

Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Struhs  
Secretary

October 25, 1999

Ms. Catherine A. McCord  
Manager, Environmental and Business Integration  
Safety-Kleen Systems  
1000 North Randall Road  
Elgin, Illinois 60123-7587

RE: Safety Kleen Branch-Based "Continued Use Program"

Dear Ms. McCord:

Your proposal for the continued use of Safety-Kleen solvents for the purposes of drum washing in the clean out dumpsters at each of the Safety-Kleen facilities in Florida, has been reviewed by staff. Your proposal as we understand it, is to divert a portion of the used mineral spirits from your qualified customers and place it in a nearby holding tank to be used for the chemical and mechanical cleaning of incoming hazardous waste mineral spirits drums. Safety-Kleen intends to apply these used mineral spirits as an effective substitute for commercial chemical products in accordance with 40 CFR 261.2 (e)(1)(ii) for drum cleaning operations.

The department staff had some concerns about the proposed process. We discussed these concerns with Safety Kleen via e-mail and at a meeting on October 20, 1999 with Phil Retallick, Lin Longshore, and David DeSha. At the October 20, 1999 meeting Safety Kleen submitted the following additional information:

1. Customer Best Management Practices Guide
2. Qualitative Measures to qualify Continued use customers
3. Continued Use Program Environmental Safeguards
4. Tracking and Record Keeping Systems
5. Results from a drum cleaning study testing the effectiveness of used solvent as a cleaning Agent.

Based on these reviews we are approving Safety Kleen's implementation of this "Continued Use Program" in the state of Florida. That authorization is contingent on the following conditions being adhered to by Safety Kleen's branch operations within our jurisdiction. These conditions are as follows:

Ms. Catherine A. McCord  
October 25, 1999  
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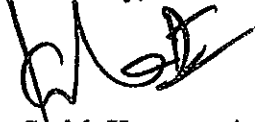
1. Education of the continued use customers in potential solvent cross contamination with toxic chemicals that will render the mixture hazardous waste and therefore ineligible to be transported as continued use materials on a DOT Shipping paper to the Safety Kleen branch facility.
2. Safety Kleen will pursue effective implementation of their customer's adherence to Safety Kleen's Best Management Practices and Environmental Safeguards and Controls as outlined in our meeting on October 20, 1999.
3. Each Safety Kleen branch facility operation will provide all manifests for waste and the DOT shipping papers for continued use materials as needed to our field inspectors for their review in the course of a compliance inspection at that branch.
4. Continued use materials will not be speculatively accumulated at a Safety Kleen branch operating facility or by any continued use customers.
5. This determination applies to the "Continued Use Program" implemented by Safety Kleen branches in Florida and does not apply to any other "similar in definition" programs Safety Kleen has or will implement.
6. If any part of a bulk shipment or individual container of solvent destined for continued use is reclaimed, burned for energy recovery, or otherwise defined as a solid and hazardous waste, the entire shipment or container is subject to hazardous waste regulation.
7. If the used solvents are used as drum washing agent when the drums do not need washing, using the used solvents would not be considered legitimate or the Continued Use Program.
8. If the used solvent(s) are being used in excess of the amount of solvent(s) needed for the drum-washing operation (i.e. more than would be necessary), using the used solvent(s) would not be considered legitimate.

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9. If the used solvent(s) would not be an effective washing agent for the drums, using the used solvent(s) in lieu of other effective drum washing agents would not be considered legitimate.
10. Finally, this determination does not relieve any Safety Kleen branch operating in the state of Florida from obtaining any necessary permit modifications from this agency to implement this program or permits from any other agency within the state of Florida.

If you have any questions regarding this determination, please call Michael Redig at 850-488-0300 extension 955.

Sincerely,



Satish Kastury, Administrator  
Hazardous Waste Regulation

SK/mxro  
Enclosure

cc: Michael Redig, FDEP-HWR  
Susan Horlick, FDEP-HWR  
David Crowley, FDEP-OGC  
District Waste Program Administrators  
District Technical Committee Members  
Reading File

Safety-Kleen Corp.  
Continued Use Program

## **CONTINUED USE PROGRAM**

### **TABLE OF CONTENTS**

- 1. SLIDE PRESENTATION.**
- 2. PROGRAM DESCRIPTION TO CUSTOMERS.**
- 3. DRUM CLEANING STUDY.**
- 4. MATERIAL SAFETY DATA SHEET FOR PARTS WASHER SOLVENT.**
- 5. PROGRAM DESCRIPTION TRANSMITTAL TO US EPA.**
- 6. US EPA RESPONSE TO S-K OUTLINING THE REGULATORY INTERPRETATION REGARDING THE PROGRAM.**
- 7. SAMPLE LETTER TO A STATE REQUESTING CONCURRENCE FOR THE PROGRAM.**
- 8. EXAMPLE LETTERS FROM VARIOUS STATES APPROVING THE PROGRAM.**
- 9. DRAWINGS AND SCHEMATICS ILLUSTRATING THE PROGRAM.**

**Safety-Kleen Corp.  
Continued Use Program**

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**Overview**

- Background
- Recycle Center Scrap Wash Program
- Branch Drum Wash Program
- Regulatory Status
- Program Status and Roll-Out Schedule

25 August 99

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**Background**

- Two competitors offer a non-waste option for management of used mineral spirits from parts cleaning
- Competition sells used mineral spirits to third parties for use as a substitute ingredient in manufacture products
- Material is not recycled/reclaimed prior to introduction into production process

25 August 99

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### Background (cont.)

- Material removed by competitors' programs are not considered a waste under the Definition of Solid Waste because it is directly re-used as a substitute ingredient

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### Recycle Center Scrap Wash Program

- New Castle KY Recycle Center has a shredder used to empty drums of industrial wastes destined for fuel program
- Scrap metal has to be washed prior to selling to scrap dealer
- Large volume of material required for scrap washing operation
- Material pre-qualified via sampling

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### Branch Drum Wash Program - Original Design

- At branch, parts washer waste (mineral spirits) is bulked
- Parts washer waste poured into wet dumpster and pumped to waste tank or 10-day transfer tanker
- Level of fluid in wet dumpster controlled by a float switch

25 August 99

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### Branch Drum Wash Program - Original Design (cont.)

- Green and red 16 & 30-g drums are washed with waste from customers in a mechanical drum washer that is part of wet dumpster
- Drum washer spins drums against brushes with waste from pool of material at the bottom of wet dumpster being sprayed on interior of drum

25 August 99

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### Branch Drum Wash Program - Original Design (cont.)

- Cleaning material falls back to bottom of wet dumpster with other waste from drum emptying operation
- Float switch again controls level of material in bottom of wet dumpster
- Drums are removed from drum washer unit and re-filled with fresh product

25 August 99

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### Branch Drum Wash Program - New System Design

- SK completed engineering cleaning study to establish standardized cleaning system
- Flow rate, time, and volume established
- Second smaller vat installed next to wet dumpster
- Material from cone shaped bottomed Continued Use vat is preferentially pumped to washer

25 August 99

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### Branch Drum Wash Program - New System Design (cont.)

- When Continued Use vat is empty, new electrical valve box allows system to be converted to former approach of pulling material off the bottom of wet dumpster
- Drums are washed with Continued Use material which falls into the bottom of wet dumpster and is co-mingled with waste from customers

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### Branch Drum Wash Program - Administrative Controls

- Original construction and future maintenance are P.E. certified as to standardized cleaning system
- Drum identification system established
- Material tracked with separate shipping description and code in computer system
- Separate computer designated location for logging material into facility

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### Branch Drum Wash Program - Administrative Controls

- Each branch given capacity for selling
- Capacity monitored electronically

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## Branch Drum Wash Program Operations

- Material balance - use on daily or two business day cycle
- All DOT packaging, labeling, and shipping paper requirements are met
- Spills managed same as product spills - SK generated waste
- No net change in flow of material through SK branches

25 August 99

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## Branch Drum Wash Program Operational Design (cont.)

- Customer acceptance criteria
  - all material must be able to go through Continued Use cleaning system

25 August 99

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## Regulatory Status

- RCRA Definition of Solid Waste (and state equivalent) governs what is and is not a waste
- Solvent initially used by customers, will be used or reused as an effective substitute for commercial products [40 CFR 261.2(e)(1) for cleaning operations

25 August 99

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### Regulatory Status (cont.)

- Preamble to DSW, 1/4/85 (50 FR 619) discusses use of substitutes for commercial products,
  - "When secondary materials are directly used as substitutes for commercial products, we (the Agency) also believe these materials are functioning as raw materials, and therefore are outside of RCRA jurisdiction and thus, are not wastes

25 August 99

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### Regulatory Status (cont.)

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- Rule states that secondary materials used as ingredients or used directly as commercial products are not wastes
- Solvents from customers still have some capacity to clean in low grade use, as demonstrated by SK's use of waste to clean drums

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### Regulatory Status Summary

- Material in Continued Use program is a substitute for commercial products
- Material is used directly without any reclamation prior to its use
- All material is used for cleaning
- No land storage or speculative accumulation
- Material used for washing becomes SK generated waste

25 August 99

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## Regulatory Concurrence

- Competitors obtained letters of concurrence on regulatory determinations from state environmental departments
- S-K also obtained such letters from USEPA, IN, OH, MI, KY, and CA
- Discussions with additional states, but S-K may not seek letters from all states as roll-out of branch program accelerates

25 August 99

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## Program Status and Roll-Out Schedule

- S-K has registered name "Continued Use"
- Recycle Center Scrap Metal Wash Program
  - program is at capacity (continuously monitored)
  - material accepted from different customers in many states
- Branch Drum Wash Program
  - program rolled out in IN, TX, LA, And OH
  - next states FL, WV, UT, KY, CA, and SC

25 August 99

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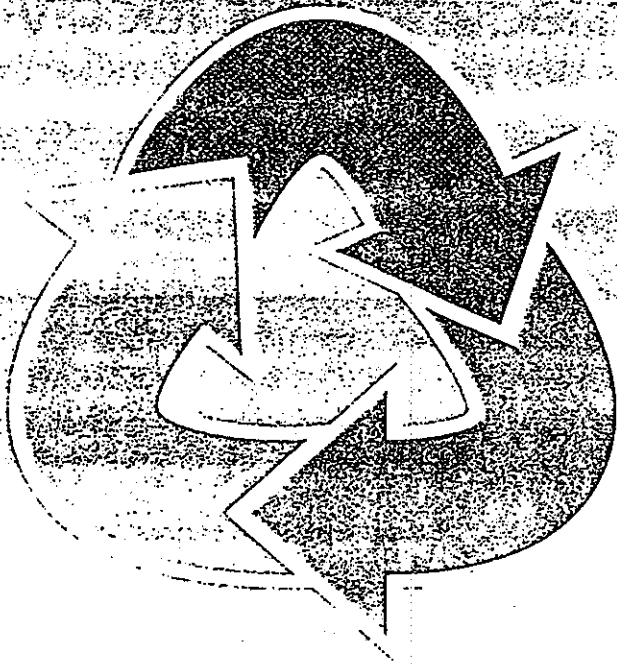
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# Safety-Kleen Announces a Program for Your Used Parts Cleaning Solution



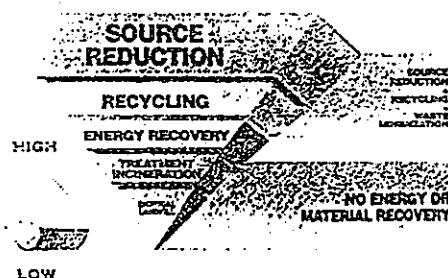
## Safety-Kleen's Continued Use™ Program

We Hear You! You told us that you wanted a way to stop manifesting used parts cleaning fluid leaving your facility. Safety-Kleen is proud to announce its new Continued Use™ Program. This program uses an alternative approach to manage the parts cleaning solutions removed from your facility.

That means:

- EPA ID Number is not required.
- The solvent is not classified as a hazardous waste (it will be used for cleaning within Safety-Kleen).
- A reduction in the overall volume of waste that you generate.
- No manifesting of waste (so you're no longer required to maintain copies of hazardous waste manifests associated with the transportation and treatment of your used parts cleaning solution).
- No Land Ban forms.

As your Total Waste Management Company, Safety-Kleen is offering participation in this program to qualified customers at no additional cost. Under our Continued Use Program, ultimately Safety-Kleen becomes the waste generator; therefore, you are no longer required to manage the used parts cleaning solution as a hazardous waste. Contact your local Safety-Kleen representative for all the details. Remember, capacity is limited.



*For purpose of pollution prevention and waste minimization consistent with RCRA's goals, a higher management option is preferable to a lower level option.*

**Continued Use Means Safety-Kleen's Highest Standards Are Met**

This exciting new Continued Use Program doesn't mean Safety-Kleen will relax its strict dedication to protecting the environment. Our commitment to Best Practices—to handling all materials we process in the way that's best for the environment—means that your material (whether Continued Use or not) goes through strict, Safety-Kleen Quality processes. In other words, every drop of your used parts cleaning solution will continue to be managed through our state-of-the-art facilities as it has been in the past. Unlike other waste handling services, Safety-Kleen can tell you exactly where—and how—your parts cleaning solution is managed and recycled. So when you work with Safety-Kleen, you know you are getting the quality that you are paying for!

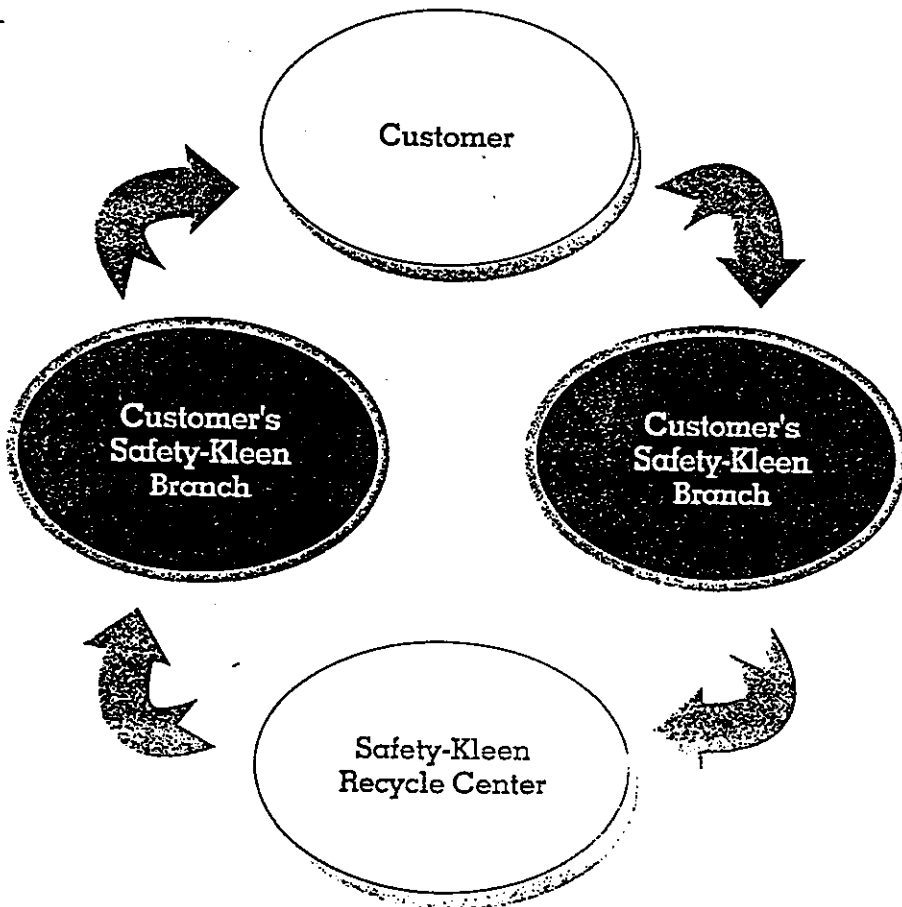


# THE SAFETY-KLEEN CONTINUED USE PROGRAM

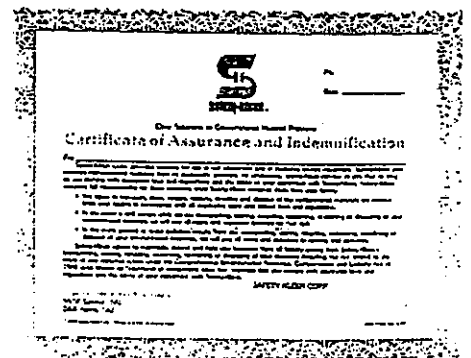
You will no longer be required to manifest the used parts cleaning solution leaving your facility!

## Safety-Kleen Closes The Loop

## Continued Use Also Means Assurance



Like all Safety-Kleen services, our Continued Use Program is backed by our \$1 billion Certificate of Assurance and Indemnification. Our certificate says we take full responsibility for managing your materials in an environmentally responsible manner. It's peace of mind that you only get with Safety-Kleen.



