D. E. R.
APR 15 1988
SOUTH WEST DISTRICT
TAMPA

APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT
PART I - GENERAL
TO BE COMPLETED BY ALL APPLICANTS

Please Type or Print

A. GENERAL INFORMATION

1. TYPE OF FACILITY:

DISPOSAL [ ] LANDFILL [ ]	LAND TREATMENT [ ]	SURFACE IMPOUNDMENT [ ]		
STORAGE [X] CONTAINERS [X]	TANKS [X]	PILES [ ]	SURFACE IMPOUNDMENT [ ]	
TREATMENT [ ] TANKS [ ]	PILES [ ]	INCINERATION [ ]	SURFACE IMPOUNDMENT [ ]	
THERMAL [ ]	CHEMICAL [ ]	PHYSICAL [ ]	BIOLOGICAL [ ]	

2. TYPE OF APPLICATION: [ ] TOP [ ] CONSTRUCTION [ ] OPERATION [ ] CLOSURE

3. DATE CURRENT OPERATION BEGAN (OR IS EXPECTED TO BEGIN): 6-28-85

4. FACILITY NAME: Safety-Kleen corp. Service Center

5. EPA/DER I.D. NO.: FLD 980847271

6. FACILITY LOCATION OR STREET ADDRESS: 24th Ave. & 54th Street

7. FACILITY MAILING ADDRESS: _____ Tampa FL 33619
(STREET OR P.O. BOX / CITY / STATE / ZIP)

8. CONTACT PERSON: Stan Walczynski TELEPHONE: (312) 697-8460 X2242
TITLE: Environmental Engineer
MAILING ADDRESS: Safety-Kleen Corp., 777 Big Timber Rd., Elgin, IL 60120
(STREET OR P.O. BOX / CITY / STATE / ZIP)

9. OPERATOR'S NAME: Frank Taylor TELEPHONE: (813) 870-2030

10. OPERATOR'S ADDRESS: 24th Ave. & 54th St. Tampa FL 33619
(STREET OR P.O. BOX / CITY / STATE / ZIP)

11. FACILITY OWNER'S NAME: Gordon Burnam TELEPHONE: ( )

12. FACILITY OWNER'S ADDRESS: P.O. Box 4 Columbia MO 65205
(STREET OR P.O. BOX / CITY / STATE / ZIP)

13. LEGAL STRUCTURE: [X] CORPORATION [ ] NON-PROFIT CORPORATION [ ] PARTNERSHIP
[ ] INDIVIDUAL [ ] LOCAL GOVERNMENT [ ] STATE GOVERNMENT [ ] FEDERAL GOVERNMENT
[ ] OTHER _____

14. IF AN INDIVIDUAL, PARTNERSHIP, OR BUSINESS IS PERFORMED UNDER AN ASSUMED NAME, SPECIFY COUNTY AND STATE WHERE NAME IS REGISTERED. COUNTY: _____ STATE N/A

15. IF A CORPORATION, INDICATE STATE OF INCORPORATION Wisconsin

RECEIVED
APR 25 1988
HAZARDOUS WASTE

I.D.2.a-1 DESCRIPTION OF THE BUSINESS

The Safety-Kleen Corp. of Elgin, Illinois, is an international service-oriented company whose customers are primarily engaged in automotive repair and industrial maintenance. Since 1968, we have been offering a leasing service for hydrocarbon and chlorinated solvents and small parts washing equipment. A unique feature of our business concept is that the solvent is produced by us through recycling the used solvent that we lease to our customers. Approximately two-thirds of the clean solvent we lease has been previously used by our customers.

The Safety-Kleen parts washers together with the solvents are leased to customers, and the leasing charge includes regularly scheduled solvent changes and machine maintenance. Our business is conducted from local service centers (sales branches) located in 48 states domestically that warehouse the products and equipment required to service the customers in their sales areas. On a regular basis, our service representatives furnish clean solvent to our customers, pick up the used solvent and assure that the leased equipment is in good working order. In 1979 we expanded the scope of our operations to make our solvent leasing service available to owners of parts cleaning equipment, regardless of manufacturer, using our types of solvents.

Basically, Safety-Kleen handles two types of parts washer solvents: a mineral spirits solvent and a special blend of chlorinated and water-phase solvent (immersion cleaner). The solvents are distributed and collected by our service

representatives in covered drums and transported in specially equipped, enclosed route trucks. The clean solvents are distributed from and the used solvents are returned to the service center where there are separate aboveground storage tanks for the clean and used mineral spirits and warehouse space for the drums of both clean and used immersion cleaner.

In our commercial leasing service, which comprises the bulk of our business, the quantity of used solvent collected from each machine serviced usually ranges from five to fifteen gallons. The solvent is contained in partially filled 16 and 30 gallon drums which double as the solvent reservoir of the parts washer.

Periodically, a company truck is dispatched from one of our seven nation-wide solvent regeneration facilities to the service center to deliver a load of clean solvent and pick up a load of used solvent. The mineral spirits are transported in bulk tank trucks between the service centers and the regeneration centers, and the chlorinated solvent remains in the covered drums during transfers between the service centers and the regeneration centers. About 97 percent of the solvent we handle in the parts washer business is mineral spirits, while the balance is immersion cleaner.

Our solvent cycle is essentially a closed loop going from the service center to the customer, from the customer to the service center, from the service center to the regeneration center, and

I.D. 2.6-1 DESCRIPTION OF WASTES

Several types of waste result from the servicing of Safety-Kleen customers and the maintenance of the service center. Analytical data for the wastes and Material Safety Data Sheets follow this chapter.

Wastes Resulting From the Parts Washer Service

Spent mineral spirits from parts washers is accumulated in a 15,000 gallon aboveground storage tank via the return and fill station. 16- and 30-gallon drums containing seven and twelve gallons of solvent, respectively, are poured into a dumpster at the return and fill station which in turn empties into the tank. This waste handling method results in three types of mineral spirits waste:

a. **Spent mineral spirits solvent**--The spent mineral spirits solvent is removed from the tank by a tanker truck on a scheduled basis. About 6,000-7,000 gallons are removed every two weeks. This waste is ignitable (D001) and EP Toxic (D008). In 1986, the Tampa service center shipped about 175,000 gallons of spent solvent to the Safety-Kleen recycle center in Lexington, South Carolina.

b. **Bottom sediment in the tank**--Approximately once every two years, it is necessary to remove sediment and other heavy material from the bottom of the tank. A Safety-Kleen vacuum truck is used for this purpose and can collect up to 4,000 gallons of this waste for

reclamation. The sediment is ignitable (D001) and EP Toxic (D006 and D008).

c. **Dumpster sediment**--Sediment also accumulates in the bottom of the dumpsters in the return and fill station. This sediment is removed manually with a shovel, drummed and the drums are stacked two-high in the drum storage area of the warehouse. About ten gallons is stored in each 16-gallon drum and the drum is color-coded (red) to indicate its contents. The chemical composition of this waste is analogous to that of the bottom sediment from the tank. In 1986, about 2,000 gallons of this waste were shipped to Safety-Kleen's Lexington, South Carolina recycle center for reclamation. It is estimated that 12,000 gallons will be shipped from the accumulation center annually.

Immersion cleaner remains in the drum in which it was originally used until it is received at the recycle center. Drums containing about four and one-half gallons of spent solvents are stacked two-high in the drum storage areas of the warehouses. The immersion cleaner contains chlorinated solvents (F002) and cresylic acid (F004) and the drums are color-coded gray. In 1986, about 5,400 gallons of these solvents were shipped to the Lexington, South Carolina recycle center for reclamation. It is estimated that more than 20,000 gallons will be shipped from the accumulation center on an annual basis.

Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of spent filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are

packaged on the customer's premises in 30- and 16-gallon drums, in polyethylene filtre tubes and in lined boxes. The containers are then palletized, stacked two-high and placed in the drum storage areas of the warehouses. While approximately 80% of the dry cleaning solvent used is perchloroethylene (F002), about 17% is mineral spirits, (D001) and the remaining 3% is trichloro-trifluoroethane (F002). In 1986, over 20,000 gallons of dry cleaning wastes were shipped to the Safety-Kleen recycle center in Lexington, South Carolina. It is estimated that 150,000 gallons will be shipped from the accumulation center on an annual basis.

Paint Wastes

Paint wastes consist of various lacquer thinners (D001, F003, and F005) and paints (D006, D007 and D008). The waste is collected in black 5-gallon pails and in 16-gallon drums at the customer's place of business and the containers are then palletized and stored in the drum storage area of the warehouse. It is anticipated that this facility will ship 14,300 gallons of paint waste to a reclaimer annually and the accumulation center will ship 57,000 gallons annually.

Industrial Solvent Wastes

Seven solvents are collected from industrial solvent users: mineral spirits (D001, D006, D008); 1,1,1-trichloroethylene (F001, F002); per-and trichloroethylene (F001, F002); methylene chloride (F001, F002); 1,1,2-trichloro-1,2,2-trifluoroethane (F001, F002) and lacquer thinners (D001, F003, F005). These wastes are shipped in 55-gallon drums and are stored on pallets. It is anticipated that 38,600 gallons of spent mineral spirits, 157,600 gallons of

spent halogenated solvents and 60,400 gallons of spent lacquer thinners will be shipped from the accumulation center to a reclaimer on an annual basis. Acceptance criteria for these solvents follow this chapter.

I.D.4.a-1 WASTE ANALYSIS - GENERAL

The used solvents are the primary feed stocks for regeneration of Safety-Kleen's clean solvent products. Quality control of the used solvents is critical to the recycle center to safely recycle the material and to assure quality products. The closed loop system of managing the clean and used solvents is therefore designed to minimize the possibility of product contamination from outside sources. Within the closed loop, ownership of the material remains with Safety-Kleen and the product is leased to the customer.

Prior to leasing a parts cleaning machine, the customer's business activity is reviewed. Where the possibility exists for contamination of the mineral spirits, i.e., pesticide, herbicide, pharmaceutical, printing operations, the process is reviewed to insure that contamination of the product does not occur.

Sales representatives are instructed to visually examine the spent product when the machines are serviced, noting the consistency and volume of material recovered. The odor of the material is also noted to detect the presence of volatile materials such as gasoline. If a different odor is noted, the customer is warned that the material must not be contaminated. If the problems is not corrected, the machine is removed from the customer.

The dry cleaning and paint wastes are collected from facilities where a single process is managed at the facility and possibility of cross contamination by other chemicals or wastes is minimal.

The contents of the drums are verified by the sales representative when he services the customer and, comparable to the handling of immersion cleaner, the drums are not reopened until they reach the recycle center.

Prior to accepting an industrial solvents customer's waste for recycling, a sample is drawn and analyzed at Safety-Kleen's laboratory in Elgin, Illinois. The criteria used to determine whether a waste is acceptable for recycling are in Appendix D. The drums are not opened until they reach the recycle center. Samples of the waste collected at the recycle center and the contents of the drum are either verified and accepted or rejected. Rejected wastes are either returned to the customer or properly disposed of.

I.D.4.a-2 WASTE ANALYSIS AT THE SERVICE CENTER

The Safety-Kleen Service Center in Tampa services about 3,000 small quantity waste generator customers and over 33,000 containers of used solvents were delivered to the facility in 1986. With such large numbers of waste generators, performing waste analyses from each or selected generating point would become very costly and unmanageable.

Furthermore, all the materials collected at the Service Center and subsequently shipped to the Recycle Center are either managed at all times in the closed loop system or will be collected from a single generator with a single-purpose process. General nature and quality of these materials are known and Safety-Kleen's operating experiences have shown that the collected materials do not usually

deviate from expectation and impact the recycling process. As an additional safe-guard, Safety-Kleen's personnel are instructed to inspect all materials before returning them to the Service Centers.

For these reasons, all waste analyses will be performed at the Recycle Center, as described in Section, I.D.4.a-3.

In accordance with 40 CFR 264.13(a), Safety-Kleen will also perform physical and chemical analysis of a waste stream when it is notified or has reason to believe that the process or operation generating the waste has changed, or when the result of inspection indicates that the waste to be collected does not match the waste designated. It is Safety-Kleen's practice that suspected non-conforming material must not be accepted until an analysis has been done or the material must be rejected.

I.D.4.a-3 WASTE ANALYSES AT THE RECYCLE CENTER

Analyses performed at the Recycle Centers are undertaken to safeguard the recycling process and to assure the product quality. The following Exhibits summarize a typical waste analysis plan at the Recycle Center related to the hazardous materials returned from the Service Center:

Exhibit I.D.4-11 Parameters and Rationale for Hazardous Waste Selection

Exhibit I.D.4-12 Parameters and Test Methods

Exhibit I.D.4-13 Methods Used to Sample Hazardous Wastes

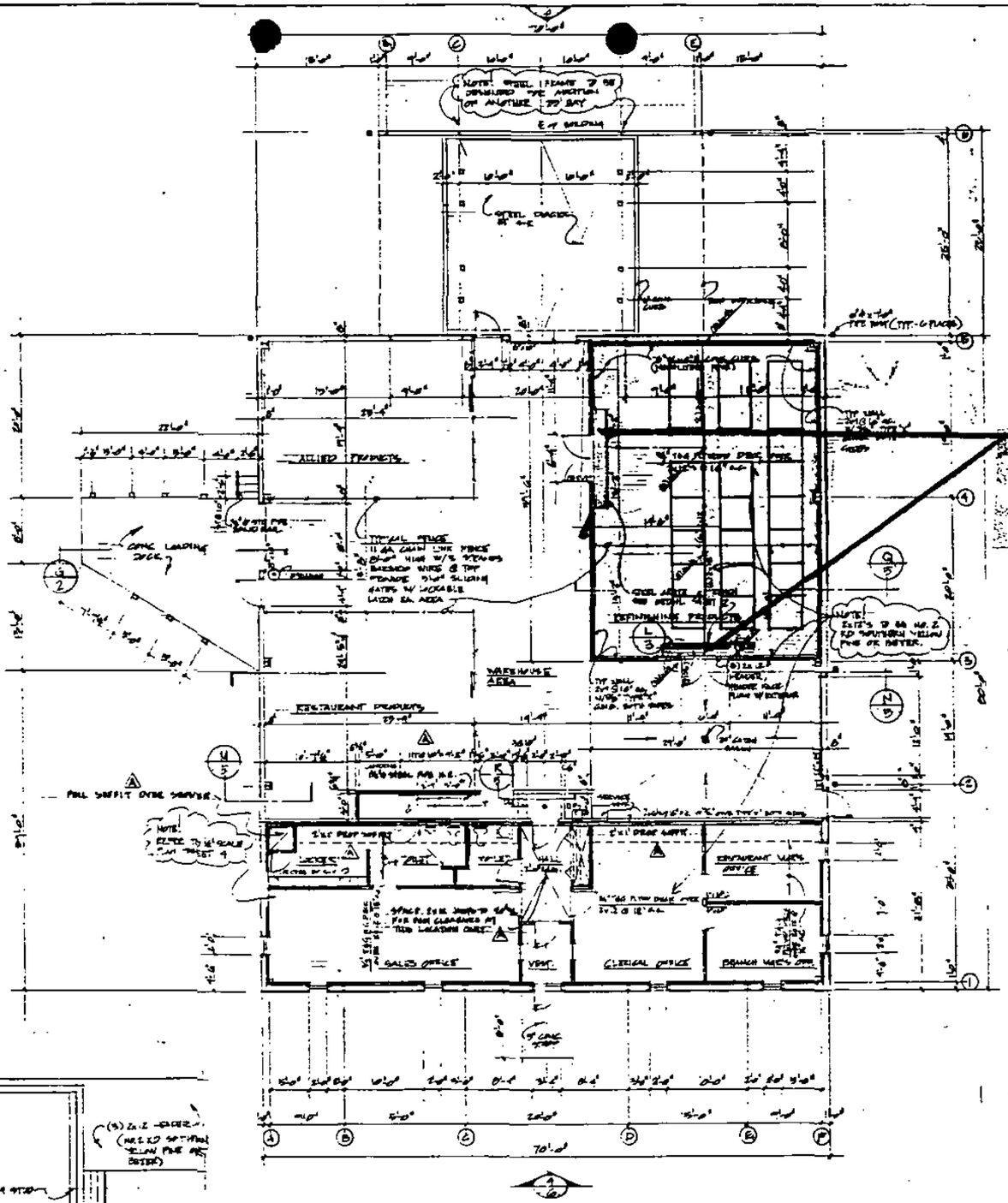
Exhibit I.D.4-14 Frequency of Analysis

A profile of the paint waste is in Exhibit 2-8a. It will be reanalyzed when the reclaimer to whom it is shipped requests reanalysis or when a change in the use of the product occurs.

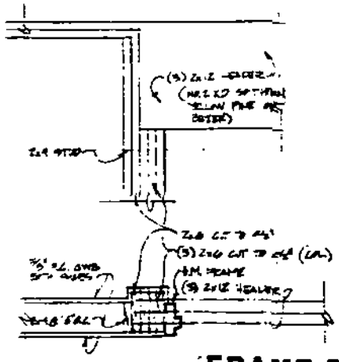
I.D.4.a-4 WASTE ANALYSIS PLAN UPDATE

This waste analysis plan will be modified if a new waste product is brought in and if sampling and material management methods change.

Monitoring and revision of the plan status is the responsibility of Environmental Department staff at Safety-Kleen Corporate Office in Elgin, Illinois.



FLOOR PLAN



FRAME DETAIL

Two Trenches:

2 x 11' 9 1/4" L x 19" W x 2' D x 7.481 gal./cf = 623.7 gallons

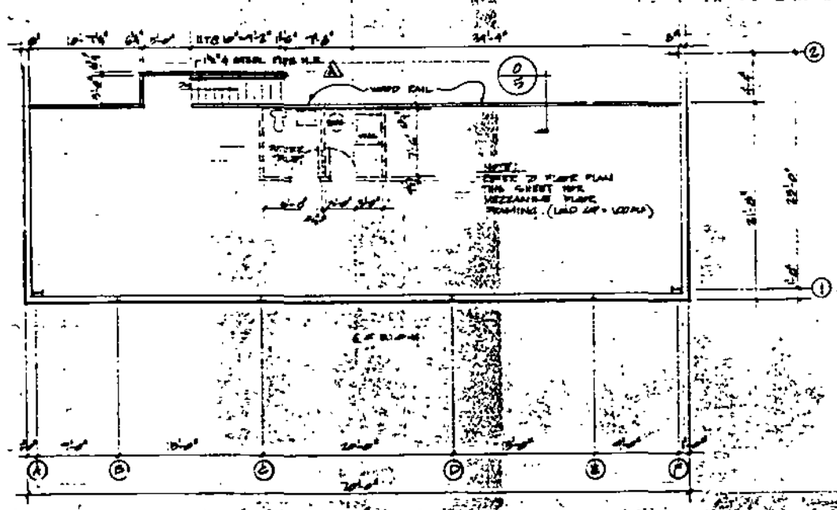
Amount to Be Stored:

43 single or double stacked pallets x 9 drums/pallet x 16 gallons/drum = 6,192 gallons

CONSTRUCTION CONTRACT REQUIREMENTS

1. AIA General Conditions dated 1976 shall form a part of this contract.
2. Contractors shall secure and pay for all permits, inspections, licenses, etc. related to their work.
3. Each contractor shall submit to the Owner insurance policies, minimum $500,000.00, which comply with Safety-Kleen insurance requirements:
   a. Liability
   b. Workmen's Compensation
   c. Automobile
   d. Hold Harmless Clause to Owner and Engineer

   These must be submitted before starting work.
4. Owner shall secure and pay for Builder's Risk insurance.
5. Equal opportunity policies of employment must be maintained.
6. Each contractor shall visit site and verify all existing conditions.
7. Any adjoining property damaged during construction shall be repaired and restored to original condition by contractor responsible for the damage at his own expense.
8. All contractors shall remove their own rubbish and debris from the site as it accumulates and transfer same to a location determined by the Owner.
9. All work shall comply with OSHA, State and Local codes.
10. All work shall guaranteed for one year after final acceptance by Owner and Engineer.



MEZZANINE PLAN

Exhibit I.D.5-2a

Safety-Kleen Corp.

80'x70'x16' SERVICE CENTER
PLAN & MECH. PLANS

3

SK SERVICE CENTER BRANCH

D12091

Exhibit I.D.5-2b

SAFETY-KLEEN CORPORATION

TAMPA, FLORIDA FACILITY

SECONDARY CONTAINMENT CALCULATIONS

Accumulation Center Container Storage Area:

Trench A:

40'4" L x 1'9" W x 1'9" D* x 7.481 gal./cf = 924 gal.

