment standards for the wastes and / or individual hazardous constituents will be identified, if required by regulation, on the LDR generated from this data. The LDRs generated in this process also identify whether the waste must be treated before being land disposed when required by regulation.

AR data is used to update subpart BB and Subpart CC plans (see these plans elsewhere in this permit application). It is anticipated that minor changes in the waste streams are unlikely to significantly change in air emissions.

Recycle centers test every shipment of waste for PCBs. If a shipment is discovered to contain PCBs, the source of the PCBs is traced and appropriate 40 CFR 761 requirements are implemented. Any equipment contaminated by PCBs is removed from service decontaminated cleaned before being put into service.

The Safety-Kleen transportation department is responsible for selecting packaging for Safety-Kleen waste streams, in addition to their responsibility for company compliance with Federal, State, and local transportation regulations and rules. The transportation department has selected packaging based on past waste recharacterizations and continue to review AR and other data to maintain compliance with material packaging requirements.

A.1 DESCRIPTION OF WASTES

Several types of waste result from the servicing of Safety-Kleen customers and the maintenance of the service center. It should be noted that the solvents managed at this facility are incompatible with strong oxidizers and reactive metals, none of which are present in the containers, container storage area, or the concrete sealant. The solvents are also compatible with one another. Analytical data for the wastes and specifications for the products are in Attachment A-1 and qualitative descriptions follow.

A.1.1 Wastes Resulting From the Parts of Washer Service

Used solvents from parts washers is accumulated in a 12,000 gallon underground, storage tank via the return and fill station. Containers of used material are poured into a dumpster at the return and fill station which in turn empties into the tank. This waste handling method results in several types of solvent waste:

- a. Used solvent - The used solvent is removed from the tank by a tanker truck on a scheduled basis. About 5,000 gallons are removed every month. This waste is ignitable (D001) and may exhibit the toxicity characteristic 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, and D043.
- 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 Safety-Kleen vacuum truck is generally used for this purpose. The sediment is ignitable (D001) and may exhibit the toxicity characteristic 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, and D043.
- c. Dumpster Sediment - Sediment may also accumulate in the drum washers in the return/fill station. The sediment is manually removed and placed in containers. The dumpster sediment is representative of the waste codes described in items a and b above.
- d. Used Aqueous Parts Cleaning Solvent - may be bulked at the service center into containers that meet DOT specifications or may be co-mingled with the other solvent into the used solvent tank. It may be toxic using the toxicity characteristic 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, and D043.
- e. Immersion Cleaner - is a different type of solvent that is not placed in the underground storage tank. Containers of immersion cleaner typically remain in the drum in which it was originally used until it is received at the recycle center. Drums are placed in the drum storage area of the warehouse and are stacked no more than two-high in the drum storage area of the warehouse.

The immersion cleaner is a non-halogenated hydrocarbon mixture and may exhibit the toxic 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, and D043.

A.1.2 Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of used filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are packaged on the customer's premises in containers meeting DOT specifications. The containers are then palletized, stacked two-high and placed in the container storage area of the warehouse. Approximately 95% of the dry cleaning solvent used is perchloroethylene (F002 and 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) and the remaining 5% is trichloro-trifluoroethane (F002) and toxic using the 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, and D043).

A.1.3 Wastes Resulting From the Paint Service

Paint wastes consist of various lacquer thinners (D001, F003, and F005) and may be toxic as per the 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, and D043). The wastes are collected in containers which meet DOT requirements at the customer's place of business and containers are then palletized and stored in an enclosed concrete masonry building (the H-3 Flammable Storage Building).

A.1.4 Photographic/Imaging Wastes

Some photographic imaging 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 three waste streams. Photo fixer solution is an aqueous solution used to etch photo film during processing. This material is characteristic for silver (D011). Safety-Kleen is able to recover the silver from the solution. Used Photo developer is an aqueous solution that exhibits no hazardous waste characteristics but may not be allowed to discharge into public wastewater treatment systems in some communities. Silver collection canisters are sent to a recycle center for reclamation. These canisters do not meet the definition of a hazardous waste as per 40 CFR 260.30(c) and are managed as a non-regulated material.

A.2 QUALITY CONTROL PROCEDURES

The used solvents are the primary feed stocks 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 service center collects used solvents from approximately 1,100 customers, most of who are small quantity generators, and an estimated 14,000 drums containing 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, all the materials collected at the service center are managed at all times in a 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 all materials before returning them to the service centers as described in Section A.2.1. This mode of operation has been proven to safeguard the recycling process and maintain a quality product.

However, in accordance with 20.4.1.500 NMAC (incorporating 40 CFR (a)(3)(i)), 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. It is Safety-Kleen's practice that suspected non-conforming material must not be

accepted until a full analysis has been conducted. If a container with questionable contents is returned to the service center, a sample will be taken and analysis will be performed at the recycling center, Safety-Kleen Tech Center (Elk Grove Village, Illinois) or other qualified lab according to the procedures outlined in Section A.3 of this attachment. The Branch Manager will be notified of any contamination that may have occurred.