Safety-Kleen Corp.  
One Brinckman Way  
Elgin, IL 60123

The chart shows the typical "handling path" of used parts cleaning solution. Every drop of

solution is handled with the expertise that only Safety-Kleen can bring to the job.

CALL YOUR LOCAL SAFETY-KLEEN REPRESENTATIVE FOR DETAILS.

800/323-5040

# **CONTINUED USE PROGRAM**

## **AGENDA**

### **A. INTRODUCTION**

- 1. TYPE OF GENERATORS**
- 2. ADVANTAGES**

### **B. QUALIFICATIONS FOR THE PROGRAM**

- 1. MUST BE S-K SOLVENTS & SERVICES (only 105 and hazardous 150 solvents)**
- 2. SOLVENT FREE OF DEBRIS**
- 3. LOCAL S-K-REPRESENTATIVES INSPECT FOR:**
  - a. COLOR**
  - b. CONSISTENCY**
  - c. ODOR**
  - d. VOLUME**
- 4. CAPACITY = NUMBER OF CONTAINERS/UNIT TIME X 12.8 GALLONS/CONTAINER**

### **C. REGULATORY APPROVAL**

- 1. EPA**
- 2. STATES**

### **D. PROGRAM IMPLEMENTATION**

- 1. MATERIAL SEGREGATION**
- 2. LABELLING & OTHER DIFFERENTIATION**
- 3. SHIPPING PAPERS**



## **CONTINUED USE PRODUCT**

The cleaning solvent/solution in this  
parts cleaner is destined for  
Continued Use.

©1997 FLEXmark® V400FW Rev. 10/97 SK81649



# **Study of Drum Cleaning with Continued Use Solvent**

**Robert Janicki & Dennis Brinkman  
Safety-Kleen Corp.**

September 24, 1997

# **Study of Drum Cleaning with Continued Use Solvent**

Robert Janicki & Dennis Brinkman  
Safety-Kleen Corp.

## **INTRODUCTION**

This report provides the results of an engineering study of drum cleaning at Safety-Kleen branch facilities. The study established a standard system to assure adequate cleaning of drums prior to their return to customers. Drums will be cleaned with solvent that has been initially used by our customers and returned to our branches for continued-use as a cleaning solvent. After use as a drum washing agent, the material will be recycled.

Parts washing involves the use of various cleaning agents to remove deposits or surface contamination from hard surfaces. Over the years, the primary agent has been a hydrocarbon distillate variously called mineral spirits, Stoddard Solvent, or petroleum naphtha. During initial use, this solvent becomes unacceptable for the intended application and fresh solvent is provided. However, the partially used solvent still retains the capacity for less rigorous cleaning applications, such as drum washing.

This multiple use of the solvent allows maximum value out of this commodity.

## **DRUM WASHING SCENARIOS**

### **Existing Drum Washer/Dumpster System**

For many years, Safety-Kleen has used a system that combines drum washing within a large trough that is used as a receptacle for receiving parts washer solvent returned from our customers. The trough portion of this unit is typically 1.5 ft wide x 3 ft. long x 1.5 ft. deep. It allows easy access for the emptying of drums and typically contains up to 40 gallons of solvent.

The drum washer mechanism sits to the side of the dumpster trough and within a unified containment area (see Figure 1). The complete system is 3 ft. wide x 5 ft. long x 6 ft high. As shown in Figure 2, it is fitted with a brush and nozzle assembly designed to wash bottom interior and exterior sidewalls of drum. Solvent is pumped from the bottom of this trough to a nozzle that sprays solvent inside drums that rotate around a large brush that scrubs the inside surface.

A maximum volume of 40 gallons is retained in the bottom of the drum washing unit. A float switch controls a second pump that moves excess solvent to a storage tank. This solvent is then transported to a recycling plant..

### **New Continued Use System**

Continued use material will be deposited in a 200-gallon open top vessel is (3 ft. wide x 4 ft. long x 5 ft. high) which has been fitted with a sloped bottom directed to a centered 1 ½" threaded outlet. This tank has a full lid which is closed when not in use and is held open with a fusible-link for emergency closure during use. As shown in Figure 3, solvent for drum washing is taken preferentially from this dumpster until it is empty. This vessel is the primary source of drum washing solvent. When this vessel is empty, solvent residing in the bottom of the main dumpster is recirculated through the drum washer for any remaining requirements.

## **EQUIPMENT DESCRIPTION**

### **Pumps**

This system utilizes two ITT Marlow pumps (Model 1½HR49EC) which are 1½-inch open impeller centrifugal-type units powered by a 1½ HP (3450 RPM) motor. These pumps are specially useful for handling liquids with substantial solids loading.

### **Valves**

The drum-washing solvent feed is controlled by two Watts Mfg. 1½" motor-driven ball valves (Model 1801-212). These valves are electrically-controlled. The valve between the final dumpster and the continued use solvent storage vessel are manually controlled by the operator from a control panel.

### **Nozzles**

Two styles of nozzles are utilized in the drum washing assembly. The primary interior nozzle is a Spraying Systems; Model H-U ¼ 65200 Brass unit. The primary working dimension for this nozzle is its 11/32-inch orifice diameter, which yields a flowrate of 22 gal/min.

Three Model H-U ¼ 6510 Brass nozzles are utilized for exterior washing. The primary working dimension for this nozzle is a 3/16-inch orifice (this is drilled out from the normal 5/64-inch orifice), which yields a liquid stream instead of a mist spray to minimize air emissions.

Both of these nozzles were selected to give good area coverage with maximum cleaning efficiency without excessive vaporization.

### **Electrical Logic**

The primary electrical circuit regulates the use of solvent from each dumpster unit. A single switch panel controls each valve simultaneously and has indicator lights to verify open (green)/ closed (red) positions. The drum washer pump will only operate when each valve is opposite each other, assuring that solvent cannot be mixed during the wash cycle (i.e., two illuminated green lights will lock out the washer pump).

A timer located in the drum washer control panel automatically stops the washer pump. The timer has a 1-9,999 second range. This assures that a specific volume of solvent is utilized during each wash cycle. Part of the objectives of this test was to establish the setting for this timer.

## **SYSTEMS OPERATION**

The drum washer/dumpster and reuse dumpster are integrated by a pump dedicated to washing drums, as shown in the system layout in Figure 4. The two motor-driven valves control the inlet to this pump from each dumpster unit. The valves operate simultaneously opposite each other to maintain a sufficient solvent flow and specify which solvent is to be used for washing drums. The reuse dumpster is always the primary source. The washer pump is activated manually once a dirty drum is in place and is automatically stopped following the preset wash cycle period.

The second pump is dedicated to removing excess solvent from the drum washer/dumpster and is automatically controlled by a float switch mounted in the trough area of this unit.

## **EXPERIMENTAL RESULTS AND DISCUSSION**

The volume of solvent required to remove sediment from parts washer drums is related to a time factor to be incorporated into the wash cycle since the solvent flowrate is constant and reproducible. All sediment settles to the bottom of a drum and a proper cleaning is considered accomplished when the interior drum bottom is visually free on any residue. It is extremely rare that the exterior is still dirty once the interior is clean.

Studies were performed at two locations to substantiate a time period required to obtain clean drums. The Safety-Kleen Branches at Elgin, IL and South Bend, IN are representative of all Safety-Kleen Branches, since all drum washer installations are identical. Approximately 100 drums were cleaned at each location to generate the data for this study.

In each test, drums were washed for a 10 second period and inspected. Additional cleaning was performed in 5 second intervals until each drum was finished. The following chart associates the percentage of drums determined to be clean to the required time to achieve the desired results.

In each test, the washer was metered at a 22 gal./min. flow rate. This was determined by extending the nozzle into a drum via a 1-inch diameter X 5-ft hose and measuring the volume using a drum and calibrated dip stick.

Table 1 presents the data for South Bend, IN.

% Clean Drum	Wash Time	Solvent Volume
31%	10 sec.	3.7 gal.
70%	15 sec.	5.5 gal.
88%	20 sec.	7.3 gal.
96%	25 sec.	9.2 gal.
100%	35 sec.	12.8 gal.

Table 2 presents the data for Elgin, IL.

% Clean Drum	Wash Time	Solvent Volume
35%	10 sec.	3.7 gal.
66%	15 sec.	5.5 gal.
92%	20 sec.	7.3 gal.
99%	25 sec.	9.2 gal.
100%	35 sec.	12.8 gal.

As can be seen, the data are very similar. By combining all of the data and utilizing the known flow rate to associate a solvent volume with each time interval, Table 3 presents both the time and solvent volume required to clean dirty solvent drums. If one assumes the goal is to only rarely run any drums through a second time, the timer will need to be set at 35 seconds and a total volume of solvent of around 13 gallons will be required. This is around the typical volume brought back in an average drum of dirty solvent.

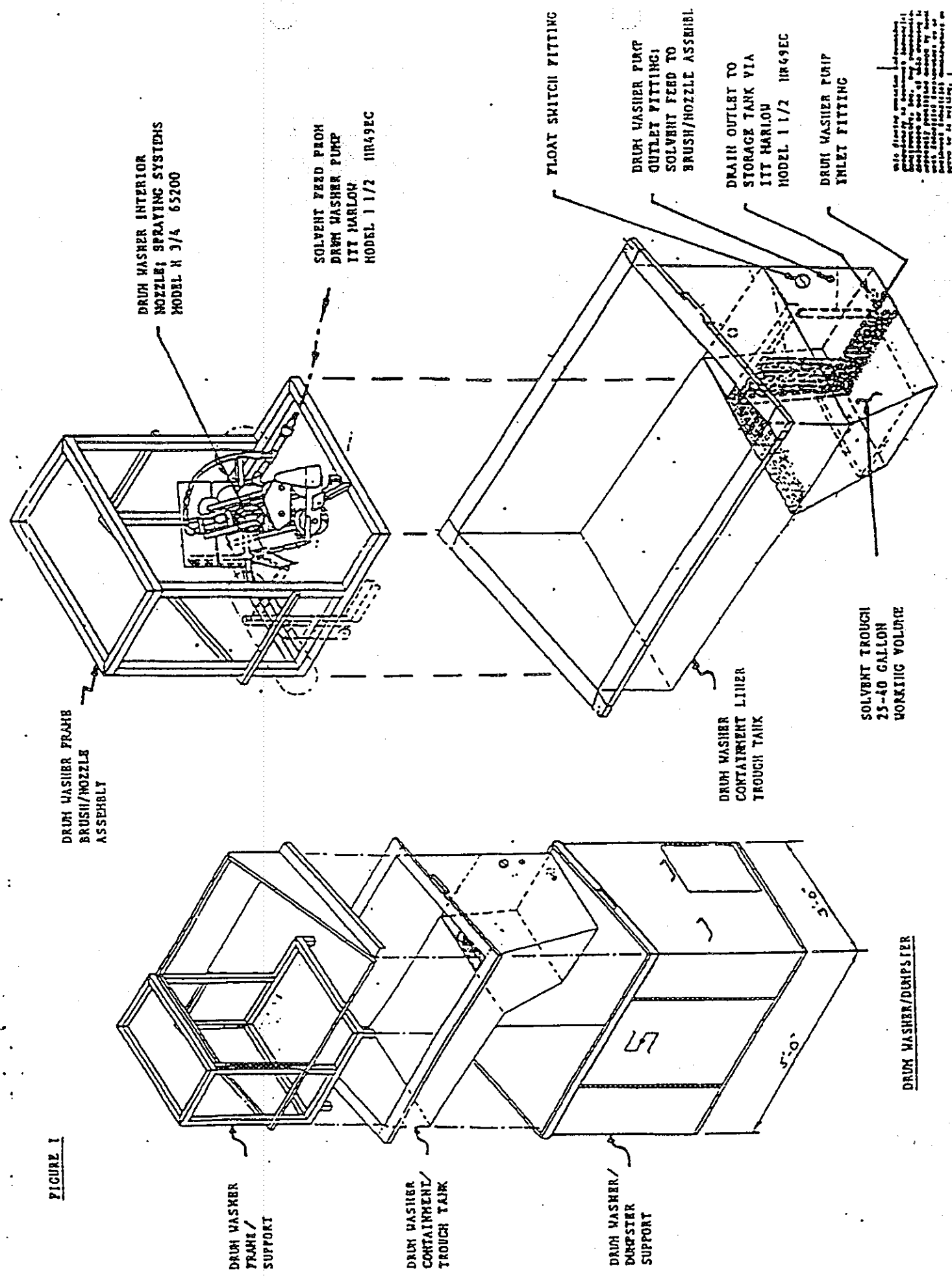
% Clean Drum	Wash Time	Solvent Volume
33%	10 sec.	3.7 gal.
68%	15 sec.	5.5 gal.
90%	20 sec.	7.3 gal.
98%	25 sec.	9.2 gal.
100%	35 sec.	12.8 gal.

## CONCLUSIONS

The average total flowrate for the drum washer is 22 gal/minute. Our study showed the time needed for cleaning all but the most highly contaminated drums was 35 seconds. Thus, 13 gallons of solvent per drum is required. When this continued use system is installed, all pumps, nozzles, and timers will be standardized to be identical to these operating parameters.



FIGURE 1



Do not start operation until all connections are properly checked. Do not operate the drum washer/dumpster until all connections are properly checked. Do not operate the drum washer/dumpster until all connections are properly checked.

DRUM WASHER/DUMPS TER

DRUM WASHER FRAME  
BRUSH/HOZZLE  
ASSEMBLY

DRUM WASHER INTERIOR  
NOZZLE; SPRAYING SYSTEMS  
MODEL R 3/4 65200

SOLVENT FEED PUMP  
DRUM WASHER PUMP  
ITT HARLOW  
MODEL 1 1/2 IR49EC

FLOAT SWITCH FITTING

DRUM WASHER PUMP  
OUTLET FITTING;  
SOLVENT FEED TO  
BRUSH/HOZZLE ASSEMBLY

DRAIN OUTLET TO  
STORAGE TANK VIA  
ITT HARLOW  
MODEL 1 1/2 IR49EC

DRUM WASHER PUMP  
INLET FITTING

DRUM WASHER  
CONTAINMENT LINER  
TROUGH TANK

SOLVENT TROUGH  
25-40 GALLON  
WORKING VOLUME

DRUM WASHER  
FRAME/  
SUPPORT

DRUM WASHER  
CONTAINMENT/  
TROUGH TANK

DRUM WASHER/  
DUMPS TER  
SUPPORT

5'-0"

3'-0"