Trench B:

(17'8" L x 1'9" W x 1'6" D + 22'8" L x 1'9" W x 1'9" D)
x 7.481 gal./cf = 866

Two Sumps (c):

2 x 1'6" x 1'6" x 3'6" D x 7.481 gal./cf = 118

Trench D:

72' L x 1'9" W x 2' D x 7.481 gal./cf = 1,885

Trench E:

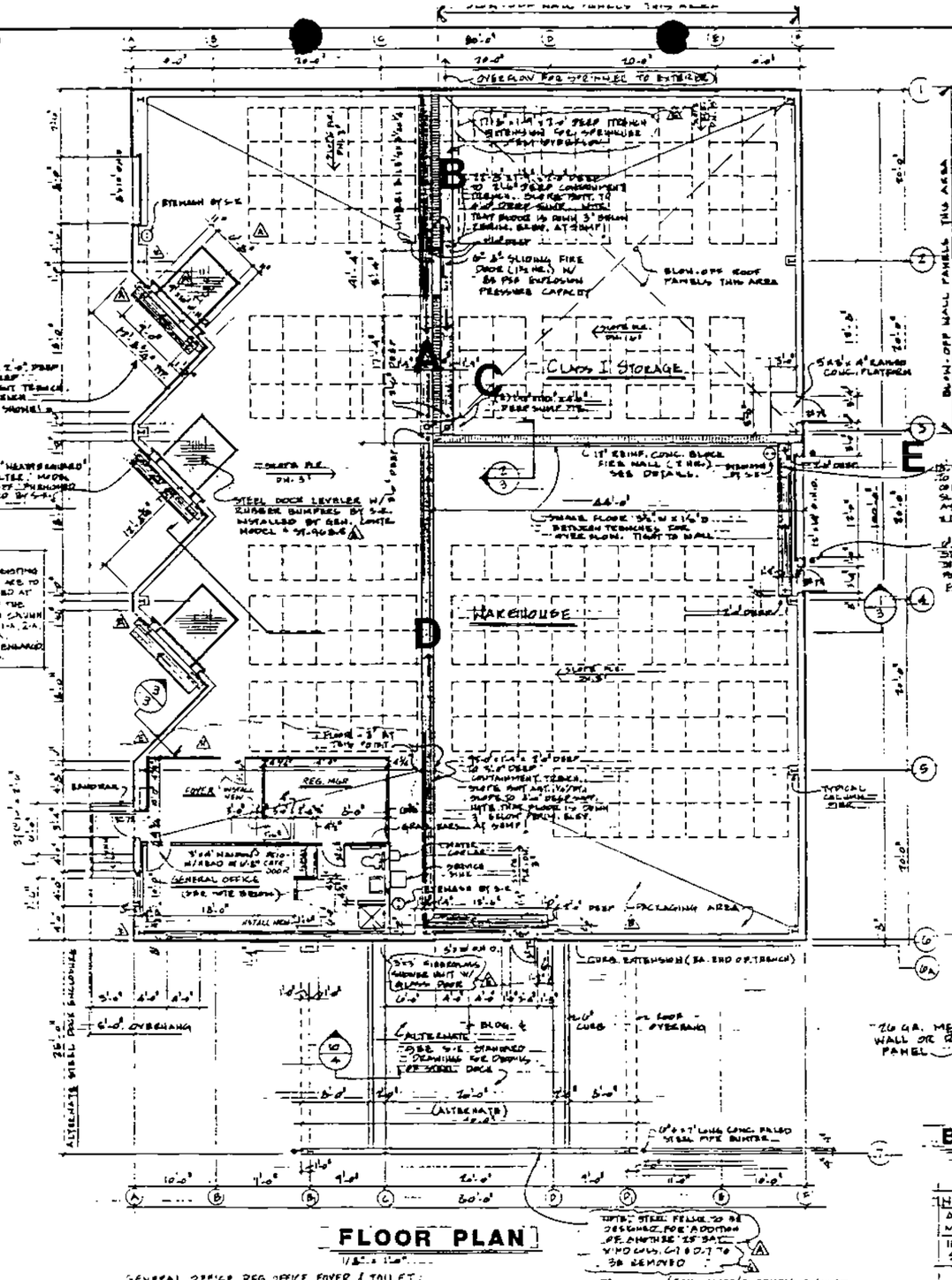
18'2" L x 1'9" W x 2' 1-1/2" D x 7.481 gal./cf = 505

Amount Held in Trenches = 4,298 gal.

Amount to be Stored:

298 double-stacked pallets x 9 drums/pallet x 16 gallons/drum = 42,912 gal.

* All trenches, except for trench E, will overflow when six inches from the top. Trench E will fill to within one and one half inch of the top before overflowing.



FLOOR PLAN

1/8" = 1'-0"

TOTAL STEEL FRAME TO BE DESIGNED FOR ADDITION OF ANOTHER 25' BAY. WIND COLS. G1 & G7 TO BE REMOVED

GENERAL OFFICE, REG OFFICE FOYER & TOILET:

1. WALLS 2x4 @ 16" OC. W/ 5/8" GYPSUM BOARD BOTH SIDES INTERIOR & ONE SIDE EXTERIOR. TWO COATS PAINT (SEMI-GLOSS/EGGSHELL COLOR).
2. CEILING AT 8'-0" CLEAR. 2x8 JOISTS IN SHORT DIRECTION @ 16" OC. 3/4" T&G PLWD. DECK & 5/8" GYPSUM BOARD CEILING. TWO COATS PAINT (SEMI-GLOSS/EGGSHELL COLOR).
3. FLOORS TO HAVE VINYL TILE & BASE. CLOSET TO HAVE ROD & HAT SHELF. TOILET TO HAVE 1½"ϕ x 42" LONG SIDE GRAB BAR & 1½"ϕ x 24" LONG REAR GRAB BAR, BOTH MTD. 33" ABOVE FLOOR.
4. EXTERIOR WINDOWS - FIXED UNITS, BRONZE OR BROWN ALUMINUM & 5/8" INSUL. GLASS.
5. INTERIOR WINDOW TO BE DOUBLE-STRENGTH, DIRECT SET IN WOOD STOPS.
6. DOORS TO BE SOLID CORE BIRCH VENEER IN WOOD FRAMES W/ 3 HINGES PER DOOR.
7. PASSAGE DOOR HARDWARE AS FOLLOWS:
   1. ALL EXTERIOR PASSDOORS TO HAVE 3 HINGES, KEYED PASSAGE LOCKSET ALWAYS OPERABLE FROM INSIDE, KEYED DEADBOLT W/ INTERNAL THUMBLATCH. SEE S-K FOR KEYING.
   2. OFFICE PASSDOOR TO HAVE 3 HINGES, KEYED PASSAGE LOCKSET ALWAYS OPERABLE FROM INSIDE. SEE S-K FOR KEYING.
   3. TOILET PASSDOOR TO HAVE 3 HINGES, KEYED PASSAGE LOCKSET ALWAYS OPERABLE FROM INSIDE. DOOR CLOSER. SEE S-K FOR KEYING.
8. TOILET/SHOWER ROOM TO BE PAINTED ENTIRELY WITH EPOXY PAINT (SEMI-GLOSS/EGGSHELL COLOR).

BUILDING SECTION

IT IS MANDATORY THAT ALL CURBS BE POURED MONOLITHICALLY WITH CONCRETE FLOORS

MASONRY WALL DETAIL

1/2" = 1'-0"

FOUNDATION DETAIL

1/2" = 1'-0"

BLOW-OFF PANEL DETAIL

3" = 1'-0"

NOTE:
ALL CONSTRUCTION CHANGES OR REVISIONS MUST BE SUBMITTED TO SAFETY-KLEEN CORP. IN WRITING & MUST BE APPROVED BY SAFETY-KLEEN CORP. IN WRITING.

BLOW-OUT PANEL FASTENER INFORMATION

1. Wall and roof panels selected to blow off in the event of an explosion or other pressure build-up are indicated on the building floor plan.

2. These panels are to be installed using Pressure Release Fasteners as approved by Factory Mutual Research Corporation.

3. Each panel to frame fastener is to be so positioned as to hold down five square feet of panel or slightly greater.

4. The selected wall and roof panels are designed to blow loose at 20 PSF Internal Pressure. Use #14 x 1" long Hex head, type "AB" point stainless steel type 410 self-tapping screws with Yellow Code aluminum washers. These are 0.02" thick x 0.625" diameter and have a release force of 102# per fastener. Panel to panel roof stitching may be done with standard fasteners. SEE #10.

5. All Pressure Release Fasteners are used with a 5/64" thick neoprene or EPDM washer bonded to the aluminum washer.

6. The Pressure Release Fasteners are to be installed using screw guns with slip clutches. These fasteners are to be tightened up snug with the centering devices acting as stops. These fasteners must not be overdriven.

7. In general, for the "Pressure Release Fastener" type of wall, 1/2" diameter holes and metal spacer washers are required.

8. Breakaway trim must be used at eave lines and around door jambs. No trim is to be used at the base of the building to permit a clean breakaway.

9. DIMENSIONS OF 'CLASS I STORAGE' AREA MAY NOT BE CHANGED WITHOUT SUBSTANTIAL ENGINEERING REVISIONS.

10. AT PERIMETER OF FULL SIZE FIREWALL BLOW-OFF PANEL SECTION, USE #12 x 1" LONG HEX HEAD TYPE "AB" POINT STAINLESS STEEL TYPE 410 SELF-TAPPING SCREWS WITH GREEN CODE ALUMINUM WASHERS. THESE ARE .013" THICK x .75" DIAMETER AND HAVE A RELEASE FORCE OF 57.5# PER FASTENER.

SEE SHEET D11999 FOR:
1- GENERAL CONSTRUCTION NOTES.
2- GENERAL CONSTRUCTION SPECIFICATIONS

Exhibit I.D.5-2b

3

△6 CHG 2'-½" @ 1'-4" DIM.	[illegible]	1-14-86
△5 ADDED FOR ACSA 265	[illegible]	1-9-86
△4 [illegible]	[illegible]	11-18-85
[illegible]	[illegible]	1-9-85

safety-kleen corp.

TYPICAL ACCUMULATION CENTER

SCALE: AS NOTED
APPROVED BY:
DRAWN BY: [illegible]
DATE: 10-11-85
REVISED: 12-15-85

FLOOR PLAN, SECTION AND DETAILS

FOR ACCUMULATION CENTER:
TAMPA, FLA.

D11997

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

TAMPA, FL SERVICE CENTER (3-163-01)

24TH AVENUE AND 54TH STREET

SAFETY-KLEEN CORP.

I.E.2.a GENERAL INFORMATION

1. Purpose

The contingency plan and emergency procedures are designed to insure that Safety-Kleen is prepared to address emergency situations rapidly and in such a manner as to prevent or minimize hazards to human health or the environment from fire, explosion, or any unplanned sudden or non-sudden release of hazardous material constituents to the air, soil, surface water, or ground water at the facility.

The provisions of the contingency plan are carried out immediately whenever there is a fire, explosion or release of hazardous materials which could threaten human health or the environment, and according to the procedures contained in this plan which describe the actions facility personnel shall take in response to an emergency.

2. General Description of Activities

The business activities carried on from the Service Center relate to the leasing and servicing of Safety-Kleen Parts Cleaning Equipment, including the provision of a solvent leasing service for the customers. The clean solvents are

distributed from and the used solvents are returned to the service center, where separate aboveground storage tanks are utilized for the storage of clean and used mineral spirits (solvent) and warehouse space is designated for the storage of drums of both clean and used immersion cleaner and dry cleaning wastes (chlorinated solvent).

The mineral spirits are transported in covered, 16-gallon and 30-gallon drums between the Service Center and customers. Upon returning to the Service Center, the used mineral spirits are transferred from the drums into a wet dumpster (solvent return receptacle) in which coarse solids in the mineral spirits are retained. The used mineral spirits in the wet dumpster flows into a 15,000-gallon aboveground tank for storage. The used mineral spirits solvent is picked up periodically by a bulk tank truck from our Recycle Center which also at the same time delivers a load of clean mineral spirits. The sludge in the wet dumpster is periodically cleaned out, drummed, and temporarily stored in the drum storage area for later shipment to the Recycle Center for reclamation.

The immersion cleaner remains in 16-gallon, covered drums at all times during transportation and storage. The solvent is never transferred to another container while being used by the customers and in storage at the Service Center. The dry cleaning wastes are picked up at commercial dry cleaning establishments in 30- and 16-gallon drums, in boxes and in polyethylene filter tubes. These containers are stored

SAFETY-KLEEN CORP.
Field Spill Report Form

Report all spills to the Safety-Kleen Environment, Health and Safety Dept. immediately.

1. Facility Number and Location _____
2. Date of spill _____ Time _____ a.m./p.m.
3. Report from: _____ Title _____
4. Location of spill: _____
5. Material spilled: _____ Quantity _____
6. Any injuries or property damage? Yes or No If yes, explain. _____
7. Cause of spill. _____
8. Was the spilled material contained? Yes or No If yes, how? If no, describe the scene in detail (including nearby surface water or sewers and distance to them). _____
9. Describe clean-up action taken. _____
10. Person involved in incident. _____
11. Vehicle # _____ Company _____
12. List any emergency agencies at scene. _____
13. Are there homes or businesses nearby? Yes or No Distance? _____
14. Notification:

	S-K Environment Dept.	Nat'l. Response Center	State
	1-800-323-5740 1-312-888-4660 (24 hr.)	1-800-424-8802	1- . .
Date/time:			
Contact name:			
Comments rec'd:			

15. Signature _____

After completing this form, file copy 1 in the Contingency Plan Section of the Environmental Manual and mail copy 2 to the SK Environment, Health and Safety Department.

Received by EHS _____

PROCESS USED FOR STORING HAZARDOUS WASTE

I.E.3.a PROCEDURE FOR SEGREGATING WASTE TYPES

The used solvents are not incompatible with each other, or with other materials handled at this facility, insofar as reactivity is concerned. However, they are the primary source of feed stock for regenerating the clean solvents. Separation of these used solvents is a standard practice at the facility.

All materials are managed in accordance with the local fire protection code and fire department recommendations.

I.E.3.b WASTE FACILITIES - DRUM STORAGE AREAS

The immersion cleaner is always contained in partially filled, 16-gallon, covered drums before, during, and after its use. Except after returning the drums to the Recycle Center or in the case of a leaking drum, the immersion cleaner is never transferred to another container. The drums containing the used immersion cleaner are returned to the Service Center and stored in a designated drum storage area before shipment to the Recycle Center.

The dry cleaning wastes are contained in 30 and 16-gallon drums, in nylon-lined, triple thickness boxes and in polyethylene filter tubes. The containers are managed similar to the used immersion cleaner drums, and contents within the drums will not be removed or processed at the Service Center. The two drum storage areas as shown on Exhibits I.D.5-2a and I.D.5-2b occupy portions of building areas

having concrete floors and berms. Both of the areas have interceptor berms. Both of the areas have interceptor trenches to form a spill containment system. The systems are free of cracks and gaps. Spills are removed by a hand-held, portable electric pump (the COMS pump), wet-dry vacuum cleaner, or sorbent materials. The capacities of the containment systems are designed to be greater than 10% of the total liquid storage capacity in the drum storage areas. Since the characteristics of the stored wastes are known, no analyses are performed for the materials collected from the containment area. All collected materials are sent to a recycling center for recycling/reclamation. The recovered materials that can not be effectively reclaimed at the recycle center will be, in turn, sent to a licensed facility for disposal.

All drums are transported, moved, and stored carefully in an upright position. The route trucks are equipped with an electric hoist to assist loading/unloading. In the warehouse area, the immersion cleaner and mineral spirits dumpster mud drums are moved with 2-wheel hand trucks and stacked by hand, and the dry cleaning wastes drums are stacked by a jib crane and moved by a pallet jack. Both the immersion cleaner and dry cleaning waste will be elevated on pallets to eliminate the possiblity of drums standing in spilled solvent. The drums are designed and constructed to be compatible with the stored material and to minimize the possibility of breakage and leaking, in accordance with the specifications which follow this chapter. Exhibits I.E.3-1 to I.E.3-4 show typical detailed construction specifications of the 16-gallon immersion cleaner drums. The containers used to store dry cleaning wastes are shown in

Exhibits 3-4a, b, c and d. Industrial solvents are stored in 55-gallon drums.

The drum storage area in the service center (Exhibit I.D. 5-2a) has secondary containment in the form of curbing and collection trenches. The two collection trenches measure 11' 9 1/4" x 2' x 1-3/4' each (623.7 gallons total). No more than 6,192 gallons of spent solvent will be stored in this area.

The accumulation center is used for the collection of containers and boxes from Safety-Kleen service centers and industrial solvents customers prior to shipment to a Safety-Kleen recycle center or an independent reclaimer. Service centers in Florida ship their containerized wastes (dumpster sediment, spent immersion cleaner, dry cleaning wastes, paint wastes and industrial solvents) to this warehouse for storage prior to reclamation.

The drum storage area in the accumulation center (Exhibit I.D. 5-2b) has secondary containment in the form of a sloped floor with trenches at the lowest point. The secondary containment will hold a minimum of 4,298 gallons; no more than 42,912 gallons will be stored in this building.

The containers will be stored in the configurations shown on the Floor Plans, Exhibit I.D. 5-2b. At least two feet of aisle space will be maintained and the drums will be stored no more than two high. Containers will be placed on pallets and moved with a forklift or pallet jack whenever possible. Otherwise, drums will be moved using a handcart.

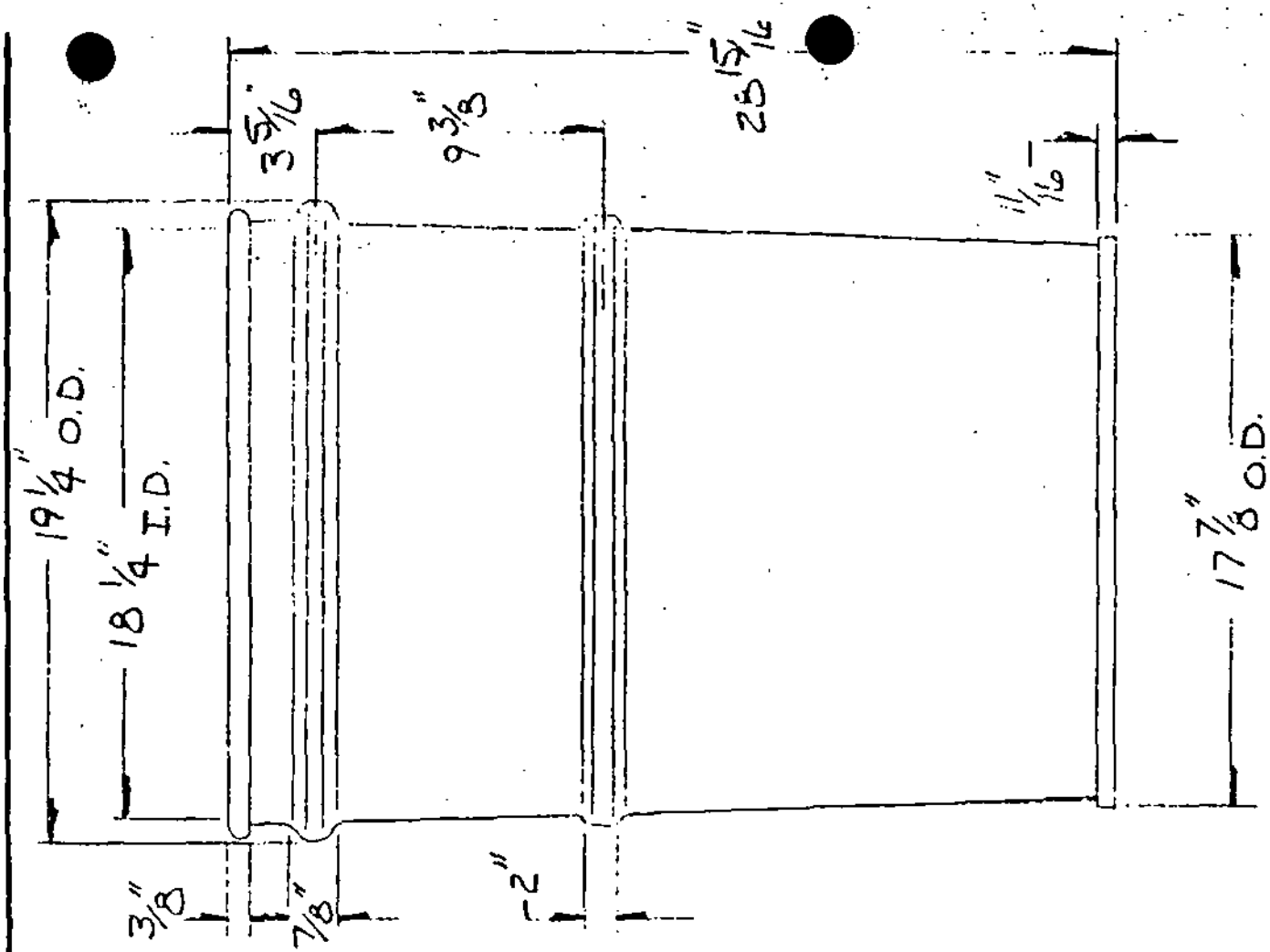
The above storage capacities (6,192 and 42,912 gallons) based on drum stacking configurations shown in Exhibits I.D.5-2a and I.D.5-2b, do not exceed the process design capacity volume presented, in Seciton III.B of the Part A permit application, Exhibit I.A.20-2.

