

Facility to District - operating
period mod.)
(3 copies) (SUPP FILE)

RCRA Permitting Routing Slip

Facility Name/Location: SAFEN - KLEEN / Boynton

PATS No.: H050 - 195905

<u>TO</u>	<u>NAME</u>	<u>INITIALS</u>	<u>DATE</u>
_____	CASTURY, Satish	_____	_____
_____	Ashwood, Janet	_____	_____
_____	Outley, Debra	_____	_____
_____	RUSSELL, Merlin	_____	_____
_____	Bland, Susan	_____	_____
_____	Graves, Shelton	_____	_____
_____	Kaharoceddin, Ami	_____	_____
_____	Liu, Xinlan	_____	_____
_____	Madrid, Nicanor	_____	_____
_____	Papp-Wells, Joyce	_____	_____
_____	Plautz, Camille	_____	_____
_____	Smith, Cindy	_____	_____
_____	OUTLAW, Doug	<u>MD</u>	<u>3/20/95</u>
_____	Budeir, Maher	_____	_____
_____	Griffin, John	_____	_____
_____	Owutaka, Alex	_____	_____
<u>+</u>	Singh, Harbhajan	<u>HS</u>	<u>03-20-95</u>
_____	KOTHUR, Bheem	_____	_____
_____	Prusty, Rabin	_____	_____
_____	WICK, Fred	_____	_____
_____	Mason, David	_____	_____
_____	Ryan, Aine	_____	_____

REQUIRED ACTION & COMMENTS:

_____ File _____

PROJECT MANAGER: Singh

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RCRA

MAR 17 1995

March 13, 1995

Mr. J. Knox McKee, Jr.
Florida Department of
Environmental Protection
1900 South Congress Avenue, Suite A
West Palm Beach, FL 33406

RE: Operating Permit Modifications, Safety-Kleen Corp., Boynton Beach, Florida; FLD
984167791

Dear Mr. McKee:

Safety-Kleen Corp. (Safety-Kleen) has reviewed its current operations and determined that it is appropriate to manage nonhazardous spent ethylene glycol by commingling with used oil. Under hazardous conditions, the spent ethylene glycol will be handled in containers. The waste stream of spent ethylene glycol will no longer be accumulated and stored in the 20,000-gallon tank. The appropriate pages of the permit application have been revised to reflect managing this waste stream as described above.

The tank was permitted to hold spent ethylene glycol but never held any waste product. Currently, a small amount of water from the hydrostatic testing procedure exists in the tank. Per discussions between you and Jon Ercole, no decontamination of the tank is required. The tank will be designated as a 20,000-gallon product tank.

Updates to the emergency contact list have also been made and are included herein.

Additionally, two references to clean perchloroethylene being stored in the 5,000-gallon tank were deleted. A permit modification submitted June 14, 1993 addressed the re-designation of the 5,000-gallon tank from perchloroethylene to any fresh product. These two references were inadvertently missed at the time of that submittal.

Table 1 provides instructions for updating the permit application. Two copies of the replacement pages are enclosed. Additional copies are being provided under separate cover to FDEP Tallahassee and Environmental Protection Agency (EPA) Region IV. Also enclosed is the required \$500 modification fee.

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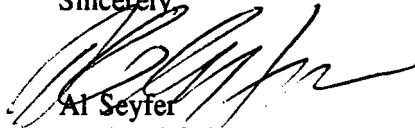
Mr. J. Knox McKee, Jr.

March 13, 1995

Page -2-

If you have any questions or comments, please do not hesitate to contact Jon Ercole at (407) 734-2560.

Sincerely,



Al Seyfer
Regional Sales Manager

pjh

Enclosure(s)

c: Jeffrey J. Grill - ERM
Cynthia H. Norton - ERM (ltr only) ---

Chief, Waste Management Division
U.S. EPA Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Environmental Administrator
Hazardous Waste Regulation Section
Bureau of Solid and Hazardous Waste
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

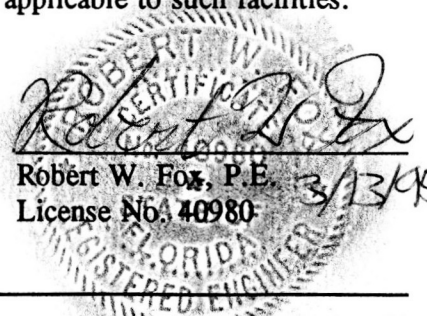
TABLE 1

**INSTRUCTIONS FOR UPDATING THE
OPERATING PERMIT APPLICATION
SAFETY-KLEEN CORP.
BOYNTON BEACH, FLORIDA
FLD 984167791
MARCH 13, 1995**

Replace the following pages:

I.B.3-1
Figure I.B.3-2
I.D.2-5
I.D.3-1A
Figure II.A.1(a)-7
II.A.1(c)-1
Figure II.A.1(c)-1
II.A.4(b)iii
II.A.4(b)-1
II.A.4(b)-2
Figure II.A.4(b)-2
II.A.4(b)-4A
Figure II.A.4(d)-1
II.A.5-8
II.A.6-7
II.A.6-9A
II.A.6-9C
II.A.6-9D
II.B.3-1
II.B.4-1
II.B.4-1A
II.C.1-1
II.C.2-1
Figure II.C.2-1
II.C.2-3
Figure II.C.7-1
II.C.9-1
II.C.12(a)-2
II.K.1-1
II.K.1-2

This is to certify that the modifications incorporated on this list have been examined by me and found to conform to engineering principles applicable to such facilities.


Robert W. Fox, P.E.
License No. 40980

ATTACHMENT I.B.3 FACILITY LAYOUT AND PHOTOGRAPHS

The facility layout and traffic patterns are illustrated in Figures I.B.3-1 and I.B.3-2, respectively.

The nonbuilding areas of the facility are paved with asphalt or concrete as noted on the site plan (Figure I.B.3-1). The stormwater retention area and other minor areas are vegetated with grass. The majority of the vehicular traffic (step side and one-ton box trucks) and loading/unloading operations occur at and near the return and fill area A and it is paved with asphalt and concrete (Figure I.B.3-2). Approximately once per week a tractor trailer brings fresh drummed solvents and removes used drummed solvents for transfer to the recycle facility. This truck backs up to the eastern side of the concrete dock, located on the southern side of the facility in area B, to load and unload drums. Area C will be used for the loading/unloading of transfer wastes and containerized permitted wastes from local area vans and trucks. Truck-to-truck transfer of Fluid Recovery Service (FRS) wastes may occur on an asphalt area south or east of the warehouse (Area E). Truck-to-truck transfer of spent ethylene glycol may occur in Area F. The transfer of wastes will occur only in areas with secondary containment. Congress Avenue, which leads to Alpha Avenue, is the major access road to the facility. The access road is designed in accordance with engineering criteria appropriate for sustaining the traffic volume and loading for the industrial activities in this area. The vans that daily travel the routes between the service center and its customers use the two-lane road within the industrial park. The trucks dispatched from the recycle center to deliver fresh parts washer solvent and pick up used parts washer solvent, will perform these activities at the aboveground tank area D approximately once per week. Traffic from this facility is not expected to have a major effect on local traffic conditions. Figure I.B.3-3 presents anticipated 1987 average daily traffic counts for the entire region.