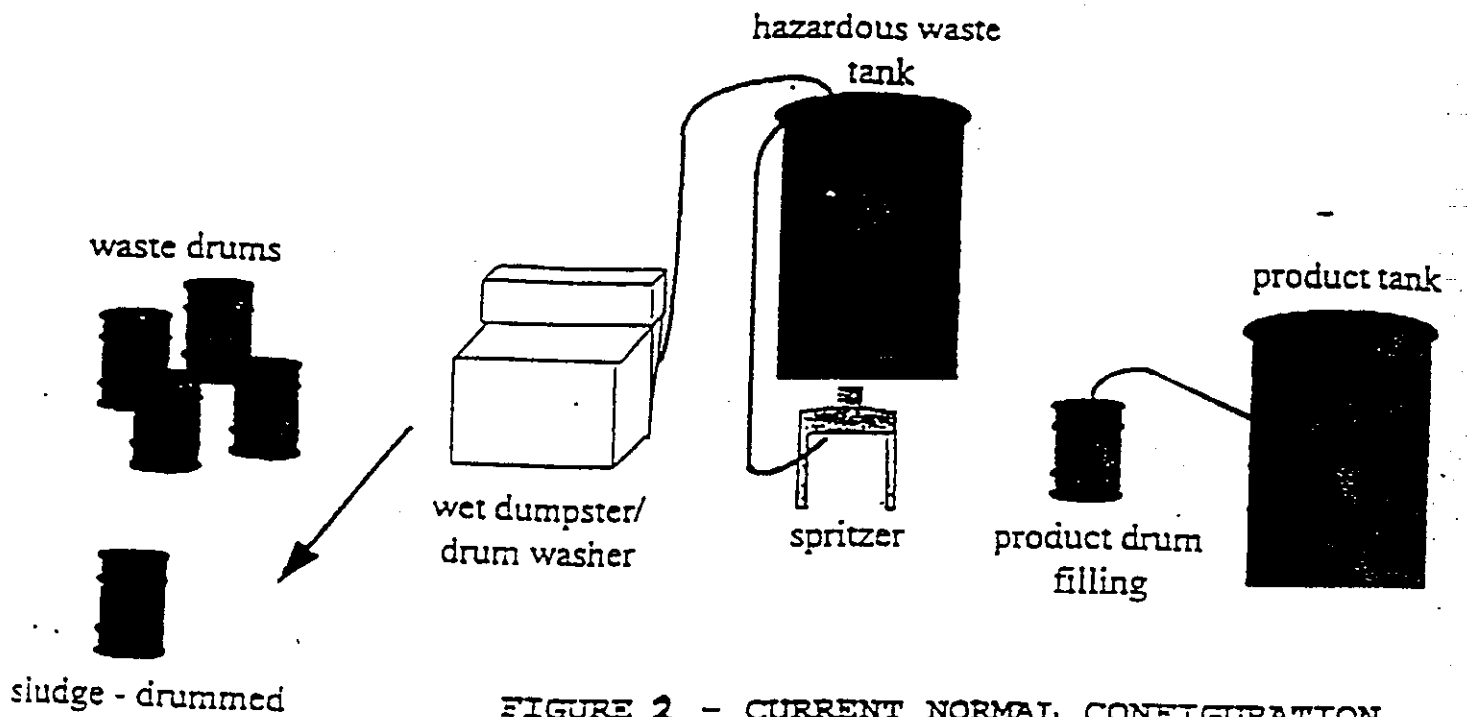


FIGURE 2 - CURRENT NORMAL CONFIGURATION

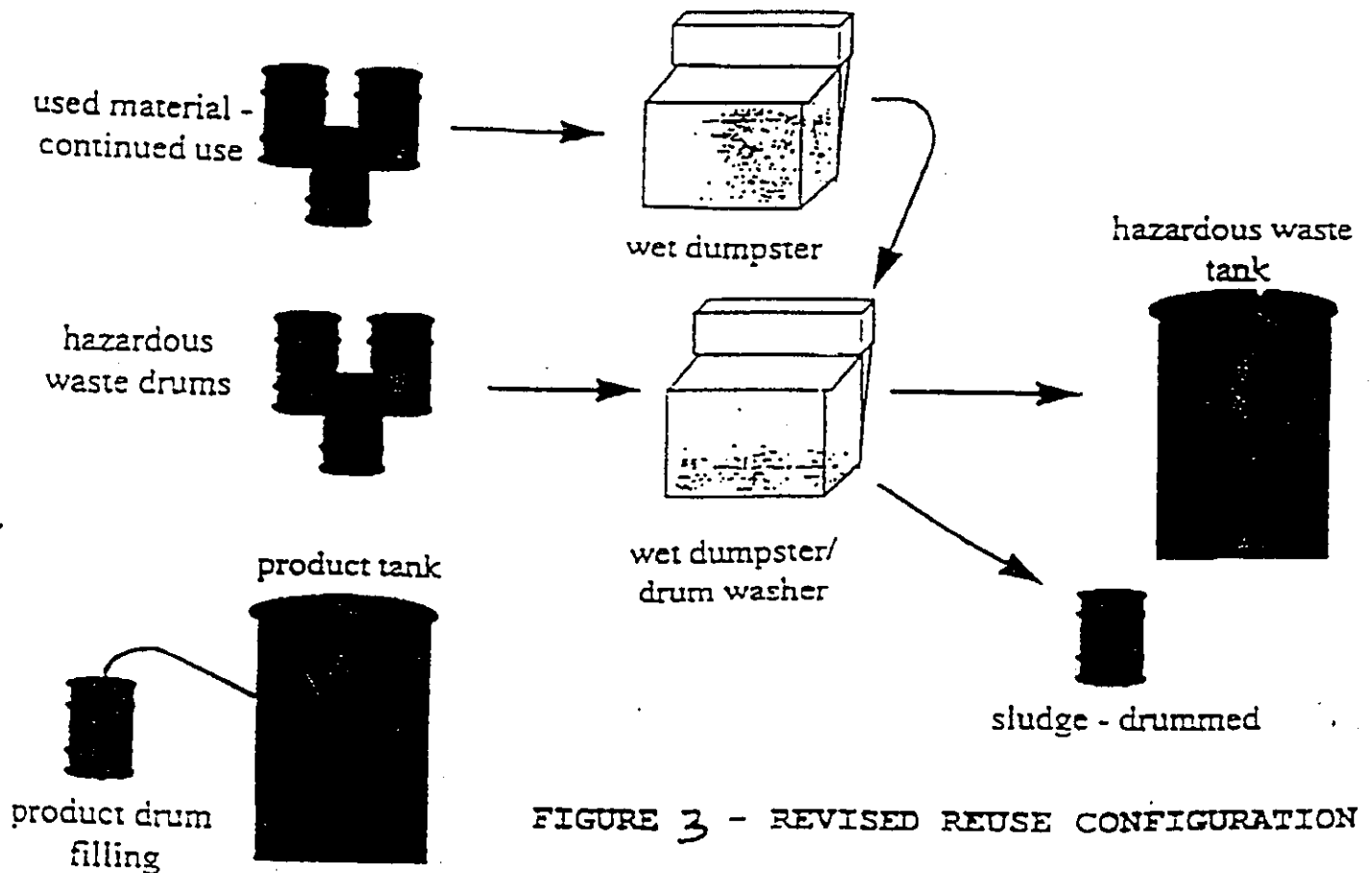


FIGURE 3 - REVISED REUSE CONFIGURATION

# BARREL WASHER/ REUSE SOLVENT SUPPLY TANK PIPING SCHEMATIC

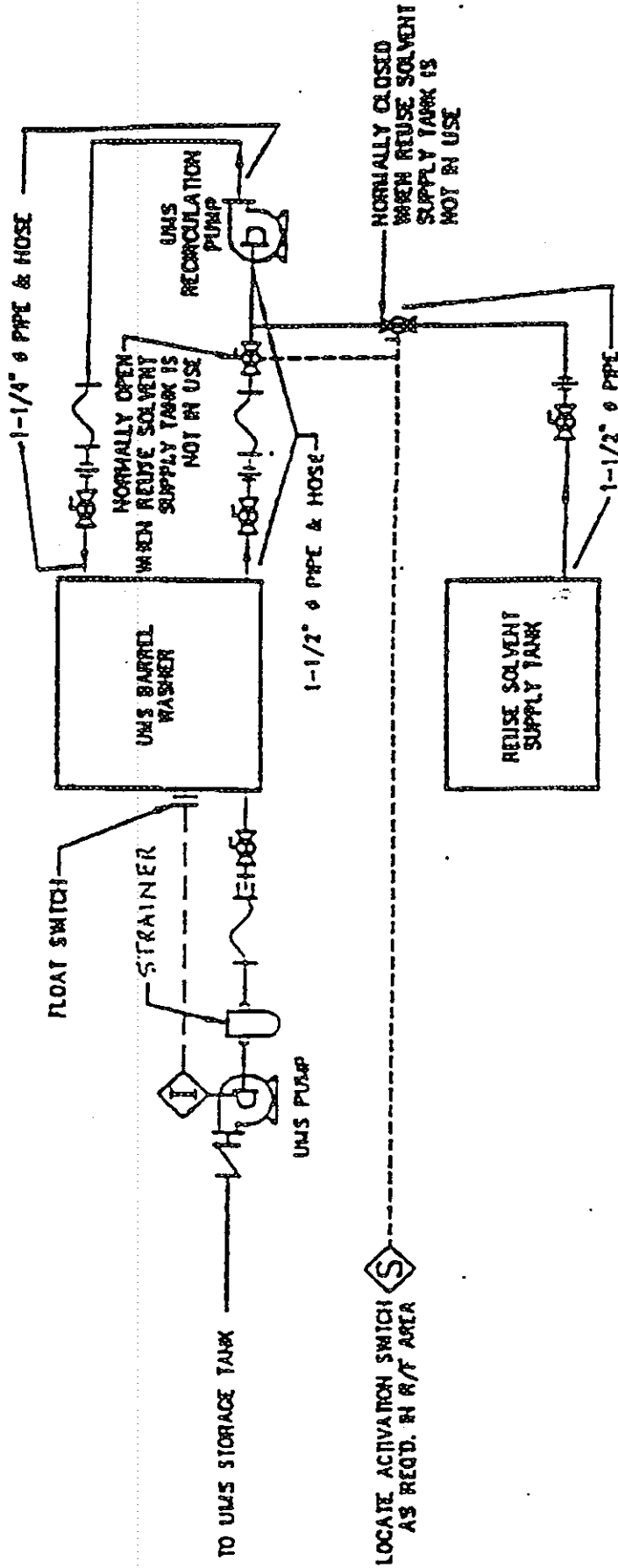


FIGURE 24





**HIGH FLASH HYDROCARBON BLEND STOCK**  
**MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**



**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** HIGH FLASH HYDROCARBON BLEND STOCK

**SYNONYMS:** Parts Washer Solvent; Petroleum Distillates; Petroleum Naphtha; Naphtha, Solvent; Stoddard Solvent; Mineral Spirits.

**PRODUCT PART NUMBERS:** Not available.

**PRODUCT USE:** Cleaning and degreasing metal parts.  
If this product is used in combination with other chemicals, refer to the Material Safety Data Sheets for those chemicals.

**24-HOUR EMERGENCY TELEPHONES**

These numbers are for emergency use only. If you desire non-emergency information about this product, please call a telephone number listed below.

**MEDICAL:**

1-800-752-7869 (USA)  
Extension 2

1-312-942-5969 (CANADA)

**TRANSPORTATION (SPILL):**

1-800-468-1760 (USA)

1-613-996-6666 (CANADA)

**MANUFACTURER/SUPPLIER:** Safety-Kleen Corp.  
1000 North Randall Road  
Elgin, IL, 60123-7857 USA  
1-800-669-5740

**TECHNICAL INFORMATION:** 1-800-669-5740 Extension 7500

**MSDS FORM NUMBER:** 82705

**ISSUE:** Original

**ORIGINAL ISSUE:** April 17, 1997

**SUPERSEDES:** New

**PREPARED BY:** Product MSDS Coordinator

**APPROVED BY:** MSDS Task Force

# HIGH FLASH HYDROCARBON BLEND STOCK

## MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV		LD <sup>a</sup>	LC <sup>b</sup>
				TWA	STEL	TWA	STEL		
100	Distillates (petroleum), hydrotreated light	N.Av.	64742-47-8	500 <sup>c</sup> ppm	N.Av.	100 <sup>c</sup> ppm	N.Av.	>5000 <sup>d</sup>	>2000 mg/m <sup>3</sup> , 4 hours

N.Av. = Not Available

<sup>c</sup>Based on Stoddard Solvent.

<sup>a</sup>Oral-Rat LD50 (mg/kg)

<sup>d</sup>Skin-Rat LD50>2000 mg/kg

<sup>b</sup>Inhalation-Rat LC50

See 29 CFR 1910.1000(d)(2) and ACGIH *Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices* booklet (Appendix C) for the determination of exposure limits for mixtures. Consult an industrial hygienist or similar professional to confirm that the calculated exposure limits are appropriate.

### SECTION 3: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### WARNING!

##### APPEARANCE

Liquid, brown or black, mild hydrocarbon odor.

##### IMMEDIATE HAZARDS

Combustible liquid and vapor.

Harmful if inhaled.

Eye and skin irritant.

May be harmful if swallowed.

##### DELAYED HAZARDS

Contains material which may cause central nervous system damage.

#### POTENTIAL HEALTH EFFECTS

**INHALATION (BREATHING):** High vapor or mist concentrations may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea and vomiting. High concentrations of vapor or mist may cause headaches, dizziness, incoordination, numbness, irregular heartbeat, and other central nervous system effects. Massive acute overexposure may result in rapid central nervous system depression, sudden collapse, deep coma, and death.

**EYES:** Direct contact with materials or exposure to vapors may cause irritation.

**SKIN:** Direct contact with materials or exposure to vapors may cause irritation. A single, prolonged exposure is not likely to cause the material to be absorbed through the skin in harmful amounts.

**INGESTION (SWALLOWING):** May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing material into the lungs during ingestion or vomiting may cause lung injury and possible death.

# HIGH FLASH HYDROCARBON BLEND STOCK

## MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing lung, cardiac, central nervous system, or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation may cause toxic effects. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball. Prolonged or repeated skin contact may cause drying, cracking, redness, itching, swelling, or burns.

**CANCER INFORMATION:** No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

### SECTION 4: FIRST AID MEASURES

**INHALATION: (BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**EYES:** For direct contact, immediately flush eyes with plenty of water, holding eyelids apart, for 15 minutes. If irritation or redness from exposure to vapor or mist develops, move away from exposure into fresh air. Get medical attention if irritation or pain persists.

**SKIN:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain persists.

**INGESTION: (SWALLOWING)** Immediately get medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid breathing material into the lungs.

**NOTE TO PHYSICIANS:** No specific antidote available. Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Call medical emergency telephone number (see **SECTION 1**) for additional information.

### SECTION 5: FIRE FIGHTING MEASURES

**FLASH POINT:** 140°F (60°C) Tag Closed Cup (minimum)

**FLAMMABLE LIMITS IN AIR:** LOWER: 0.5 VOL% (minimum)  
UPPER: 9.3 VOL% (maximum)

**AUTOIGNITION TEMPERATURE:** 440°F (227°C) (minimum)

**HAZARDOUS COMBUSTION PRODUCTS:** Burning may produce carbon monoxide.

**CONDITIONS OF FLAMMABILITY:** Heat, sparks, or flame.



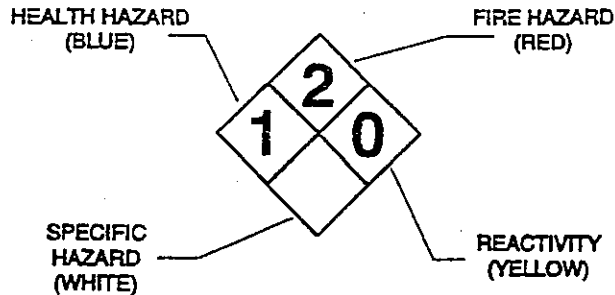
# HIGH FLASH HYDROCARBON BLEND STOCK

## MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

**EXTINGUISHING MEDIA:** Carbon dioxide, foam, dry chemical, water spray, or water fog.

**NFPA 704  
HAZARD  
IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



**FIRE FIGHTING  
INSTRUCTIONS:**

Keep storage containers cool with water spray. Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing may provide limited protection.

**FIRE AND  
EXPLOSION HAZARDS:**

Decomposition and combustion products may be toxic. "Empty" containers may retain residue and can be dangerous. Heated containers may rupture. Vapors can travel to ignition source and flash back. Vapor explosion hazard indoors, outdoors, or in sewers. Run-off to sewer may create fire or explosion hazard. Not sensitive to mechanical impact. Material may be sensitive to static discharge, which could result in fire or explosion.

**EMERGENCY RESPONSE  
GUIDE NUMBER:**

128  
Reference *North American Emergency Response Guidebook*

### SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Wear protective equipment specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain away from surface waters and sewers. Contain as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, non-sparking tool into sealable container for disposal.

Additionally, for large spills: isolate hazard area. Keep unnecessary and unprotected personnel from entering. Dike far ahead of liquid spill for collection and later disposal.

**HIGH FLASH HYDROCARBON BLEND STOCK  
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**SECTION 7: HANDLING AND STORAGE**

**HANDLING:**

Keep away from heat, sparks, or flame. Where explosive mixtures may be present, equipment safe for such locations should be used. Use clean, non-sparking tools and explosion-proof equipment. When transferring material, metal containers, including trucks and tank cars, should be grounded and bonded. Avoid contact with eyes, skin, clothing, and shoes. Use in well ventilated area. Do not breathe vapor or mist.

**SHIPPING AND  
STORING:**

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury or death. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

**PERSONAL  
HYGIENE:**

Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard contaminated clothing, shoes, or protective equipment if they cannot be thoroughly cleaned.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING  
CONTROLS:**

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limit. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limit. Where explosive mixtures may be present, equipment safe for such locations should be used.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY  
PROTECTION:**

Use NIOSH/MSHA-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limit. A self-contained breathing apparatus (SCBA) and full protective equipment are required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4-M1982.

**EYE  
PROTECTION:**

Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

**SKIN  
PROTECTION:**

Where skin contact is likely, wear nitrile, Viton®, or equivalent protective gloves; use of butyl rubber, natural rubber, or equivalent gloves is not recommended.

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**OTHER  
PROTECTIVE  
EQUIPMENT:**

Where spills and splashes are likely, wear appropriate chemical-resistant boots, apron, or other protective clothing. Clean water should be available in work areas for flushing the eyes and skin.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE, APPEARANCE, AND ODOR:** Liquid, brown or black, mild hydrocarbon odor.