I.E.3.c STORAGE TANKS

The facility consists of two 15,000-gallon capacity aboveground steel tanks. Used mineral spirits contained in returned drums from the customers are transferred via the wet dumpster into one of these two storage tanks, before bulk shipment to the Recycle Center. The other tank is used to store fresh Mineral Spirits solvent.

The tanks are designed and constructed to be compatible with the materials stored in it. Typical construction and installation standards for the aboveground tanks are shown in Exhibits I.E.3-5 and I.E.3-6 respectively. All tanks are vented in accordance with N.F.P.A. Standards and the tanks are to be equipped with high level alarms. The design and installation of the tank alarm system are shown in Exhibits I.E.3-7 and I.E.3-8.

The aboveground tanks are protected by a 2'6" high concrete retaining dike. Therefore, no run-on would occur and no runoff would be in contact with the wastes stored at the site and no runoff collection and management system is deemed necessary. Equipment used in the operation of the aboveground tanks for used mineral spirits will be gauges for measuring liquid levels in tanks and automatic high level alarms. A suction pump equipped with the tanker truck is used to withdraw the content from the tank. No other equipment or standby equipment are used in the operation of the aboveground tanks.



NOTES 1) MAT'L - 20 GA. (CRS)
(22 GA. CRS ALTERNATE)
2) LEAK PROOF - USE AIR TEST
(7-16. PSI).

NOV 1982
PRODUCTION
PRINT
DESTROY ALL
PREVIOUS PRINTS

Exhibit I.E.3-4c

REV	ECO	DESCRIPTION	DATE	BY
A	[illegible]	[illegible]	[illegible]	[illegible]

REVISIONS

TOLERANCE EXCEPT AS NOTED
DECIMAL ±
METRIC ±
ANGULAR ±

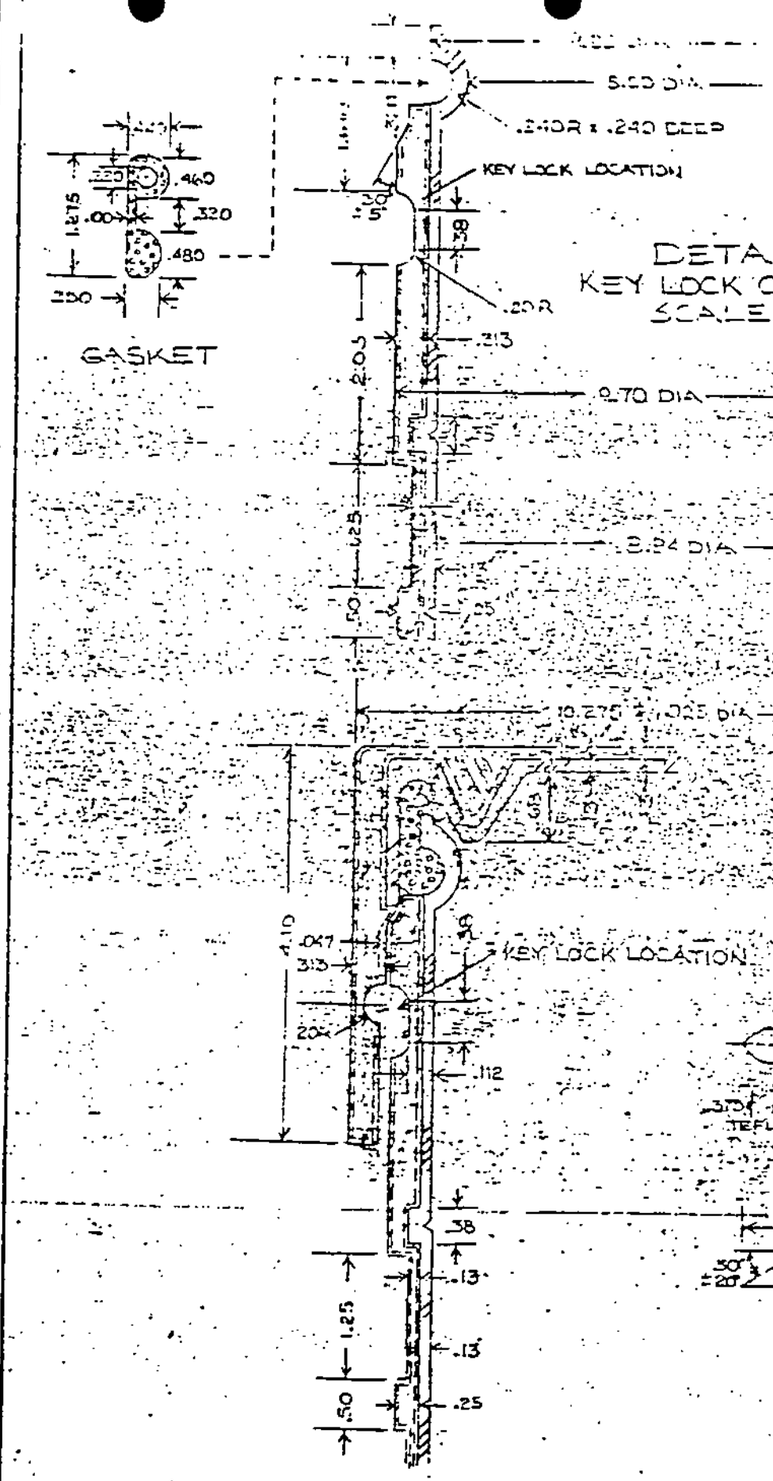
NESTING DRUM, 30 GAL.

SCALE [illegible] APPROVED BY [illegible] DRAWN BY [illegible]
DATE [illegible] REVISED

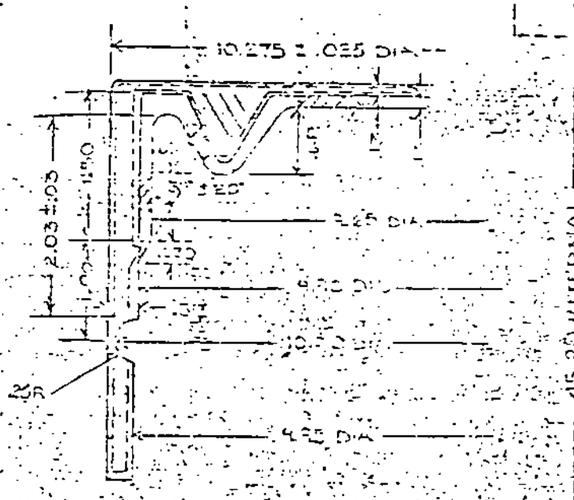
safety-kleen corp.

REV A
DRAWING NUMBER 349

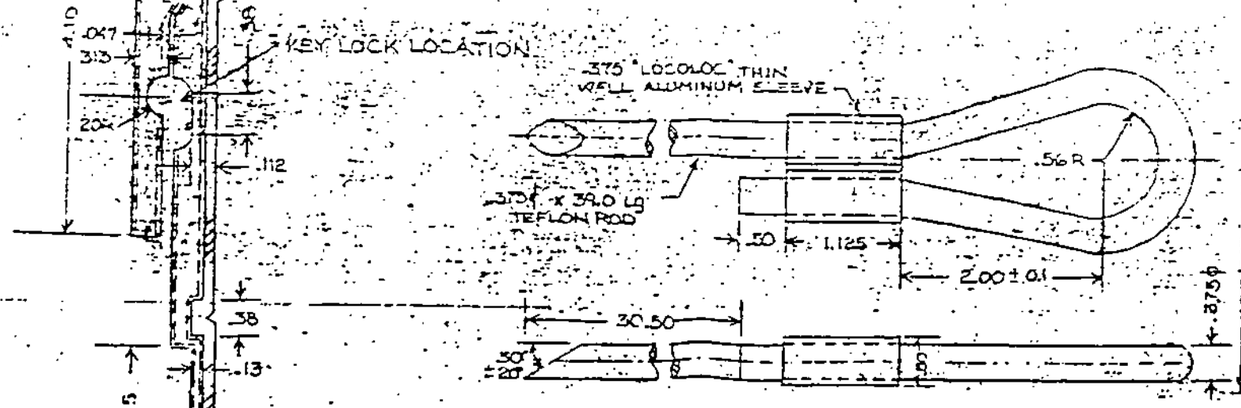
M-P INC.



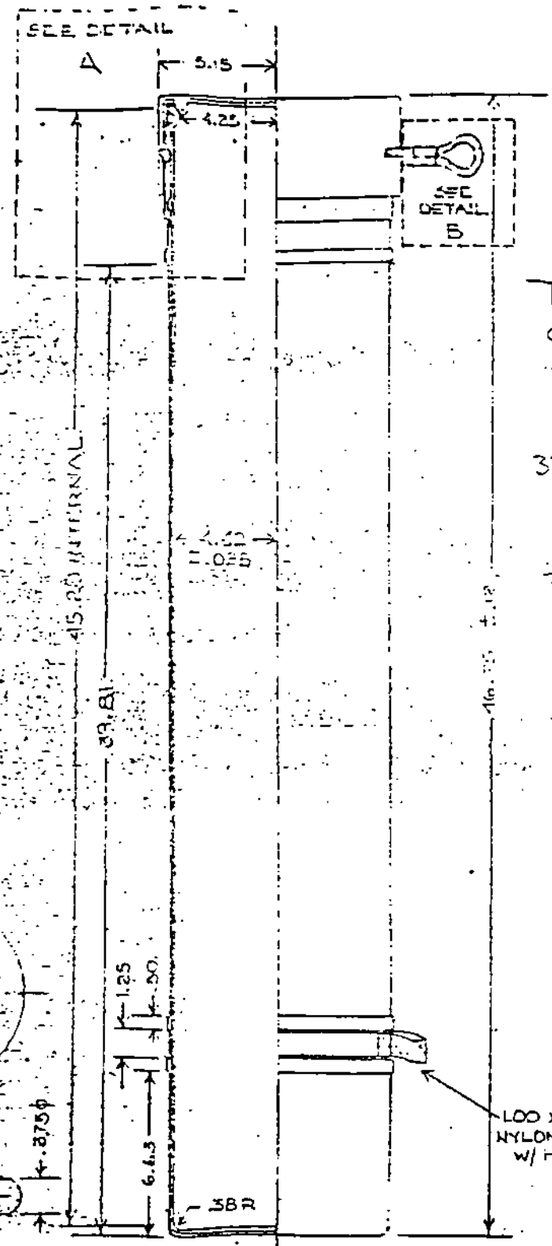
DETAIL A
KEY LOCK CLOSURE W/O LID
SCALE: FULL



DETAIL A
LID
SCALE: FULL



DETAIL A
KEY LOCK LOCATION



This assembly consists of the following SK#'s for ref.

3375 Dry Clng Cartridge tube

3376 Dry Clng Cartrid Gasket

3377 Dry Clr Cartrid Key

3378 Dry Clng Cartrid Cap (Lid) JPK 2/16

DETAIL B
KEY
SCALE: FULL

PRELIMINARY

Exhibit I.E.3-4d
(1 of 4 pages)

DIMENSIONS IN INCHES.
TOLERANCES AS SHOWN BEL
UNLESS OTHERWISE SPECIFIE
.X ± 0.5 .XX .05 . .XXX ±.005

FRP

BONDICO, INC.

SCALE: 1/4
DATE: 12-10-87

605 DEV-TEST

BONDICO

Exhibit I.E.3-4d
(2 of 4 pages)

February 17,1988

Mr. John Kusz
Safety-Kleen Corp.
777 Big Timber Road
Elgin, IL 60120

Dear John,

As requested, enclosed is a summary of the testing performed on the dry cleaning cartridge tube. A copy of the March 1987 letter from the DOT is included as well.

Please let me know if any additional information is needed.

Sincerely Yours,

BONDICO, INC.

J. Tad Heyman
National Sales Manager

DRY CLEANING CARTRIDGE CONTAINER
Test Result Summary

	DOT SPEC.	TEST	DESCRIPTION	DATE	TOTAL # TESTS	RESULTS
1)	Spec. 35	4' Flat Bottom Drop	Fully loaded (95 lb. gross wt.)container; free fall drop onto 6" concrete slab.	Sept. 1986	12	No damage. No leakage. Passed.
2)	Spec. 35	4' Bottom Edge Drop	Same as above.	Sept. 1986	12	No damage. No leakage. Passed.
3)	Spec. 35	4' Closure Edge Drop	Same as above. Original poly-ethylene gasket used.	Sept. 1986	12	No damage. No measurable deflection of lid/container assembly. No leakage upon impact.Three units experienced slight loss of liquid after initial impact.
			Same as above. S-K gasket used.	Sept. 1987	10	No damage. No measurable deflection of lid/container assembly. No leakage. Passed.
4)	Spec. 35	Static Compression	Compression load of 1000 lbs. is applied vertically to empty container for 24 hrs.	Sept. 1986	3	No measurable deflection of top to bottom dimension. Passed.
5)	Spec. 7A	Penetration	16 lb. steel bar is dropped from 3.3' to impact weakest point of container.	Sept. 1986	9	No damage. No leakage. Passed.
6)	"Tip Over" Impact		Fully loaded unit is permitted to fall onto its side from vertical position onto concrete. Polyethylene gasket.	Sept. 1986	26	No damage. No leakage. Passed.
			Same as above. S-K gasket.	Sept. 1987	57	No damage. No leakage. Passed

Bondico, Inc.
2/17/88

US Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 16 1987

Mr. Mark D. Shaw
Vice President
Bondico, Inc.
2410 Silver Street
Jacksonville, Florida 32206

Dear Mr. Shaw:

This is in response to your letter dated February 6, 1987, regarding the acceptability of your "strong, tight" container.

Based on the information you have provided, your container appears adequate to satisfy the requirements of 49 CFR 173.24 and may be used as a packaging for Perchloroethylene (Tetrachloroethylene), UN 1897. We apologize for the delay of our reply.

Sincerely,

Thomas J. Charlton

Thomas J. Charlton
Chief, Standards Division
Office of Hazardous Materials
Transportation

activities These records verify that the site security and inspection plans are properly carried out and corrective actions, when necessary, are taken.

I.E.4.e CORRECTIVE ACTION

Any discrepancies or deficiencies found during the routine inspection must be corrected on a most expedient basis to insure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or an accident has already occurred, remedial action must be taken immediately. The Branch Manager of the Service Center has the overall responsibility for remedying any discrepancies found during the routine inspection.

I.E.4.f AVAILABLE EQUIPMENT AND COMMUNICATION

Due to the small size of the facility, routine communication is accomplished by voice communication without the need for an intercom or alarm. Telephones are used in case of a spill or fire emergency to summon assistance. Emergency numbers are posted by each phone in the office. Included with these phone numbers is the 24-hour spill number which connects to Corporate Environmental Department at the corporate office in Elgin, Illinois. See Exhibits I.D.5-2a and I.D.5-2b for locations of telephones, fire extinguishers, the first aid kit, and the emergency eyewash. Other emergency response equipment are kept in a small storage area inside the warehouse near the return/fill dock; the equipment includes mops and bucket, soap, shovels, and spill sorbent pads. Rubber gloves, boots, pumps, and wet/dry vacuum cleaner are stored in an emergency supply area near the drum storage area. Exhibit I.E.4-2 summarizes the type,

quantity, storage location, and capabilities of all the emergency equipment available at this Service Center. The city of Tampa supplies water for domestic use, decontamination, and fire fighting. Adequate aisle space is provided in the drum storage area for movement and emergency situation.

The equipment available at the Service Center for emergency situations has shown to be adequate for most cases. Large or serious emergency situations have been assisted by local emergency response teams or special emergency response or cleanup contractors. The facility is constructed and operated in accordance with National Fire Protection Association (NFPA) standards and applicable local ordinances. Applicable health and safety standards are also observed at the Service Center. A recent air quality survey conducted by an independent industrial hygenist at the Los Angeles Service Center has shown that air quality at a typical Service Center is within Threshold Limit Values (TLV) as specified by OSHA and local air pollution control criteria and no respirator or special protection unit is deemed mandatory.

I.E.4.g CONTAINMENT SYSTEM

All containers of clean and used solvent are stored in the container (drum) storage areas (Exhibit I.D.5-2a and I.D.5-2b) prior to transport. The current storage areas are totally contained by concrete floors, sumps and berms. The containment systems are free of cracks and gaps. All drums are stored on pallets.

In each drum storage area, drums are handled with a hand-truck free of sharp points and stacked by hand. Every time a drum is moved, a slight chance exists that it could possibly be tipped over, dropped or punctured. To minimize the possibility of the spillage of under those conditions, the drums are tightly covered and kept in an upright position. A small portable electric pump is available to quickly transfer the liquid from any leaking container into another safe drum. Each route truck is equipped with an electric hoist. This hoist is used in the loading/unloading operation to minimize chances for spillage and/or employee injury. The trucks shipping containers between the Recycle Center and Service Center have lift gates for drum loading/unloading.

All drums are covered during movement and are located within diked, concrete floored areas to contain any potential spill. The small quantities of waste on-site at any time can be cleaned up immediately through the use of hand-held electric pumps, mops, wet/dry vacuums, or sorbent materials should a spill occur. Any spilled waste will be drummed and sent for recycling/reclamation.

All drummed waste movement is done manually or by a pallet jack and power outages are not expected to threaten employee safety.

Employee training emphasizes the importance of inspection, maintenance, personal safety, and reporting of conditions with pollution incident potential. This training, containment system and immediate clean-up of any spills will eliminate chance of

contamination of ground water and surface water around and beneath the site region. Surface run off at the site will not come in contact with storage in the waste management area.

I.E.4.h INCOMPATIBLE WASTES

Reactive and/or incompatible waste is not handled at the facility. All waste or products are kept away from ignitable sources when being handled. The employees confine smoking or open flame to designated safe areas.

Materials are handled so that they do not:

a. Generate extreme heat or pressure, fire or explosion, or violent reaction.
b. Product uncontrolled toxic mists, fumes, dusts or gasses in sufficient quantities to threaten human health.
c. Produce uncontrolled fires or gases in sufficient quantities to pose a risk of fire or explosion.
d. Damage the structural integrity of the Safety-Kleen facility.

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

I.E.4-i RESPONSIBILITY FOR PREPAREDNESS AND PREVENTION PLAN

The preparedness and prevention plan as well as the training of employees for its implementation is the responsibility of the Branch

INSPECTION LOG SHEET FOR: Daily Inspection of **STORAGE TANK SYSTEM**

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
DATE:(M/D/Y)					
TIME:					

STORAGE TANKS:
(TANKS MUST NEVER BE MORE THAN 95% FULL!)

Volume in Product Tank (in./gal.)					
Volume in Second Product Tank (in./gal.)					
Volume in Waste Tank (in./gal.)					
Volume in Second Waste Tank (in./gal.)					

Tank Exterior	A* N	A N	A N	A N	A N
High Level Alarms	A N	A N	A N	A N	A N
Volume Gauges	A N	A N	A N	A N	A N
Bottom and Walls	A N	A N	A N	A N	A N
Self-closing Drain Valve	A N	A N	A N	A N	A N
Rigid Piping and Supports	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: rusty or loose anchoring, lack of grounding, wet spots, discoloration, leaks, distortion, other: _____

If 'N', circle appropriate problem: malfunctioning "Power On" light, malfunctioning siren/strobe light, other: _____

If 'N', circle appropriate problem: disconnected, sticking, condensation, other: _____

CONTAINMENT AREA (Tank Dike):

If 'N', circle appropriate problem: cracks, debris in dike, open drums in dike, ponding/wet spots/stains, deterioration, displacement, leaks, other: _____

If 'N', circle appropriate problem: open, leaks, other: _____

If 'N', circle appropriate problem: distortion, corrosion, paint failure, leaks, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: Daily Inspection of **STORAGE TANK SYSTEM**

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
TRANSFER PUMPS AND HOSES					
Pump Seals	A* N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, other: _____					
Motors	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: overheating, other: _____					
Fittings	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, other: _____					
Valves	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, sticking, other: _____					
Hose Connections and Fittings	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: cracked, loose, leaks, other: _____					
Hose Body	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: crushed, cracked, thin spots, leaks, other: _____					
RETURN AND FILL STATION					
Wet Dumpster	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: excess sediment buildup, leaks, rust, split seams, distortion, deterioration, excess debris, other: _____					
Secondary Containment	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: excess sediment/liquid, leaks, deterioration, distortion, excess debris, other: _____					
Loading/Unloading Area	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: cracks, ponding/wet spots, deterioration, other: _____					

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: Daily Inspection of **DRUM STORAGE AREA** - A log must be completed for each storage area.

