

Part II, A. General**5. WASTE CHARACTERISTICS**

Waste analysis requirements mandate that before an owner or operator transfers, treats, stores, or disposes of any hazardous waste, he must obtain a detailed chemical and physical analysis of a representative sample of wastes. This analysis, at a minimum, must contain all of the information that must be known to treat, store, or dispose of the waste. The analysis may include data developed under 40 CFR 261 of the regulations and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes. The Waste Analysis Plan for the Safety-Kleen Medley Branch, found in Part II.WAP, has been developed to meet the requirements described above and as found in 40 CFR 270.14(b) and 264.13.

Permitted/Site Generated Waste Streams

Waste Type	Process Code(s)	Estimated Annual Amounts (Tons)	Waste Codes
Spent Parts Washer Solvent	S01* S02**	542	D001 and D-Codes Listed in Note Below
Branch Generated Liquids/Solids (Debris)	S01*	6	D001 and D-Codes Listed In Note Below; F002, F003, F005
Dumpster Sediment	S01*	Included Above	D001 and D-Codes Listed in Note Below
Tank Bottoms	S01*	Included Above	D001 and D-Codes Listed in Note Below
Used Immersion Cleaner (#699)	S01*	21	D-Codes Listed in Note Below
Dry Cleaning Waste (Perchloroethylene)	S01*	234	F002 and D-Codes Listed in Note Below
Dry Cleaning Waste (Naphtha-Based)	S01*	Included above	D001 and D-Codes Listed in Note Below
Paint Wastes	S01*	46	D001, F003, F005 and D-Codes Listed in Note Below
Retain Samples From Used Oil Operations	S01*	3	D008, D018, D039, D040
Spent Aerosol Cans	S01*	< 1	D001, D035
Fluid Recovery Service (FRS) Transfer Wastes	S01***	167	Transfer wastes – waste codes assigned by generator ****
Aqueous Brake Cleaner	S01***	14	Transfer wastes – none, unless assigned by generator
Mercury-Containing Lamps/devices	N/A***	Less than 2.2	N/A – handled as non-hazardous transfer wastes

NOTES:

D-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

* This waste will be stored in containers in the warehouse container storage area. The maximum capacity in the warehouse container storage area is 29,400 gallons, with 6,912 gallons being hazardous waste..

** The RCRA-Permitted Hazardous Waste Tank (Used Solvent) has a capacity of 20,000 gallons and may be filled up to 19,000 gallons.

*** This waste will be held for transfer in containers in the transfer area(s). There is one transfer waste area Located inside the warehouse adjacent to the container storage area

**** Various D-Codes, F-Codes, K-Codes, P-Codes, U-Codes may be accepted for 10-day storage and transfer

CHEMICAL AND PHYSICAL ANALYSIS

270.14(b)(2)

264.13(a)

Used materials generated by Safety-Kleen customers are the primary feedstock for the generation of Safety-Kleen recycled solvent products. As a result, quality control of the used materials is necessary to monitor product quality and regulatory consistency. The Medley facility collects used materials from numerous customers, many of whom are Very Small and Small Quantity Generators (VSQGs and SQGs).

Most of the materials collected at the Service Center are managed in a closed-loop system and are collected from companies with a single process (i.e., washing oily parts, dry-cleaning, or painting). 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.

Analysis of Safety-Kleen's core/permitted waste streams is undertaken each year through the Annual Recharacterization Program (AR). The AR program involves representative samples being taken from customer core waste streams, randomly selected after being returned to the branches, at approximately 30-35 Safety-Kleen branches across the country. Representative samples of common waste streams generated at Safety-Kleen branches are also taken and submitted for analysis as part of the AR program. Samples are sent to an independent laboratory for analysis (TCLP metals, volatiles, semi-volatiles, flash point, and pH). The results of the analyses are then tabulated for all participating Safety-Kleen Branches to provide a cross-sectional view of the waste characteristics associated with the closed-loop or industry-specific waste streams. Then the results are subjected to a statistical review to determine applicable EPA hazardous waste codes for the upcoming year. A summary and explanation of the statistical analysis and methodology utilized to evaluate the analytical data obtained through the AR program each year is included in Part II WAP section. A summary of the analyses for the AR program is found in Appendix B.