**ODOR THRESHOLD:** 30 ppm (based on Stoddard Solvent)

**SPECIFIC GRAVITY:** 0.78 to 0.82 60°F/60°F (15.6°C/15.6°C) (water = 1)

**DENSITY:** 6.5 to 6.8 lb/US gal (780 to 820 g/l)

**VAPOR DENSITY:** 5 (air = 1) approximately

**VAPOR PRESSURE:** 0.2 mm Hg at 68°F (20°C) (approximately)  
0.6 mm Hg at 100°F (38°C) (approximately)

**BOILING POINT:** 350°F (177°C) (initial)

**FREEZING/MELTING POINT:** less than -45°F (-43°C)

**pH:** Not applicable.

**EVAPORATION RATE:** 0.1 (butyl acetate = 1)

**SOLUBILITY IN WATER:** Insoluble.

**MOLECULAR WEIGHT:** 160 (approximately)

**SECTION 10: STABILITY AND REACTIVITY**

**STABILITY:** Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.

**INCOMPATIBILITY:** Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

**REACTIVITY:** Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**SENSITIZATION:** Based on best current information, there is no known human sensitization associated with these materials.

# HIGH FLASH HYDROCARBON BLEND STOCK

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<b>CARCINOGENICITY:</b>	<p>IARC classifies chemicals by their carcinogenic risk, including agents that are known, probable, or possible carcinogens. NTP classifies chemicals as either known carcinogens, or for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. ACGIH recognizes several categories of carcinogens, including confirmed human carcinogens and suspected human carcinogens.</p> <p>Based on best current information, there is no known carcinogenicity associated with these materials.</p> <p>Also see <b>SECTION 15: CALIFORNIA.</b></p>
<b>REPRODUCTIVE TOXICITY:</b>	<p>Based on best current information, there is no known reproductive toxicity associated with these materials.</p> <p>Also see <b>SECTION 15: CALIFORNIA.</b></p>
<b>TERATOGENICITY:</b>	<p>Based on best current information, there is no known teratogenicity associated with these materials.</p>
<b>MUTAGENICITY:</b>	<p>Based on best current information, there is no known mutagenicity associated with these materials.</p>
<b>TOXICOLOGICALLY SYNERGISTIC PRODUCT(S):</b>	<p>Based on best current information, there are no known toxicologically synergistic products associated with these materials.</p>

### SECTION 12: ECOLOGICAL INFORMATION

<b>ECOTOXICITY:</b>	<p>A Static Acute Bioassay as per the California Department of Fish and Game WPCL, was done using fathead minnows, and up to 750 ppm of the products in water.</p> <p>The material passed the bioassay with only 1 out of 10 minnows dying. To fail the bioassay, more than 40% of the fish would die in 750 ppm.</p>
<b>OCTANOL/WATER PARTITION COEFFICIENT:</b>	<p>Not available.</p>
<b>VOLATILE ORGANIC COMPOUNDS:</b>	<p>100 WT%; 6.5 to 6.8 lb/US gal; 780 to 820 g/l Photochemically reactive as per 40 CFR Part 51.100(s).</p>

### SECTION 13: DISPOSAL CONSIDERATIONS

<b>DISPOSAL:</b>	<p>Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.</p>
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**HIGH FLASH HYDRO-CARBON BLEND STOCK  
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**USEPA WASTE  
CODE(S):**

Not regulated.  
Based on available data, this information applies to the material as supplied to the user. Processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA),  
NA1993, PGIII

**TDG:** Not regulated.

**SECTION 15: REGULATORY INFORMATION**

**USA REGULATIONS**

**SARA SECTIONS  
311 AND 312:**

Materials pose the following physical and health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986:

Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard  
Fire Hazard

**SARA SECTION 313:** These products do not contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**TSCA:** All the components of these products are listed on the TSCA Inventory.

**CALIFORNIA:** This product is not for sale or use in the State of California.

**CANADIAN REGULATIONS**

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS:** B3, D2B

**CANADIAN  
ENVIRONMENTAL  
PROTECTION ACT  
(CEPA):**

All the components of these products are listed on the Canadian Domestic Substances List.

# HIGH FLASH HYDROCARBON BLEND STOCK MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

## SECTION 16: OTHER INFORMATION

**REVISION INFORMATION:** New format.  
**LABEL/OTHER INFORMATION:** Not available.

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the material as supplied to the user.



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April 25, 1997

via Federal Express

Ms. Michele Anders, Chief  
Generator and Recycling Branch  
U.S. Environmental Protection Agency  
Office of Solid Waste  
401 M Street, S.W.  
Washington, D.C. 20460

**RE: Written Confirmation of Regulatory Interpretation of 40 CFR 261.2(e)(1)**

Dear Ms. Anders:

Safety-Kleen is submitting the following information as Confidential Business Information and has been labeled as such pursuant to 40 CFR Part 2, Subpart B, Section 2.203(b).

The purpose of this letter is to follow up on an April 16 telephone conversation with Mr. Jeff Hannaple about a regulatory interpretation and to request that the interpretation Mr. Hannaple provided be confirmed in writing. The regulatory interpretation was provided in response to Safety-Kleen's request on how used parts washing solvent that was used for drum washing would be regulated, if it was used for the drum washing activity prior to any reclamation.

As previously discussed, Safety-Kleen collects used solvents from customers' parts cleaning operations and consolidates such materials at one of our branch collection facilities for shipment to one of our recycle centers. It is our intent to use a certain quantity of this material for washing drums prior to re-filling them with product. The quantity of solvent used in this manner will be dictated by the volume needed to wash a drum and the total number of drums used to service our customers. None of the solvent used in this manner will be reclaimed prior to its use as drum wash. Safety-Kleen will establish criteria for the amount and type of material to be used for this purpose.

Safety-Kleen believes that the parts washer solvent to be used in this manner is excepted from the definition of solid waste because it will be "used or reused as an effective substitute for [1] commercial product[s]..." (40 CFR 261.2(e)(1)). The preamble to the Definition of Solid Waste, dated January 4, 1985 (50 FR 619), discusses the use of substitutes for commercial products in the following manner:

"When secondary materials are directly used as substitutes for commercial products, we [the Agency] also believe these materials are functioning as raw materials and therefore are outside of RCRA's jurisdiction and thus, are not wastes."



Ms. Michele Anders

Page 2

April 23, 1997

*Contains Confidential Business Information Pursuant to 40 CFR Part 2, Subpart B*

Page 637 of the preamble also states,

When secondary materials are directly used (or, in the case of previously used materials, reused)... they function as raw materials in normal manufacturing operations or as products in normal commercial applications. We [the Agency] reiterate these positions in the final regulation. These direct use recycling situations represent exceptions to the general principle that accumulated hazardous secondary materials are hazardous wastes.

The final rule consequently states that secondary materials used as ingredients or used directly as commercial products are not wastes and are outside the Agency's RCRA jurisdiction. They thus are not subject to RCRA Subtitle C regulations when generated, transported, or used..."

See also attached guidance from the RCRA/Superfund Hotline.

The discussion on page 624 of the preamble, addresses "continued-use" when distinguishing between spent materials from those that are still fit for use,

"...where solvents used to clean circuit boards are no longer pure enough for that continued use, but are still pure enough for use as metal degreasers. These solvents are not spent materials when used for metal degreasing. The practice is simply continued use of a solvent. (This is analogous to using/reusing a secondary material as an effective substitute for commercial products.)"

We request that EPA confirm in writing that the solvent Safety-Kleen intends to use for drum wash in the manner described above is not a solid waste pursuant to 40 CFR 261.2(e)(1) and thus not a hazardous waste when it is being used as an effective substitute for a commercial product.

Please contact me at (847) 468-2245, if you have any questions.

Sincerely,

Catherine A. McCord, Manager  
Environment and Business Integration

Attachment

cc: Jeff Hannaple

ment must be installed with special leak detection and collection system. Do any existing tank systems may not have a system to detect and contain releases. Do the new July 14, 1986 regulations have any leak testing requirements for existing systems prior to installation of secondary containment?

Yes. The new hazardous waste tank regulations do provide for leak testing in existing tank systems prior to installation of secondary containment. 40 CFR 264.193(i) and 265.193(i) require all existing tank systems to be evaluated for leaks in some manner. Non-enterable underground tanks must be tested for leaks at least annually. All other tanks (aboveground and enterable underground tanks) under interim status must be leak-tested, inspected internally, or examined for cracks, leaks, corrosion and erosion at least annually. Other permitted tanks must be either leak-tested annually or placed on a schedule for overall integrity assessments. The frequency of assessments would depend on the material, the construction of the tank, the age of the system, the type of waste stored or treated, the type of corrosion or erosion, and the rate of corrosion or erosion of the tank. The annual leak testing requirement also applies to all ancillary equipment. In addition, § 264.191 and § 265.191 require the owner/operator of an existing tank system that does not have a secondary containment system meeting the requirements of §§ 264.193 and 265.193 to obtain a written assessment of the tank system's integrity by January 12, 1988. All assessments must be certified by an independent, qualified registered professional engineer and must be kept on file at the facility.

[December 1986; Regulatory Cross References: 264.193(i), 265.193(i), 264.191, 265.191]

### RCRA-78 Existing Units, Replacement Units, and Minimum Technology Standards

The owner/operator of an existing landfill unit which is holding F006 waste, wants to remove all the waste from the unit in order to stabilize it. Once the waste is stabilized, it will be put back in the same landfill and the landfill will then be closed. Will this action change the status of the landfill from an existing unit to a replacement unit? If the landfill was then considered a replacement unit, would it have to meet minimum technology requirements under Section 3004(u) of RCRA before the stabilized waste is replaced?

A unit is considered a replacement if it is taken out of service and all or substantially all waste is removed from it, and the unit is reused. If the removal, stabilization, and replacement of the waste is part of closure, and no new waste is being added to the landfill, then EPA does not consider that the unit has been "reused." Therefore, the landfill would retain its status as an existing unit and would not have to meet minimum technology standards prior to replacing the waste.

[Ed. Note: On January 29, 1992 (57 FR 3462), EPA promulgated liner and leak detection system standards for landfills, surface impoundments, and waste piles, effective July 29, 1992. As part of that rulemaking, EPA codified a definition of "replacement unit" that is essentially the same as the one described here.]

[December 1986; Regulatory Cross References: 260.10 "replacement unit," 264.301, 264.310, 265.301(a), 265.310]

### RCRA-79 Land Disposal Definition

How is land disposal defined regarding the Section 3004(d) RCRA land disposal restrictions?

Land disposal is defined to include, but not be limited to, any placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, or underground mine or cave (Section 3004(k) of RCRA). EPA also considers placement of hazardous wastes in concrete vaults or bunkers intended for disposal purposes as meeting the land disposal restrictions. However, EPA does not consider open detonation, which includes open burning, as methods constituting land disposal and has concluded that the land disposal restrictions program is not applicable to open detonation and open burning [51 FR 40580].

[December 1986; Regulatory Cross Reference: 268.2(c)]

### RCRA-80 Lab Packs and the Land Disposal Prohibitions

Are lab packs containing wastes restricted from land disposal included in the land disposal restrictions?

Neither the legislative history nor the statute indicates that lab packs can be excluded from the land disposal restrictions if they contain restricted wastes. If a lab pack contains these restricted wastes, the entire lab pack is subject to the land disposal restrictions [51 FR 40585].

[December 1986; Regulatory Cross Reference: 268.1(a)]

### RCRA-81 Definition of Solid Waste

A generator generates a 5% solution of sodium hydroxide from his metal cleaning operation. Another facility can use the generator's waste as a substitute for a commercial product in their process of cleaning out tanks, except the waste is too dilute to be completely effective. If the generator adds 5% sodium hydroxide to his waste to make a 10% solution, would this material be a solid?

RCRA SUBTITLE C REGULATIONS

According to § 261.2(e)(1)(ii), materials are not solid waste when they can be shown to be recycled by being used or reused as effective substitutes for commercial products. The waste is employed in a particular function or application as an effective substitute for a commercial product (40 *CFR* 261.1(c)(5)(ii)). Since it would function as a product in a normal commercial use, it would not be a solid waste and is not subject to RCRA Subtitle C regulations when generated, transported or used (unless accumulated speculatively).

[May 1987; Regulatory Cross References: 261.2(e)(1)(ii), 261.1(c)(5)(ii)]

### RCRA-82 Disposal Prior to November 19, 1980

A tank owner closed a tank which contained waste solvent in 1977. The waste solvent was an unlisted, ignitable waste (D001) which was pumped out of the tank. Some ignitable residues remained in the tank. The tank was sealed and has not been used since 1977. Is the tank a RCRA disposal facility?

The preamble of the May 19, 1980 *Federal Register* (40 *CFR* 264 and 265, page 33170) specifically states that the regulatory scheme of Subtitle C is prospective, i.e., it applies to hazardous waste management which takes place after the effective date of the Subtitle C regulations. Inactive (either closed or abandoned) disposal facilities could be subject to RCRA Section 7003 enforcement authorities and CERCLA. If the tank was closed in accordance with existing industry practices, it would be an inactive disposal facility not subject to RCRA Subtitle C regulation unless the waste in the tank is subsequently managed in a manner that would constitute treatment, storage or disposal.

[May 1987; Regulatory Cross Reference: 265.197]

### RCRA-83 Hazardous Waste Tanks

An existing above-ground hazardous waste tank is moved to another location at the same facility. Does it become subject to new tank standards when it is moved? What would the situation be if the tank was underground?

For both above-ground and underground tanks, the tank would be classified as a new tank after being moved and reinstalled (see 50 *FR* 25446, July 14, 1986). The tank would be subject to the requirements for new tank systems. The tank would have to be reinstalled with secondary containment meeting the requirements specified in §§ 264.193(a) or 265.193.

[May 1987; Regulatory Cross References: 264.190, 265.190]

### RCRA-84 Applicability of Contingent Closure and Post-Closure Plans for Tanks

Section 264.197(c)(1) and (2) requires that, unless a tank has secondary containment, a contingent plan for closure as a landfill and a contingent post-closure plan must be prepared. 40 *CFR* 264.193(a)(3) requires that an existing tank be retrofitted with secondary containment by the time it reaches 15 years of age. If the owner of an existing tank is planning to install secondary containment before the tank reaches 15 years of age, is the owner/operator required to prepare the contingent plans?

Yes. The contingent closure and contingent post-closure plans are required for all tanks not having secondary containment even if the owner/operator is planning on installing secondary containment. The plans would be required until the secondary containment meeting the requirements of §§ 264.193 or 265.193 is installed.

[May 1987; Regulatory Cross References: 264.197(c), 264.193(a); 265.197(c), 265.193(a)]

### RCRA-85 Dissolved vs. Entrained Metals Subject to the Land Disposal Restrictions

The land disposal restrictions in RCRA Section 3004(d) require that the California List wastes be banned from land disposal by July 8, 1987. Concentrations of nickel greater than 134 mg/l are subject to the ban. Is hazardous wastewater containing nickel dispersed by agitation, but not chemically in solution, included in the restriction?

Yes. It does not matter whether the nickel is chemically or physically contained in the wastewater. The ban applies to the total concentration of nickel in the filtrate as determined by subjecting a representative sample of wastewater to the Pass Filter Liquids Test. If the facility were to settle out the pieces of nickel and lower the concentration of nickel below 134 mg/l, the wastewater would no longer be subject to the ban. Until treatment standards are finalized, this method of lowering the concentration is allowable.

[July 1987; Regulatory Cross Reference: 268.32]

### RCRA-86 Domestic Sewage Exclusion

A RCRA hazardous waste is transported by truck accompanied by a Uniform Hazardous Waste Manifest to a publicly owned treatment works (POTW). Does the domestic sewage exclusion apply to this hazardous waste if it mixes with domestic sewage prior to treatment? Is the sludge generated from treating the RCRA hazardous waste and the domestic sewage a hazardous waste due to the "Derived-From Rule" (40 *CFR* 261.3(c) and (d))?



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

AUG 31 1998

AUG 21 1998

OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

Ms. Catherine A. McCord  
Manager, Environment and Business Integration  
Safety-Kleen  
1000 North Randall Road  
Elgin, Illinois 60123-7857

Dear Ms. McCord:

Thank you for your April 25, 1997 letter to Michele Anders requesting a written confirmation of the regulatory status of used parts washing solvent that is to be used for drum wash at Safety-Kleen's facilities without first being reclaimed. You asked whether the used parts washing solvent would be excluded from the definition of solid waste pursuant to 40 CFR §261.2(e)(1) when it is used as an effective substitute for a commercial product. Based on the information that you provided, it is the Agency's understanding that Safety-Kleen intends to collect used parts washing solvents from its customers. Some of the used parts washing solvent from designated customers would be used for drum washing at Safety-Kleen facilities. This used solvent designated for drum washing would be consolidated, but would not be reclaimed, prior to its use for drum washing. The solvents designated for drum washing would also be segregated (i.e., always in separate containers or tanks) from the other used solvents collected from Safety-Kleen's customers.

Because the material (i.e., used solvent continuing to be employed in solvent uses) remains a product, your question about the applicability of 40 CFR §261.2(e)(1) is moot. That regulatory section is intended to apply to secondary materials, which is not the case for used solvents that are not yet "spent."