DESCRIPTION OF AREA (e.g., metal shelter, northeast corner of warehouse, etc.): _____

PERMITTED STORAGE VOLUME: _____

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
DATE:(M/D/Y)					
TIME:					
CONTAINERS:					
Number/Volume* of M.S. Waste Drums:					
Number/Volume of I.C. Waste Drums:					
Number/Volume of Dry Cleaning Waste Drums:					
Number/Volume of Dry Cleaning Waste Boxes:					
Number/Volume of Paint Waste Drums:					
Number/Volume of Paint Waste Pails:					
TOTAL VOLUME (IN GALLONS):					
	A**N	A N	A N	A N	A N

If 'N', circle appropriate problem: Total volume exceeds the amount for which the facility is permitted, other: _____

Condition of Drums/Boxes	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: missing or loose lids, missing, incorrect or incomplete labels, rust, leaks, distortion, other: _____

Stacking/Placement/Aisle Space	A N	A N	A N	A N	A N

If 'N', *circle appropriate problem:* different from Part B Floor Plan, containers not on pallets, unstable stacks, other: _____

CONTAINMENT:

Curbing, Floor and Sump(s)	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: ponding/wet spots, deterioration (cracks, gaps, etc.), displacement, leaks, other: _____

Loading/Unloading Area	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: cracks, deterioration, ponding/wet spots, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

* *To calculate total volumes, use the following: M.S., I.C., D.C. and paint waste drums hold 16* gallons; D.C. boxes hold 10 gallons and paint waste pails hold 5 gallons.

**A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: *Weekly Inspection of* ***SAFETY AND EMERGENCY EQUIPMENT,***
SECURITY DEVICES AND MISCELLANEOUS EQUIPMENT

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

DATE OF INSPECTION (Month/Day/Year): _____

TIME OF INSPECTION: _____

SAFETY AND EMERGENCY EQUIPMENT

Fire Extinguishers: A* N

If 'N', circle appropriate problem: overdue inspection, inadequately charged, inaccessible, other: _____

Eyewash and Shower: A N

If 'N', circle appropriate problem: disconnected malfunctioning valves, inadequate pressure, inaccessible, malfunctioning drain leaking, other: _____

First Aid Kit: A N

If 'N', circle appropriate problem: inadequate inventory, other: _____

Spill Cleanup Equipment: A N

If 'N', circle appropriate problem: inadequate supply of sorbent, towels and/or clay, inadequate supply of shovels, mops, empty drums, wet/dry vacuum, other: _____

Personal Protection Equipment: A N

If 'N', circle appropriate problem: inadequate supply of aprons, gloves, glasses, respirator, other: _____

SECURITY DEVICES:

Gates and Locks: A N

If 'N', circle appropriate problem: sticking, corrosion, lack of warning signs, fit, other: _____

Fence: A N

If 'N', circle appropriate problem: broken ties, corrosion, holes, distortion, other: _____

MISCELLANEOUS EQUIPMENT:

Dry Dumpster: A N

If 'N', circle appropriate problem: rust, corrosion, split seams, distortion, deterioration, excess debris, liquids in unit, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

---

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

Exhibit I.E.5-1

NEW BRANCH MANAGER TRAINING

Program for Regional Engineer branch visit -

Review of Environmental Notebook/Part B Permit
- Part A Application
- Waste Analysis Plan
- Contingency Plan
- Financial Requirements
- Training Plan
- Transportation Licensing

Review of Environmental Compliance Guidance and Corporate Policy Manual
- Tranship Labels
- Land Ban Notifications
- Spill Reporting
- Preparation for Agency Inspections

Conduct Detailed Facility Inspection with Branch Manager
- Identify deficiencies requiring branch attention
- Identify problems requiring Technical Services assistance
- Review actual vs. permitted waste storage capacities

File Review
- Manifests and Land Ban Notices
- Training Files
- Spill Report File
- Community Right-to-Know Files
- Inspection Records

Contingency Plan Training Session with Branch Manager and All Alternate Emergency Coordinators
- Include Spill Simulation and Response
- Update the Emergency Information and Local Authority Notifications

Health and Safety
- OSHA 200 Reporting
- Hazard Communication Program

Review Branch Specific Manifesting Procedures and Customer ID # Compliance

Review of Past Agency Inspections and Other Past Branch Compliance-related "History"

Environmental Training for Branch Personnel
- Recordkeeping

Exhibit I.E.5-1

Notes to Regional Engineers:

- Be prepared with examples and extra copies of all forms in case the branch is missing them.
- Spend time at the beginning of visit reviewing Environmental files for potential missing information or problems.
- Use several short quizzes covering the major topics as a review and documentation of the training session. A training record form should also be completed.
- Provide copies of your recent memos concerning environmental compliance at the branch or in the state. Branch copies may be missing.
- Provide Safety-Kleen part numbers for equipment (sorbents, signs, etc.) that may be missing at the branch.

Exhibit I.E.5-1

ANNUAL TRAINING FOR BRANCH EMPLOYEES

Facility Operation: Interim Status

A. *Environmental Regulation Update*

B. Part A Application

C. Waste Analysis Plan

D. Preparedness and Prevention Plan

E. Contingency Plan and Emergency Procedure

F. Training

G. Closure

H. Inspections

I. Manifesting

J. Spill Simulation and Spill Reports

I.F.1.a CLOSURE INTRODUCTION

The Safety-Kleen Corp. has constructed each service center with the intent that each will be a long term facility for the distribution of Safety-Kleen products. There is no onsite disposal activity at any plant and hence there is no disposal capacity to be exhausted that will necessitate closure of a facility. Based on current business and facility conditions, this facility is expected to remain in operation until the year of 2000.

In the event that some presently unforseen circumstance(s) would result in the discontinuance of operations and permanent closure or sale of the facility, the following Closure Plan is designed to identify the steps necessary to completely close the facility at any point during its intended life, and should be used for tanks, drum storage areas and equipment.

It is intended that all closures will be complete and final with removal of waste and decontamination of the facility and associated equipment, in order to eliminate need for maintenance after closure and chance of escape of hazardous waste constituents into the environment.

Procedures described in this closure plan are also applicable to cleaning up of spills and repairing/decontamination of facility or equipment.

An anticipated closure schedule can be seen in Exhibit H-1. An anticipated maximum waste inventory for the facility is presented in the following section.

I.F.1.b FACILITY DATA

1. Waste Management Facility Descriptions

a. Aboveground Storage Tanks

A 15,000-gallon steel tank, 10'6" diameter x 23'3" high, for used mineral spirits storage.

b. Drum Storage Areas

In the service center: A 40'x 30' area with 6" wide by 4" high continuous curbing and collector sumps. It has a capacity for 387 16-gallon drums (6,192 gallons), or the equivalent, of mineral spirits dumpster mud drums, dry cleaner wastes and/or spent immersion cleaner.

In the accumulation center: An 80' x 100' area with 6" wide by 4" high concrete curbing, sloped floors, collection trenches, and sumps. It has a capacity for 2,682 16-gallon drums (42,912 gallons) or the equivalent. Various halogenated and nonhalogenated solvents will be stored in this area.

c. Solvent Return/Fill Shelter: two 10' x 25' stations with one solvent return receptacle (wet dumpster) each and ancillary equipment.

2. Maximum Inventory of Wastes

a. Used Mineral Spirits: 15,000 gallons

b. Drummed Waste: 49,104 gallons

I.F.1.c CLOSURE PROCEDURE

1. Drum Storage Areas

a. The drum storage areas contain drums of used immersion cleaner, Mineral Spirits dumpster mud, and dry cleaning wastes, paint wastes and industrial (halogenated and non halogenated) solvents.

b. At closure all the drums will be removed and transported to the Recycle Center with proper packaging, labeling and manifesting, where the contents in the drums will be reclaimed and the drums will be cleaned for reuse.

c. The concrete floor and spill containment areas will be cleaned with detergent solution and tested for effectiveness of decontamination.

d. The wash water and all other wastes generated in the closure process when tested to be hazardous, will be properly disposed of.

2. Solvent Return/Fill Shelter Area

a. This area is used to return the used mineral spirits to the storage tank.

b. Closure of the solvent return receptacle (wet dumpster) will be made prior to the cleaning and removal of the storage tank.

c. At closure, the sludge in the dumpster ("dumpster mud") will be cleaned out and drummed, labeled, and manifested for proper disposal at permitted facilities.

d. The dumpster and the dock area will be thoroughly rinsed with clean mineral spirits followed by detergent solution.

e. The rinsing fluids are discharged through the appurtenant piping system into the storage tank, which will be subjected to a separate closure procedure as described below.

f. The cleansed dumpster and dock structure will be reused by Safety-Kleen, or scrapped.

3. Aboveground Tanks and Associated Piping

a. OUTLINE - To safely clean and decommission aboveground storage tanks:

(1) Expose doorways or cut openings to provide access to each tank.

(2) Remove remaining material from tanks and return the materials to the Recycle Center for reclamation.

(3) Rinse, scrape and squeegee tank interiors.

(4) Disconnect and cap all appurtenant piping.

(5) Disconnect and cap all appurtenant pumping equipment.

(6) Remove tanks and appurtenant equipment for final disposition.

(7) Transport and dispose of all other waste material generated during the project.

5. When closure is completed, all facility equipment and structures shall have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

6. When closure is completed, Safety-Kleen shall submit to the certification by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

I.F.1.e CLOSURE COST ESTIMATE

1. Tank Closure - Open, remove contents of, and clean, remove, and dispose of, a 15,000-gallon 10'6" diameter x 23'3" high aboveground storage tank.

Phase I - Remove Contents and Clean

1. Ship contents to reclaimer.	
Crew:	
2 Truck Dr. $17.56/hr. x 4 hrs. =	$ 140.48
2 Trucks $500 lump sum =	500.00
Tank size = 15,000 gal. ÷ 7,500 gal/truck = 2 trucks	
2 trucks x 30 miles x 1.75/mile =	105.00
Reclamation cost ($0.30/gal.) =	4,500.00
2. Squeegie Clean Tank	
Crew:	
1 Foreman $18.30/hr. x 24 hrs. =	439.20
1 laborer ($17.00/hr. & $3.00/hr. hazard pay) x 24 hrs. =	480.00
3. Use of high pressure water for two days	800.00
4. Disposal and transportation of Wash Water (1,500 gallons @ $0.12/gallon) =	180.00
5. Transportation of wastewater 500 miles x $1.75/mile =	875.00
Total - Phase I	$8,020.00

Phase II - Remove and Dispose of Tank

1. Disconnect and Remove Appurtenant Equipment	
Crew:	
1 Foreman $18.30/hr. x 8 hrs. =	$ 146.40
2 Laborers $17.00/hr. x 8 hrs. =	272.00
2. Torch Tank	
Crew:	
1 Foreman $18.30/hr. x 8 hrs. =	146.40
1 Laborer $17.00/hr. x 8 hrs. =	136.00

3. Remove Tank

Crew:		
1 Foreman	$18.30/hr. x 2 hrs. =	36.60
4 Laborers	$16.80/hr. x 2 hrs. =	134.40
1 Backhoe	$28.97/hr. x 2 hrs. =	57.94
1 Oiler	$25.47/hr. x 2 hrs. =	50.94
1 Truck Dr.	$17.56/hr. x 2 hrs. =	35.12
Equipment	$200 Lump Sum =	200.00
	Total Phase II	$1,216.00

Phase III - Backfilling, Regrading, Soil Testing

1. Test for soil contamination
   Scan soil with a photoionization detector
   (1 hour) = $ 50.00

2. Regrading

Crew:		
1 F.E. Loader	$27.38/hr. x 1 hr. =	27.38
Equipment	$ 2.00/c.y. x 10 c.y. =	20.00
	Total - Phase III =	$ 97.00

Summary of Closure Cost for 15,000-gallon Tank:

Phase I	$8,020
Phase II	1,216
Phase III	97
	$9,333

2. CLOSURE OF DRUM STORAGE AREAS - Remove and return drums to reclaimer, clean the drum storage areas and dispose of wash water generated.

a.	18 Truck Dr. $17.56/hr. x 4 hrs./each	$ 1,264.32
	18 Trucks $250 lump sum each	4,500.00
	Hauling cost = 30 miles x $1.75/mile x 18 trucks =	945.00
b.	Clean drum storage areas:	
	Crew:	
	1 Foreman $18.30/hr. x 10 hrs. =	183.00
	1 Laborer ($17.00/hr. & 3.00/hr. hazard pay) x 10 hrs. =	200.00
c.	Dispose of wash water	
	1000 gallons x $0.12/gallon =	120.00
d.	Dispose of used solvents	
	3,069 16-gallon drums x $30.00/drum =	92,070.00
e.	Testing for contamination	
	6 samples x $75.00/each	450.00
	Total Drum Closure Cost	$ 99,732.00

3. CLOSURE OF DUMPSTER AND DOCK AREA - Remove, package and dispose of sludge, clean the dumpster and dock area, remove dumpster and dock structure for reuse.

a.	1 Truck $250 lump sum	$ 250.00
	Hauling Cost = 30 miles x $1.75/mile	52.50
	1 Truck Dr. $17.56/hr. x 8 hrs. =	140.48
	Crew:	
	1 Foreman $18.30/hr. x 4 hrs. =	73.20
	1 Laborer ($17.00/hr. x $3.00/hr. hazard pay) x 4 hrs. =	80.00
b.	Clean Dumpster and Dock Area	
	Crew:	
	1 Foreman $18.30/hr. x 16 hrs. =	292.80
	1 Laborer ($17.00/hr. x $3.00/hr. hazard pay) x 16 hrs. =	320.00
	Use of high pressure water for one day =	400.00
c.	Disposal of wash water	
	100 gallons x $0.12/gallon =	12.00
d.	Dispose of dumpster mud	
	10 55-gallon drums x $300/drum =	3,000.00
e.	Testing for contamination	
	4 samples x $75 each =	300.00

f. Torch, disassemble, and remove dumpster and dock

Crew:		
1 Foreman $18.30/hr. x 24 hrs. =		439.20
2 Laborers $17.00/hr. x 24 hrs. =		408.00
Equipment $5.20/hr. x 8 hrs. =		41.60
1 Truck Dr. $17.56/hr. x 2 hrs. =		35.12
	Total Dock Closure Cost	$ 6,253.00

4. PE CERTIFICATION = $ 500.00

5. TOTAL CLOSURE COST:

15,000-gallon tank =	9,333.00
Drum storage areas =	99,732.00
Dock and dumpster area =	6,253.00
P.E. certification =	500.00
TOTAL	$115,818.00

PART II

CONTAINERS

PART II - CONTAINERS

II.B.1 CONTAINMENT

The immersion cleaner is always contained in partially filled, 16-gallon, covered drums before, during, and after its use. Until received at the Recycle Center, the immersion cleaner is never transferred to another container. The drums containing the used immersion cleaner are returned to the facility and stored in one of two designated drum storage areas before shipment to the Recycle Center.

The dry cleaning wastes are contained in 30- and 16-gallon drums, in lined boxes (16" x 16" x 15") and in polyethylene filter tubes. Paint wastes are stored in 16-gallon drums and in 5-gallon pails and industrial solvents are stored in 55-gallon drums. These containers are managed similar to the used immersion cleaner drums, and contents within the drums will not be removed or processed at the facility.

The drum storage areas as shown on Exhibits I.D.5-2a and I.D.5-2b occupy portions of building areas which have a concrete floor, berms, and interceptor trenches to form spill containment systems. The system is free of cracks and gaps. Spills are removed by a hand-held, portable electric pump (the COMS pump), wet-dry vacuum cleaner, or sorbent materials. The capacities of the containment systems in each section are designed to be greater than 10% of the total liquid storage capacity in the drum storage areas. Since the characteristics of the stored wastes are known, no analysis are performed for the materials collected from the containment area. All collected

materials are sent to a recycling center for recycling/reclamation. The recovered materials that can not be effectively reclaimed at the recycle center will be, in turn, sent to a licensed facility for disposal.

All drums are transported, moved, and stored carefully in an upright position. The route trucks are equipped with an electric hoist to assist loading/unloading. In the warehouse area, the immersion cleaner, mineral spirits dumpster mud drums, and dry cleaning waste drums are moved with 2-wheel hand trucks and stacked by hand. All drums will be elevated on pallets to eliminate the possiblity of drums standing in spilled solvent.

The drums are designed and constructed to be compatible with the stored material and to minimize the possibility of breakage and leaking, in accordance with DOT shipping container specifications. Exhibits I.E.3-1 to I.E.3-2 show typical detailed construction specifications of the 16-gallon immersion cleaner drums.

The drum storage areas for spent solvents (Exhibits I.D.5-2a and I.D.5-2b) have capacity for holding 49,104 gallons (892 55-gallon drums or 3,069 16-gallon drums).

Containers will be double-stacked. Exhibits I.D.5-2a and I.D.5-2b show the configuration and stacking arrangements of containers.

Wastes are stored in nylon-lined boxes, polyethylene and steel containers. Since none of the waste handled by Safety-Kleen react with metal, nylon or polyethylene, compatibility is assured. Immersion cleaner, industrial wastes, paint wastes and dry cleaning waste drums are never opened at the branch. None of the wastes are incompatible; however, solvents are segregated for quality assurance purposes. Only mineral spirits is placed in red drums, only immersion cleaner in gray, only perchloroethylene in polyethylene drums or in boxes and only paint waste in black drums or pails.

All drum storage areas are located indoors. The drum storage containment systems consist of 4" x 6" concrete curbing, trenches and sumps which prevent both run-on and run-off.

II.B.2. WASTE COMPATIBILITY

The solvents stored at this facility are not incompatible with each other, or with other materials handled at this facility, insofar as reactivity is concerned. However, they are the primary source of feed stock for regenerating the clean solvents. Separation of these used solvents is a standard practice at the Service Center.

All material at the facility is managed in accordance with local fire protection code and fire department recommendation.

Drum storage configurations are shown of Exhibit I.D.5-2a and I.D.5-2b.

II.B.3 INCOMPATIBLE WASTES

See above Section II.B.2.

II.B.4 PROCEDURES FOR LEAKING CONTAINERS

Specific procedures for inspection and management of leaking containers are presented in Section I.E.4.

II.B.5 INSPECTION PROCEDURES

See Section I.E.4.

II.B.6 CLOSURE PLAN

A closure plan for the entire facility is presented in Section I.F.

PART III

TANKS

PART III - TANKS

III.A.1 MATERIAL COMPATABILITY

The facility consists of two aboveground steel tanks. Used mineral spirits contained in returned drums from the customers are transferred via the wet dumpster into a 15,000 gallon tank, awaiting bulk shipment to the Recycle Center. The other 15,000-gallon tank is used to store fresh Mineral Spirits solvent.

Product stored in the tanks at this facility is mineral spirits (petroleum naphtha). The material is compatible with the mild steel tank structure; in fact, mineral spirits is often used as a light hydrocarbon coating to prevent rusting of metal parts. As with all petroleum storage vessels, water will accumulate over time due to condensation. The mineral spirits has a specific gravity less than water and the water will accumulate in the bottom of the tank. There is the potential for corrosion of the tank at the mineral spirits/water interface. Experience, however, has shown that the corrosion potential at the interface is minimal when compared to the potential for corrosion from soil conditions.

III.A.2 TREATMENT PROCESSES

There are no treatment processes at this facility.

III.B.1 TANK DESIGN AND OPERATION PROCEDURES

The tanks are designed and constructed to be compatible with the materials stored in it. Typical construction and installation

standards for the aboveground tanks are shown in Exhibits I.E.3-5 and I.E.3-6, respectively. All tanks are vented in accordance with N.F.P.A. Standards, and the tanks are equipped with high level alarms. The design and installation of the tank alarm system are shown in Exhibits I.E.3-7 and I.E.3-8.

All tanks are aboveground, underlain by a 6" concrete slab, and surrounded by a 30" concrete dike. Therefore, no surface runoff would be in contact with the wastes stored at the site and no runoff collection and management system is deemed necessary. Equipment used in the operation of the aboveground tanks for used mineral spirits are gauges for measuring liquid levels in tanks and automatic high level alarms. A suction pump equipped with the tanker truck is used to withdraw the content from the tank. No other equipment or standby equipment are used in the operation of the aboveground tanks.

III.B.2 INSPECTION PROCEDURES

See Section I.E.4.

III.B.3 CLOSURE PLAN

See Section I.F.

SAFETY-KLEEN CORPORATION

TAMPA, FLORIDA FACILITY

SECONDARY CONTAINMENT CALCULATIONS

Service Center Container Storage Area:

Two Trenches:

2 x 11' 9 1/4" L x 19" W x 2' D x 7.481 gal./cf = 623.7 gallons

Amount to Be Stored:

43 single or double stacked pallets x 9 drums/pallet x 16 gallons/drum = 6,192 gallons

Accumulation Center Container Storage Area:

Trench A:

40'4" L x 1'9" W x 1'9" D* x 7.481 gal./cf = 924 gal.