Photographs which depict the hazardous waste management units, security features, and general layout of the facility are provided in this attachment.

In 1990, Safety-Kleen began offering a service for the collection of spent antifreeze (ethylene glycol) from automobile repair shops. These wastes are deposited into a 150-gallon translucent carboy by the customer, which is located on the customer's premises. The contents of the carboy, if nonhazardous, are pumped into a 3,500-gallon tanker truck and combined with used oil. The contents of the carboy, if hazardous, are pumped into 30- or 55-gallon containers. A sales representative conducts the pumping of the contents of the carboy. It is then placed in the container storage warehouse or transferred from tanker truck to tanker truck for shipment to a recycle center.

Safety-Kleen's solvent cycle is essentially a closed loop, moving from the service center to the customer, from the customer to the service center, from the service center to the recycle facility and then from the recycle center back to the service center. The small quantities of residue remaining in the storage tanks at the service centers and after distillation of the used solvent at Safety-Kleen's solvent recycling facilities are disposed of in accordance with applicable laws and regulations.

This closed loop supplies Safety-Kleen with most of its solvent requirements; the resultant stabilized cost benefits are passed on to its customers. Ownership of the solvent remains with Safety-Kleen; the service center managers are accountable for the quantities of clean and used solvents handled by their branch operations. The service center is basically a temporary storage and transfer facility. By FDER definition, however, these centers are considered to be the waste generator.

**ATTACHMENT I.D.3-1
SAFETY-KLEEN CORP. FACILITY
BOYNTON BEACH, FLORIDA**

Waste Type	Process Code(s)	Estimated Annual Amounts (Tons)	Waste Codes
Spent Parts Washer Solvent*	S01** S02***	993	D001 and D-Codes Listed in Note Below
Dumpster Sediment	S01**	Included Above	D001 and D-Codes Listed in Note Below
Tank Bottoms	S01**	Included Above	D001 and D-Codes Listed in Note Below
Hazardous Spent Ethylene Glycol	S01**	5,000	D-Codes Listed in Note Below
Spent Immersion Cleaner (Old Formula)	S01****	31	F002, F004, and D-Codes Listed in Note Below
Spent Immersion Cleaner (New Formula)	S01**	Included Above	D-Codes Listed in Note Below
Dry Cleaning Waste (Perchloroethylene)	S01**	350	F002 and D-Codes Listed in Note Below
Dry Cleaning Waste (Non-perchloroethylene)	S01****	Included Above	D001 or F002 and D-Codes Listed in Note Below
Paint Waste	S01**	50	D001, F003, F005 and D-Codes Listed in Note Below
Fluid Recovery Service (FRS) Waste	S01** ****	250	D001, D002, and D-Codes, F-Codes, K-Codes, U-Codes Listed in Note Below

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

F-Codes: F001, F002, F003, F004, F005, F006, F019, F024, F039

K-Codes: K006, K016, K019, K022, K029, K030, K031, K048, K049, K050, K051, K052, K085, K086, K095, K096, K009, K010, K011, K013, K014, K015, K002, K003, K004, K005

U-Codes: U001, U002, U003, U009, U031, U037, U043, U044, U051, U052, U055, U056, U057, U068, U069, U070, U071, U072, U075, U077, U078, U079, U080, U083, U084, U107, U108, U110, U112, U113, U117, U118, U121, U125, U140, U154, U159, U161, U162, U165, U169, U171, U188, U191, U196, U210, U211, U213, U220, U226, U227, U228, U239, U359

* Spent Parts Washer 105 and Actrel® are transported from the customer to the Service Center as a hazardous waste unless a generator's hazardous waste determination indicates that it is non-hazardous. Spent Premium Solvent is transported in accordance with the generator's hazardous waste determination pursuant to 40 CFR 262.11.

** These wastes will be stored in containers in the container storage area. The maximum drum capacity in the container storage area for hazardous waste and product is 29,400 gallons with 6,912 gallons being waste.

*** The spent parts washer solvent storage tank has a capacity of 20,000 gallons and may be filled up to 19,000 gallons.

**** These are transfer wastes only. They will be managed in accordance with FAC 17-730.171.

ATTACHMENT II.A.1(c)
TRAFFIC INFORMATION

The facility layout and traffic patterns are illustrated in Figure II.A.1(c).

The nonbuilding areas of the facility are paved with asphalt, concrete, or gravel as noted on the site plan (Figure II.A.1(c)-1). The stormwater retention area is vegetated with grass. The majority of the vehicular traffic (step side and one-ton box trucks) and loading/unloading operations occur at and near the return and fill area A and it is paved with asphalt and concrete (Figure II.A.1(c)-1). Approximately once per week a tractor trailer brings fresh drummed solvents and removes used drummed solvents for transfer to the recycle facility. This truck backs up to the eastern side of the concrete dock, located on the southern side of the facility in area B to load and unload drums. Area C will be used for the loading/unloading of transfer wastes and containerized permitted wastes from local area vans and trucks. Area E will be used for the truck-to-truck transfer of FRS wastes. Truck-to-truck transfer of spent ethylene glycol may occur in Area F. The transfer of wastes will occur only in areas with secondary containment.

Congress Avenue is the major access road to the facility. The access road is designed in accordance with engineering criteria appropriate for sustaining the traffic volume and loading for the industrial activities in this area. The vans that daily travel the routes between the service center and its customers use the two-lane road within the industrial park. The trucks dispatched from the recycle center to deliver fresh parts washer solvent and pick up used parts washer solvent, will perform these activities at the aboveground tank area D approximately once per week. Traffic from this facility is not expected to have a major effect on local traffic conditions. Figure II.A.1(c)-2 presents anticipated 1987 average daily traffic counts for the entire region.

EMERGENCY PHONE NUMBERS

Emergency Coordinators

Primary:	Bernie Korzekwinski 1240 Grandview Circle Royal Palm Beach, FL 33411 Home: (407) 791-7053 Office: (407) 736-1339 Pager: (407) 787-2731	Alternate:	Steve Becker 12126 Sugar Pine Trail West Palm Beach, FL 33414 Home: (407) 798-5583 Office: (407) 736-1339 Pager: (407) 787-2759
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Emergency Notification Phone Numbers

Safety-Kleen Environmental Health & Safety Department
Telephone (708) 888-4660 (24-hour number)

National Response Center¹
Telephone (800) 424-8802

Southeast Florida District of the FDEP, 1900 South Congress Avenue, Suite A, West Palm Beach, Florida (407) 433-2650 (M-F, 8-5 except holidays) or (904) 488-1320 - 24 hours.