***Descriptions of Permitted Waste Streams
Wastes Resulting from Solvent-Based Parts Washer Service***

Used parts washer solvent from parts washer services at Safety-Kleen customers is accumulated in a 20,000-gallon aboveground storage tank (RCRA-Permitted Hazardous Waste Tank (Used Solvent) via the wet dumpster in the Return and Fill Shelter (R/F). Containers of used solvent are poured into a drum washer unit (wet dumpster) at the R/F which in turn empties into the tank. The appropriate waste codes will be based on Safety-Kleen's Annual Recharacterization (AR) study. This waste handling method results in three types of parts washer solvent-based waste:

1. Used Parts Washer Solvent which may include any of Safety-Kleen's petroleum-naphtha based products, is removed from the RCRA-Permitted Hazardous Waste Tank (Used Solvent) by a tanker approximately every 20 working days. For appropriate waste codes, see the Table above in this section. The Medley facility will ship used parts washer solvent to a permitted Safety-Kleen/Clean Harbors TSDF or other facility appropriately permitted to accept the waste for reclamation. The used parts washer solvent removed from the bulk tank is a homogeneous material as no other waste streams are placed in the bulk tank.
2. Solvent Tank Bottoms includes sediment and other heavy material that has accumulated at bottom of the RCRA-Permitted Hazardous Waste Tank (Used Solvent). Periodically it is necessary to remove this material when the accumulation impacts or may impact the ability to pump liquid solvent from the bottom outlet of the tank. The frequency of removal of the tank bottoms varies, dependent on the amount of suspended solids in the used solvent that settle during tank storage. Bottoms are typically removed by suction/vacuum truck and transported for offsite disposal. Typically, removal may be required every three-five years. For appropriate waste codes, see the Table above in this section.
3. Branch Generated Liquids/Solids/Dumpster Sediment – In the course of day-to day operations, the Branch generates waste associated with sampling customers' waste and branch activities. Such wastes may include wipes, gloves, etc. In addition, liquid wastes may be generated as a result of decontaminating sampling equipment. The dumpster sediment chemical composition is analogous to that of the solvent tank bottoms. These containers are stored in the container storage area. The facility ultimately ships these materials to a permitted Safety-Kleen/Clean Harbors TSDF or other permitted facility for disposal. This waste stream is not sampled/analyzed, a "worst case scenario" is assumed. For appropriate waste codes, see the Table above in this section.

4. System One Type Parts Washers (recycling units) – These types of parts washers build up oil/sludge in the distillation unit of the machine while in use at the customer's location. This material is not sampled/analyzed as part of SK's annual re-characterization program and is managed according to the customer/generator waste determination. If a generator is a VSQG, SK recommends that they place this material in their used oil, if they are a generator of used oil.

Immersion Cleaner (IC) is another type of parts washer solvent. This product is a heavy aromatic naphtha, N-methyl-2-pyrrolidinone, dipropylene glycol methyl ether, monoethanolamine and oleic acid, and may contain a maximum of 1 percent chlorinated compounds. Containers of used IC are stored in the container storage area or transfer area. The Immersion Cleaner remains in the container in which it was originally delivered to the customer in until it is received at a permitted SK/Clean Harbors TSDF for reclamation/disposal. For appropriate waste codes, see the Table above in this section.

Wastes Resulting From the Dry Cleaner Service

Safety-Kleen manages naphtha-based, and perchloroethylene-type of hazardous dry cleaner waste in the container storage area or transfer waste area. This waste can have three forms: bottoms, filters, and separator waters. These wastes are packaged on the customers' premises in containers meeting U.S. DOT specifications. When received at the facility, the perchloroethylene, and naphtha-based non-perchloroethylene dry cleaning containers are placed in the container storage area or transfer waste area. Dry cleaning wastes remain in the containers received from the customer until received at the designated, permitted Safety-Kleen/Clean Harbors TSDF, or other appropriately permitted facility.