Safety-Kleen trains personnel to verify the physical characteristics of the wastes at several points in the management of the solvent. These procedures are described briefly below.

Safety-Kleen controls the use and management of its solvents by:

1. Limiting the solvents stored to those compatible with one another and their containers;
2. Limiting the uses of each type of solvent for (example, dry cleaning waste is only collected from dry cleaner shops);
3. Determining the customer's type of business (i.e., the SIC code is recorded) and the purpose for which the customer will use the machine;
4. Training customers to use the machines properly;
5. Training employees to inspect the physical characteristics of used solvent and determine whether it is acceptable;
6. When waste is collected from a customer, indicate on the service document whether the used solvent meets Safety-Kleen's acceptance criteria;
7. Marking each container with the customer's name, address, and EPA I.D. number (if available). This information remains on containerized waste until it is accepted at the reclamation facility;
8. Keeping a record of each incoming and outgoing shipment in the operating log; and

Safety-Kleen's customers sign a service document containing the following information:

- a. the name, address and EPA I.D. number of the facility to which the waste is being shipped;
- b. the customer's name, address and EPA I.D. number (if available); and
- c. the description and amount of Safety-Kleen solvent waste generated.

In addition, each incoming and outgoing shipment is recorded in the facility's operating log.

If a waste is rejected at the time of service, the customer will be given a choice as to whether he will dispose of the waste himself or require Safety-Kleen's assistance. If he requests Safety-Kleen's assistance, a sample will be drawn using a Coliwasa tube or similar sampling device to ensure representative samples. The sample will be analyzed for flash point and volatile organic compounds. If this analysis does not adequately define the constituents, additional analyses will be performed as necessary (e.g., semi-volatile organic compounds, PCBs, etc.).

The laboratory sends waste analyses results to the service center. If through the additional analysis the waste is determined to be acceptable at the branch, it will be relabeled, manifested and then managed with the other wastes. If it is determined through the additional analysis to not be acceptable, the waste will either be: (a) managed at the Service Center on a 10 day transfer basis and manifested to a properly permitted reclamation or disposal facility, or (b) manifested and shipped directly to a properly permitted reclamation or disposal facility. The analytical results from the additional characterization analysis will be used to appropriately manage the waste. The Branch Manager has the right to refuse any further service to a business which has returned waste that does not meet acceptable criteria.

A.2.1 Qualitative Waste Analysis

a. General Inspection Procedures:

Safety-Kleen visually inspects each drum of waste when it is collected at the customer's location. Safety-Kleen examines the waste for volume, appearance, consistency and odor and is intimately familiar with the characteristics of the waste it receives. Based on the known waste characteristics, Safety-Kleen has established the specific acceptance criteria set forth below, to be used by Safety-Kleen personnel in their visual inspections. These inspection procedures allow Safety-Kleen to ensure that the waste being picked up meets appropriate acceptance criteria.

If a particular drum of waste does not meet the acceptance criteria, the Safety-Kleen service representative will either (1) sample the waste for testing at a Safety-Kleen laboratory to determine whether the waste has been contaminated; or (2) reject the waste. In the event the waste is not sampled, Safety-Kleen will notify the generator's State Agency that is authorized to implement the RCRA hazardous waste management program (or EPA if the RCRA program has not been delegated to the State).

If the waste is sampled for further analysis, the service representative will collect a sample, then seal the drum and label it as hazardous waste. The drum is left with the customer pending the results of the laboratory tests. The laboratory testing initially involves analyzing the suspect waste for flash-point and the presence of volatile organic compounds. Pending those results, additional constituents may also be analyzed. The costs of any sampling and testing performed as a result of the waste failing to meet the acceptance criteria, will be borne by the customer.

If the laboratory analysis reveals that the sampled waste is not contaminated, Safety-Kleen will accept the waste from the customer. If the laboratory confirms that the waste is contaminated, the generator will be responsible for securing an alternate means of disposal or they may contract with Safety-Kleen to handle the waste on a ten-day transfer basis.

b. Waste Specific Criteria:

The following is a description of the specific acceptance criteria for each waste stream.

1. Used solvent:

The acceptance criteria for determining by visual inspection whether used solvent has been contaminated are volume, odor and color, the most significant of which is volume. If the volume of waste in a given drum exceeds the specified level, the Safety-Kleen service representative will conduct an inquiry of the customer's operation and handling procedures. Contingent on the customer's responses, the solvent may be accepted, a sample of the waste may be collected for laboratory testing as described above, or the waste may be rejected.