The Agency has previously stated that when a used solvent is employed for another solvent use, this continued use indicates that the solvent remains a product. The used solvent in this case is a material continuing to be used as a solvent, the purpose for which it is intended, rather than a spent material being reused. Consequently, the used solvent to be employed for drum washing would not be considered a solid waste and would not be subject to the Resource Conservation and Recovery Act ("RCRA") Subtitle C hazardous waste regulations when generated, transported, or used. 50 Fed. Reg. 614, 624 (1985). Accordingly, used parts washing solvents that are collected and consolidated by Safety-Kleen and then used for drum washing without first being reclaimed would not be a RCRA solid waste.

In the case of shipments of used solvents in tanker trucks, if any part of a shipment of solvent is reclaimed, burned for energy recovery, or otherwise defined as solid or hazardous waste (as opposed to being directly used only for drum wash), the entire shipment must be managed according to the

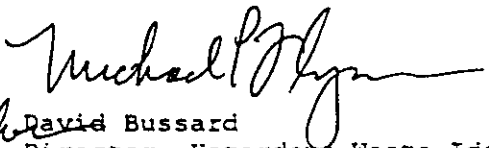
applicable RCRA Subtitle C regulations. In situations in which used solvents collected from multiple sources are handled in separate drums or containers on the same truck, each container must be handled according to the applicable regulations (depending on how the solvent is to be used or managed), including hazardous waste manifest requirements. After the solvents have been used for drum washing, any residual solvents would be subject to a hazardous waste determination and must be managed according to the applicable RCRA Subtitle C requirements.

Furthermore, the Agency is aware of the potential for the "continued use" policy to be abused, and thus, notes that the continued use must be legitimate for the used solvents to be excluded from regulation as a solid waste. The Agency would consider the continued use of the used solvents for drum washing to be legitimate in situations in which: 1) the used solvents are effective for the drum-washing operation, especially if the used solvents substitute for solvents that would otherwise have to be purchased (if the used solvents would not be an effective washing agent for the drums, using the used solvents in lieu of other effective drum-washing agents would not be considered legitimate), 2) the used solvents are used only for washing drums that actually need it (if the used solvents are used as drum-washing agent when the drums do not need washing, using the used solvents would not be considered legitimate), and 3) the used solvents are not used in excess of what would normally be required to wash drums (if the used solvents are being used in excess of the amount of solvents needed for the drum-washing operation, e.g., more than would be necessary to wash the drums effectively, using the used solvents would not be considered legitimate).

The regulatory interpretation provided above is based on the U.S. EPA's interpretation of federal regulations. Some states in which the continued use of the used parts washing solvent occurs may have different regulatory requirements or interpretations. For case-specific determinations on the status of the continued use of the parts washing solvent for drum wash, please contact the appropriate state regulatory agency or EPA Regional Office.

If you have any questions or would like additional information, please contact Jeff Hannapel at (703) 308-8826.

Sincerely,

  
David Bussard  
Director, Hazardous Waste Identification  
Division  
Office of Solid Waste



May 28, 1999

Mr. Satish Kastury  
Florida Department of Environmental Protection  
Division of Waste Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**RE: Safety-Kleen's Continued Use Program**

Dear Mr. Kastury:

Thank you for the opportunity to meet with John Ruddell and yourself on May 24, 1999 to discuss Safety-Kleen's Continued Use program. As promised during the meeting, we are submitting additional regulatory background information regarding this program. By way of this correspondence, Safety-Kleen Corp. is requesting concurrence with our regulatory interpretation that the Continued Use material is not subject to regulation under the Definition of Solid Waste.

**Background and Program Overview**

Historically, Safety-Kleen has used the mineral spirits waste returned from our customers parts washer drums to wash the drums prior to their refilling with recycled product. Safety-Kleen has many years of experience demonstrating the efficacy of using this material to wash drums. Upon the request of customers and with a thorough researching of RCRA and state implementing regulations, Safety-Kleen has developed a Continued Use program involving this drum cleaning operation.

Parts washer solvent is the primary material that is bulked at the branch level and the only material allowed in this program. When the 16 and 30-gallon drums of parts washer solvent are returned from customers, they are emptied, washed, and re-filled with fresh solvent. The branch-based Continued Use program was initiated almost two years ago in Indiana branches and involves a change to our existing drum washing operation. The Continued Use drum washing program provides for the removal of parts washer solutions from certain customers as a product to be exclusively used at our branches for the cleaning of the drums. A copy of this product's Material Safety Data Sheet (MSDS), schematic

drawing showing the flow of materials through the through the Continued Use cleaning system, and system engineering drawings were distributed at our May 24 meeting.

The cleaning system includes a vat to contain Continued Use material that will be added to the return and fill dock. The vat has a cone-shaped bottom to prevent solids from settling out of the material and is preferentially piped to the drum washer unit. The vat also contains a rough screen to protect the pump system from any foreign objects. It is typical that pumping systems have such screens. This screen will not provide any reclamation value to the Continued Use product prior to its use in the drum washer. Additionally, the material going through this screen is a product, not a waste, therefore, no waste treatment occurs as a result of the screening.

To qualify for Safety-Kleen's Continued Use program, customers must not put materials (e.g., paper and rags) into the solvent that are required to be removed prior to placement in the Continued Use cleaning system. Customers who add such materials will be counseled and if their performance does not improve they will be removed from the program.

During the drum washing operation, if the Continued Use vat is empty, the Safety-Kleen Material Handler will activate an electrical valve switch, which allows washing material (waste material) to be pumped off the bottom of the waste wet dumpster directly into the drum washer. This has been the approach for cleaning drums prior to the installation of the Continued Use vat.

Under the Continued Use program, Safety-Kleen will ensure that used cleaning solutions will be transported in compliance with all applicable DOT shipping papers and packaging requirements. The material will not be speculatively accumulated, nor reclaimed prior to our use for drum washing.

Once we have used the solutions for cleaning, the material will become Safety-Kleen generated waste and sent for recycling at one of our chemical recycling plants. There is no net change in material flowing through our branch for this operation, but rather the branch will be bringing in more material as a product and shipping more material from the branch as branch-generated waste. Any spills of Continued Use product will be handled as any product spill, with spill residues being considered Safety-Kleen generated waste.

The volume of material necessary to clean a drum has been established by a Safety-Kleen engineering study that evaluated time, flow rate, and pressure. This study was used to determine the amount of cleaning solution that is required to clean a drum. The resultant volume, multiplied by the number of drums to be cleaned, provides each branch with their ~~A~~ capacity ~~@~~ for the branch-based drum washing Continued Use program. Branch capacity and sales level is monitored through our computer Branch Automation Program. The system tracks Continued Use material into our system and controls the volume of a particular branch's sales of this program. This provides a system of centrally controlled



checks and balances to assure that a particular branch does not have excess drum cleaning material.

### **Regulatory Background**

The regulatory provision that governs what is a waste and what is not is found in the Definition of Solid Waste (40 CFR 261). The parts washer solvent that would be initially used by our customers will be Aused or reused as an effective substitute for commercial products" [40 CFR 261.2(e)(1)] at a Safety-Kleen facility for cleaning operations. The preamble to the Definition of Solid Waste, dated January 4, 1985 (50 FR 619) discusses the use of substitutes for commercial products by stating,

A When secondary materials are directly used as substitutes for commercial products, we [the Agency] also believe these materials are functioning as raw materials and therefore are outside of RCRA's jurisdiction and thus, are not wastes.@

Page 637 of the preamble also states,

When secondary materials are directly used (or, in the case of previously used materials, reused)... they function as raw materials in normal manufacturing operations or as products in normal commercial applications. We [the Agency] reiterate these positions in the final regulation. These direct-use recycling situations represent exceptions to the general principle that accumulated hazardous secondary materials are hazardous wastes.

The final rule consequently states that secondary materials used as ingredients or used directly as commercial products are not wastes and are outside the Agency's RCRA jurisdiction. They thus are not subject to RCRA Subtitle C regulations when generated, transported, or used...

The discussion on page 624 of the preamble, addresses Acontinued-use@ when distinguishing between spent materials from those that are still fit for use,

A...where solvents used to clean circuit boards are no longer pure enough for that continued use, but are still pure enough for use as metal degreasers. These solvents are not spent materials when used for metal degreasing. The practice is simply continued use of a solvent. (This is analogous to using/reusing a secondary material as an effective substitute for commercial products.)@

In conclusion, the cleaning solutions will be considered a waste when they are no longer suitable to use for their original intended purpose (cleaning). The material will be Safety-Kleen generated waste after final use at one of our facilities.

### **Material Specification**

Safety-Kleen provides customers with the mineral spirits-based parts cleaning solutions for their cleaning operations. The branch has comprehensive knowledge of the material that is returned from our customers because of the many years of providing this service and that the used mineral spirits is feed for our production of recycled mineral spirits products.

The cleaning of the emptied parts washer drums does not require a high specification material. We have had many years of experience of using material as it is returned from our customers, directly for the cleaning of emptied mineral spirits 16 and 30-gallon containers. The efficacy for this operation is demonstrated by the many years of its use. The specification for Continued Use includes requirements that the customer is a closed loop mineral spirits customer and that all material can be used in the Continued Use drum cleaning operation. Some customers' parts cleaning operations, or specific parts washers themselves, may not be suitable for being in the Continued Use program. This determination is made on a customer-by-customer basis.

### **Regulatory Concurrence**

A letter of regulatory concurrence from U.S. EPA was distributed during our May 24 meeting. Similar letters of concurrence have been obtained from several states. Copies of the letters from California, Colorado, Indiana, Florida, Kentucky, Ohio, and Texas are enclosed.

While we know that requirements for waste determinations are self-implementing, Safety-Kleen requests a letter of regulatory concurrence from the Florida Department of Environmental Protection. We request that the Florida DEP provide a letter of regulatory concurrence that the Continued Use material would not be classified as a waste and under certain conditions is not subject to hazardous waste requirements.

As discussed, Safety-Kleen would welcome the opportunity to have representatives see a Continued Use system, once they are installed at our Florida branches. Please let us know if this fits into the schedule for the August quarterly or October annual workshops.

We were happy to hear that our Continued Use program coincides with the Department's goals of limiting the number of Florida's small quantity generators. Safety-Kleen would welcome the opportunity to assist the department in reaching out to provide information to certain customer groups.

Thank you again for the opportunity to discuss our program. Please contact Lin Longshore 803-933-6511 or myself if you have any questions 847-468-2245.

Sincerely,

Catherine A. McCord, Director  
Business and Environmental Management

cc: John Ruddell

Attachments

**Bcc:** Lin Longshore  
Bill Crawford  
Ed Genovese  
Clyde Phillips  
Tom Hillstrom  
Dave Ehrhard  
Rob Claypoole  
Randy Caltrider



Ca/EPA

Department of  
Toxic Substances  
Control

400 P Street,  
4th Floor  
P.O. Box 806  
Sacramento, CA  
95812-0806

March 23, 1998

**RECEIVED**  
APR - 6 1998

ENVIRONMENTAL AFFAIRS  
SAFETY-KLEEN CORP.



Pete Wilson  
Governor

Peter M. Roon  
Secretary  
Environmental  
Protection

Mr. Scott E. Davies, P. G.  
Regional Environmental Manager  
Safety-Kleen Corporation  
8795 Folsom Boulevard, Suite 108  
Sacramento, California 95826

**"CONTINUED USE PROGRAM" FOR CONTINUING SOLVENT USE AS A  
SUBSTITUTE FOR A PRODUCT**

Dear Mr. Davies:

This letter is to confirm your understanding that solvents employed in Safety-Kleen's proposed "Continued Use Program," may be excluded from the definition of waste pursuant to Health and Safety Code Section (HSC) 25143.2(b)(2). I met with you on February 17, 1998 for a discussion of this subject. The discussion is summarized below.

The "Continued Use Program" will involve a limited number of customers within a Safety-Kleen service center area. These particular customers will relinquish designated solvent to their Safety-Kleen representative<sup>1</sup> who will transport it to the Safety-Kleen service center and add it to the drum-cleaning solvent reservoir.<sup>2</sup> Drum cleaning solvent, whether new solvent or "continued use" solvent used as a safe and effective substitute for a product, is used only once to clean drums before it becomes a regulated hazardous waste.<sup>3</sup>

When used as drum cleaner the "continued use" solvent is used as a safe and effective substitute for a commercial product and is therefore conditionally excluded from classification as waste pursuant to HSC Section 25143.2(b)(2). In Safety-Kleen's proposed "Continued Use Program" the commercial product substituted for is clean drum-washing grade solvent.

<sup>1</sup> You indicated that the "continued use" solvent would be handled separately from other materials in order to be shipped using a bill of lading; therefore the "Continued Use" solvent must be in separate containers from waste solvent.

<sup>2</sup> Although the drum cleaning operations of a service center will fluctuate, the quantity of solvent needed will have been anticipated. We would view excessive accumulations in the drum cleaning reservoir as an indication of sham recycling.

<sup>3</sup> You have stated that the "continued use" solvent will be used to clean drums only once. Because the "continued use" solvent must be a safe and effective substitute for a product, I have surmised that the product for which it substitutes is also only used once. If the "continued use" solvent does not perform as well as new product for drum cleaning, it is not an effective substitute.

Mr. Scott E. Davies, P. G.

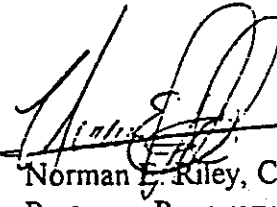
March 23, 1998

Page 2

Please note that HSC Sections 25143.9 and 25143.1C apply to the "continued use" operation which qualifies this particular reused solvent to be excluded from the definition of waste.

It was a pleasure meeting with you and Ms. Marty White. If I can be of further assistance to you, please contact me at (916) 324-1806 or write to me at the letterhead address.

Sincerely,

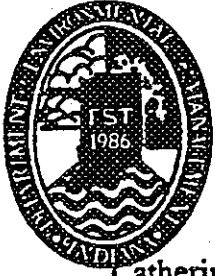


Norman E. Riley, Chief  
Resource Recovery Section

cc: Ms. Paula Rasmussen, Chief  
State Regulatory Program Division  
Department of Toxic Substances Control  
245 West Broadway, Suite 425  
Long Beach, California 90802

Mr. Larry Matz, Chief  
Statewide Compliance Division  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806

Mr. Donald A. Johnson, Chief  
State Regulatory Branch  
Department of Toxic Substances Control  
P.O. Box 806  
Sacramento, California 95812-0806



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

*Frank O'Bannon*  
Governor

*John M. Hamilton*  
Commissioner

Catherine A. McCord, Manager  
Environment and Business Integration  
Safety-Kleen Corp.  
1000 North Randall Road  
Elgin, Illinois 60123-7857

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6015

JUL 18 1997

July 14, 1997

ENVIRONMENTAL POLICY  
AND GOVERNMENT RELATIONS

Dear Ms. McCord:

Re: Continued Use Program

This is in response to your letter of June 2, 1997, in which you were seeking confirmation of your interpretation of the hazardous waste rules, specifically 40 CFR 261.2(e)(1)(ii). Indiana has incorporated this federal provision in our rules at 329 IAC 3.1-6. Our understanding is that your company intends to directly reuse solvents which have been used by your customers for drum washing prior to filling them with product.

Your review of the applicable regulations and principals as they apply to this situation are consistent with the interpretation of these provisions as applied by this office. Information provided in your letter indicates that these used solvents will be used consistent with their original intended purpose as a cleaning solvent without prior reclamation. These solvents would not be a solid waste and therefore not subject to regulation as a hazardous waste.

Staff consider the documentation of claims that the materials are not solid waste as required by 40 CFR 261.2(f) as an important component of this exemption. Only those solvents which are legitimately reused are exempt. If the quantity of solvents collected from your customers under the exemption exceed that which is necessary for your use this office would consider this a sham situation. Excess solvents collected would be subject to regulation as a hazardous waste.

If you should have a question regarding this matter please contact Mr. Dave Berrey of this Department at 317-232-4417.

Sincerely,

Bruce Palin,  
Acting Assistant Commissioner  
Solid and Hazardous Waste Management

DWB

JAMES E. BICKFORD  
SECRETARY



PAUL E. PATTON  
GOVERNOR

COMMONWEALTH OF KENTUCKY  
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE MANAGEMENT  
14 REILLY RD  
FRANKFORT KY 40601-1190

June 30, 1998

Ms. Catherine A. McCord  
Manager, Environment and Business Integration  
Safety-Kleen Corp.  
One Brinckman Way  
Elgin, Illinois 60123-7857

JUL 13 1998

ENVIRONMENTAL POLICY  
AND GOVERNMENT RELATIONS

Re: Branch-Based Continued Use Program

Dear Ms. McCord:

Thank you for your letter requesting our formal regulatory interpretation regarding the management of used cleaning solutions, received from Safety-Kleen's Kentucky customers, to clean drums at the Safety-Kleen branches.