South Florida Water Management District, West Palm Beach, Florida (407) 686-8800

Emergency Team to be Notified

Boynton Beach Fire Department
150 E. Boynton Beach Blvd.
Boynton Beach, FL 33435
(407) 738-7430

O.H. Materials Company
P.O. Box 551
Findlay, OH 45839-0551
(800) 537-9540
(Primary Cleanup Contractor)

Boynton Beach Police Department
135 N.E. 1st Avenue
Boynton Beach, FL 33435
(407) 732-8132

Ryckman's Emergency Action and
Consulting Team
P.O. Box 27310
St. Louis, MO 63146
(800) 325-1398
(Secondary Cleanup Contractor)

Bethesda Memorial Hospital
2815 S. Seacrest Blvd.
Boynton Beach, FL 33435
(407) 737-7733 or 278-7733

¹Call NRC only if Florida Department of Emergency Management cannot be reached.

ATTACHMENT II.A.4(b)**CONTINGENCY PLAN AND EMERGENCY PROCEDURES
FOR DAILY BUSINESS OPERATIONS****GENERAL INFORMATION****Purpose**

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

The provisions of the contingency plan are to be carried out immediately if there is a fire, explosion, or release of hazardous materials occurs that could threaten human health or the environment. All contingency plan responses must conform with the procedures contained in this plan.

General Description of Activities

The business activities conducted at the Boynton Beach Service Center relate to the leasing and servicing of Safety-Kleen Parts Cleaning Equipment, including the provisions of a solvent leasing service for the customers. Clean solvents are distributed from and the used solvents are returned to the service center, where separate storage tanks are utilized for the storage of clean and used parts washer solvent (Parts Cleaner 105, Premium Solvent, and Actrel®). There are three storage tanks for fresh product at this time, a 5,000-a 15,000-, and a 20,000-gallon tank. These tanks may store any of the clean parts washer solvents (Parts Cleaner 105, Premium Solvent, and Actrel®). Warehouse space is designated for the storage of containers of both clean and used immersion cleaner, parts washer solvent, tank bottoms, dumpster mud, antifreeze, paint, dry cleaning wastes (chlorinated solvent), and Fluid Recovery Service (FRS) wastes. Safety-Kleen uses a container color scheme as a part of its waste management system. An 85-gallon overpack container is used for the management of containers whose integrity has been compromised.

The parts washer solvents are transported in covered containers between the service center and customers. Upon returning to the service center, the used parts washer solvents (Parts Cleaner 105, Premium Solvent, and Actrel®) are transferred from the containers into a wet dumpster (solvent return receptacle) in which coarse solids in the parts washer solvents are retained. Used parts washer solvents (Parts Cleaner 105, Premium Solvent, and Actrel®) from the wet dumpster flows into a 15,000-gallon aboveground tank for storage. Used parts washer solvent (Parts Cleaner 105, Premium Solvent, and Actrel®) is picked up periodically by a bulk tank truck from the recycle facility which at the same time delivers a load of clean parts washer solvent. The sludge in the wet dumpster is periodically cleaned out, containerized in satellite accumulation drums next to the wet dumpster units, and temporarily stored in the container storage area for later shipment to the recycle facility for reclamation.

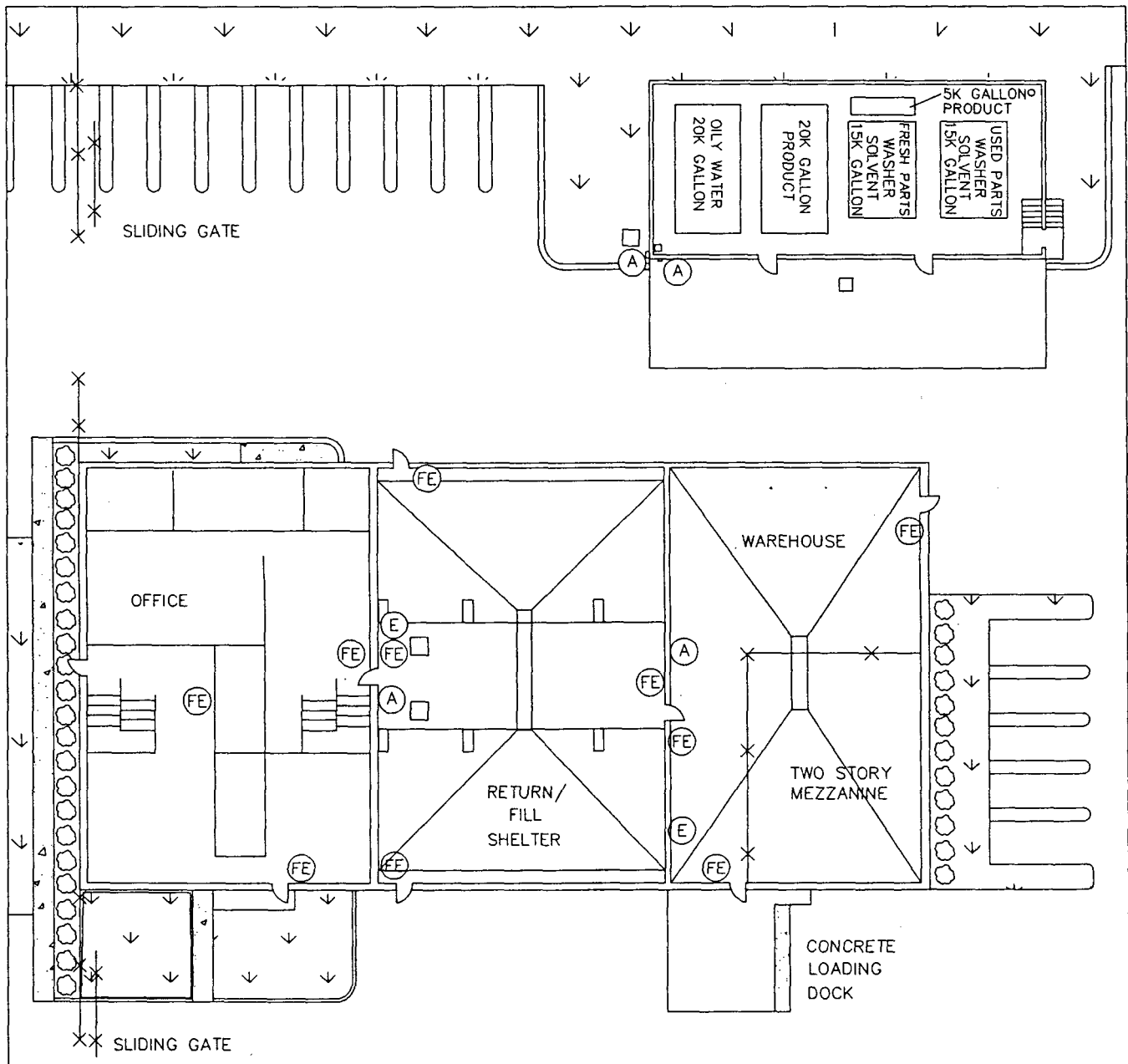
The immersion cleaner remains in a covered container at all times during transportation and storage. The solvent is not transferred to another container while being used by the customers or while in storage at the service center. Immersion cleaner #609 is managed as a transfer waste. Dry cleaning wastes are picked up at commercial dry cleaning establishments in containers and are stored temporarily at the service center. The containers are picked up periodically for recycling at the recycle facility. Nonperchloroethylene dry cleaning wastes are managed as a transfer waste.