Trench B:

(17'8" L x 1'9" W x 1'6" D + 22'8" L x 1'9" W x 1'9" D) x 7.481 gal./cf = 866

Two Sumps (c):

2 x 1'6" x 1'6" x 3'6" D x 7.481 gal./cf = 118

Trench D:

72' L x 1'9" W x 2' D x 7.481 gal./cf = 1,885

Trench E:

18'2" L x 1'9" W x 2' 1-1/2" D x 7.481 gal./cf = 505

Amount Held in Trenches = 4,298 gal.

Amount to be Stored:

298 double-stacked pallets x 9 drums/pallet x 16 gallons/drum = 42,912 gal.

* All trenches, except for trench E, will overflow when six inches from the top. Trench E will fill to within one and one half inch of the top before overflowing.

D. E. P

APR 15 1988

SOUTH WEST DISTRICT
TAMPA

APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT
PART I - GENERAL
TO BE COMPLETED BY ALL APPLICANTS

Please Type or Print

A. GENERAL INFORMATION

1. TYPE OF FACILITY:

DISPOSAL				
LANDFILL [ ]	LAND TREATMENT [ ]	SURFACE IMPOUNDMENT [ ]		
STORAGE [X]				
CONTAINERS [X]	TANKS [X]	PILES [ ]	SURFACE IMPOUNDMENT [ ]	
TREATMENT [ ]				
TANKS [ ]	PILES [ ]	INCINERATION [ ]	SURFACE IMPOUNDMENT [ ]	
THERMAL [ ]	CHEMICAL [ ]	PHYSICAL [ ]	BIOLOGICAL [ ]	

2. TYPE OF APPLICATION: [ ] TOP [ ] CONSTRUCTION [ ] OPERATION [ ] CLOSURE

3. DATE CURRENT OPERATION BEGAN (OR IS EXPECTED TO BEGIN): 6-28-85

4. FACILITY NAME: Safety-Kleen corp. Service Center

5. EPA/DER I.D. NO.: FLD 980847271

6. FACILITY LOCATION OR STREET ADDRESS: 24th Ave. & 54th Street

7. FACILITY MAILING ADDRESS: _____ Tampa FL 33619
STREET OR P.O. BOX CITY STATE ZIP

8. CONTACT PERSON: Stan Walczynski TELEPHONE: (312) 697-8460 X2242
TITLE: Environmental Engineer
MAILING ADDRESS: Safety-Kleen Corp., 777 Big Timber Rd., Elgin, IL 60120
STREET OR P.O. BOX CITY STATE ZIP

9. OPERATOR'S NAME: Frank Taylor TELEPHONE: (813) 870-2030

10. OPERATOR'S ADDRESS: 24th Ave. & 54th St. Tampa FL 33619
STREET OR P.O. BOX CITY STATE ZIP

11. FACILITY OWNER'S NAME: Gordon Burnam TELEPHONE: ( )

12. FACILITY OWNER'S ADDRESS: P.O. Box 4 Columbia MO 65205
STREET OR P.O. BOX CITY STATE ZIP

13. LEGAL STRUCTURE: [X] CORPORATION [ ] NON-PROFIT CORPORATION [ ] PARTNERSHIP
[ ] INDIVIDUAL [ ] LOCAL GOVERNMENT [ ] STATE GOVERNMENT [ ] FEDERAL GOVERNMENT
[ ] OTHER _____

14. IF AN INDIVIDUAL, PARTNERSHIP, OR BUSINESS IS PERFORMED UNDER AN ASSUMED NAME, SPECIFY COUNTY AND STATE WHERE NAME IS REGISTERED. COUNTY: _____ STATE N/A

15. IF A CORPORATION, INDICATE STATE OF INCORPORATION Wisconsin.

I.D.2.a-1 DESCRIPTION OF THE BUSINESS

The Safety-Kleen Corp. of Elgin, Illinois, is an international service-oriented company whose customers are primarily engaged in automotive repair and industrial maintenance. Since 1968, we have been offering a leasing service for hydrocarbon and chlorinated solvents and small parts washing equipment. A unique feature of our business concept is that the solvent is produced by us through recycling the used solvent that we lease to our customers. Approximately two-thirds of the clean solvent we lease has been previously used by our customers.

The Safety-Kleen parts washers together with the solvents are leased to customers, and the leasing charge includes regularly scheduled solvent changes and machine maintenance. Our business is conducted from local service centers (sales branches) located in 48 states domestically that warehouse the products and equipment required to service the customers in their sales areas. On a regular basis, our service representatives furnish clean solvent to our customers, pick up the used solvent and assure that the leased equipment is in good working order. In 1979 we expanded the scope of our operations to make our solvent leasing service available to owners of parts cleaning equipment, regardless of manufacturer, using our types of solvents.

Basically, Safety-Kleen handles two types of parts washer solvents: a mineral spirits solvent and a special blend of chlorinated and water-phase solvent (immersion cleaner). The solvents are distributed and collected by our service

representatives in covered drums and transported in specially equipped, enclosed route trucks. The clean solvents are distributed from and the used solvents are returned to the service center where there are separate aboveground storage tanks for the clean and used mineral spirits and warehouse space for the drums of both clean and used immersion cleaner.

In our commercial leasing service, which comprises the bulk of our business, the quantity of used solvent collected from each machine serviced usually ranges from five to fifteen gallons. The solvent is contained in partially filled 16 and 30 gallon drums which double as the solvent reservoir of the parts washer.

Periodically, a company truck is dispatched from one of our seven nation-wide solvent regeneration facilities to the service center to deliver a load of clean solvent and pick up a load of used solvent. The mineral spirits are transported in bulk tank trucks between the service centers and the regeneration centers, and the chlorinated solvent remains in the covered drums during transfers between the service centers and the regeneration centers. About 97 percent of the solvent we handle in the parts washer business is mineral spirits, while the balance is immersion cleaner.

Our solvent cycle is essentially a closed loop going from the service center to the customer, from the customer to the service center, from the service center to the regeneration center, and

I.D. 2.6-1 DESCRIPTION OF WASTES

Several types of waste result from the servicing of Safety-Kleen customers and the maintenance of the service center. Analytical data for the wastes and Material Safety Data Sheets follow this chapter.

Wastes Resulting From the Parts Washer Service

Spent mineral spirits from parts washers is accumulated in a 15,000 gallon aboveground storage tank via the return and fill station. 16- and 30-gallon drums containing seven and twelve gallons of solvent, respectively, are poured into a dumpster at the return and fill station which in turn empties into the tank. This waste handling method results in three types of mineral spirits waste:

a. **Spent mineral spirits solvent**--The spent mineral spirits solvent is removed from the tank by a tanker truck on a scheduled basis. About 6,000-7,000 gallons are removed every two weeks. This waste is ignitable (D001) and EP Toxic (D008). In 1986, the Tampa service center shipped about 175,000 gallons of spent solvent to the Safety-Kleen recycle center in Lexington, South Carolina.

b. **Bottom sediment in the tank**--Approximately once every two years, it is necessary to remove sediment and other heavy material from the bottom of the tank. A Safety-Kleen vacuum truck is used for this purpose and can collect up to 4,000 gallons of this waste for

reclamation. The sediment is ignitable (D001) and EP Toxic (D006 and D008).

c. **Dumpster sediment**--Sediment also accumulates in the bottom of the dumpsters in the return and fill station. This sediment is removed manually with a shovel, drummed and the drums are stacked two-high in the drum storage area of the warehouse. About ten gallons is stored in each 16-gallon drum and the drum is color-coded (red) to indicate its contents. The chemical composition of this waste is analogous to that of the bottom sediment from the tank. In 1986, about 2,000 gallons of this waste were shipped to Safety-Kleen's Lexington, South Carolina recycle center for reclamation. It is estimated that 12,000 gallons will be shipped from the accumulation center annually.

Immersion cleaner remains in the drum in which it was originally used until it is received at the recycle center. Drums containing about four and one-half gallons of spent solvents are stacked two-high in the drum storage areas of the warehouses. The immersion cleaner contains chlorinated solvents (F002) and cresylic acid (F004) and the drums are color-coded gray. In 1986, about 5,400 gallons of these solvents were shipped to the Lexington, South Carolina recycle center for reclamation. It is estimated that more than 20,000 gallons will be shipped from the accumulation center on an annual basis.

Wastes Resulting From the Dry Cleaner Service

Dry cleaning wastes consist of spent filter cartridges, powder residue from diatomaceous or other powder filter systems and still bottoms. These wastes are

packaged on the customer's premises in 30- and 16-gallon drums, in polyethylene filtre tubes and in lined boxes. The containers are then palletized, stacked two-high and placed in the drum storage areas of the warehouses. While approximately 80% of the dry cleaning solvent used is perchloroethylene (F002), about 17% is mineral spirits, (D001) and the remaining 3% is trichloro-trifluoroethane (F002). In 1986, over 20,000 gallons of dry cleaning wastes were shipped to the Safety-Kleen recycle center in Lexington, South Carolina. It is estimated that 150,000 gallons will be shipped from the accumulation center on an annual basis.

Paint Wastes

Paint wastes consist of various lacquer thinners (D001, F003, and F005) and paints (D006, D007 and D008). The waste is collected in black 5-gallon pails and in 16-gallon drums at the customer's place of business and the containers are then palletized and stored in the drum storage area of the warehouse. It is anticipated that this facility will ship 14,300 gallons of paint waste to a reclaimer annually and the accumulation center will ship 57,000 gallons annually.

Industrial Solvent Wastes

Seven solvents are collected from industrial solvent users: mineral spirits (D001, D006, D008); 1,1,1-trichloroethylene (F001, F002); per-and trichloroethylene (F001, F002); methylene chloride (F001, F002); 1,1,2-trichloro-1,2,2-trifluoroethane (F001, F002) and lacquer thinners (D001, F003, F005). These wastes are shipped in 55-gallon drums and are stored on pallets. It is anticipated that 38,600 gallons of spent mineral spirits, 157,600 gallons of

spent halogenated solvents and 60,400 gallons of spent lacquer thinners will be shipped from the accumulation center to a reclaimer on an annual basis. Acceptance criteria for these solvents follow this chapter.

I.D.4.a-1 WASTE ANALYSIS - GENERAL

The used solvents are the primary feed stocks for regeneration of Safety-Kleen's clean solvent products. Quality control of the used solvents is critical to the recycle center to safely recycle the material and to assure quality products. The closed loop system of managing the clean and used solvents is therefore designed to minimize the possibility of product contamination from outside sources. Within the closed loop, ownership of the material remains with Safety-Kleen and the product is leased to the customer.

Prior to leasing a parts cleaning machine, the customer's business activity is reviewed. Where the possibility exists for contamination of the mineral spirits, i.e., pesticide, herbicide, pharmaceutical, printing operations, the process is reviewed to insure that contamination of the product does not occur.

Sales representatives are instructed to visually examine the spent product when the machines are serviced, noting the consistency and volume of material recovered. The odor of the material is also noted to detect the presence of volatile materials such as gasoline. If a different odor is noted, the customer is warned that the material must not be contaminated. If the problems is not corrected, the machine is removed from the customer.

The dry cleaning and paint wastes are collected from facilities where a single process is managed at the facility and possibility of cross contamination by other chemicals or wastes is minimal.

The contents of the drums are verified by the sales representative when he services the customer and, comparable to the handling of immersion cleaner, the drums are not reopened until they reach the recycle center.

Prior to accepting an industrial solvents customer's waste for recycling, a sample is drawn and analyzed at Safety-Kleen's laboratory in Elgin, Illinois. The criteria used to determine whether a waste is acceptable for recycling are in Appendix D. The drums are not opened until they reach the recycle center. Samples of the waste collected at the recycle center and the contents of the drum are either verified and accepted or rejected. Rejected wastes are either returned to the customer or properly disposed of.

I.D.4.a-2 WASTE ANALYSIS AT THE SERVICE CENTER

The Safety-Kleen Service Center in Tampa services about 3,000 small quantity waste generator customers and over 33,000 containers of used solvents were delivered to the facility in 1986. With such large numbers of waste generators, performing waste analyses from each or selected generating point would become very costly and unmanageable.

Furthermore, all the materials collected at the Service Center and subsequently shipped to the Recycle Center are either managed at all times in the closed loop system or will be collected from a single generator with a single-purpose process. General nature and quality of these materials are known and Safety-Kleen's operating experiences have shown that the collected materials do not usually

deviate from expectation and impact the recycling process. As an additional safe-guard, Safety-Kleen's personnel are instructed to inspect all materials before returning them to the Service Centers.

For these reasons, all waste analyses will be performed at the Recycle Center, as described in Section, I.D.4.a-3.

In accordance with 40 CFR 264.13(a), Safety-Kleen will also perform physical and chemical analysis of a waste stream when it is notified or has reason to believe that the process or operation generating the waste has changed, or when the result of inspection indicates that the waste to be collected does not match the waste designated. It is Safety-Kleen's practice that suspected non-conforming material must not be accepted until an analysis has been done or the material must be rejected.

I.D.4.a-3 WASTE ANALYSES AT THE RECYCLE CENTER

Analyses performed at the Recycle Centers are undertaken to safeguard the recycling process and to assure the product quality. The following Exhibits summarize a typical waste analysis plan at the Recycle Center related to the hazardous materials returned from the Service Center:

Exhibit I.D.4-11 Parameters and Rationale for Hazardous Waste Selection

Exhibit I.D.4-12 Parameters and Test Methods

Exhibit I.D.4-13 Methods Used to Sample Hazardous Wastes

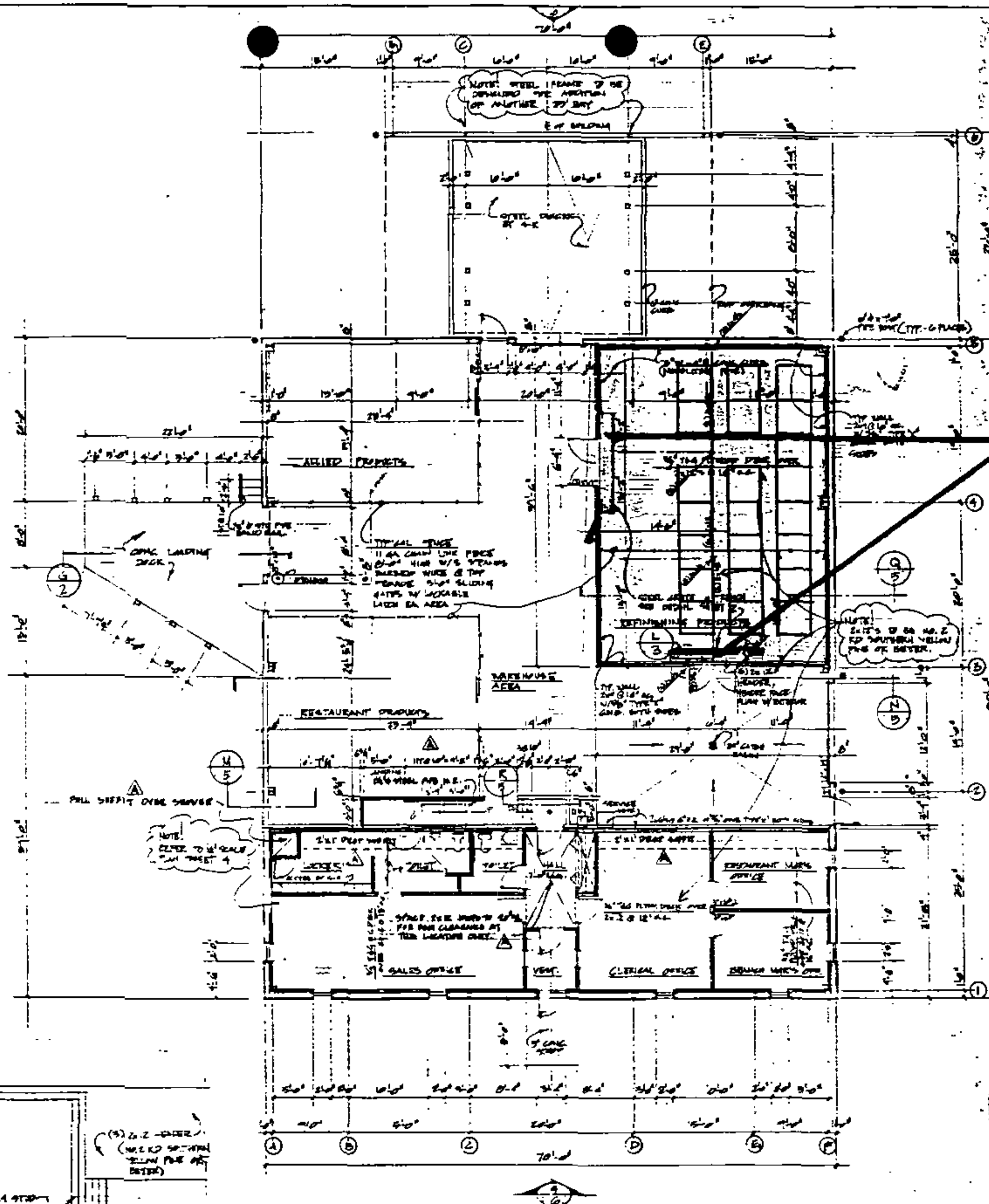
Exhibit I.D.4-14 Frequency of Analysis

A profile of the paint waste is in Exhibit 2-8a. It will be reanalyzed when the reclaimer to whom it is shipped requests reanalysis or when a change in the use of the product occurs.

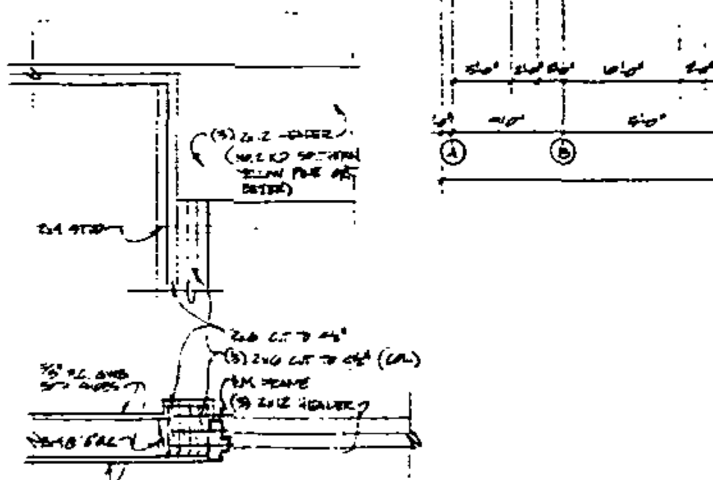
I.D.4.a-4 WASTE ANALYSIS PLAN UPDATE

This waste analysis plan will be modified if a new waste product is brought in and if sampling and material management methods change.

Monitoring and revision of the plan status is the responsibility of Environmental Department staff at Safety-Kleen Corporate Office in Elgin, Illinois.



FLOOR PLAN



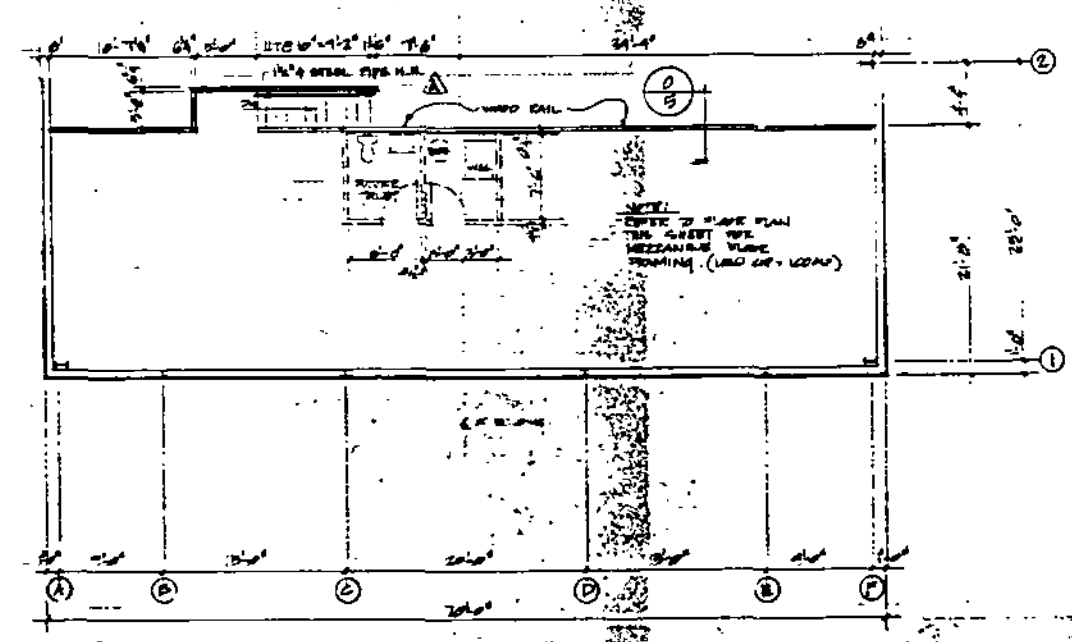
FRAME DETAIL

Two Trenches:

2 x 11' 9 1/4" L x 19" W x 2' D x 7,481 gal./cf = **623.7 gallons**

Amount to Be Stored:

43 single or double stacked pallets x 9 drums/pallet x 16 gallons/drum = **6,192 gallons**



MEZZANINE PLAN

CONSTRUCTION CONTRACT REQUIREMENTS

1. AIA General Conditions dated 1976 shall form a part of this contract.

2. Contractors shall secure and pay for all permits, inspections, licenses, etc. related to their work.

3. Each contractor shall submit to the Owner insurance policies, minimum $500,000.00, which comply with Safety-Kleen insurance requirements:
   a. Liability
   b. Workman's Compensation
   c. Automobile
   d. Hold Harmless Clause to Owner and Engineer

These must be submitted before starting work.