It is our understanding that Safety-Kleen would like to reuse, directly without any prior reclamation, used mineral spirits received from its customers to wash drums at the Safety-Kleen branches before filling these washed drums with product. This material will be used as an effective substitute for the spent mineral spirit waste currently utilized to wash the drums.

In accordance with 401 KAR 31:010, Section 2 (5) (a) 2, materials are not wastes when they can be shown to be recycled by being used or reused as effective substitutes for commercial products. After reviewing the documentation submitted to this office, we concur with your opinion that this material is not hazardous waste and not subject to the hazardous waste regulations provided the following conditions are adhered to:

- The material used to wash the drums will only be used once in this program, and will be classified as hazardous waste after use.
- This material, when spent, may be accumulated on-site in accordance with 401 KAR 32:030, Section 5 and must be ultimately managed off-site at a permitted treatment/storage hazardous waste management facility.
- 401 KAR 31:010, Section 2(5)(b), prohibits Safety-Kleen Corporation and the original users of this material from speculatively accumulating this material, ultimately land disposing/storing, or using this material for the purposes of fuel blending for energy recovery (i.e., sent to a cement kiln).





Ms. Catherine A. McCord

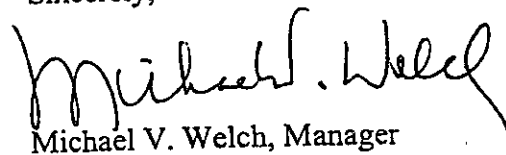
June 30, 1998

Page 2

- Once it is co-mingled with hazardous waste, any re-use of the spent material from the continued use program is prohibited in either the branch based drum washing program or Recycle Center-based scrap washing programs. Furthermore, the reused material is automatically classified as hazardous waste and will no longer qualify for this exemption.
- This determination only and specifically addresses the "Continued Use Program" implemented at the Safety-Kleen branches in Kentucky and is not intended to cover any other "similar in definition" programs Safety-Kleen has or will implement.
- This determination may not apply if the above mentioned secondary material is mismanaged contrary to intention of this submittal. Mismanagement may cause it to become a waste that is subject to a hazardous waste determination upon receipt by the Safety-Kleen branch.
- In addition, this determination shall not relieve the applicant from obtaining any other permits from any other agency within the Commonwealth.

If you have any questions regarding this correspondence, please do not hesitate to contact George W. Wakim at (502) 564-6716 ext. 674.

Sincerely,

  
Michael V. Welch, Manager  
Hazardous Waste Branch  
Division of Waste Management

MVW/gw

c: Caron Falconer, US EPA Region IV  
Keith Crabtree, Florence Regional Office  
Hannah Helm, Field Operations Branch  
Abbie Meyer, Hazardous Waste Branch  
Dale Burton, Hazardous Waste Branch  
Ron Gruzesky, Hazardous Waste Branch  
Massoud Shoa, Hazardous Waste Branch  
George Wakim, Hazardous Waste Branch  
Central File: Safety-Kleen/Correspondence  
Fayette, Jefferson, Boyd, and Henry Counties



FEB 16 1998

State of Ohio Environmental Protection Agency  
ENVIRONMENTAL POLICY  
AND GOVERNMENT RELATIONS

STREET ADDRESS:

1800 WaterMark Drive  
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS  
P.O. Box 10  
Columbus, OH 43216-10

February 2, 1998

Ms. Catherine McCord  
Safety-Kleen Corporation  
One Brinckman Way  
Elgin, IL 60123-7857

Dear Ms. McCord:

This letter is in response to our meeting and your subsequent letter dated January 14, 1998, regarding Safety-Kleen's "Continued Use" program. You would like to know if Ohio EPA's Division of Hazardous Waste Management agrees with your interpretation of regulations with respect to this program.

It is my understanding that Safety-Kleen reuses some of their customers used solvents in their drum washing program in Indiana. These solvents are used to clean scrap metal from drum shredding operations. Safety-Kleen would like to expand a similar program, the Continued Use program to branches across Ohio. The branches would be reusing parts cleaning solutions collected from customers to clean drums. After the solution is reused in the Continued Use program, it will be considered Safety-Kleen generated waste and will be recycled.

In Ohio, materials are not wastes when they can be shown to be recycled by being used or reused as effective substitutes for commercial products as stated in Ohio Administrative Code (OAC) rule 3745-51-02(E)(1)(b). Although, they must not be used in a manner constituting disposal, applied to the land, or accumulated speculatively (OAC 3745-51-02(E)(2)).

Safety-Kleen's use of the cleaning solutions are considered a continued use of the solutions. The parts cleaners are not considered a spent material. A "spent material" is defined in OAC rule 3745-51-01(C)(1) as any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing. U.S. EPA interprets "the purpose for which it was produced" to include all uses of the products that are similar to the original use of the particular batch of material in question. For example, in 50 FR 624, U.S. EPA discusses the continued use of solvents used to clean printed circuit boards. Although the solvents are not pure enough to be used again on the circuit boards, U.S. EPA agrees that they are still pure enough for similar applications (metal degreasers, etc.). Ohio EPA concurs with this

George V. Voinovich, Governor  
Nancy P. Hollister, Lt. Governor  
Donald R. Schregardus, Director

Ms. Catherine McCord  
Safety-Kleen Corporation  
February 2, 1998  
Page 2

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interpretation. Ohio EPA agrees that by being used in Safety-Kleen's Continued Use program, the cleaning solutions are serving their intended purpose.

Ohio EPA continues to encourage pollution prevention which includes environmentally friendly alternatives. If you have any questions, please contact Jeff Mayhugh or myself at (614) 644-2934.

Sincerely,



Wendy A. Miller  
Compliance Assurance Section  
Division of Hazardous Waste Management

wp61.WAM.lcn.g:styklee.

# STATE OF COLORADO

Bill Owens, Governor  
Jane E. Norton, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION  
<http://www.cdphs.state.co.us/hmw/>

4300 Cherry Creek Dr. S.  
Denver, Colorado 80246-1530  
Phone (303) 692-3300  
Fax (303) 759-5355

222 S. 6th Street, Room 232  
Grand Junction, Colorado 81501-2768  
Phone (970) 248-7164  
Fax (970) 248-7198



Colorado Department  
of Public Health  
and Environment

May 10, 1999

Sean McMahan  
Regional Manager, Denver  
Safety-Kleen Corp.  
3333 Quebec Street, Penthouse A  
Denver, Colorado 80207

Dear Mr. McMahan:

Gary Baughman and I appreciated the opportunity to meet you and Catherine McCord on April 22 and to discuss Safety-Kleen's Continued Use Program. We now have a much better understanding of the program and the regulatory status of the solvents used in the program. We have reviewed the August 21, 1998 letter to Catherine McCord from David Bussard of the U.S. EPA (attached) and generally concur with the regulatory interpretation in that letter. We believe that if solvents are managed in the manner you have described for the Continued Use Program that they will qualify for being excluded as an effective substitute for a commercial product in accordance with 6 CCR 1007-3, Section 261.2(e)(1).

The steps that Safety-Kleen has taken to establish criteria for continued use of solvents and segregation of solvents in the continued use program from waste solvents will allow the solvents to not be considered solid wastes. The record keeping and automatic control features of the continued use program are also important for documenting the legitimate continued use of the solvent as an effective substitute for a commercial product.

If you have any questions regarding this matter, please feel free to contact me at (303) 692-3342.

Sincerely,

Frederick R. Dowsett  
Compliance Coordinator

cc: Catherine A. McCord, Safety-Kleen  
Attachment



Office of Waste Management  
Compliance Assurance and Emergency Response  
1356 Hanford Street  
Charleston, WV 25301-3402  
304-558-5988; Fax 304-558-0256

## West Virginia Division of Environmental Protection

Coal 12, Underwood  
Governor

Michael P. Manso  
Director

April 20, 1999

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Catherine A. McCord  
Manager, Environment and Business Integration  
1000 North Randall Road  
Elgin, Illinois 60123-7657

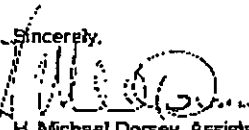
Dear Ms. McCord:

I have received your letter of April 2, 1999 in which you address a number of concerns regarding Safety-Kleen's Continued Use Program that I raised in our telephone conversation of April 2, 1999. This letter is to grant provisional approval to that program.

Your responses to my questions eased my concerns about the structure of the program and its ability to limit the amount of reused solvent to the quantity necessary to clean the drums. This office will monitor the program for approximately one year, however, to insure that safeguards are indeed working before granting unconditional approval.

Please notify me when Safety Kleen begins the program in West Virginia so that we can begin observing the process.

I hope that this information is helpful to you. If I can be of any further assistance, please contact me at (304) 558-5988.

Sincerely,  
  
H. Michael Dorsey, Assistant Chief  
Compliance Assurance and Emergency Response

HMD/kw

cc: Tom Fisher  
Stan Moskal  
Mike Stratton

"To use all available resources to protect and restore West Virginia's  
environment in concert with the needs of present and future generations."



West Virginia  
Division of  
Environmental Protection



**Oregon**

John A. Kitzhaber, M.D., Governor

Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-8993

June 28, 1999

Ms. Catherine McCord, Director  
Business and Environmental Management  
Safety-Kleen  
One Brinckman Way  
Elgin, IL 60123-7857

Dear Ms. McCord:

This letter is in response to your May 28, 1999 letter requesting written confirmation that some used parts-cleaning solvents collected by Safety-Kleen from Oregon generators and continued to be used for drum washing at Safety-Kleen facilities are not classified as wastes and are not subject to hazardous waste requirements.

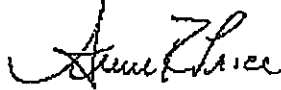
The Department has a statutory and regulatory commitment to see materials of value, that would normally be hazardous wastes, recycled. Although unlike some other States, the Department does not provide formal approval of specific recycling programs at this time. In most instances, hazardous waste recycling decisions are made by the hazardous waste generator or management facility without Department concurrence.

However, to assist you in determining how the used solvent management practices that Safety-Kleen implements at its facility in Oregon is regulated, attached is an EPA letter that addresses the issues you raise. The Department adopts the federal regulations by reference and uses federal preamble language and other federal guidance, including EPA letters, as a basis for regulatory decision making. The key RCRA regulations you requested concurrence on are discussed by EPA in the letter. The Department agrees with EPA's regulatory clarification in the letter.

Please be aware that, generally, generators claiming that their material is not a solid waste must support that claim with documentation on the legitimate use of the material. Therefore, it is recommended that Safety-Kleen contract with its customers and provide them the necessary documentation on the use of their material.

We hope that this information is helpful. Please contact me at (503) 229-6585 or Gary Calaba at (503) 229-6534, if you have additional questions regarding this matter.

Sincerely,



Anne R. Price, Manager  
Hazardous Waste Policy and Program Development

Attachments:

1. David Bussard, EPA, to Catharine McCord, Safety Kleen, August 21, 1998.

Cc: Hazardous Waste Managers, DEQ  
Larry Edelman, DOJ

Gejic62899







Michael O. Leavitt  
Governor  
Dianne R. Nielson, Ph.D.  
Executive Director  
Dennis R. Doyus  
Director

## State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF SOLID AND HAZARDOUS WASTE

288 North 1460 West  
P.O. Box 144888  
Salt Lake City, Utah 84114-4888  
(801) 538-6176  
(801) 538-6715 Fax  
(801) 536-4414 T.D.D.  
[www.deq.state.ut.us](http://www.deq.state.ut.us) Web

COPY

July 20, 1999

Mr. Wayne Johnson  
Branch Manager  
Safety-Kleen Corporation  
1066 South Pioneer Road  
Salt Lake City, Utah 84104

Subject: Continued Use Program  
Safety-Kleen Corporation UFD9809957088

Dear Mr. Johnson:

Thank you for meeting with me and members of my staff on March 29, 1999 to further discuss the Division's concerns associated with Safety-Kleen's Continued Use Program and for your follow-up letter dated April 8, 1999.

The Division's first concern related to ensuring that the used solvent is reused directly without prior reclamation in order to qualify as a product not subject to regulation as either a solid or a hazardous waste. Of particular interest was whether the mesh screen in the Continued Use vat was filtering the solvent prior to use in drum cleaning. Safety-Kleen addressed this concern by clarifying that the sole purpose for the screen is to protect the pump and not to filter or separate. Continued Use participants will be required to not place foreign objects (e.g., rags, paper, metal parts and tools) into the solvent. Safety-Kleen service representatives will also be instructed to not "clean up" parts washers for customers by placing foreign objects into the solvent drum. In addition, it is the Division's understanding that any contaminants that are recovered from the screen will be commingled with sludge which is currently removed from the drum washer and shipped off-site and burned as hazardous waste at a cement kiln.

The Division's second concern related to the efficient reuse of the solvent. Safety-Kleen addressed this during our March 29, 1999 meeting by stating that an assessment has determined that it takes approximately 13 gallons of used solvent used in conjunction with agitating brushes to efficiently clean a 35-gallon drum in the drum washer. Once the specified volume of solvent is used to clean a drum, the solvent will be declared spent and subsequently managed as hazardous waste. You further clarified that the specific volume of used solvent needed for washing drums at your site will be calculated by multiplying the number of drums serviced by 13 gallons. Based on your current process rate of washing approximately 100 drums each day, Safety-Kleen would need approximately 1,300 gallons of used solvent each day. This figure could go up or down depending upon Safety-Kleen's future customer base and cleaning needs. The Division also understands that documentation will be maintained demonstrating site solvent needs and uses.

July 20, 1999  
Page 2

Based upon Safety-Kleen's presentation and further clarifications of the Continued Use Program, the Division concurs with Safety-Kleen that if the solvent is reused in the specified manner it will qualify for being excluded as an effective substitute for a commercial product in accordance with R315-2-2(e)(1)(ii) of the Utah Administrative Code [40 CFR 261.2(e)(1)(ii)].

To maintain the exclusion, Safety-Kleen should develop and maintain records to document the quantities of drums washed and the amounts of Continued Use solvents utilized. In addition, to avoid potential confusion to Safety-Kleen employees and to state inspectors, we strongly recommend that Safety-Kleen maintain containers of Continued Use solvents separately from solvents that are not in the program until the solvents have been placed into their respective vats in the drum washer unit.

If you have any questions, please contact Brad Maulding of my staff at (801) 538-6170.

Sincerely,



Dennis R. Downs, Executive Secretary  
Utah Solid and Hazardous Waste Control Board

DRD/BCM/kg

c: Kathryn N. Vedder M.D. MPH Health Officer/Dept Director Salt Lake County Hlth Dept.  
Catherine A. McCord, Safety-Kleen, 1000 North Randall Road, Elgin, Illinois 60123-7857

Barry R. McBoe, *Chairman*  
R. B. "Ralph" Marquez, *Commissioner*  
John M. Baker, *Commissioner*  
Jeffrey A. Saitas, *Executive Director*



## TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

February 1, 1999

Mr. Timothy F. Kent  
District EHS Manager  
Safety-Kleen  
One Brinckman Way  
Elgin, IL 60123-7857

Re: Safety-Kleen's Continued Use Program  
Technical Analysis File Number 1-99

Dear Mr. Kent:

This is in response to your December 18, 1998 letter regarding Safety-Kleen's recycling of solvents through its "Continued Use Program".

According to the information in your letter, the information provided by Ms. Catherine McCord and the information provided in a December 8, 1998 meeting between representatives from Safety-Kleen and the Texas Natural Resource Conservation Commission (TNROC):

- ▶ Safety-Kleen has historically used waste parts washer solvent (mineral spirits) to washout and clean drums in which parts washer solvents arrive at Safety-Kleen sites. Based upon the experience gained in doing so, the results of an engineering study conducted by Safety-Kleen, customer requests and a thorough researching of RCRA rules, Safety-Kleen has developing what it calls the "Continued Use Program";
- ▶ The dual objectives of the Continued Use Program are: (1) to provide qualified Safety-Kleen customers with a means by which they can recycle their parts washer solvent and at the same time legitimately exempt the solvent from the definition of a solid waste (thus realizing relief from most regulatory requirements) and (2) to allow Safety-Kleen a legitimate means of meeting the challenge posed by some of its competitors who offer their customers the option of exempting their parts washer solvent from the definition of a solid waste (thus giving them a potential marketing advantage over Safety-Kleen);
- ▶ Upon its arrival at a Safety-Kleen site, the first step in the actual physical processing of parts washer solvent in the Continued Use Program occurs when the solvent is emptied from drums which have a capacity from 16 to 30 gallons into a vat that is physically separated from the entry point for solvent which is not from the Continued Use Program;

Mr. Timothy F. Kent  
Page 2  
February 1, 1999

Re: Safety-Kleen's Continued Use Program  
Technical Analysis File Number 1-99

- ▶ By contractual agreement with its customers, Safety-Kleen allows only parts washer solvent to enter the Continued Use Program and all customers who wish to participate in it are required to avoid allowing any foreign materials (e.g., paper, rags, metal parts etc.) to contaminate the Continued Use Program solvent. Customers who do not agree to these terms are not allowed to participate in the Continued Use Program. Customers already participating in the Continued Use Program who fail to abide by these terms are removed from the Continued Use Program by Safety-Kleen;
  
- ▶ The solvents from the Continued Use Program and those which are not part of the Continued Use Program sources enter the drum cleaning operation at two physically *separate* points. Solvents which are not part of the Continued Use Program enter the "wet dumpster" portion of the "drum washer/wet dumpster" unit shown in the diagram entitled, "Proposed Alternative Operations" that accompanied your letter.  
  