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 containers.

The antifreeze waste is approximately one-third water and two-thirds antifreeze (ethylene glycol) and contaminants. The waste is collected in 150-gallon carboys at the customer's facility. The spent antifreeze if nonhazardous, is then transferred to a 3,500-gallon tanker truck. The tanker truck may transfer its waste to an outgoing tanker truck. Hazardous spent antifreeze is handled in containers. The containerized waste is placed in the container storage area prior to shipment to a reclamation facility.

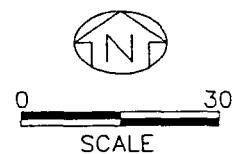
The paint wastes consist of various lacquer thinners and paints collected in containers.

**Figure II.A.4(b)-2
Safety Equipment
Safety-Kleen Corp. Facility
Boynton Beach, Florida**



LEGEND

- (FE) FIRE EXTINGUISHER
- (E) EYE WASH/SHOWER
- (A) ALARM



REVISED 03-06-95

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ERM

EMERGENCY PHONE NUMBERS

Emergency Coordinators

Primary:	Bernie Korzekwinski 1240 Grandview Circle Royal Palm Beach, FL 33411 Home: (407) 791-7053 Office: (407) 736-1339 Pager: (407) 787-2731	Alternate:	Steve Becker 12126 Sugar Pine Trail West Palm Beach, FL 33414 Home: (407) 798-5583 Office: (407) 736-1339 Pager: (407) 787-2759
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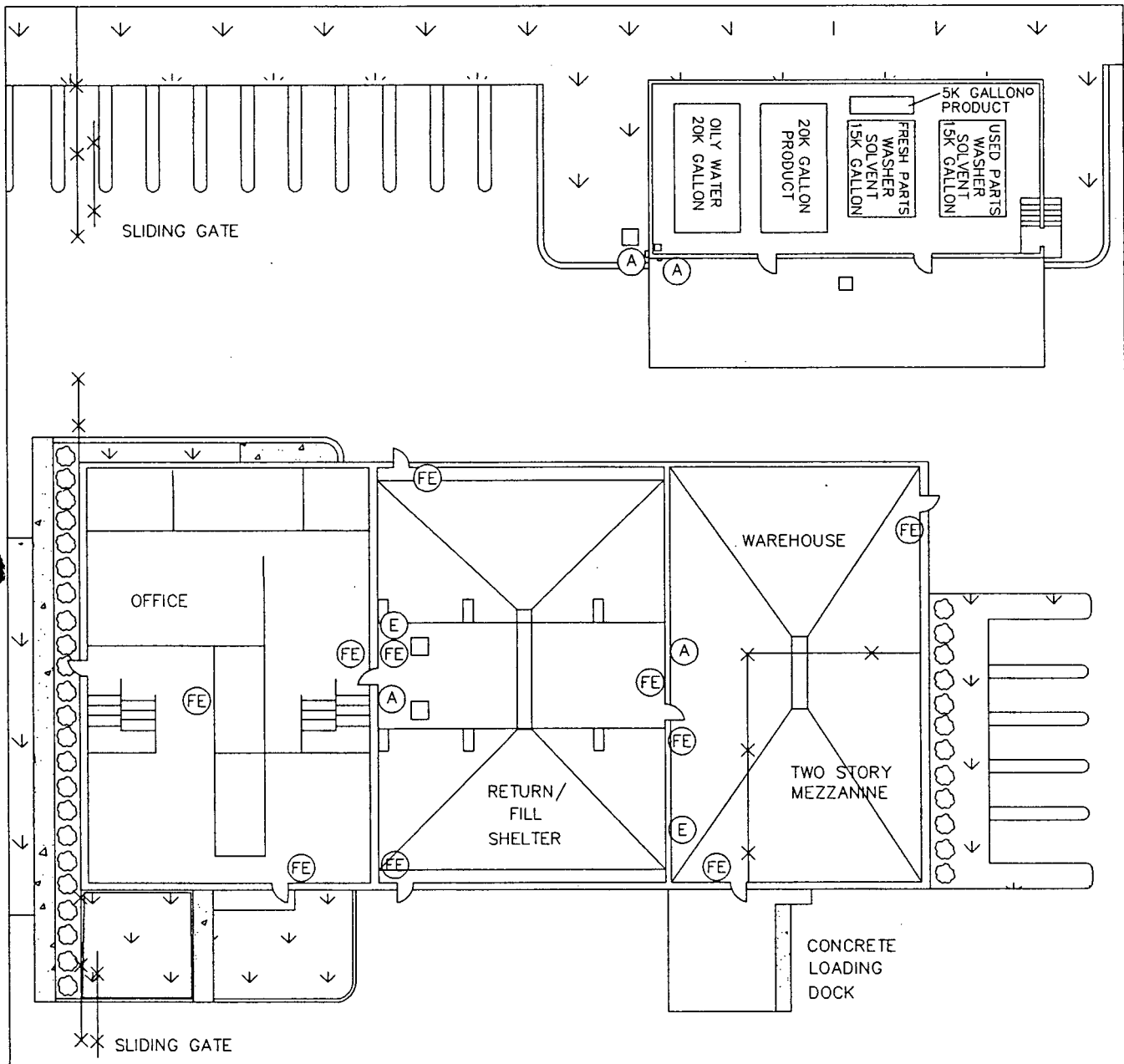
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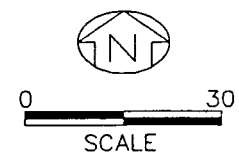
¹Call NRC only if Florida Department of Emergency Management cannot be reached.