4. Owner shall secure and pay for Builder's Risk Insurance.

5. Equal opportunity policies of employment must be maintained.

6. Each contractor shall visit site and verify all existing conditions.

7. Any adjoining property damaged during construction shall be repaired and restored to original condition by contractor responsible for the damage at his own expense.

8. All contractors shall remove their own rubbish and debris from the site as it accumulates and transfer same to a location determined by the Owner.

9. All work shall comply with OSHA, State and Local codes.

10. All work shall guaranteed for one year after final acceptance by Owner and Engineer.

Exhibit I.D.5-2a

safety-kleen corp.

80'x70'x16' SERVICE CENTER
FLOOR & MEZZ. PLANS

3

AS NOTED
11-8-85

SK SERVICE CENTER BRANCH
D12091

Exhibit I.D.5-2b

SAFETY-KLEEN CORPORATION

TAMPA, FLORIDA FACILITY

SECONDARY CONTAINMENT CALCULATIONS

Accumulation Center Container Storage Area:

Trench A:

40'4" L x 1'9" W x 1'9" D* x 7.481 gal./cf =	924 gal.

Trench B:

(17'8" L x 1'9" W x 1'6" D + 22'8" L x 1'9" W x 1'9" D) x 7.481 gal./cf =	866

Two Sumps (c):

2 x 1'6" x 1'6" x 3'6" D x 7.481 gal./cf =	118

Trench D:

72' L x 1'9" W x 2' D x 7.481 gal./cf =	1,885

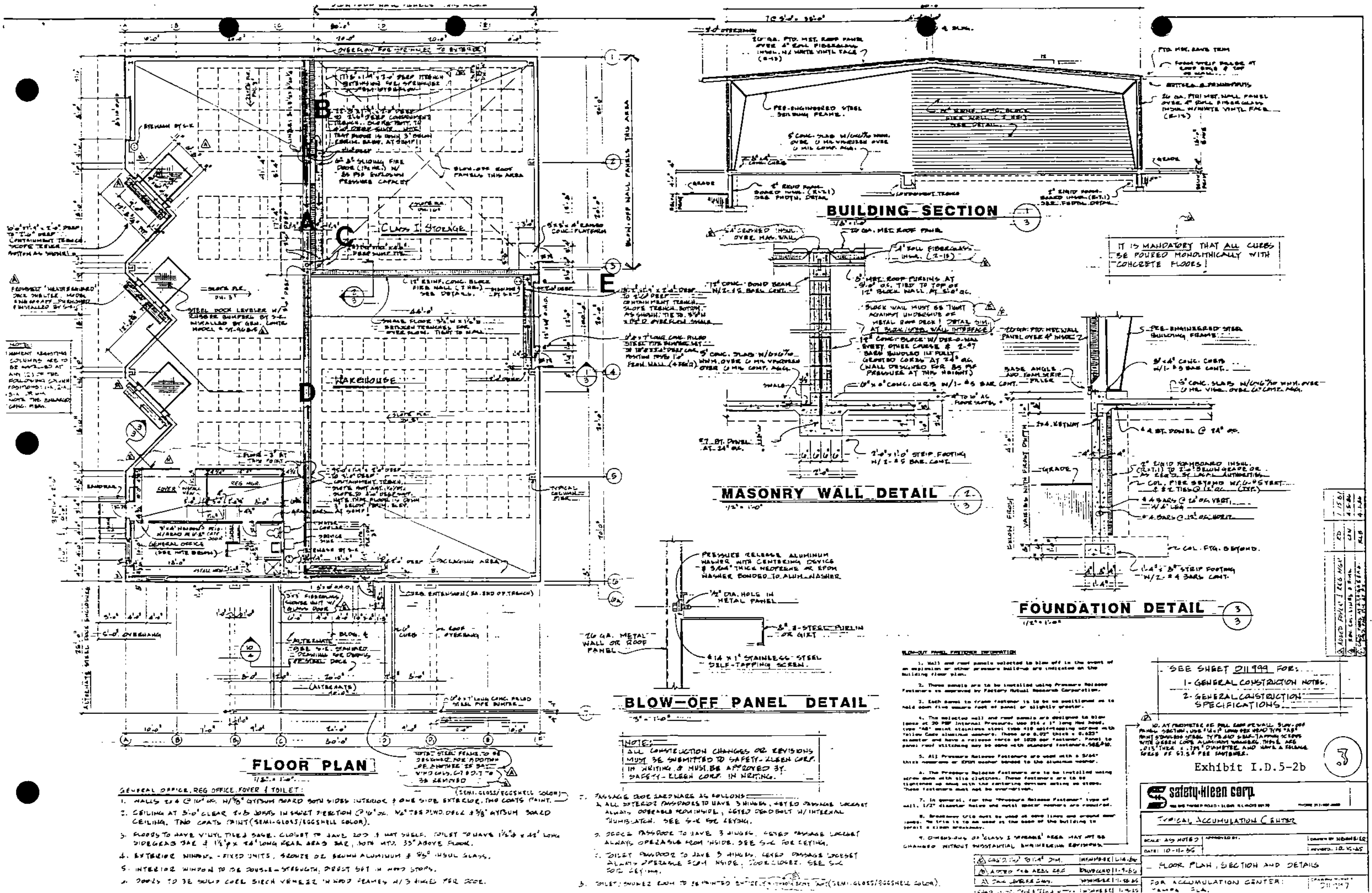
Trench E:

18'2" L x 1'9" W x 2' 1-1/2" D x 7.481 gal./cf =	505
Amount Held in Trenches =	4,298 gal.

Amount to be Stored:

298 double-stacked pallets x 9 drums/pallet x 16 gallons/drum = 42,912 gal.

* All trenches, except for trench E, will overflow when six inches from the top. Trench E will fill to within one and one half inch of the top before overflowing.



BUILDING SECTION
MASONRY WALL DETAIL
FOUNDATION DETAIL
BLOW–OFF PANEL DETAIL
FLOOR PLAN
CLASS I STORAGE
WAREHOUSE
GENERAL OFFICE
IT IS MANDATORY THAT ALL CURBS BE POURED MONOLITHICALLY WITH CONCRETE FLOORS
NOTE:
ALL CONSTRUCTION CHANGES OR REVISIONS MUST BE SUBMITTED TO SAFETY-KLEEN CORP. IN WRITING & MUST BE APPROVED BY SAFETY-KLEEN CORP. IN WRITING.
SEE SHEET 011999 FOR:
1- GENERAL CONSTRUCTION NOTES.
2- GENERAL CONSTRUCTION SPECIFICATIONS.
Exhibit I.D.5-2b
Safety-Kleen Corp.
TYPICAL ACCUMULATION CENTER
FLOOR PLAN, SECTION AND DETAILS
FOR ACCUMULATION CENTER: TAMPA, FLA.

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

TAMPA, FL SERVICE CENTER (3-163-01)

24TH AVENUE AND 54TH STREET

SAFETY-KLEEN CORP.

I.E.2.a GENERAL INFORMATION

1. Purpose

The contingency plan and emergency procedures are designed to insure that Safety-Kleen is prepared to address emergency situations rapidly and in such a manner as to prevent or minimize hazards to human health or the environment from fire, explosion, or any unplanned sudden or non-sudden release of hazardous material constituents to the air, soil, surface water, or ground water at the facility.

The provisions of the contingency plan are carried out immediately whenever there is a fire, explosion or release of hazardous materials which could threaten human health or the environment, and according to the procedures contained in this plan which describe the actions facility personnel shall take in response to an emergency.

2. General Description of Activities

The business activities carried on from the Service Center relate to the leasing and servicing of Safety-Kleen Parts Cleaning Equipment, including the provision of a solvent leasing service for the customers. The clean solvents are

distributed from and the used solvents are returned to the service center, where separate aboveground storage tanks are utilized for the storage of clean and used mineral spirits (solvent) and warehouse space is designated for the storage of drums of both clean and used immersion cleaner and dry cleaning wastes (chlorinated solvent).

The mineral spirits are transported in covered, 16-gallon and 30-gallon drums between the Service Center and customers. Upon returning to the Service Center, the used mineral spirits are transferred from the drums into a wet dumpster (solvent return receptacle) in which coarse solids in the mineral spirits are retained. The used mineral spirits in the wet dumpster flows into a 15,000-gallon aboveground tank for storage. The used mineral spirits solvent is picked up periodically by a bulk tank truck from our Recycle Center which also at the same time delivers a load of clean mineral spirits. The sludge in the wet dumpster is periodically cleaned out, drummed, and temporarily stored in the drum storage area for later shipment to the Recycle Center for reclamation.

The immersion cleaner remains in 16-gallon, covered drums at all times during transportation and storage. The solvent is never transferred to another container while being used by the customers and in storage at the Service Center. The dry cleaning wastes are picked up at commercial dry cleaning establishments in 30- and 16-gallon drums, in boxes and in polyethylene filter tubes. These containers are stored

SAFETY-KLEEN CORP.
Field Spill Report Form

Report all spills to the Safety-Kleen Environment, Health and Safety Dept. immediately.

1. Facility Number and Location _____
2. Date of spill _____ Time _____ a.m./p.m.
3. Report from: _____ Title _____
4. Location of spill: _____
5. Material spilled: _____ Quantity _____
6. Any injuries or property damage? Yes or No If yes, explain. _____

   _____
7. Cause of spill. _____

   _____

   _____
8. Was the spilled material contained? Yes or No If yes, how? If no, describe the scene in detail (including nearby surface water or sewers and distance to them). _____

   _____

   _____
9. Describe clean-up action taken. _____

   _____

   _____

   _____
10. Person involved in incident. _____
11. Vehicle # _____ Company _____
12. List any emergency agencies at scene. _____
13. Are there homes or businesses nearby? Yes or No Distance? _____
14. Notification:

	S-K Environment Dept.	Nat'l. Response Center	State
	1-800-323-5740 1-312-888-4660 (24 hr.)	1-800-424-8802	1- - -
Date/time:	_____	_____	_____
Contact name:	_____	_____	_____
Comments rec'd:	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

15. Signature _____

After completing this form, file copy 1 in the Contingency Plan Section of the Environmental Manual and mail copy 2 to the SK Environment, Health and Safety Department.

Received by EHS _____

PROCESS USED FOR STORING HAZARDOUS WASTE

I.E.3.a PROCEDURE FOR SEGREGATING WASTE TYPES

The used solvents are not incompatible with each other, or with other materials handled at this facility, insofar as reactivity is concerned. However, they are the primary source of feed stock for regenerating the clean solvents. Separation of these used solvents is a standard practice at the facility.

All materials are managed in accordance with the local fire protection code and fire department recommendations.

I.E.3.b WASTE FACILITIES - DRUM STORAGE AREAS

The immersion cleaner is always contained in partially filled, 16-gallon, covered drums before, during, and after its use. Except after returning the drums to the Recycle Center or in the case of a leaking drum, the immersion cleaner is never transferred to another container. The drums containing the used immersion cleaner are returned to the Service Center and stored in a designated drum storage area before shipment to the Recycle Center.

The dry cleaning wastes are contained in 30 and 16-gallon drums, in nylon-lined, triple thickness boxes and in polyethylene filter tubes. The containers are managed similar to the used immersion cleaner drums, and contents within the drums will not be removed or processed at the Service Center. The two drum storage areas as shown on Exhibits I.D.5-2a and I.D.5-2b occupy portions of building areas

having concrete floors and berms. Both of the areas have interceptor berms. Both of the areas have interceptor trenches to form a spill containment system. The systems are free of cracks and gaps. Spills are removed by a hand-held, portable electric pump (the COMS pump), wet-dry vacuum cleaner, or sorbent materials. The capacities of the containment systems are designed to be greater than 10% of the total liquid storage capacity in the drum storage areas. Since the characteristics of the stored wastes are known, no analyses are performed for the materials collected from the containment area. All collected materials are sent to a recycling center for recycling/reclamation. The recovered materials that can not be effectively reclaimed at the recycle center will be, in turn, sent to a licensed facility for disposal.

All drums are transported, moved, and stored carefully in an upright position. The route trucks are equipped with an electric hoist to assist loading/unloading. In the warehouse area, the immersion cleaner and mineral spirits dumpster mud drums are moved with 2-wheel hand trucks and stacked by hand, and the dry cleaning wastes drums are stacked by a jib crane and moved by a pallet jack. Both the immersion cleaner and dry cleaning waste will be elevated on pallets to eliminate the possiblity of drums standing in spilled solvent. The drums are designed and constructed to be compatible with the stored material and to minimize the possibility of breakage and leaking, in accordance with the specifications which follow this chapter. Exhibits I.E.3-1 to I.E.3-4 show typical detailed construction specifications of the 16-gallon immersion cleaner drums. The containers used to store dry cleaning wastes are shown in

Exhibits 3-4a, b, c and d. Industrial solvents are stored in 55-gallon drums.

The drum storage area in the service center (Exhibit I.D. 5-2a) has secondary containment in the form of curbing and collection trenches. The two collection trenches measure 11' 9 1/4" x 2' x 1-3/4' each (623.7 gallons total). No more than 6,192 gallons of spent solvent will be stored in this area.

The accumulation center is used for the collection of containers and boxes from Safety-Kleen service centers and industrial solvents customers prior to shipment to a Safety-Kleen recycle center or an independent reclaimer. Service centers in Florida ship their containerized wastes (dumpster sediment, spent immersion cleaner, dry cleaning wastes, paint wastes and industrial solvents) to this warehouse for storage prior to reclamation.

The drum storage area in the accumulation center (Exhibit I.D. 5-2b) has secondary containment in the form of a sloped floor with trenches at the lowest point. The secondary containment will hold a minimum of 4,298 gallons; no more than 42,912 gallons will be stored in this building.

The containers will be stored in the configurations shown on the Floor Plans, Exhibit I.D. 5-2b. At least two feet of aisle space will be maintained and the drums will be stored no more than two high. Containers will be placed on pallets and moved with a forklift or pallet jack whenever possible. Otherwise, drums will be moved using a handcart.

The above storage capacities (6,192 and 42,912 gallons) based on drum stacking configurations shown in Exhibits I.D.5-2a and I.D.5-2b, do not exceed the process design capacity volume presented, in Seciton III.B of the Part A permit application, Exhibit I.A.20-2.

I.E.3.c STORAGE TANKS

The facility consists of two 15,000-gallon capacity aboveground steel tanks. Used mineral spirits contained in returned drums from the customers are transferred via the wet dumpster into one of these two storage tanks, before bulk shipment to the Recycle Center. The other tank is used to store fresh Mineral Spirits solvent.

The tanks are designed and constructed to be compatible with the materials stored in it. Typical construction and installation standards for the aboveground tanks are shown in Exhibits I.E.3-5 and I.E.3-6 respectively. All tanks are vented in accordance with N.F.P.A. Standards and the tanks are to be equipped with high level alarms. The design and installation of the tank alarm system are shown in Exhibits I.E.3-7 and I.E.3-8.

The aboveground tanks are protected by a 2'6" high concrete retaining dike. Therefore, no run-on would occur and no runoff would be in contact with the wastes stored at the site and no runoff collection and management system is deemed necessary. Equipment used in the operation of the aboveground tanks for used mineral spirits will be gauges for measuring liquid levels in tanks and automatic high level alarms. A suction pump equipped with the tanker truck is used to withdraw the content from the tank. No other equipment or standby equipment are used in the operation of the aboveground tanks.

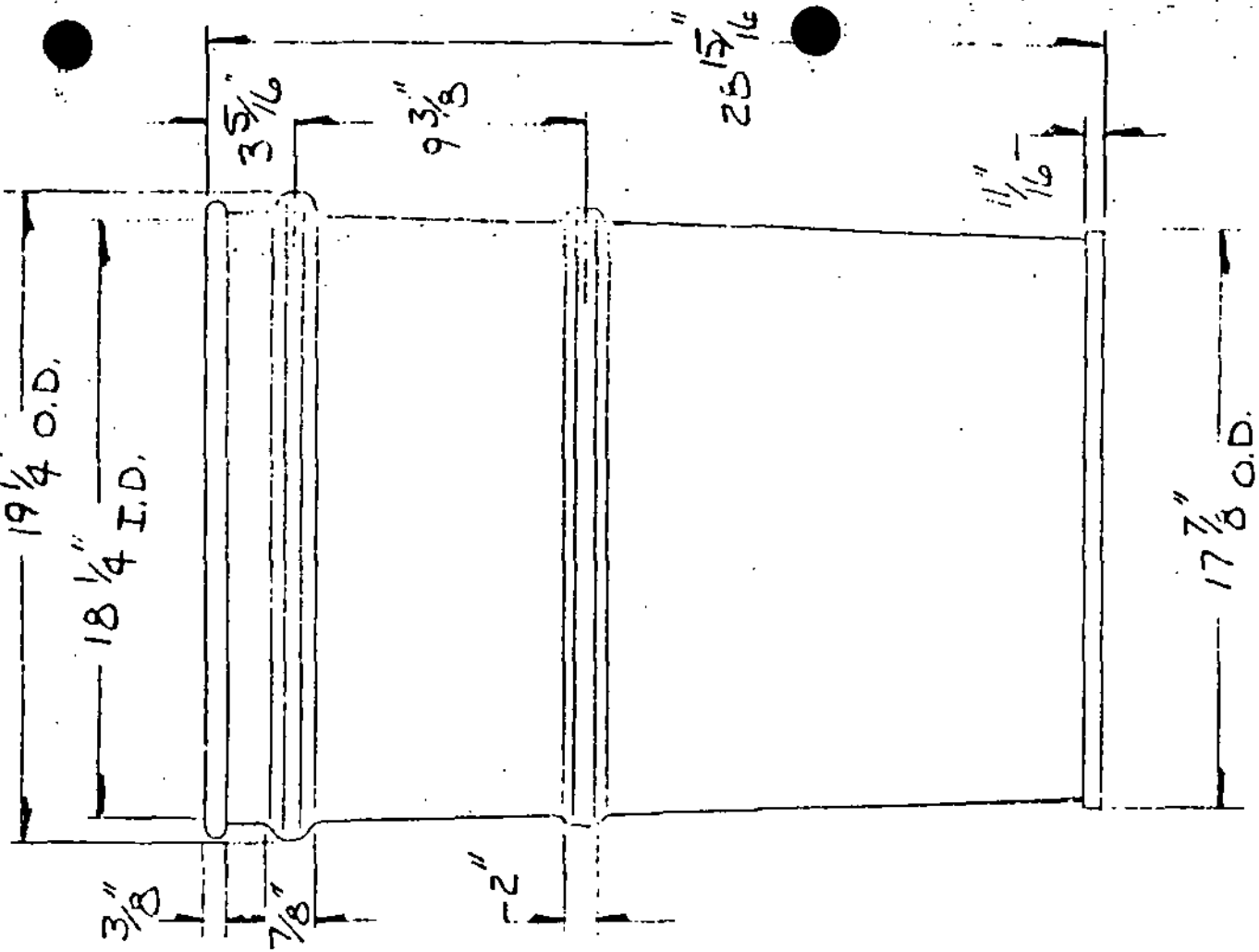


Exhibit I.E.3-4c

NOTES 1) MAT'L - 20 GA. (CRS) (22 GA. CRS ALTERNATE)
2) LEAK PROOF - USE AIR TEST (7-16 PSI).

NOV 1982
PRODUCTION
PRINT
DESTROY ALL
PREVIOUS PRINTS

REV	ECO	DESCRIPTION	DATE	BY
A	[illegible]	[illegible]	[illegible]	[illegible]

REVISIONS

TOLERANCE EXCEPT AS NOTED.
DECIMAL ±
METRIC ±
ANGULAR ±

NESTING DRUM, 30 GAL.