The dry-cleaning process may produce three waste streams:

1. Filter Cartridges are generated as waste when they can no longer effectively filter the solvent in the chamber. In addition to the filter materials of construction consisting of steel, paper, clay, and carbon, the used cartridge retains solvent, oil and grease, lint, hair, and soil. Solvent retained in the filter cartridge generally amounts to less than 50 percent of the total cartridge weight. Dry cleaner filters are given the same waste codes as the associated dry cleaner bottoms because both streams are derived from the same source.

Designating the same codes for the filters as were used for the bottoms is a conservative approach. A representative filter sample is difficult to obtain because of the make-up of the filter (metal core) and obtaining the sample would involve dismantling of the filter and undue exposure to the dismantler.

2/3. Still Bottom Residue and Separator Water are generated after filtration and distillation at the generator to remove the dissolved materials from the used solvent. The dissolved materials (still bottom residues) are in liquid form and consist primarily of solvent, oil, grease, hair, dirt, and water. In some cases, the dry cleaner will separate the water condensate from the still residue. Water condensate, generated during the distillation process, may contain dry cleaning solvent, oil, grease, and dirt as well. The dry-cleaning separator water will be given the same waste codes as the associated bottoms with the omission of D007 because chromium is not expected to carry over into the separator water during the distillation process (i.e., the boiling point of chromium is much greater than the operating temperature of the distillation unit). For appropriate waste codes see the Table above in this section.

Wastes Resulting From Paint and Thinner Services

Paint wastes consist Safety-Kleen lacquer thinner and paint residues resulting from cleaning of the paint guns by the generator. There are primarily three waste streams from this service: Paint Gun Cleaner, Clear Choice® Paint Gun Cleaner, and paint waste-other. Safety-Kleen thinners are used during the generation of the first two waste streams.

1. Paint Gun Cleaner is a paint gun cleaning lacquer thinner containing a blend of solvents such as acetone, alcohols, ketones, toluene, xylene, and acetate compounds. These have primary waste codes of D001, F003 and F005. These are contaminated with lower levels of waste paint, as the gun cleaning machine is removing it from the paint sprayer during the cleaning operation. Safety-Kleen's core paint waste is typically recycled and fuel blended. Reference the table above in this section for other applicable waste codes.
2. Clear Choice Paint Gun Cleaner is acetone, so the F005 waste code does not apply to this waste stream. Other applicable waste codes are D001 and F003. The two Paint Gun Cleaner streams share the same AR data because the waste streams are similar due to the identical process generating the wastes. Reference the table above in this section for

other applicable waste codes.

3. Paint Waste Other consists of the same material as the Paint Gun Cleaner, but has a higher level of paint solids, as this comes from the dumping of left-over paint from paint cups and guns when all the paint in a paint gun is not used. During the process creating this waste, typically smaller volumes of thinner are in the waste so these drums are fuel blended or incinerated rather than recycled for their solvent value. The primary waste codes are D001, F003 and F005. Reference the table above in this section for other applicable waste codes.

The paint wastes described above are collected in containers from the customer's location meeting U.S. DOT specifications. The wastes are containerized by the generator at their place of business. The paint wastes remain in these containers and are stored in the container storage area while at the SK Medley branch. Paint wastes are then shipped to a permitted Safety-Kleen/Clean Harbors TSDF, or other properly permitted facility for disposal.