**Figure II.A.4(d)-1
Safety Equipment
Safety-Kleen Corp. Facility
Boynton Beach, Florida**



LEGEND

- (FE) FIRE EXTINGUISHER
- (E) EYE WASH/SOWER
- (A) ALARM



REVISED 03-06-95



ERM

Certain other wastes that result from the use of organic solvents are also managed through the service centers. These include the solids and sludges that settle out of the used solvent during handling and processing. Lint, paper, oils, greases, carbons, and metals are examples of materials which may settle or separate out of used solvent. In addition to the listed waste codes, these wastes may also exhibit a characteristic under the toxicity characteristic leaching procedure.

Certain solvents are not economically recoverable in their prime form. These are typically solvents of low intrinsic value (e.g., methanol), those where the user's specifications are unattainable or where the mixture cannot be efficiently separated because of the formation of azeotropes, overlapping or close boiling ranges. However, when properly blended and processed, these solvents can be a beneficial source of energy. The Safety-Kleen recycle centers are equipped to process non-recoverable solvent mixtures with still bottoms from recovery of their solvent to produce valuable solvent based fuels.

In each of these end use applications at facilities classified as Industrial Furnaces, the combustion conditions are orders of magnitude more destructive than those specified for incinerators. For each industrial furnace emission controls are in place and covered by existing regulations. Specifications are restrictive for polychlorinated biphenyls (PCBs), herbicides, pesticides, etc., and for other wastes that might adversely affect the operation of the unit or the properties of the finished product.

ANTIFREEZE COLLECTION SERVICE

The spent antifreeze (ethylene glycol) is collected from automobile service stations. These wastes are deposited into 150-gallon translucent carboy by the customer, on the customer's premises, the carboy is pumped into containers or a 3,500-gallon tanker by the sales representative. Nonhazardous ethylene glycol is commingled with used oil in a tanker truck, and hazardous ethylene glycol is pumped to 30- or 55-gallon containers. It should be noted that the vast majority of the antifreeze sample analyses indicated this waste is not hazardous. However, due to the low concentrations at which contaminants render a waste hazardous under TCLP, the container storage area for spent antifreeze will, as a protective measure, be permitted to hold TCLP wastes.

tube in the left hand pail extends exactly half way into the pail (i.e., to the 2.5 gallon mark). The left hand pail starts with five gallons of clean solvent which will be pumped out as the machine is used to clean the spray guns. This process will continue until the left hand pail contains 7.5 gallons of solvent. Any solvent above 7.5 gallons remaining in the left hand pail at the time of servicing will be pumped through the machine into the right hand pail by the Safety-Kleen service representative. Therefore, when the machine is serviced, the right hand pail will always contain five gallons of solvent. If a service representative discovers more than a total of 7.5 gallons of solvent in the two pails or there is an overfill from the right hand pail, the waste will be sampled for contamination in accordance with the procedures described above, or the waste will be rejected.

Paint Waste

The significant criterion for the inspection of paint waste is consistency. The waste should contain no more than 30 percent solids. The service representative will insert a three-foot-long glass tube into the container. The tube should glide easily down to the bottom of the container. If there is resistance to the insertion of the glass tube, it is assumed that the level of solids is in excess of 30 percent and the service representative will reject the waste.

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

Antifreeze Waste

Spent antifreeze is collected in carboys or containers at a customer's place of business until it is picked up by Safety-Kleen. Nonhazardous spent antifreeze is pumped into a tanker truck and hazardous spent antifreeze is handled in containers. Prior to transferring the spent antifreeze into the tanker truck or container, the Safety-Kleen service representative is responsible for visually inspecting the waste. Spent antifreeze is typically yellowish green to blue in color with traces of orange, red, or black discoloration due to ferric oxide (i.e., rust). A slight sheen may be present on the surface of the spent antifreeze due to the presence of oils or other petroleum products. Sediment (brownish or black) may collect in the carboy due to particulate matter from vehicle engines, rust, dirt, or other matter.

**TABLE II.A.6-1
PARAMETERS AND RATIONALE
FOR HAZARDOUS WASTE IDENTIFICATION**

Hazardous Waste	Parameter ^a	Rationale
1. Used Immersion Cleaner (699IC)	TCLP	May contain these compounds
2. Used Parts Washer Solvent	Flash Point TCLP	Ignitable characteristics D001; may contain these compounds
3. Parts Washer Solvent Tank Bottom Sludge and Free Water	TCLP Flash Point	The sludge and free water may contain these compounds and the sludge has a flash point of 105° F (D001)
4. Parts Washer Solvent Dumpster Mud	TCLP Flash Point	The sludge and free water may contain these compounds and the sludge has a flash point of 105° F (D001)
5. Dry Cleaning Wastes	Perchloroethylene	Contain ingredient of F002 or contains a hazardous constituent.
6. Paint Wastes	Toluene, Xylene, Methyl ethyl ketone, Methyl isobutyl ketone, Acetone, Isopropanol, Methanol, Ethanol, Normal butyl acetate, Isobutyl acetate, Cadmium, Chromium, Lead	Contains these components: F003, F005, D001, D006, D007, and D008
7. Hazardous Spent Antifreeze	TCLP	May contain these compounds

FOOTNOTE:

^a TCLP Waste Codes: D004-D011, D018, D019, D021-D030, D032-D043.

TABLE II.A.6-3

METHODS USED TO SAMPLE HAZARDOUS WASTES

Hazardous Waste	Reference for Sampling	Sampler	Description of Sampling Method
1. Used Immersion Cleaner (699IC)	Sampling a drum "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA/600/2-80/018	Test Methods for the Evaluation of Solid Waste Physical/Chemical Methods, SW-846, USEPA	Representative composite sample using drum sampler
2. Used Parts Washer Solvent	Sampling a tank "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA/600/2-80/018	Same as 1	For tanks--Bomb sampler (similar to weighted bottle sampler)
3. Parts Washer Solvent, Tank Bottom Sludge, and Free Water	Same as 2	Same as 2	Same as 2
4. Parts Washer Solvent Dumpster Mud	Same as 1	Same as 1	Same as 1
5. Dry Cleaning Wastes	Same as 1	Same as 1	Same as 1
6. Paint Wastes	Same as 1	Same as 1	Same as 1
7. Hazardous Spent Antifreeze	Same as 1 or 2	Same as 1 or 2	Same as 1 or 2

TABLE II.A.6-4
FREQUENCY OF ANALYSIS

Hazardous Waste	Frequency ^a
1. Used Immersion Cleaner 699	Gas chromatograph annually TCLP annually
2. Used Parts Washer Solvent	Gas chromatograph annually Flash point annually TCLP annually
3. Parts Washer Solvent, Tank Bottom Sludge, and Free Water	Gas chromatograph annually TCLP annually
4. Parts Washer Solvent Dumpster Mud	Gas chromatograph annually TCLP annually
5. Dry Cleaning Wastes	Gas chromatograph annually TCLP annually
6. Paint Wastes	Gas chromatograph annually TCLP annually
7. Hazardous Spent Antifreeze	Gas chromatograph annually TCLP annually

^a 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.