In addition to the volume criterion, the odor of the used solvent may typically indicate whether the waste has been contaminated. Used solvent has a distinctive odor. The service representatives are expressly instructed not to deliberately sniff the waste. However, if the solvent has been contaminated the service representative may notice a difference in the odor when he services the machine.

The used solvent is also visually inspected for its color. Unused solvent typically has a clear or greenish tint. As the solvent is used, it turns brown in color. The more it is used, the darker brown it becomes, until it is almost black. In the case of a print shop, the solvent may be clear, green, brown, black, or many colors. Therefore, if the used solvent does not appear to be the expected color, the service representative will sample the waste for possible contamination as described above, or will reject the waste.

2. Immersion Cleaner:

The criteria for the inspection of used immersion cleaner are volume and color. If the volume of waste exceeds the specified level a sample will be tested for contamination following the procedures described above or the waste will be rejected.

Unused immersion cleaner is amber in color. As the solvent is used, it turns brown in color. The more it is used, the darker brown it becomes, until it is almost black. If the used immersion cleaner does not appear to be the expected color, the service representative will either sample the waste for possible contamination as described above, or reject the drum of waste.

3. Dry Cleaner Wastes:

Dry cleaner wastes normally consist of used filter cartridges, powder residue, and still bottoms.

a. Used Filter Cartridges:

Used filter cartridges are placed in containers meeting DOT specifications. It is obvious to the service representative whether the items in the drums are filter cartridges. The drums may also contain approximately one inch of liquid which should either be clear or have a light brownish tint. If the amount of the liquid is greater than approximately one inch or if the liquid is a color other than light brown, the service representative will sample the waste for contamination in accordance with the procedures described above, or will reject the waste.

b. Powder Residue:

The criteria for the acceptance of powder residue are consistency and color, the former being the more significant criterion of the two. A drum of powder residue should not contain any liquid. As the name implies, it will be dry or "powdery". If there is any liquid in the drum, the waste will be sampled for contamination in accordance with the procedures described above, or the waste will be rejected.

The powder residue is also inspected for color and should appear to be grayish-black. If the residue is not grayish-black in color, the service representative will sample the waste for contamination in accordance with the procedures described above, or will reject the waste.

the contents of the containers of photographic/imaging waste when the sales representative services the customer. The pH and silver content of the waste is checked at the time of service, and the waste is also inspected visually.

A.3 WASTE ANALYSES AT THE RECYCLE CENTER OR QUALIFIED LABORATORY

Analyses performed at the Safety-Kleen recycle centers are undertaken to safeguard the recycling process and to assure a product quality. The following section summarizes the waste analyses practiced at the recycle center for the hazardous materials returned from the Albuquerque branch. For each waste type stored at the branch, at least the following analyses must be performed annually (annual re-characterization analysis). If a particular waste stream is not managed at the service center during the previous year, no re-characterization analysis is performed. Copies of the results for the annual analyses must be maintained at the branch office for the life of the permit. A copy of the most recent re-characterization analysis is contained in Attachment A-1.

A.3.1 Solvents

- Flash point (must be greater than 90°F).

If the flashpoint is unacceptable, the Albuquerque Branch Manager will be notified immediately and the load will receive appropriate special handling. If the results are acceptable, the following tests will be performed:

- Volatile Organic Analysis, using EPA Methods 8015, 8021, 8260, or approved equivalents.
- Physical appearance, including bottom sediment and water content
- Specific gravity
- pH
- Distillation performance

If any of these tests yield unacceptable results or indicate solvent contamination outside the normal range, the Branch Manager will be notified immediately.

In addition to the tests listed above, which will be performed on a representative sample from every load received at the recycle center from the Albuquerque service center, a full Toxicology Characteristic Leaching Procedure (TCLP) analysis for all 40 constituents, (except for pesticides and herbicides) will be performed at least once each calendar year.

A.3.2 Solvent Tank Bottom Sludge and Free Water

- Flash point (Must be greater than 90°F).
- Analysis for content of lead, cadmium, and chromium.
- pH

As described above for solvent, a full TCLP analysis (except for the pesticides and herbicides) will be performed on a representative sample at least once each calendar year.

A.3.3 Immersion Cleaner Solvent

Containers of waste immersion cleaner are typically characterized at the recycle center using the following criteria:

- Flash point
- Physical appearance
- Specific gravity
- Percent water
- Volatile Organic Analysis (using EPA methods 8015, 8021, 8260 or approved equivalents)

If any of these tests yield unacceptable results or indicate solvent contamination outside the normal range, the Branch Manager will be notified immediately. As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of immersion cleaner at least once each calendar year.

A.3.4 Dry Cleaning Solvent/Still Bottoms

- Physical appearance
- Volatile Organic Analysis for Perchloroethylene (using EPA methods 8015, 8021, 8260 or approved equivalents)
- Specific gravity

If any of these tests yield unacceptable results or indicate contamination outside the normal range, the Branch Manager will be notified immediately.