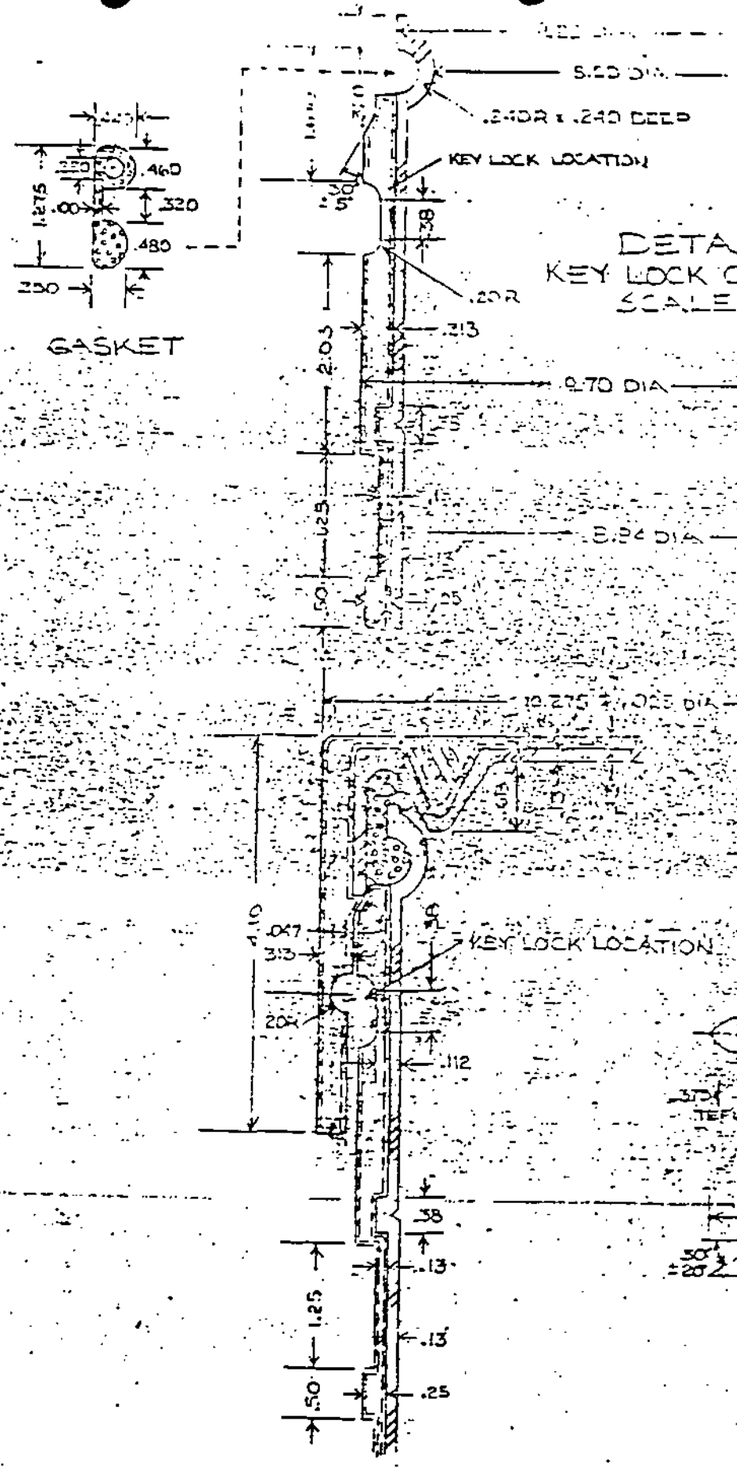
SCALE [illegible] APPROVED BY [illegible] DRAWN BY [illegible]
DATE [illegible] REVISED

safety-kleen corp.

REV A
DRAWING NUMBER [illegible]49

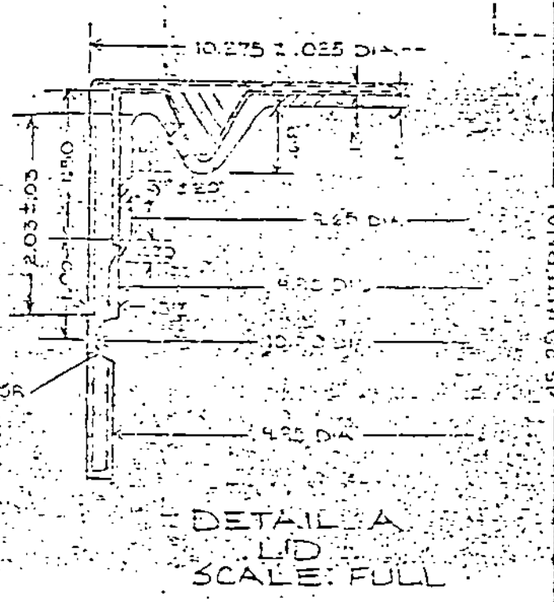
H.P. INC.

PRELIMINARY

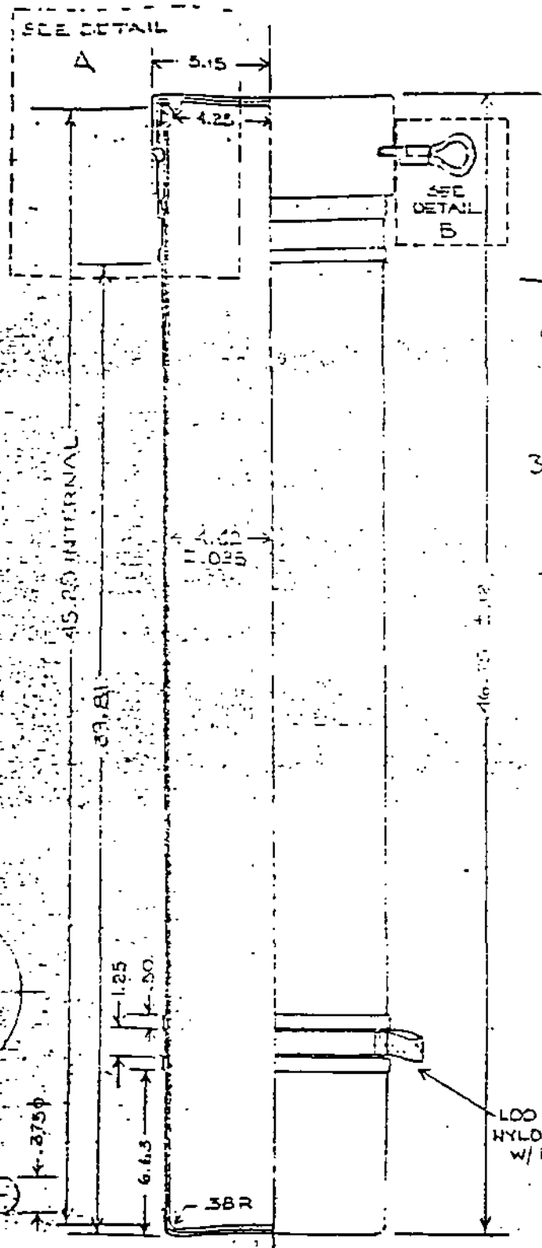


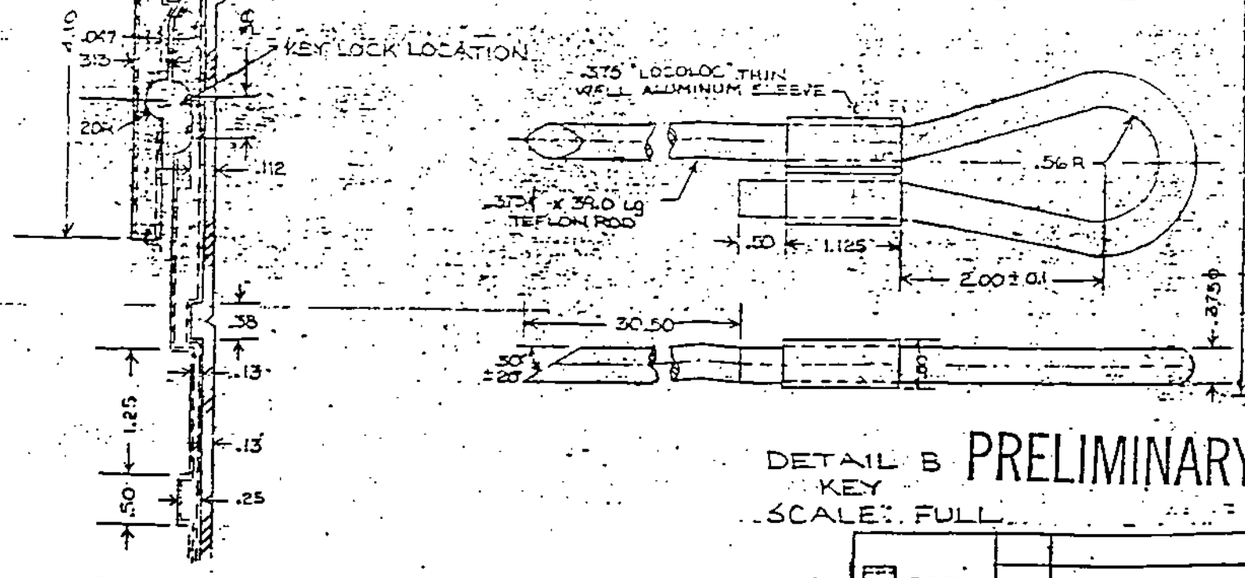
DETAIL A
KEY LOCK CLOSURE W/O LID
SCALE: FULL

GASKET



DETAIL A
LID
SCALE: FULL





DETAIL A
KEY LOCK LOCATION

DETAIL B
KEY
SCALE: FULL

This assembly consists of the following SK#'s for 1

3375 Dry Cln Cartridge tube

3376 Dry Cln Cartrid Gasket

3377 Dry Cl Cartrid Key

3378 Dry Cln Cartrid Cap (Lid)

JPK 2/16

Exhibit I.E.3-4d
(1 of 4 pages)

DIMENSIONS IN INCHES.
TOLERANCES AS SHOWN. SEE
UNLESS OTHERWISE SPECIFIED
.X ± 0.5 .XX .05 .XXX ±.005

FRP

BONDICO, INC.

SCALE: 1/4
DATE: 12-10-87
APPROVED BY:
DRAWN BY: JC
REVISED

605 DEV-TEST

BONDICO

Exhibit I.E.3-4d
(2 of 4 pages)

February 17,1988

Mr. John Kusz
Safety-Kleen Corp.
777 Big Timber Road
Elgin, IL 60120

Dear John,

As requested, enclosed is a summary of the testing performed on the dry cleaning cartridge tube. A copy of the March 1987 letter from the DOT is included as well.

Please let me know if any additional information is needed.

Sincerely Yours,

BONDICO, INC.

J. Tad Heyman
National Sales Manager

DRY CLEANING CARTRIDGE CONTAINER
Test Result Summary

	DOT SPEC.	TEST	DESCRIPTION	DATE	TOTAL # TESTS	RESULTS
1)	Spec. 35	4' Flat Bottom Drop	Fully loaded (95 lb. gross wt.)container; free fall drop onto 6" concrete slab.	Sept. 1986	12	No damage. No leakage. Passed.
2)	Spec. 35	4' Bottom Edge Drop	Same as above.	Sept. 1986	12	No damage. No leakage. Passed.
3)	Spec. 35	4' Closure Edge Drop	Same as above. Original poly-ethylene gasket used.	Sept. 1986	12	No damage. No measurable deflection of lid/container assembly. No leakage upon impact.Three units experienced slight loss of liquid after initial impact.
			Same as above. S-K gasket used.	Sept. 1987	10	No damage. No measurable deflection of lid/container assembly. No leakage. Passed.
4)	Spec. 35	Static Compression	Compression load of 1000 lbs. is applied vertically to empty container for 24 hrs.	Sept. 1986	3	No measurable deflection of top to bottom dimension. Passed.
5)	Spec. 7A	Penetration	16 lb. steel bar is dropped from 3.3' to impact weakest point of container.	Sept. 1986	9	No damage. No leakage. Passed.
6)	"Tip Over" Impact		Fully loaded unit is permitted to fall onto its side from vertical position onto concrete. Polyethylene gasket.	Sept. 1986	26	No damage. No leakage. Passed.
			Same as above. S-K gasket.	Sept. 1987	57	No damage. No leakage. Passed

Bondico, Inc.
2/17/88

U.S Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

MAR 16 1987

Mr. Mark D. Shaw
Vice President
Bondico, Inc.
2410 Silver Street
Jacksonville, Florida 32206

Dear Mr. Shaw:

This is in response to your letter dated February 6, 1987, regarding the acceptability of your "strong, tight" container.

Based on the information you have provided, your container appears adequate to satisfy the requirements of 49 CFR 173.24 and may be used as a packaging for Perchloroethylene (Tetrachloroethylene), UN 1897. We apologize for the delay of our reply.

Sincerely,

Thomas J. Charlton

Thomas J. Charlton
Chief, Standards Division
Office of Hazardous Materials
Transportation

activities These records verify that the site security and inspection plans are properly carried out and corrective actions, when necessary, are taken.

I.E.4.e CORRECTIVE ACTION

Any discrepancies or deficiencies found during the routine inspection must be corrected on a most expedient basis to insure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or an accident has already occurred, remedial action must be taken immediately. The Branch Manager of the Service Center has the overall responsibility for remedying any discrepancies found during the routine inspection.

I.E.4.f AVAILABLE EQUIPMENT AND COMMUNICATION

Due to the small size of the facility, routine communication is accomplished by voice communication without the need for an intercom or alarm. Telephones are used in case of a spill or fire emergency to summon assistance. Emergency numbers are posted by each phone in the office. Included with these phone numbers is the 24-hour spill number which connects to Corporate Environmental Department at the corporate office in Elgin, Illinois. See Exhibits I.D.5-2a and I.D.5-2b for locations of telephones, fire extinguishers, the first aid kit, and the emergency eyewash. Other emergency response equipment are kept in a small storage area inside the warehouse near the return/fill dock; the equipment includes mops and bucket, soap, shovels, and spill sorbent pads. Rubber gloves, boots, pumps, and wet/dry vacuum cleaner are stored in an emergency supply area near the drum storage area. Exhibit I.E.4-2 summarizes the type,

quantity, storage location, and capabilities of all the emergency equipment available at this Service Center. The city of Tampa supplies water for domestic use, decontamination, and fire fighting. Adequate aisle space is provided in the drum storage area for movement and emergency situation.

The equipment available at the Service Center for emergency situations has shown to be adequate for most cases. Large or serious emergency situations have been assisted by local emergency response teams or special emergency response or cleanup contractors. The facility is constructed and operated in accordance with National Fire Protection Association (NFPA) standards and applicable local ordinances. Applicable health and safety standards are also observed at the Service Center. A recent air quality survey conducted by an independent industrial hygenist at the Los Angeles Service Center has shown that air quality at a typical Service Center is within Threshold Limit Values (TLV) as specified by OSHA and local air pollution control criteria and no respirator or special protection unit is deemed mandatory.

I.E.4.g CONTAINMENT SYSTEM

All containers of clean and used solvent are stored in the container (drum) storage areas (Exhibit I.D.5-2a and I.D.5-2b) prior to transport. The current storage areas are totally contained by concrete floors, sumps and berms. The containment systems are free of cracks and gaps. All drums are stored on pallets.

In each drum storage area, drums are handled with a hand-truck free of sharp points and stacked by hand. Every time a drum is moved, a slight chance exists that it could possibly be tipped over, dropped or punctured. To minimize the possibility of the spillage of under those conditions, the drums are tightly covered and kept in an upright position. A small portable electric pump is available to quickly transfer the liquid from any leaking container into another safe drum. Each route truck is equipped with an electric hoist. This hoist is used in the loading/unloading operation to minimize chances for spillage and/or employee injury. The trucks shipping containers between the Recycle Center and Service Center have lift gates for drum loading/unloading.

All drums are covered during movement and are located within diked, concrete floored areas to contain any potential spill. The small quantities of waste on-site at any time can be cleaned up immediately through the use of hand-held electric pumps, mops, wet/dry vacuums, or sorbent materials should a spill occur. Any spilled waste will be drummed and sent for recycling/reclamation.

All drummed waste movement is done manually or by a pallet jack and power outages are not expected to threaten employee safety.

Employee training emphasizes the importance of inspection, maintenance, personal safety, and reporting of conditions with pollution incident potential. This training, containment system and immediate clean-up of any spills will eliminate chance of

contamination of ground water and surface water around and beneath the site region. Surface run off at the site will not come in contact with storage in the waste management area.

I.E.4.h INCOMPATIBLE WASTES

Reactive and/or incompatible waste is not handled at the facility. All waste or products are kept away from ignitable sources when being handled. The employees confine smoking or open flame to designated safe areas.

Materials are handled so that they do not:

a. Generate extreme heat or pressure, fire or explosion, or violent reaction.
b. Product uncontrolled toxic mists, fumes, dusts or gasses in sufficient quantities to threaten human health.
c. Produce uncontrolled fires or gases in sufficient quantities to pose a risk of fire or explosion.
d. Damage the structural integrity of the Safety-Kleen facility.

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

I.E.4-i RESPONSIBILITY FOR PREPAREDNESS AND PREVENTION PLAN

The preparedness and prevention plan as well as the training of employees for its implementation is the responsibility of the Branch

INSPECTION LOG SHEET FOR: Daily Inspection of **STORAGE TANK SYSTEM**

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
DATE:(M/D/Y)					
TIME:					

STORAGE TANKS:
(TANKS MUST NEVER BE MORE THAN 95% FULL!)

Volume in Product Tank (in./gal.)					
Volume in Second Product Tank (in./gal.)					
Volume in Waste Tank (in./gal.)					
Volume in Second Waste Tank (in./gal.)					

Tank Exterior	A* N	A N	A N	A N	A N

If 'N', circle appropriate problem: rusty or loose anchoring, lack of grounding, wet spots, discoloration, leaks, distortion, other: _____

High Level Alarms	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: malfunctioning "Power On" light, malfunctioning siren/strobe light, other: _____

Volume Gauges	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: disconnected, sticking, condensation, other: _____

CONTAINMENT AREA (Tank Dike):

Bottom and Walls	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: cracks, debris in dike, open drums in dike, ponding/wet spots/stains, deterioration, displacement, leaks, other: _____

Self-closing Drain Valve	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: open, leaks, other: _____

Rigid Piping and Supports	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: distortion, corrosion, paint failure, leaks, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: *Daily Inspection of **STORAGE TANK SYSTEM***

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
TRANSFER PUMPS AND HOSES					
Pump Seals	A* N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, other: _____					
Motors	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: overheating, other: _____					
Fittings	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, other: _____					
Valves	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: leaks, sticking, other: _____					
Hose Connections and Fittings	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: cracked, loose, leaks, other: _____					
Hose Body	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: crushed, cracked, thin spots, leaks, other: _____					
RETURN AND FILL STATION					
Wet Dumpster	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: excess sediment buildup, leaks, rust, split seams, distortion, deterioration, excess debris, other: _____					
Secondary Containment	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: excess sediment/liquid, leaks, deterioration, distortion, excess debris, other: _____					
Loading/Unloading Area	A N	A N	A N	A N	A N
If 'N', circle appropriate problem: cracks, ponding/wet spots, deterioration, other: _____					

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: Daily Inspection of **DRUM STORAGE AREA** - A log must be completed for each storage area.

DESCRIPTION OF AREA (e.g., metal shelter, northeast corner of warehouse, etc.): _____

PERMITTED STORAGE VOLUME: _____

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

	MON	TUES	WED	THURS	FRI
DATE: (M/D/Y)					
TIME:					
CONTAINERS:					
Number/Volume* of M.S. Waste Drums:					
Number/Volume of I.C. Waste Drums:					
Number/Volume of Dry Cleaning Waste Drums:					
Number/Volume of Dry Cleaning Waste Boxes:					
Number/Volume of Paint Waste Drums:					
Number/Volume of Paint Waste Pails:					
TOTAL VOLUME (IN GALLONS):					
	A**N	A N	A N	A N	A N

If 'N', circle appropriate problem: Total volume exceeds the amount for which the facility *is permitted, other:* _____

Condition of Drums/Boxes	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: missing or loose lids, missing, incorrect or incomplete labels, rust, leaks, distortion, other: _____

Stacking/Placement/Aisle Space	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: different from Part B Floor Plan, containers not on pallets, unstable stacks, other: _____

CONTAINMENT:

Curbing, Floor and Sump(s)	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: ponding/wet spots, deterioration (cracks, gaps, etc.), displacement, leaks, other: _____

Loading/Unloading Area	A N	A N	A N	A N	A N

If 'N', circle appropriate problem: cracks, deterioration, ponding/wet spots, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

* To calculate total volumes, use the following: M.S., I.C., D.C. and paint waste drums hold 16 gallons; D.C. boxes hold 10 gallons and paint waste pails hold 5 gallons.