Branch Generated Retain Samples From Used Oil Operations

Used Oil/Oily Water Retain Samples are taken and maintained for every used oil/oily water service SK performs. This is to ensure that we can identify any customers who introduce contaminants (halogenated solvents or PCBs) into our used oil/oily water loads. At the time the retain sample is taken at the customer location, the driver is able to check the material for appearance (used oil mixed with fuels may cause the material to have a thinner/lighter appearance), unusual odors, and viscosity (used oil mixed with fuels would have a noticeably lower viscosity and flow more easily into the sample jar). These retain samples are kept for a minimum of 90 days at the branch in metal cabinets in the warehouse, and then disposed of as hazardous waste. The samples are typically 4-oz. plastic/glass jars. They are manually placed into 55-gallon containers, and properly labeled for disposal. These containers are stored in the container storage area until being sent to a permitted Safety-Kleen/Clean Harbors TSDF, or other properly permitted facility for disposal. Waste codes for this material are found in the table above in this section.

Branch Generated Aerosol Cans

Spent Aerosol Cans: From time to time the facility generates spent aerosol cans during operations. These cans are accumulated in a satellite accumulation container (30 or 55 gallon) at the facility. Once this container is full it is moved to the container storage area until being sent to a permitted Safety-Kleen/Clean Harbors TSDF, or other properly permitted facility for disposal. Waste codes (D001/D035) for this material are found in the table above in this section.

Used Antifreeze

The spent antifreeze (ethylene glycol) is collected from automobile service stations. All antifreeze is collected by Safety-Kleen with the intent of it being recycled. At the customer's location, Safety-Kleen pumps waste ethylene glycol (antifreeze) into a Safety-Kleen used oil tanker truck. This truck transports the used antifreeze (glycol) to the Medley branch, for off-loading into dedicated storage tanks. The comingled material (used antifreeze/used oil) is sent to the SK East Chicago re-refinery where the ethylene glycol is separated by distillation. The glycol is then sent to a recycler for processing into a pure product which is then sold on the open market. This procedure is in accordance with FDEP's *the Best Management Practices for Managing Used Antifreeze at Vehicle Repair Facilities*, dated May 22, 2012. The Florida Department of Environmental Protection (FDEP) has determined this waste stream can be handled as non-hazardous as long as it is destined for recycling. If used antifreeze collected by the Safety-Kleen Medley facility is sent to a facility other than the East Chicago re-refinery it will be managed as follows. The material will be segregated and off-loaded into a separate storage container/tote, then sampled and analyzed for glycol percentage. If the glycol percentage is acceptable it is sent to a recycler. If the glycol percentage is not acceptable a representative sample will be taken and sent for TCLP analysis to determine if it is a hazardous waste. It will be managed properly according to the TCLP analysis result. In addition, Safety-Kleen sells its' own private label antifreeze in 55-gallon containers. Customers will then place used antifreeze in these containers to be shipped back to the branch. This material is then shipped to SK distribution centers, and then shipped to a recycler.

Aqueous Brake Cleaner

The Aqueous Brake Cleaner (ABC) is an aqueous, alkaline concentrated cleaner diluted with water (4¾ gallons of water is mixed with ¼-gallon of concentrated aqueous cleaner). The ABC parts cleaner has a 5-gallon reservoir under the cleaning vat that provides the aqueous solution for cleaning. The spent ABC is transported from the customers in 5-gallon suitcase type containers. Spent aqueous brake cleaner that is non-hazardous is sent to a waste-water treatment facility for processing. If a customer (generator) assigns any hazardous waste code to the spent ABC, the material is managed as a 10-day transfer waste and sent to an appropriate Safety-Kleen/Clean Harbors TSDF for processing.

Fluid Recovery Services (FRS) 10-Day Transfer Wastes

Fluid Recovery Services (FRS) is a program managed by the Safety-Kleen Branch to collect and transfer various other hazardous wastes to the appropriate Safety-Kleen/Clean Harbors TSDF's for processing. Non-hazardous Containerized Waste Services (CWS) are also performed under this program. FRS wastes that are RCRA hazardous wastes are managed as 10-day transfer wastes. Examples of types of wastes that may be received under this program include:

- Spent hydrocarbon distillates, such as waste fuel, oil, petroleum-naphtha, etc.;
- Lubricating oils, hydraulic oils, synthetic oils, and machine oils, used antifreeze;
- Industrial halogenated solvents such as 1,1,1-trichloroethane, tetrachloroethylene, Freon, trichloroethylene, carbon tetrachloride, etc;
- Non-halogenated solvents such as cresols, nitrobenzene;
- Photographic and x-ray related wastes;
- Paint and lacquer thinners, acids/bases;
- Various returned/damaged/expired products from national retail chains. These are typical household products that may carry U codes due to being unused commercial chemical products;
- Other hazardous and non-hazardous halogenated and non-halogenated wastes.