As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of dry cleaning waste at least once each calendar year.

A.3.5 Paint Waste

Paint wastes are generally characterized at the recycle center using the following criteria:

- Metals
- Flash points
- Physical appearance
- Specific gravity
- Percent water
- Volatile organic analysis (using EPA methods 8015, 8021, 8260, or approved equivalents)

As described above, a full TCLP test (except for pesticides and herbicides) will be performed on a representative sample of paint waste at least once each calendar year.

A.4 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. Revision of the plan is typically the responsibility of the Safety-Kleen corporate or regional compliance offices. Any revision to this plan will be in accordance with 20.4.1.900 NMAC (incorporating 40 CFR 270.42)

A.5 LAND BAN NOTIFICATION/CERTIFICATION FORMS

In accordance with 40 CFR 268.7(a)(2), Safety-Kleen provides a one time written notice for wastes banned for land disposal with the initial shipment. No further notification is necessary unless the waste changes. Safety-Kleen will provide the written notice for wastes banned from landfills as follows:

1. Printing the Notice language on manifests - such as for core-business customers to branch shipments; or
2. Special forms for each regularly handled waste types (e.g., parts washer solvents, immersion cleaner, dry cleaning wastes, etc); or
3. 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. Further, all wastes stored at the facility will have been characterized and appropriate notification made of LDR requirements, regardless of where the waste was generated and a copy of the required notice maintained in the facility record. 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.

A.6 OPERATING LOG RECORD

Safety-Kleen maintains an operating log record on site which includes the following information as it becomes available:

1. A description and the quantity of each hazardous waste received, and the method and date of its storage as required by Pt. V. Sec. 264, Appendix I;
2. The location of hazardous waste within the facility and quantity;
3. Records and results of waste analyses performed;
4. Summary reports and details of all incidents that require implementing the contingency plan;
5. Records and results of inspections;
6. Monitoring, testing or analytical data and corrective action where required;
7. For off-site facilities, Notices to generators as specified in 264.12(b);
8. Closure and post-closure cost estimates;
9. A certification by the permittee no less often than annually, that the permittee has a program in place to reduce the volume and toxicity of hazardous waste; and
10. The land ban notices and requirements. These records are kept on file at the facility.

A.7 WASTE DETERMINATION FOR SUBPART BB AND CC COMPLIANCE

For purposes of waste determination, this facility utilizes knowledge of the wastes described in Section A.1, A.2 and A.3 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 ppmw at the point of waste origination. Documentation of this knowledge is provided in Attachment A-1 (waste characterization analytical results), as required in 40 CFR 264.1063(d) and 264.1083. Therefore, hazardous wastes managed in tanks or containers at this facility shall be managed in accordance with the applicable Subpart CC standards.

Table A-1

Parameters And Rationale For Hazardous Waste Analysis

Hazardous Waste	Parameter*	Rationale
1. Spent Solvents	Flash Point	Ignitable Characteristic (D001)
	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
2. Solvent Tank Bottoms	Same as number 1	Same as number 1
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
3. Used Immersion Cleaner	TCLP	Contains components which exceed the limits listed in 40 CFR 261.24
	Hazardous Constituent Concentration	Determination of Waste's LDR Status
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)
	Hazardous Constituent Concentration	Determination of Waste's LDR Status

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

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

Table A-2

Parameters And Test Methods

Parameter	Test Method	Reference
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 LDR Constituents	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 if necessary, followed by 1310 or (3010, 7760) then 6010 and 1310 then 7470.	40 CFR 261, Appendix II; 55 FR 11798 (March 29, 1990)

Table A-3

Methods To Sample Hazardous Wastes

Hazardous Waste	Reference for Sampling	Description of Sampling Method	Sampler
1. Spent Solvents	Sampling a tank "Samples & Sampling Procedures for Hazardous Waste Streams" EPA – 600/2-80-018 and Safety-Kleen training, ET-143, "Sampling Hazardous Materials and Wastes".	Test Methods for the Evaluation of Solid Waste Physical/ Chemical Methods, SW846, U.S. EPA Chapter One, et. seq. And Safety-Kleen Training ET-143, "Sampling Hazardous Materials and Wastes"	Coliwasa Tube, Weighted Bottle Sampler, Pond Sampler, Trier, Large Trier, Auger, Grain Thief, or Scoop as appropriate.
2. Solvent 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

Table A-4
Frequency of Analysis

Hazardous Waste	Analysis*	Frequency
1. Spent Solvents	Flash Point	At least annually
	TCLP	At least annually
2. Solvent 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,,2,2-trifluoroethane	At least annually
		At least annually
	TCLP	At least annually
	Flash Point	At least annually

Notes: TCLP = Toxicity Characteristic Leaching Procedure.

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