ATTACHMENT II.B.3 WASTE SEGREGATION

PROCEDURE FOR SEGREGATING WASTE TYPES

The used solvents are compatible with each other and with other materials to be handled at this facility, with respect to reactivity, and therefore do not require special segregation procedures. However, they are the primary source of feed stock for regenerating the clean solvents. For ease of inventory control and product integrity, separation and grouping of both used and fresh solvents is a standard practice at the facility.

All materials are managed in accordance with the local fire protection code and fire department requirements. Safety-Kleen uses a container color scheme as part of its waste management system. Eighty-five gallon overpack containers are used for the management of containers whose integrity has been compromised.

The immersion cleaner is always contained in partially filled, covered containers before, during, and after its use. Until received at the recycle facility, the immersion cleaner is never transferred to another container. The containers containing the used immersion cleaner are returned to the facility and stored in the designated container storage areas before shipment to the recycle center. Immersion cleaner #609 is managed as a transfer waste.

The dry cleaning wastes are contained in containers. All containers are Department of Transportation (DOT)-approved. These containers are managed similarly to the used immersion cleaner containers and contents within the containers are not removed or processed at the facility. Nonperchloroethylene dry cleaning wastes are managed as transfer wastes.

The parts washer solvents are collected in containers. These containers are then emptied into the dumpsters in the return/fill shelter. ~~Hazardous~~ spent antifreeze is packaged in containers, and the containers are not opened at the facility.

Paint wastes consist of various lacquer thinners and paints. The waste is collected in containers at the customer's place of business and the containers are palletized and stored in the container storage area of the warehouse.

ATTACHMENT II.B.4 CONTAINER MANAGEMENT

The immersion cleaner is always contained in partially filled, covered containers before, during, and after its use. Until received at the recycle facility, the immersion cleaner is never transferred to another container. The containers containing the used immersion cleaner are returned to the facility and stored in the designated container storage areas before shipment to the recycle facility.

The dry cleaning wastes are contained in containers. The perchloroethylene from dry cleaning operations is collected in polyethylene containers. The dry cleaning filters are in steel containers. These containers are managed similarly to the used immersion cleaner containers, and contents within the containers will not be removed or processed at the facility.

Hazardous spent antifreeze is packaged in containers, and the containers are not opened at the facility. The parts washer solvents are collected in containers which are poured into the dumpsters. Paint wastes are stored in containers. The contents within these containers will not be transferred or processed at the service center. The paint waste is not removed from the containers until receipt by an offsite reclaimer.

The containers 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. Figures II.B.3-1 through II.B.3-4 showed typical detailed construction specifications of the 16-gallon immersion cleaner containers. The containers used to store dry cleaning wastes were shown in Figures II.B.3-5 through II.B.3-7. Paint waste containers were shown in Figure II.B.3-8. Table II.B.4-1 provides a list of the containers used at the facility.

Fluid Recovery Service (FRS) wastes received at the facility are classified as characteristic wastes (D-waste codes), non-specific source wastes (F-waste codes), listed wastes from specific sources (K-wastes), commercial chemical products, manufacturing intermediates or off-specification chemical commercial products (U-waste codes). Most of the time, a waste stream will be some combination of specific components, and be categorized as a D- or F-

TABLE II.B.4-1

**SAFETY-KLEEN CORP.
WASTE STREAMS AND CONTAINER SIZES
BOYNTON BEACH, FLORIDA**

Waste Stream	Container Sizes (gallons)	Construction Material of Container
Parts Washer Solvent	5	Polyethylene
	16	Steel
	30	Steel
Dry Cleaner (including off specification perchloroethylene)	5	Steel
	13.5	Polyethylene
	16	Polyethylene
	16	Steel
	Split 30 (also known as 15- or 20-gallon)	Steel
Immersion Cleaner	16	Steel
Paint Waste	5	Steel
	16	Steel
Hazardous Ethylene Glycol	30	Steel
	55	Steel
Fluid Recovery Service (FRS) Waste	30	Steel or Polyethylene
	55	Steel or Polyethylene
Dumpster Mud/Tank Bottoms	16	Steel
	30	Steel
Overpack	85	Steel
	85	Polyethylene

ATTACHMENT II.C.1

The engineering assessments of the tank systems were conducted in February 1991, November 1991, and April 1992. Drawings and figures contained in the engineer's reports were correct at the time of submittal. The facility has undergone minor modifications in the recent past which no longer conform to the drawings and figures in these reports. These minor modifications have not affected the tank volumes, system integrity, or secondary capacity of the tank system. For a current figure of the facility layout and tank farm, see Figures I.B.3-1 and II.C.2-1, respectively.

ATTACHMENT II.C.2

TANK SYSTEM SPECIFICATIONS

The facility includes five aboveground steel tanks (Figure II.C.2-1). Used parts washer solvent (Parts Cleaner 105, Premium Solvent, and Actrel®) contained in drums returned by the customers are transferred via the wet dumpster into a 15,000-gallon tank, awaiting bulk shipment to the recycle center. The other four tanks consist of one 15,000-gallon fresh parts washer solvent product tank (parts cleaner 105 or premium solvent), one 20,000-gallon nonhazardous oily water tank, one 20,000-gallon product tank, and one 5,000-gallon product tank. These four tanks are not considered Resource Conservation and Recovery Act (RCRA) tanks.