Mercury Containing Lamps and Devices & Batteries

Mercury-containing lamps and devices are another type of waste handled by the Branch. All mercury-containing lamps/devices are managed in accordance with the Standards for Universal Waste Management found in 40 CFR Part 273. As part of its protocol for handling mercury-containing lamps and devices, the Branch provides customers with four-foot and eight-foot boxes which hold up to 39 lamps. The boxes are picked up at customer locations and are stored at the Branch in the transfer waste storage areas. These containers are labeled in accordance with 62-737.400 (5)(b), Florida Administrative Code (FAC). The boxes are periodically shipped to a permitted mercury recovery or reclamation facility.

Safety-Kleen handles all types of batteries. All applicable batteries, per 40 CFR Part 273.2 & 273.9, are managed in accordance with the Standards For Universal Waste Management found in 40 CFR Part 273. Batteries not meeting those standards may be managed as 10-day transfer waste.

270.15(b)(1) Waste Compatibility with Containers

264.172

It is Safety-Kleen's standard operating procedure to use containers made of, or lined with, materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.

Safety-Kleen manages a limited number of permitted waste streams, most are liquid, and most originate from new products that are supplied to its customers in the original DOT approved containers. Safety-Kleen has evaluated the chemical composition of these products and wastes and has determined that the wastes are compatible with the containers in which they are stored.

Note: None of the permitted waste streams carry the D002 waste code for corrosivity. In most cases where a container is not available from a Safety-Kleen-supplied product, Safety-Kleen supplies the customer with a DOT approved container for that waste type (e.g., when Safety-Kleen collects Dry Cleaning wastes).

270.16(a), 264.190(a) Waste Compatibility with Tank System

264.191(b)(2), 264.192(a)(2)

The only hazardous waste stored in the RCRA-Permitted Hazardous Waste Tank (Used Solvent) is used parts washer solvent. This material has been analyzed and found to be compatible with the steel tank in which it is stored.

Waste in Piles, Waste on Drip Pads

Safety-Kleen's Medley facility does not have any of these processes on site. Therefore; these sections do not apply.

Part II

A. General

6. Waste Analysis Plan (WAP)

The waste analysis plan (WAP) for the Safety-Kleen Medley facility is found in the Part II WAP section.

Part II

A. General

7. 264.12 Required Notices, 264 Subpart E Manifest System, Recordkeeping, and Reporting Waste Manifests

Appropriate shipping papers/manifests are used, based on the monthly quantity of hazardous waste generated by the customer. Safety-Kleen services all three categories of generators in Florida – Very Small Quantity Generators (VSQGs), SQGs, and LQGs. VSQG's used parts washer solvent is removed via a service document/bill of lading and no manifest or Land Disposal Restrictions (LDR) form is required. Appropriate records are kept by the Branch as to the date of waste pick-up, quantity, and other data on the service document. A hazardous waste manifest and LDR form is completed for each SQG. LQGs' used parts washer solvent is always manifested (if hazardous) and an LDR form completed.

Used parts washer solvent (from each Safety-Kleen customer, regardless of generator status) is brought back to the Branch and dumped into the wet dumpster at return/fill shelter and pumped to

the RCRA-Permitted Hazardous Waste Tank (Used Solvent). This tank contains the used parts washer solvent of many customers and is managed as hazardous waste. The contents are regularly sent via tanker truck to the recycle center in Lexington, SC. These loads are always manifested and accompanied by an LDR form. Shipments of parts washer solvent dumpster mud are also manifested accordingly. Required records are kept at the Branch and the recycle center in accordance with regulatory timeframes.