**A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

INSPECTION LOG SHEET FOR: Weekly Inspection of **SAFETY AND EMERGENCY EQUIPMENT, SECURITY DEVICES AND MISCELLANEOUS EQUIPMENT**

INSPECTOR'S NAME/TITLE: _____

INSPECTOR'S SIGNATURE: _____

DATE OF INSPECTION (Month/Day/Year): _____

TIME OF INSPECTION: _____

SAFETY AND EMERGENCY EQUIPMENT

Fire Extinguishers: A* N

If 'N', circle appropriate problem: overdue inspection, inadequately charged, inaccessible, other: _____

Eyewash and Shower: A N

If 'N', circle appropriate problem: disconnected malfunctioning valves, inadequate pressure, inaccessible, malfunctioning drain leaking, other: _____

First Aid Kit: A N

If 'N', circle appropriate problem: inadequate inventory, other: _____

Spill Cleanup Equipment: A N

If 'N', circle appropriate problem: inadequate supply of sorbent, towels and/or clay, inadequate supply of shovels, mops, empty drums, wet/dry vacuum, other: _____

Personal Protection Equipment: A N

If 'N', circle appropriate problem: inadequate supply of aprons, gloves, glasses, respirator, other: _____

SECURITY DEVICES:

Gates and Locks: A N

If 'N', circle appropriate problem: sticking, corrosion, lack of warning signs, fit, other: _____

Fence: A N

If 'N', circle appropriate problem: broken ties, corrosion, holes, distortion, other: _____

MISCELLANEOUS EQUIPMENT:

Dry Dumpster: A N

If 'N', circle appropriate problem: rust, corrosion, split seams, distortion, deterioration, excess debris, liquids in unit, other: _____

OBSERVATIONS, COMMENTS, DATE AND NATURE OF ANY REPAIRS: _____

---

*A = ACCEPTABLE

N = NOT ACCEPTABLE

(IF AN ITEM IS NOT APPLICABLE, ENTER 'N/A' AFTER IT AND DRAW A LINE THROUGH THE 'ACCEPTABLE/NOT ACCEPTABLE' ROW)

Exhibit I.E.5-1

NEW BRANCH MANAGER TRAINING

Program for Regional Engineer branch visit -

Review of Environmental Notebook/Part B Permit
- Part A Application
- Waste Analysis Plan
- Contingency Plan
- Financial Requirements
- Training Plan
- Transportation Licensing

Review of Environmental Compliance Guidance and Corporate Policy Manual
- Tranship Labels
- Land Ban Notifications
- Spill Reporting
- Preparation for Agency Inspections

Conduct Detailed Facility Inspection with Branch Manager
- Identify deficiencies requiring branch attention
- Identify problems requiring Technical Services assistance
- Review actual vs. permitted waste storage capacities

File Review
- Manifests and Land Ban Notices
- Training Files
- Spill Report File
- Community Right-to-Know Files
- Inspection Records

Contingency Plan Training Session with Branch Manager and All Alternate Emergency Coordinators
- Include Spill Simulation and Response
- Update the Emergency Information and Local Authority Notifications

Health and Safety
- OSHA 200 Reporting
- Hazard Communication Program

Review Branch Specific Manifesting Procedures and Customer ID # Compliance

Review of Past Agency Inspections and Other Past Branch Compliance-related "History"

Environmental Training for Branch Personnel
- Recordkeeping

Exhibit I.E.5-1

Notes to Regional Engineers:

- Be prepared with examples and extra copies of all forms in case the branch is missing them.
- Spend time at the beginning of visit reviewing Environmental files for potential missing information or problems.
- Use several short quizzes covering the major topics as a review and documentation of the training session. A training record form should also be completed.
- Provide copies of your recent memos concerning environmental compliance at the branch or in the state. Branch copies may be missing.
- Provide Safety-Kleen part numbers for equipment (sorbents, signs, etc.) that may be missing at the branch.

Exhibit I.E.5-1

ANNUAL TRAINING FOR BRANCH EMPLOYEES

Facility Operation: Interim Status

A. Environmental Regulation Update

B. Part A Application

C. Waste Analysis Plan

D. Preparedness and Prevention Plan

E. Contingency Plan and Emergency Procedure

F. Training

G. Closure

H. Inspections

I. Manifesting

J. Spill Simulation and Spill Reports

I.F.1.a CLOSURE INTRODUCTION

The Safety-Kleen Corp. has constructed each service center with the intent that each will be a long term facility for the distribution of Safety-Kleen products. There is no onsite disposal activity at any plant and hence there is no disposal capacity to be exhausted that will necessitate closure of a facility. Based on current business and facility conditions, this facility is expected to remain in operation until the year of 2000.

In the event that some presently unforseen circumstance(s) would result in the discontinuance of operations and permanent closure or sale of the facility, the following Closure Plan is designed to identify the steps necessary to completely close the facility at any point during its intended life, and should be used for tanks, drum storage areas and equipment.

It is intended that all closures will be complete and final with removal of waste and decontamination of the facility and associated equipment, in order to eliminate need for maintenance after closure and chance of escape of hazardous waste constituents into the environment.

Procedures described in this closure plan are also applicable to cleaning up of spills and repairing/decontamination of facility or equipment.

An anticipated closure schedule can be seen in Exhibit H-1. An anticipated maximum waste inventory for the facility is presented in the following section.

I.F.1.b FACILITY DATA

1. Waste Management Facility Descriptions

a. Aboveground Storage Tanks

A 15,000-gallon steel tank, 10'6" diameter x 23'3" high, for used mineral spirits storage.

b. Drum Storage Areas

In the service center: A 40'x 30' area with 6" wide by 4" high continuous curbing and collector sumps. It has a capacity for 387 16-gallon drums (6,192 gallons), or the equivalent, of mineral spirits dumpster mud drums, dry cleaner wastes and/or spent immersion cleaner.

In the accumulation center: An 80' x 100' area with 6" wide by 4" high concrete curbing, sloped floors, collection trenches, and sumps. It has a capacity for 2,682 16-gallon drums (42,912 gallons) or the equivalent. Various halogenated and nonhalogenated solvents will be stored in this area.

c. Solvent Return/Fill Shelter: two 10' x 25' stations with one solvent return receptacle (wet dumpster) each and ancillary equipment.

2. Maximum Inventory of Wastes

a. Used Mineral Spirits: 15,000 gallons

b. Drummed Waste: 49,104 gallons

I.F.1.c CLOSURE PROCEDURE

1. Drum Storage Areas

a. The drum storage areas contain drums of used immersion cleaner, Mineral Spirits dumpster mud, and dry cleaning wastes, paint wastes and industrial (halogenated and non halogenated) solvents.

b. At closure all the drums will be removed and transported to the Recycle Center with proper packaging, labeling and manifesting, where the contents in the drums will be reclaimed and the drums will be cleaned for reuse.

c. The concrete floor and spill containment areas will be cleaned with detergent solution and tested for effectiveness of decontamination.

d. The wash water and all other wastes generated in the closure process when tested to be hazardous, will be properly disposed of.

2. Solvent Return/Fill Shelter Area

a. This area is used to return the used mineral spirits to the storage tank.

b. Closure of the solvent return receptacle (wet dumpster) will be made prior to the cleaning and removal of the storage tank.

c. At closure, the sludge in the dumpster ("dumpster mud") will be cleaned out and drummed, labeled, and manifested for proper disposal at permitted facilities.

d. The dumpster and the dock area will be thoroughly rinsed with clean mineral spirits followed by detergent solution.

e. The rinsing fluids are discharged through the appurtenant piping system into the storage tank, which will be subjected to a separate closure procedure as described below.

f. The cleansed dumpster and dock structure will be reused by Safety-Kleen, or scrapped.

3. Aboveground Tanks and Associated Piping

a. OUTLINE - To safely clean and decommission aboveground storage tanks:

(1) Expose doorways or cut openings to provide access to each tank.

(2) Remove remaining material from tanks and return the materials to the Recycle Center for reclamation.

(3) Rinse, scrape and squeegee tank interiors.

(4) Disconnect and cap all appurtenant piping.

(5) Disconnect and cap all appurtenant pumping equipment.

(6) Remove tanks and appurtenant equipment for final disposition.

(7) Transport and dispose of all other waste material generated during the project.

5. When closure is completed, all facility equipment and structures shall have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

6. When closure is completed, Safety-Kleen shall submit to the certification by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

I.F.1.e CLOSURE COST ESTIMATE

1. Tank Closure - Open, remove contents of, and clean, remove, and dispose of, a 15,000-gallon 10'6" diameter x 23'3" high aboveground storage tank.

Phase I - Remove Contents and Clean

1. Ship contents to reclaimer.

Crew:	
2 Truck Dr. $17.56/hr. x 4 hrs. =	$ 140.48
2 Trucks $500 lump sum =	500.00
Tank size = 15,000 gal. ÷ 7,500 gal/truck = 2 trucks	
2 trucks x 30 miles x 1.75/mile =	105.00
Reclamation cost ($0.30/gal.) =	4,500.00

2. Squeegie Clean Tank

Crew:	
1 Foreman $18.30/hr. x 24 hrs. =	439.20
1 laborer ($17.00/hr. & $3.00/hr. hazard pay) x 24 hrs. =	480.00

3. Use of high pressure water for two days — 800.00

4. Disposal and transportation of Wash Water
(1,500 gallons @ $0.12/gallon) = — 180.00

5. Transportation of wastewater
500 miles x $1.75/mile = — 875.00

Total - Phase I — $8,020.00

Phase II - Remove and Dispose of Tank

1. Disconnect and Remove Appurtenant Equipment

Crew:	
1 Foreman $18.30/hr. x 8 hrs. =	$ 146.40
2 Laborers $17.00/hr. x 8 hrs. =	272.00

2. Torch Tank

Crew:	
1 Foreman $18.30/hr. x 8 hrs. =	146.40
1 Laborer $17.00/hr. x 8 hrs. =	136.00

3. Remove Tank

Crew:		
1 Foreman	$18.30/hr. x 2 hrs. =	36.60
4 Laborers	$16.80/hr. x 2 hrs. =	134.40
1 Backhoe	$28.97/hr. x 2 hrs. =	57.94
1 Oiler	$25.47/hr. x 2 hrs. =	50.94
1 Truck Dr.	$17.56/hr. x 2 hrs. =	35.12
Equipment	$200 Lump Sum =	200.00
	Total Phase II	$1,216.00

Phase III - Backfilling, Regrading, Soil Testing

1. Test for soil contamination
   Scan soil with a photoionization detector
   (1 hour) = $ 50.00

2. Regrading

Crew:		
1 F.E. Loader	$27.38/hr. x 1 hr. =	27.38
Equipment	$ 2.00/c.y. x 10 c.y. =	20.00
	Total - Phase III =	$ 97.00

Summary of Closure Cost for 15,000-gallon Tank:

Phase I	$8,020
Phase II	1,216
Phase III	97
	$9,333

2. CLOSURE OF DRUM STORAGE AREAS - Remove and return drums to reclaimer, clean the drum storage areas and dispose of wash water generated.

a.	18 Truck Dr. $17.56/hr. x 4 hrs./each	$ 1,264.32
	18 Trucks $250 lump sum each	4,500.00
	Hauling cost = 30 miles x $1.75/mile x 18 trucks =	945.00
b.	Clean drum storage areas:	
	Crew:	
	1 Foreman $18.30/hr. x 10 hrs. =	183.00
	1 Laborer ($17.00/hr. & 3.00/hr. hazard pay) x 10 hrs. =	200.00
c.	Dispose of wash water	
	1000 gallons x $0.12/gallon =	120.00
d.	Dispose of used solvents	
	3,069 16-gallon drums x $30.00/drum =	92,070.00
e.	Testing for contamination	
	6 samples x $75.00/each	450.00
	Total Drum Closure Cost	$ 99,732.00

3. CLOSURE OF DUMPSTER AND DOCK AREA - Remove, package and dispose of sludge, clean the dumpster and dock area, remove dumpster and dock structure for reuse.

a.	1 Truck $250 lump sum	$ 250.00
	Hauling Cost = 30 miles x $1.75/mile	52.50
	1 Truck Dr. $17.56/hr. x 8 hrs. =	140.48
	Crew:	
	1 Foreman $18.30/hr. x 4 hrs. =	73.20
	1 Laborer ($17.00/hr. x $3.00/hr. hazard pay) x 4 hrs. =	80.00
b.	Clean Dumpster and Dock Area	
	Crew:	
	1 Foreman $18.30/hr. x 16 hrs. =	292.80
	1 Laborer ($17.00/hr. x $3.00/hr. hazard pay) x 16 hrs. =	320.00
	Use of high pressure water for one day =	400.00
c.	Disposal of wash water	
	100 gallons x $0.12/gallon =	12.00
d.	Dispose of dumpster mud	
	10 55-gallon drums x $300/drum =	3,000.00
e.	Testing for contamination	
	4 samples x $75 each =	300.00

f. Torch, disassemble, and remove dumpster and dock

Crew:		
1 Foreman $18.30/hr. x 24 hrs. =		439.20
2 Laborers $17.00/hr. x 24 hrs. =		408.00
Equipment $5.20/hr. x 8 hrs. =		41.60
1 Truck Dr. $17.56/hr. x 2 hrs. =		35.12
	Total Dock Closure Cost	$ 6,253.00

4. PE CERTIFICATION = $ 500.00

5. TOTAL CLOSURE COST:

15,000-gallon tank =	9,333.00
Drum storage areas =	99,732.00
Dock and dumpster area =	6,253.00
P.E. certification =	500.00
TOTAL	$115,818.00

PART II

CONTAINERS

PART II - CONTAINERS

II.B.1 CONTAINMENT

The immersion cleaner is always contained in partially filled, 16-gallon, covered drums before, during, and after its use. Until received at the Recycle Center, the immersion cleaner is never transferred to another container. The drums containing the used immersion cleaner are returned to the facility and stored in one of two designated drum storage areas before shipment to the Recycle Center.

The dry cleaning wastes are contained in 30- and 16-gallon drums, in lined boxes (16" x 16" x 15") and in polyethylene filter tubes. Paint wastes are stored in 16-gallon drums and in 5-gallon pails and industrial solvents are stored in 55-gallon drums. These containers are managed similar to the used immersion cleaner drums, and contents within the drums will not be removed or processed at the facility.

The drum storage areas as shown on Exhibits I.D.5-2a and I.D.5-2b occupy portions of building areas which have a concrete floor, berms, and interceptor trenches to form spill containment systems. The system is free of cracks and gaps. Spills are removed by a hand-held, portable electric pump (the COMS pump), wet-dry vacuum cleaner, or sorbent materials. The capacities of the containment systems in each section are designed to be greater than 10% of the total liquid storage capacity in the drum storage areas. Since the characteristics of the stored wastes are known, no analysis are performed for the materials collected from the containment area. All collected

materials are sent to a recycling center for recycling/reclamation. The recovered materials that can not be effectively reclaimed at the recycle center will be, in turn, sent to a licensed facility for disposal.

All drums are transported, moved, and stored carefully in an upright position. The route trucks are equipped with an electric hoist to assist loading/unloading. In the warehouse area, the immersion cleaner, mineral spirits dumpster mud drums, and dry cleaning waste drums are moved with 2-wheel hand trucks and stacked by hand. All drums will be elevated on pallets to eliminate the possiblity of drums standing in spilled solvent.

The drums are designed and constructed to be compatible with the stored material and to minimize the possibility of breakage and leaking, in accordance with DOT shipping container specifications. Exhibits I.E.3-1 to I.E.3-2 show typical detailed construction specifications of the 16-gallon immersion cleaner drums.

The drum storage areas for spent solvents (Exhibits I.D.5-2a and I.D.5-2b) have capacity for holding 49,104 gallons (892 55-gallon drums or 3,069 16-gallon drums).

Containers will be double-stacked. Exhibits I.D.5-2a and I.D.5-2b show the configuration and stacking arrangements of containers.

Wastes are stored in nylon-lined boxes, polyethylene and steel containers. Since none of the waste handled by Safety-Kleen react with metal, nylon or polyethylene, compatibility is assured. Immersion cleaner, industrial wastes, paint wastes and dry cleaning waste drums are never opened at the branch. None of the wastes are incompatible; however, solvents are segregated for quality assurance purposes. Only mineral spirits is placed in red drums, only immersion cleaner in gray, only perchloroethylene in polyethylene drums or in boxes and only paint waste in black drums or pails.

All drum storage areas are located indoors. The drum storage containment systems consist of 4" x 6" concrete curbing, trenches and sumps which prevent both run-on and run-off.

II.B.2. WASTE COMPATIBILITY

The solvents stored at this facility are not incompatible with each other, or with other materials handled at this facility, insofar as reactivity is concerned. However, they are the primary source of feed stock for regenerating the clean solvents. Separation of these used solvents is a standard practice at the Service Center.

All material at the facility is managed in accordance with local fire protection code and fire department recommendation.

Drum storage configurations are shown of Exhibit I.D.5-2a and I.D.5-2b.

II.B.3 INCOMPATIBLE WASTES

See above Section II.B.2.

II.B.4 PROCEDURES FOR LEAKING CONTAINERS

Specific procedures for inspection and management of leaking containers are presented in Section I.E.4.

II.B.5 INSPECTION PROCEDURES

See Section I.E.4.

II.B.6 CLOSURE PLAN

A closure plan for the entire facility is presented in Section I.F.

PART III

TANKS

PART III - TANKS

III.A.1 MATERIAL COMPATABILITY

The facility consists of two aboveground steel tanks. Used mineral spirits contained in returned drums from the customers are transferred via the wet dumpster into a 15,000 gallon tank, awaiting bulk shipment to the Recycle Center. The other 15,000-gallon tank is used to store fresh Mineral Spirits solvent.

Product stored in the tanks at this facility is mineral spirits (petroleum naphtha). The material is compatible with the mild steel tank structure; in fact, mineral spirits is often used as a light hydrocarbon coating to prevent rusting of metal parts. As with all petroleum storage vessels, water will accumulate over time due to condensation. The mineral spirits has a specific gravity less than water and the water will accumulate in the bottom of the tank. There is the potential for corrosion of the tank at the mineral spirits/water interface. Experience, however, has shown that the corrosion potential at the interface is minimal when compared to the potential for corrosion from soil conditions.

III.A.2 TREATMENT PROCESSES

There are no treatment processes at this facility.

III.B.1 TANK DESIGN AND OPERATION PROCEDURES

The tanks are designed and constructed to be compatible with the materials stored in it. Typical construction and installation

standards for the aboveground tanks are shown in Exhibits I.E.3-5 and I.E.3-6, respectively. All tanks are vented in accordance with N.F.P.A. Standards, and the tanks are equipped with high level alarms. The design and installation of the tank alarm system are shown in Exhibits I.E.3-7 and I.E.3-8.

All tanks are aboveground, underlain by a 6" concrete slab, and surrounded by a 30" concrete dike. Therefore, no surface runoff would be in contact with the wastes stored at the site and no runoff collection and management system is deemed necessary. Equipment used in the operation of the aboveground tanks for used mineral spirits are gauges for measuring liquid levels in tanks and automatic high level alarms. A suction pump equipped with the tanker truck is used to withdraw the content from the tank. No other equipment or standby equipment are used in the operation of the aboveground tanks.

III.B.2 INSPECTION PROCEDURES

See Section I.E.4.

III.B.3 CLOSURE PLAN

See Section I.F.

SAFETY-KLEEN CORPORATION

TAMPA, FLORIDA FACILITY

SECONDARY CONTAINMENT CALCULATIONS

Service Center Container Storage Area:

Two Trenches:

2 x 11' 9 1/4" L x 19" W x 2' D x 7.481 gal./cf = 623.7 gallons

Amount to Be Stored:

43 single or double stacked pallets x 9 drums/pallet x 16 gallons/drum = 6,192 gallons

Accumulation Center Container Storage Area:

Trench A:

40'4" L x 1'9" W x 1'9" D* x 7.481 gal./cf = 924 gal.

Trench B:

(17'8" L x 1'9" W x 1'6" D + 22'8" L x 1'9" W x 1'9" D) x 7.481 gal./cf = 866

Two Sumps (c):

2 x 1'6" x 1'6" x 3'6" D x 7.481 gal./cf = 118

Trench D:

72' L x 1'9" W x 2' D x 7.481 gal./cf = 1,885

Trench E:

18'2" L x 1'9" W x 2' 1-1/2" D x 7.481 gal./cf = 505

Amount Held in Trenches = 4,298 gal.

Amount to be Stored:

298 double-stacked pallets x 9 drums/pallet x 16 gallons/drum = 42,912 gal.

* All trenches, except for trench E, will overflow when six inches from the top. Trench E will fill to within one and one half inch of the top before overflowing.