MATERIAL COMPATIBILITY

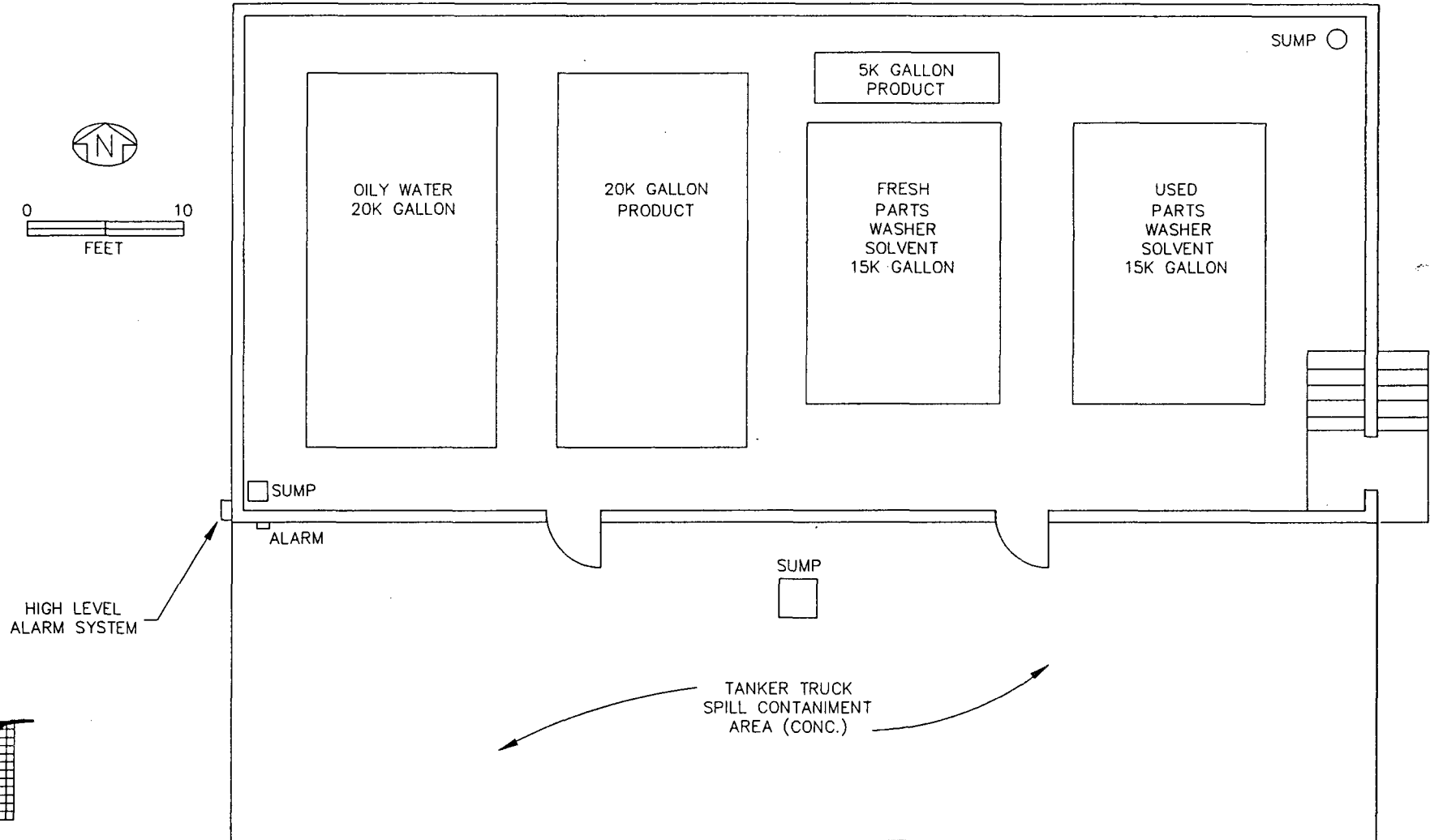
Parts washer solvent is compatible with the mild steel tank structure; in fact, petroleum products are often used as a light hydrocarbon coating to prevent rusting of metal parts. Parts Cleaner 105 and Premium Solvent consist primarily of mineral spirits (petroleum naphtha). The Actrel® solvent consists primarily of a paraffinic compound with C₁₂-C₁₄ chains. As with all petroleum storage vessels, water will accumulate over time due to condensation. The parts washer solvent 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 parts washer solvent/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.

TANK DESIGN AND OPERATION PROCEDURES

Spent parts washer solvents from parts washers is accumulated in the 15,000-gallon aboveground storage tank by transfer through the return and fill station. Containers are poured into the dumpsters (barrel washers) in the return and fill station, and material in the dumpster is pumped into the storage tank for spent solvent. The return and fill station has secondary containment.

REVISED 03-06-95

Figure II.C.2-1 Tank Farm Safety-Kleen Corp. Facility Boynton Beach, Florida



electrode and can withstand a 4-psi air pressure test (which is performed by the manufacturer). All tanks were new and unused when installed.

Attachment II.C.1 provides an independent assessment of the tank system. The parts washer solvent assessment by Wishmeier & Associates includes a detailed description of the tank system components and operation. The assessment of the ethylene glycol tank was prepared by TERA, Inc. The following is a concise description of the main features of the tank system.

All tanks are aboveground, underlain by a 71' x 32'4" x 6" concrete slab, surrounded by a 36" concrete dike and are in an enclosed building. The dike has been sealed with a chemical resistant coating. Therefore, no surface run-on or precipitation would be in contact with the wastes stored in the tank farm and no run-off collection and management system is deemed necessary. Gauges are used to measure liquid levels in tanks and float switch-activated automatic high level alarms (which consist of a strobe light and siren) will signal the tank's being 95 percent full. This alarm allows an operator more than two minutes to stop operations and avoid overfilling the tank. In addition, the gauges of the tank must be read before filling and before and during the filling of a tanker truck (the available volume of which must be noted prior to emptying the tank) to prevent overfilling of the truck. A suction pump equipped with the tanker truck is used to withdraw used parts washer solvent from the tank. No other equipment or standby equipment is used in the operation of the aboveground tanks. The secondary containment under the tanks and return/fill station must be cleaned within 24 hours of a spill. The used parts washer solvent tank may be operated at a maximum volume of 14,250 gallons (95 percent).