In accordance with 40 CFR 264.71 through 77, Safety-Kleen will ensure that:

1. Customers who are required to provide a manifest do so;
2. The manifests are prepared and signed properly; and
3. Copies are distributed and kept on file, as required.

In addition, discrepancies must be remediated in accordance with 40 CFR 264.72 and un-manifested wastes will be reported as described under 40 CFR 264.76.

Required Notices

If Safety-Kleen arranges to receive hazardous waste from a foreign source, the Regional Administrator must be notified in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required. Safety-Kleen informs its customers in writing (i.e., on each service document) that the facility has the appropriate permit(s) for, and, will accept the waste the generator is shipping. Safety-Kleen keeps a copy of this written notice as part of the operating record.

Before transferring ownership or operation of this facility during its operating life, Safety-Kleen will notify the new owner or operator in writing of the requirements of Part 264 and Part 270 of Chapter 40 in the Code of Federal Regulations.

Biennial reports required by Chapter 62-730.180(4) FAC, will be prepared and submitted by Safety-Kleen, and these records will also be available at the facility for review. The biennial report will be submitted to the Regional Administrator and/or FDEP by March 1 during each even year (1990 being the first year) on EPA form 8700-13B. The report will cover facility activities during the previous calendar years and will include:

- The EPA identification number, and address of the facility;

- The calendar years covered by the report;
- The method of treatment, storage, and disposal for each hazardous waste; and
- A certification signed by the owner or operator of the facility or the authorized representative.

Operating Record

An operating record which contains the information required under 40 CFR 264.73 is maintained and all records and logs are available at the facility, in accordance with 40 CFR 264.74. An electronic copy of the operating record is retained at the facility to comply with 40 CFR 264.73(b).

The following information will be maintained in writing in the operation record for the facility:

- A description and quantity of each hazardous waste received;
- The date and storage method for such hazardous waste;
- The location of each hazardous waste stored within the facility;
- Records and results of waste analyses performed;
- Summary reports and details of all incidents that require implementation of the contingency plan;
- Monitoring, testing, or analytical data, and corrective action where required by Subpart F and other applicable sections of 40 CFR 264;
- All closure cost estimates under 40 CFR 264.142 and all contingent post-closure cost estimates under 40 CFR 264.144;
- Records of quantities and date of placement for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted;
- For any restricted waste generated that can be land disposed without further treatment, and is sent to a land disposal facility, a notice and certification will be sent to the treatment, storage, or land disposal facility with the waste. The notice will state that the waste meets the applicable treatment standards set forth in Subpart D of 40 CFR 268 and applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). The notice will include the following information:
 1. EPA Hazardous Waste Number; and

2. The corresponding treatment standards and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).
- Training records, inspection reports, waste minimization certifications, closure plan, and Corrective Action Documents.

Further, the LDR certification will be signed by an authorized representative and will state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Section 264.74 requires that all records, including plans, must be furnished upon request to duly designated representative of the Regional Administrator, and this requirement will be honored. A copy of all records of waste disposal locations and quantities will be submitted to the Regional Administrator and/or FDEP upon closure of the facility, if applicable.

As a registered transporter and storage facility for mercury-containing lamps and devices destined for recycling, the Branch complies with the record keeping requirements of FAC 62-737.

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:

1. Special forms for each regularly handled wastes types (e.g., parts washer solvent, immersion cleaner, and percholoroethylene); or
2. A general form that must be completed for unique or nonstandard waste streams.

The notice is required paperwork for the streams handled by Safety-Kleen. When a shipment with the 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.

The facility will comply with the RCRA permitting conditions found in 40 CFR Part 270.30(I)(1) 270.30(I)(2), and 270.30(I)(6). The facility will comply with the recordkeeping requirements found in 40 CFR Part 264.1064 and 264.1089.

Part II

A. General

8. 40 CFR Part 270.3

The Federal laws found in 40 CFR Part 270.3 do apply to Safety-Kleen although they do not appear to be applicable at this time.