Solvent from the Continued Use Program vat is pumped into the drum washer portion of the aforementioned unit and is sprayed by a nozzle into the drum washer to clean the aforementioned drums. The drum washer portion is located *prior* to the wet dumpster portion of the unit. The reusable solvent is transferred from the reuse vat by a submersible pump.  
  
The vat contains a "gross mesh" screen. Its sole purpose of the screen is to protect the pump. The screen does *not* function as a separation mechanism. The fact that participants in the Continued Use Program are required to keep foreign materials such as paper, rags, metal parts etc. from entering Continued Use Program solvent combined with the fact that the aforementioned screen is essential to the protection of the pump system means that no reclamation occurs at any point in the Continued Use Program until after the cleaning of the aforementioned drums;
  
- ▶ When the quantity of solvent in the Continued Use Program vat falls below a preset level, an electronic sensor automatically shuts off the flow of Continued Use Program solvent to the nozzle and non-Continued Use Program solvent is then pumped from the non-Continued Use Program vat into the nozzle to clean the drums. The segregation of the Continued Use Program solvent and the solvent from the non-Continued Use Program insure that only *after* the drums have been cleaned does the solvent from the Continued Use Program and solvent that is not part of the Continued Use Program come into contact;

Mr. Timothy F. Kent  
Page 3  
February 1, 1999

Re: Safety-Kleen's Continued Use Program  
Technical Analysis File Number 1-99

- ▶ Once the solvent has been used to clean the drums, Safety-Kleen acknowledges that all of it meets the definition of a spent material as defined in 40 Code of Federal Regulations (CFR) Section § 261.1(c)(1)/30 Texas Administrative Code (TAC) § 335.17(a)(1). Furthermore, Safety-Kleen acknowledges that it will be the generator of the spent solvent and all wastes associated with it (e.g., sludges from the reclamation of the spent solvent);
- ▶ From the results of its engineering study, Safety-Kleen has determined the volume of parts washer solvent necessary to clean a given size drum. This volume multiplied by the number of drums to be cleaned provides each Safety-Kleen site with the maximum volume of solvent that the site can accept into its Continued Use Program. As an added measure of control, each site's maximum capacity is monitored by Safety-Kleen's Branch Automation Program which tracks the amount of Continued Use Program solvent coming into a given site. This plus the site's own monitoring efforts will insure that the site does not accept more solvent than it can legitimately use to clean the drums that arrive at that site;
- ▶ Once cleaned, the drums are then refilled with fresh solvent; and
- ▶ Safety-Kleen wishes for the TNRCC to confirm that the portion of parts washer solvent in the Continued Use Program is exempt from being a solid waste pursuant to 40 CFR §261.1(e)(1)/30 TAC §335.1(f)(i).

Based upon the aforementioned information, the TNRCC has concluded that there is no reason at this time to object to Safety-Kleen or its customers exempting from the definition of a solid waste parts washer solvent participating in Safety-Kleen's Continued Use Program provided that the following points (many of which are discussed in an August 21, 1998 letter from Mr. David Bussard of the Environmental Protection Agency (EPA) to Ms. Catherine McCord of regarding Safety-Kleen's Continued Use Program) about Safety-Kleen's Continued Use Program are taken into consideration:

- ▶ The solvent in the Continued Use Program would be considered by the TNRCC to be exempt from being a solid waste only if it has the capacity to function effectively as a solvent in the aforementioned drum cleaning operation. The TNRCC would not consider solvent used in the Continued Use Program which had lost all or the great majority of its solvent properties (e.g., through contamination) to be exempt from being a solid waste;
- ▶ The solvent in the Continued Use Program must be used only for washing drums that actually need it and only in quantities sufficient to wash the aforementioned drums. The TNRCC would not consider solvent used in excess of that which would normally be required to wash the drums to be exempt from being a solid waste;

Mr. Timothy F. Kent

Page 4

February 1, 1999

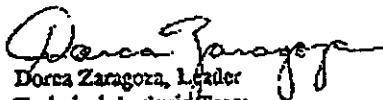
Re: Safety-Kleen's Continued Use Program  
Technical Analysis File Number 1-99

- ▶ Solvent in the Continued Use Program and solvent which is not in the Continued Use Program must be kept physically separated until they exit the drum washer portion of the aforementioned unit. Each container of the two types of solvents must be handled according to the applicable state and federal rules. If any portion of the Continued Use Program solvent is reclaimed, burned for energy recovery or used in a manner which would otherwise cause it to be a solid waste (as opposed to being directly used only for drum wash), then it is a solid waste and must be managed accordingly; and
  
- ▶ The TNRCC wishes to especially emphasize to Safety-Kleen the importance of *properly creating and maintaining the documentation to show that it is complying with all applicable state and federal regulations (including those implied in the aforementioned points) at all times and at all of its sites.*

On behalf of the TNRCC, I wish to thank you, the other representatives of Safety-Kleen (most notably Ms. McCord who met and communicated on several occasions with Mr. Boultinghouse of the Technical Analysis Team) and Safety-Kleen for your efforts to promote and encourage legitimate recycling of parts washer solvents in Texas.

If you have any questions regarding this matter, please contact Mr. Jesse Boultinghouse of the Technical Analysis Team at (512) 239-6832.

Sincerely,



Dorra Zaragoza, Leader  
Technical Analysis Team  
Waste Evaluation Section  
Registration and Evaluation Division

DZ/JKB/hgk

cc: Ms. Catherine McCord, Director, Business and Environmental Management, Safety-Kleen Corporation, 1000 North Randall Road, Elgin, IL 60123



State of Louisiana  
Department of Environmental Quality

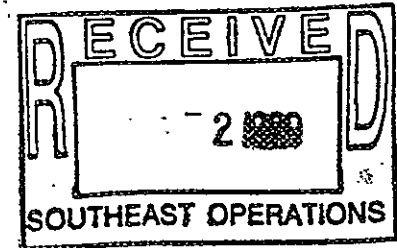


M.J. "MIKE" FOSTER, JR.  
GOVERNOR

J. DALE GIVENS  
SECRETARY

July 26, 1999

Mr. Lin Longshore, Director  
EH&S, Southern Division  
Safety-Kleen  
1301 Gervais Street, Suite 300  
Columbia, SC 29201



RE: Re-Used Solvent Is Not Solid Waste  
Safety-Kleen (LAD985171024 and LAD981057441)

Dear Mr. Longshore:

Your letter of June 14, 1999, requested a waste classification decision for a naphtha product that, after an initial use by Safety-Kleen customers, is returned to Safety Kleen for direct secondary use as a drum washing solvent. Based on information you provided, the Permits Division agrees with the interpretation expressed in your letter: The used naphtha, when returned to Safety-Kleen for drum washing, is not a solid waste and therefore not a hazardous waste.

The definition of solid waste provides exclusions for materials which substitute directly (that is, without prior reclamation) for commercial products. The re-use scenario you describe bears perfect resemblance to "continued use of a solvent", about which the Environmental Protection Agency wrote at some length and in very plain language (preamble to the January 4, 1985, definition of solid waste). We respect this interpretation.

If you have any questions about this, you may contact Michael Beck of the Permits Division at (225) 765-0272.

Sincerely,

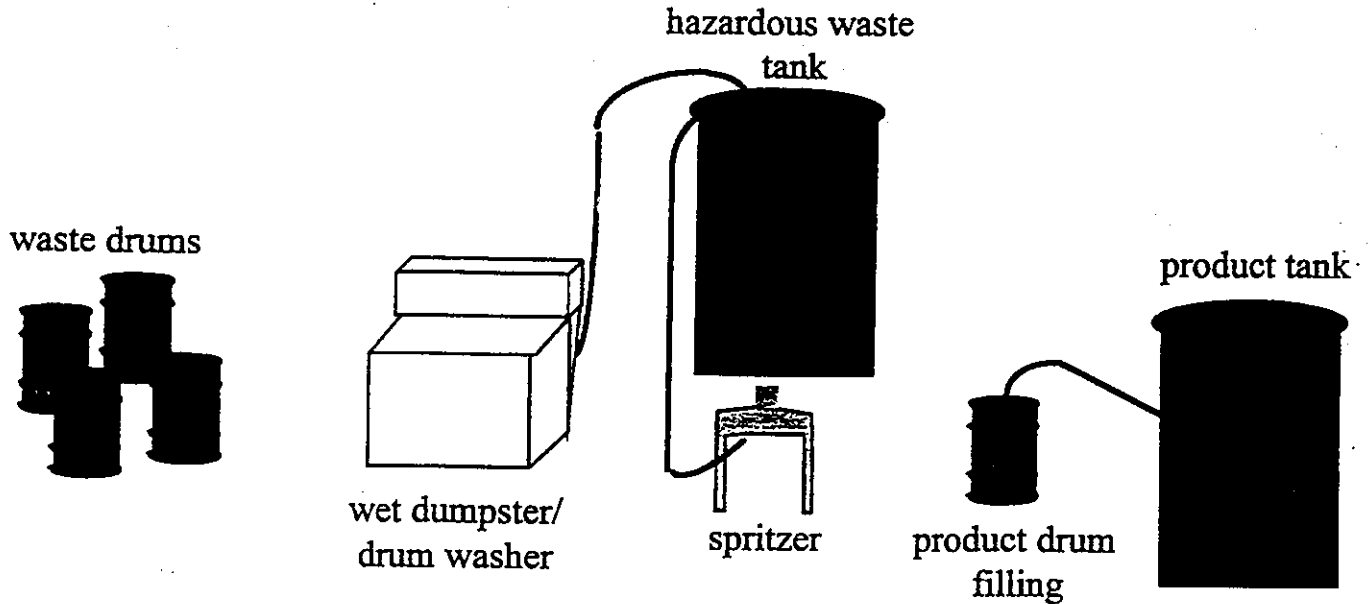
Michael D. Vince  
Administrator

attachment

mb



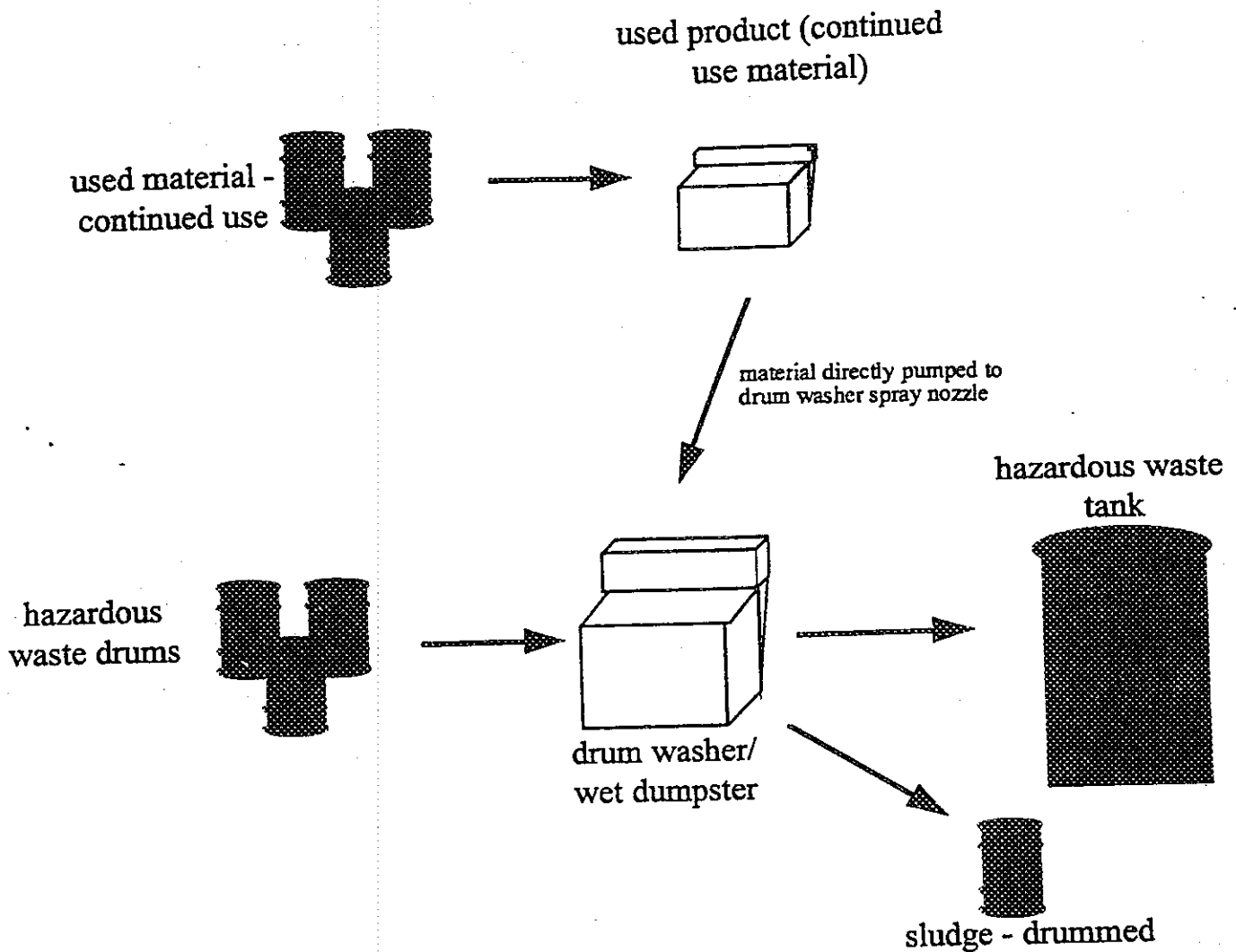
# CURRENT RETURN & FILL OPERATION



1. Drums poured into wet dumpster.
2. Level indicator maintains fixed level of waste in bottom of wet dumpster.
3. Drum placed on drum washer within wet dumpster.
4. Drum washer brushes spin and spray waste inside of drum.
5. If necessary, product is dispensed on outside and inside drum.
6. Drum placed upside down on wet dumpster drain rack.
7. If non-haz drum, drum placed in drum spritzer for polishing rinse with 150 Premium Gold Product.
8. Drum is filled with 105 or 150 Premium Gold.



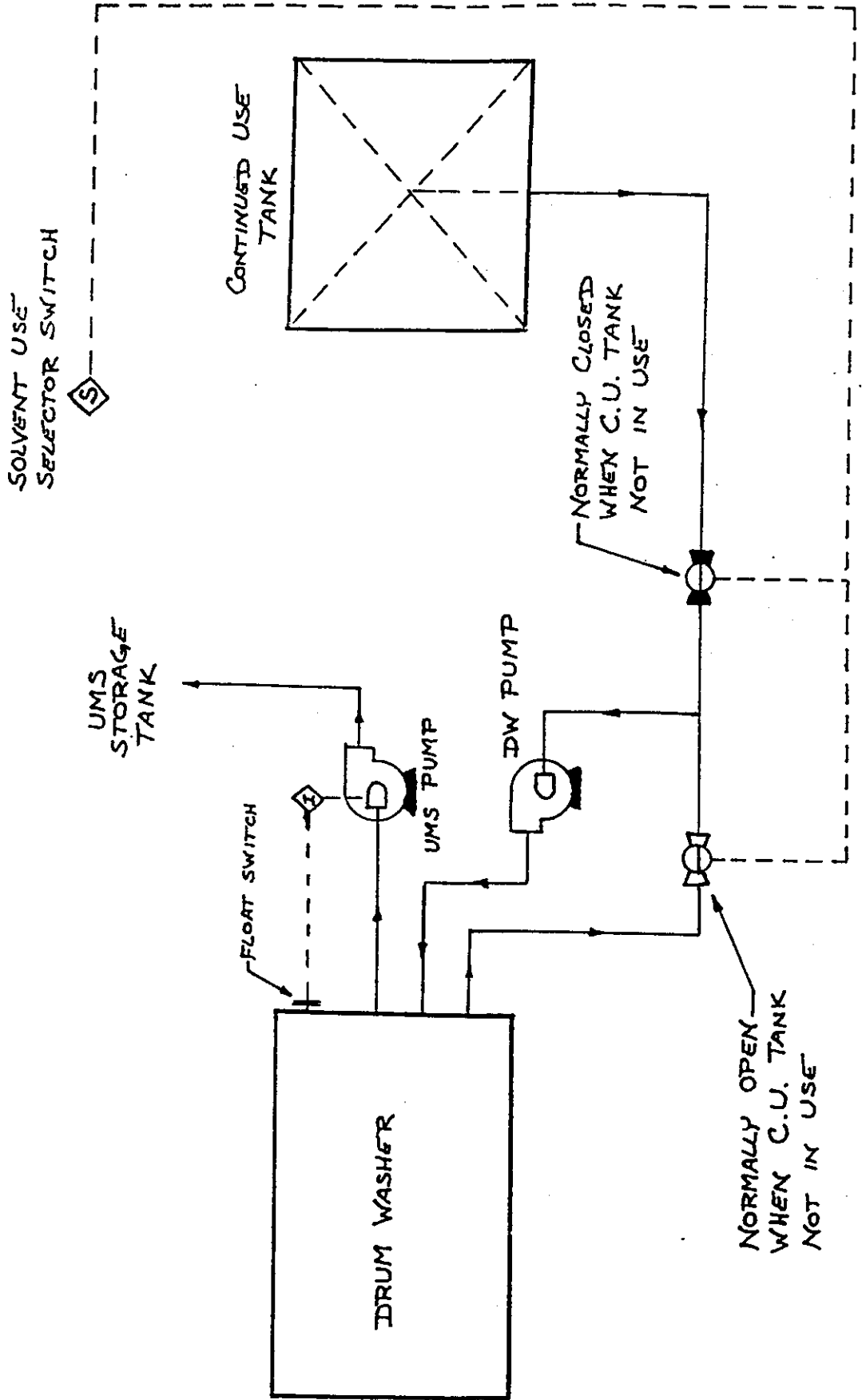
# PROPOSED ALTERNATIVE OPERATION



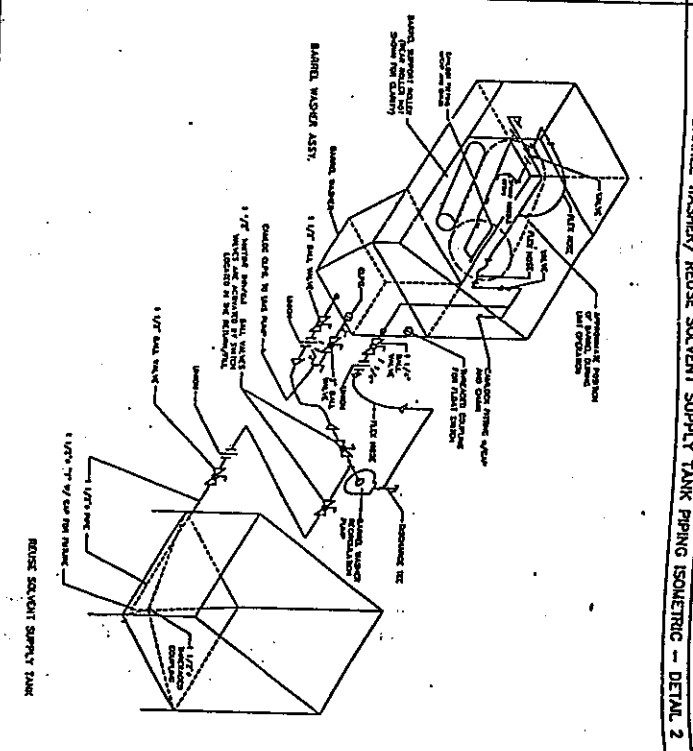
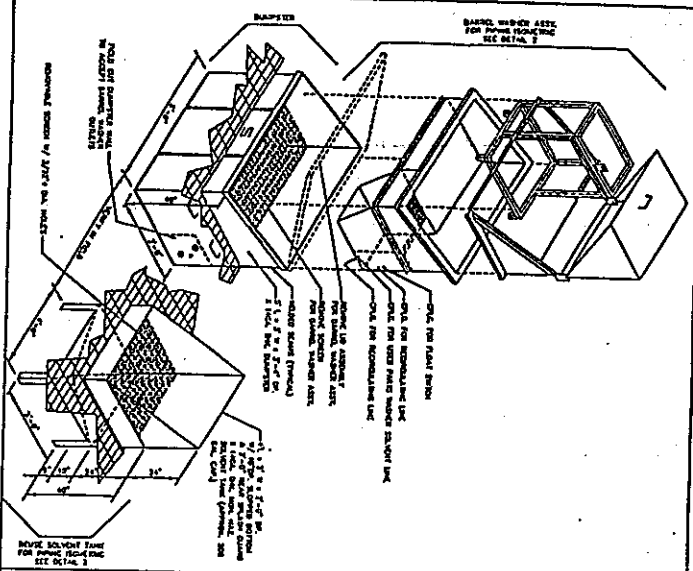
1. Drums of "continued-use product" emptied into separate dumpster/tank.
2. Hazardous waste drums are emptied into wet dumpster.
3. To clean drums, continued-use material is pumped to drum washer spray. Material is pumped to hazardous waste tank after use as drum wash. All drums are washed in the drum washer.

# CONTINUED USE

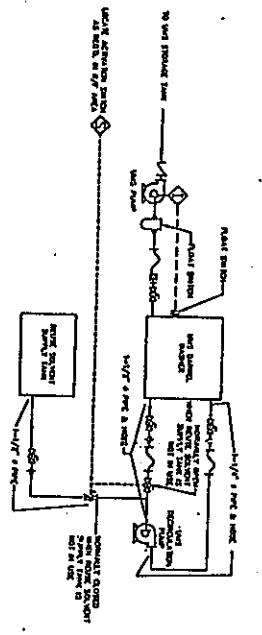
## R/F SCHEMATIC







BARREL WASHER/ REUSE SOLVENT SUPPLY TANK PIPING SCHEMATIC - DETAIL 3



**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUED FOR CONSTRUCTION		
2		REVISION TO BARREL WASHER		
3		REVISION TO BARREL WASHER		
4		REVISION TO BARREL WASHER		
5		REVISION TO BARREL WASHER		
6		REVISION TO BARREL WASHER		

**PROPRIETARY STATEMENT**

This drawing is the property of Safety-Kleen Corp. and contains confidential information. It is not to be distributed, copied, or used in any way without the written consent of Safety-Kleen Corp. Any unauthorized use or disclosure of this information is strictly prohibited and may result in legal action.

**Safety-Kleen Corp.**  
 BARREL WASHER /  
 REUSE SOLVENT  
 SUPPLY TANK

NO.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUED FOR CONSTRUCTION		
2		REVISION TO BARREL WASHER		
3		REVISION TO BARREL WASHER		
4		REVISION TO BARREL WASHER		
5		REVISION TO BARREL WASHER		
6		REVISION TO BARREL WASHER		



**PARTS WASHER CUSTOMER  
BEST MANAGEMENT PRACTICES GUIDE**

ACTIVITY	BEST MANAGEMENT PRACTICE	QUESTIONS AND FOLLOWUP
Keep solvent from getting contaminated with other materials	Do not combine any other material into parts washer unit solvent other than the parts to be cleaned	
	Do not use sprays over parts cleaner units	
Rags and Wipes	Do not place any rags or wipes into your parts washer machine or tank/vat	
Emissions reduction from	Close parts cleaner unit lids when not in operation	

Questions can be presented to your S-K Sales/Service Representative or by the local Safety-Kleen branch.

**CONTINUED USE PARTS WASHER CUSTOMER  
BEST MANAGEMENT PRACTICES GUIDE**

ACTIVITY	BEST MANAGEMENT PRACTICE	QUESTIONS AND FOLLOWUP
Rags and Wipes	Do not place any rags or wipes into vat-style cleaning units	
Other Solid Objects	Do not place any additional objects into vat-style cleaning units	
Customer certifications on Placement and Service Documents	Assure that operation complies with restrictions on addition of material to parts washer solvent	

10/22/99

**SAFETY-KLEEN  
CONTINUED USE PROGRAM**

**2. Qualitative measures used to qualify Continued Use customers**

Safety-Kleen has a set of qualitative requirements for a Customer to enter into and remain in our Continued Use program. These requirements are outlined below:

1. The customer must be an S-K parts washer closed loop customer. S-K must provide the mineral spirits solvent, the cleaning equipment may be provided by Safety-Kleen or customer-owned, an S-K Sales and Service Representative must service the parts washer unit, and the solvent is returned to the S-K system as feed for our Recycle Centers to manufacture fresh mineral spirits product.
1. All parts washer customers must sign both placement agreements (to initiate parts washer service) and service agreements (at each parts washer service). These documents include customers certification language that they will not impart .....GET DOCUMENT LANGUAGE.
1. Only a limited portion of the parts washer solvent returned from customers to our branches will be classified as Continued Use product and brought to our branches for use as drum wash. The balance of the material will still be transported to the branch as a waste. Since only a sub-set of our overall solvent parts washer customers can be in the Continued Use program, we have to make a decision on who to allow into the program. The first decision is a business decision on who gets offered the program (e.g., customers who have a certain number of machines, or who are willing to participate in service contracts). Then individual customers from these groups are selected for the program.
1. In order to be in the Continued Use program, customers must not add any solid objects to the Continued Use parts washer solvent. Safety-Kleen Sales and Service Representatives shall evaluate whether or not inappropriate additions have been made the solvent. For vat style units, S-K Sales and Service Representatives must pump and scoop material from the units and will see if any solid objects or excessive solids have collected in the cleaning unit. Solid objects are to be returned to the customers. These objects typically include parts that are being cleaned and remain in the unit, wrenches, etc. For sink-on-a-drum units, objects found in the sink must be remain in the sink and not be



placed into the drum. The size of the screens in the sink-on-a-drum units is smaller than the nozzle opening in the branch drum washer unit. This screen size will preclude any inappropriate solids from getting into the drum that sits below the sink units.

1. At the time of service, the presence of any indicators that the solvent has been adulterated through something other than typical customer parts washer use requires the S-K Sales and Service Representative to leave the drum(s) of solvent at the customer and take a sample for laboratory analysis or further investigate this anomaly. The mineral spirits will not be accepted into the Continued Use program if indicators of problems are present and may not be accepted into the returned mineral spirits program if analytical supports an alternate waste management handling method. Indicators that indicates special handling include abnormal odors, differing appearance, and increased volumes of solvent.
1. Customers who do not comply with limitations of the Continued Use program (by imparting objects / material into the solvent that cannot go through the Continued Use drum cleaning system) will be shifted to the parts washer waste program. Customers who do not comply with the overall requirements of the parts washer program, will also be removed from the waste program.

10/22/99

**SAFETY-KLEEN  
CONTINUED USE PROGRAM**

**3. Continued Use Program environmental safeguards**

Below is a comparison of environmental control elements of parts washer Continued Use verses waste solvent services.

**ENVIRONMENTAL SAFEGUARDS AND CONTROLS**

ACTIVITY	Hazardous Waste LQs and SQGs	CESQGs and Non-Hazardous Waste	Continued Use Product
Ownership of solvent	S-K retains ownership of solvent	S-K retains ownership of solvent	S-K retains ownership of solvent
Source of mineral spirits	Both 105 and Premium 150 mineral spirits is supplied by S-K	Both 105 and Premium 150 mineral spirits is supplied by S-K	Both 105 and Premium 150 mineral spirits is supplied by S-K
Use of solvent	Used in customers' parts cleaning operations	Used in customers' parts cleaning operations	Used in customers' parts cleaning operations
Ultimate fate of used mineral spirits	Transported to S-K Recycle Center for reclamation (re-distillation) into fresh product	Transported to S-K Recycle Center for reclamation (re-distillation) into fresh product	Transported to S-K Recycle Center for reclamation (re-distillation) into fresh product
Containers used to transport solvent to and from customer	-Containers meet all applicable UN drum requirements; -SK custom-made red and green 16 and 30-gallon containers	-Containers meet all applicable UN drum requirements; -SK custom-made red and green 16 and 30-gallon containers	-Containers meet all applicable UN drum requirements; -SK custom-made red and green 16 and 30-gallon containers
Handling of parts washer containers brought to branch	All containers are emptied and bulked into 10-day transfer tanker	All containers are emptied and bulked into 10-transfer tanker	All Continued Use
Washing containers prior to re-filling	All containers washed prior to re-filling; Continued use material preferentially used to clean drums	-All containers washed prior to re-filling; Continued use material preferentially used to clean drums; -Non-haz customer containers polished rinsed with fresh product	All containers washed prior to re-filling; Continued use material preferentially used to clean drums
Trucks used for transportation of solvent	S-K owned and operated DOT licensed and inspected trucks used for all legs of transportation	S-K owned and operated DOT licensed and inspected trucks used for all legs of transportation	S-K owned and operated DOT licensed and inspected trucks used for all legs of transportation

Tracking movement of bulk solvent product from SK Recycle Center for SK branches	DOT shipping papers	DOT shipping papers	DOT shipping papers
Tracking movement of solvent product containers from SK Branch to customers	DOT shipping papers	DOT shipping papers	DOT shipping papers
Tracking movement of used solvent containers from customers to SK branch	Hazardous Waste Manifests	DOT shipping papers	DOT shipping papers
Tracking of solvent inventory at SK branch	Inventory tracked in facility's computer-based operating log	Inventory tracked in facility's computer-based operating log	Inventory tracked in facility's computer-based operating log
Tracking movement of bulked solvent waste from SK branch to SK Recycle Center	Customer Hazardous Waste Manifest	SK branch Hazardous Waste Manifest	SK branch Hazardous Waste Manifest
RCRA Annual Reporting	-LQGs report volume of off-site shipments to MI DEQ; -No annual reports for SQGs ???TED - Fed sys	No generator annual reporting	SK reports Continued Use volume in branch annual generator report to MI DEQ
Training of Branch Personnel	SK Branch personnel receive DOT and RCRA training for management of product and waste	SK Branch personnel receive DOT and RCRA training for management of product and waste	SK Branch personnel receive additional training for Continued Use program at roll-out and annual update
Spill response and spill residue cleanup	DOT Transportation Contingency Plan and Facility Contingency Plan and SPCC Plan for product and waste cleanups; cleanup residue managed as a hazardous waste	DOT Transportation Contingency Plan and Facility Contingency Plan and SPCC Plan for product and waste cleanups; cleanup residue managed as a hazardous waste	DOT Transportation Contingency Plan and Facility Contingency Plan and SPCC Plan for product and waste cleanups; cleanup residue managed as a hazardous waste
Inventory Tracking	Separate identifiers for all categories of solvent (e.g., fresh product, LQGs, non-haz, Cont Use); All material logged in and out of computer system upon arrival and departure of SK branch; Inventories maintained in SK branch facility operating log	Separate identifiers for all categories of solvent (e.g., fresh product, LQGs, non-haz, Cont Use); All material logged in and out of computer system upon arrival and departure of SK branch; Inventories maintained in SK branch facility operating log	Separate identifiers for all categories of solvent (e.g., fresh product, LQGs, non-haz, Cont Use); All material logged in and out of computer system upon arrival and departure of SK branch; Inventories maintained in SK branch facility operating log
Customer requirements	Customer must certify and sign Placement and Service documents that include language on not placing other materials into parts cleaners	Customer must certify and sign Placement and Service documents that include language on not placing other materials into parts cleaners	Customer must certify and sign Placement and Service documents that include language on not placing other materials into parts cleaners

<b>Characterization and Management of material transported from SK branches to SK Recycle Centers</b>	All consolidated material transported under hazardous waste manifests from Branch to Recycle Centers	All consolidated material transported under hazardous waste manifests from Branch to Recycle Centers	All consolidated material transported under hazardous waste manifests from Branch to Recycle Centers
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10/22/99

**SAFETY-KLEEN  
CONTINUED USE PROGRAM**

#### **4. Tracking and Record-Keeping Systems**

Separate DOT shipping descriptions and associated identifiers have been developed within our computer system. These identifiers allow the company to nationally monitor individual branches' sales of the Continued Use program and their associated volumes. The Continued Use material is logged into a category of our branch operating log that is separate from waste logged categories. The Safety-Kleen Michigan branches maintain facility operating logs, such as a RCRA TSD would, even though our 10-day transfer facilities are not required to have such logs. (TED – VERIFY THAT THIS IS NOT A REQUIREMENT OF MI TRANSFER PERMITS).

These logs monitor the total number of parts washer containers (LQG, SQG, CESQG, non-hazardous waste, and Continued Use containers) that are accepted by the local branch. All these containers must be washed prior to being re-filled with fresh product. As the number of containers change over time (driven by a change in the level of business activity), the volume of Continued Use material that can be accepted by a local branch is changed.

PROVIDE COPIES OF BAP SCREENS/ OPERATING LOG PAGES.