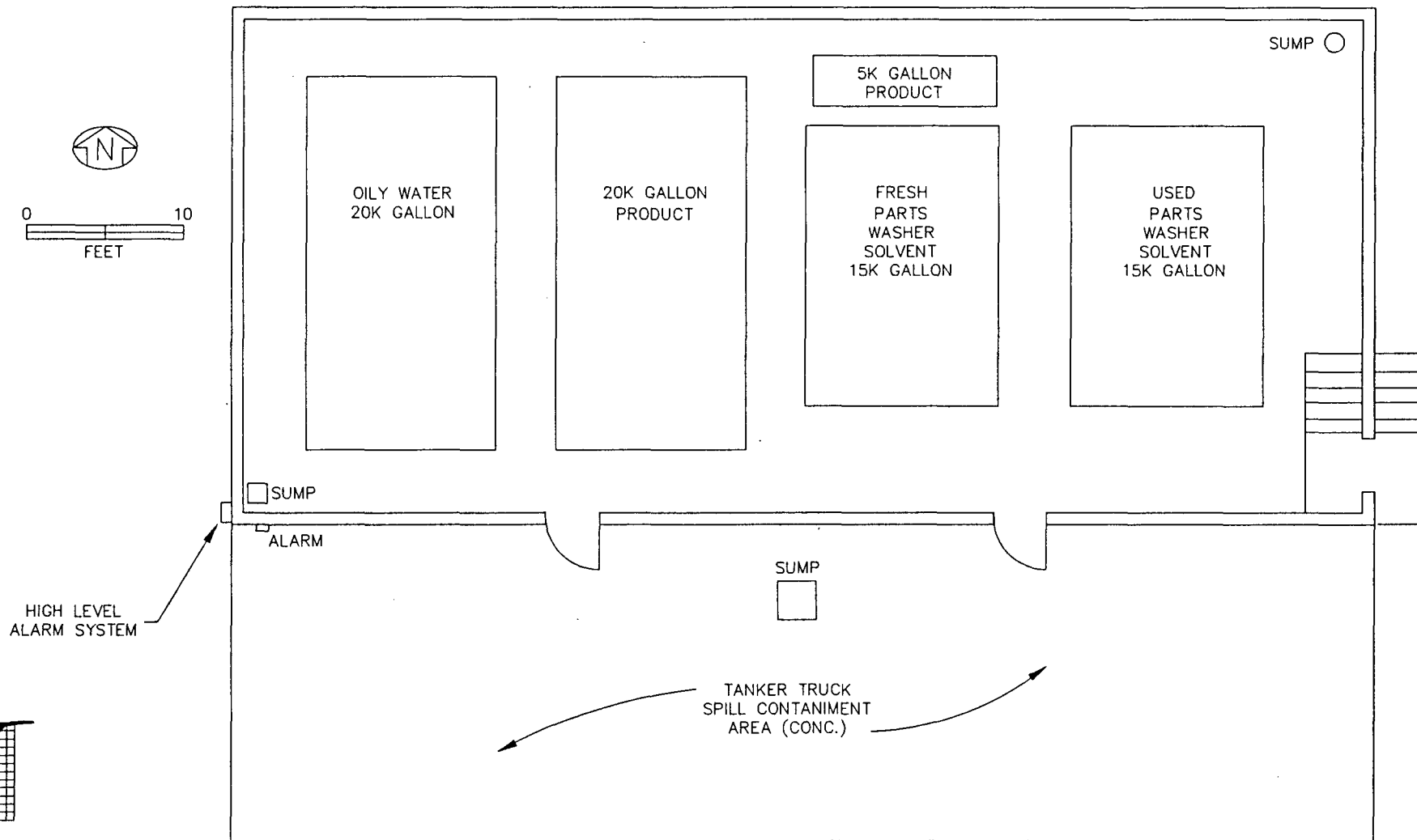
Material which collects in the tank dike and return/fill station can be removed using a "wet/dry" vacuum, sorbents, or mop.

"No smoking" signs are posted on the entrance to the tank farm and return/fill station.

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Figure II.C.7-1
Tank Farm
Safety-Kleen Corp. Facility
Boynton Beach, Florida



ATTACHMENT II.C.9

CONTROLS AND SPILL PREVENTION

The tank system is designed to minimize the potential for spills and to control any spills which may occur. The tank area prevention and control system includes proper tanks, and containment walls and trenches. The return/fill shelter consists of dumpsters (barrel washers) located inside a containment area.

The prevention and control system minimizes the opportunity for an uncontrolled release of material to the environment.

DESCRIPTION OF FACILITY

The facility utilizes five aboveground steel tanks. Used parts washer solvent housed in containers returned by the customers are transferred via the wet dumpster into a 15,000-gallon tank, awaiting bulk shipment to the recycle center. The other ~~four~~ tanks consist of one 15,000-gallon parts washer solvent product tank, one 20,000-gallon nonhazardous oily water tank, ~~one 20,000-gallon product tank,~~ and one 5,000-gallon product tank. These ~~four~~ tanks are not considered Resource Conservation and Recovery Act (RCRA) tanks.

MATERIAL COMPATIBILITY

Parts washer solvent is compatible with the mild steel tank structure. In fact, petroleum products are often used as a light hydrocarbon coating to prevent rusting of metal parts. Parts Cleaner 105 and Premium Solvent consist primarily of mineral spirits (petroleum naphtha). The Actrel® solvent consists primarily of a paraffinic compound with C₁₂-C₁₄ chains. As with all petroleum storage vessels, water will accumulate over time due to condensation. The parts washer solvent 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 parts washer solvents/water interface.

Facility Data

A 15,000-gallon waste mineral spirits tank in a three-foot high concrete containment area enclosed inside a building. This building also houses one 20,000-gallon nonhazardous oily water tank, a 20,000-gallon product tank, a 15,000-gallon clean mineral spirits tank, and an 5,000-gallon product tank.

Solvent Return/Fill Shelter Area

One 45' x 44' structure with two solvent return receptacles (wet dumpsters) each and ancillary equipment. Each dumpster can hold 275 gallons of waste.

MAXIMUM INVENTORY OF WASTE

The maximum amount of waste mineral spirits in the tank is 95% of 15,000 gallons.

Dumpsters: 550 gallons (two 275-gallon dumpsters).

Solvent Return/Fill Shelter Area

- This area is used to return the used mineral spirits to the storage tank.
- Closure of the solvent return receptacles (wet dumpster) will be made prior to the cleaning and removal of the storage tank.
- At closure, the sludge in the dumpsters ("dumpster mud") will be cleaned out and containerized, labeled, and manifested for proper disposal at permitted facilities.

ATTACHMENT II.K.1 CLOSURE PLAN

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. No onsite disposal activity occurs at any plant and, hence, no disposal capacity will 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 unforeseen 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, container storage area, 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.

Facility Data

Tank Area

15,000-gallon waste parts washer solvent tank in a three-foot-high concrete containment area enclosed inside a building. This building also houses one 20,000-gallon nonhazardous oily water tank, a 20,000-gallon product tank, a 15,000-gallon clean parts washer solvent tank, and a 5,000-gallon product tank.

Container Storage Area:

A 48' x 78' foot area with sloped floor and collection sump. The maximum total volume stored is 18,750 gallons with 6,912 gallons anticipated to be waste parts washer solvent

dumpster mud containers, dry cleaner wastes, antifreeze, spent immersion cleaner, paint wastes, and/or Fluid Recovery Service (FRS) wastes.

Solvent Return/Fill Shelter:

One 45-foot by 44-foot structure with two solvent return receptacles (wet dumpsters) each and ancillary equipment. Each dumpster can hold 275 gallons of waste.

MAXIMUM INVENTORY OF WASTE

Tank Wastes

The maximum amount of waste parts washer solvent in the tank is 95% of 15,000 gallons.

Containerized Waste: Anticipated maximum of 6,912 gallons

This amount includes any combination of 5-, 15-, 16-, split 30- (also known as 20-gallon), 30-, 55-, and 85-gallon containers.

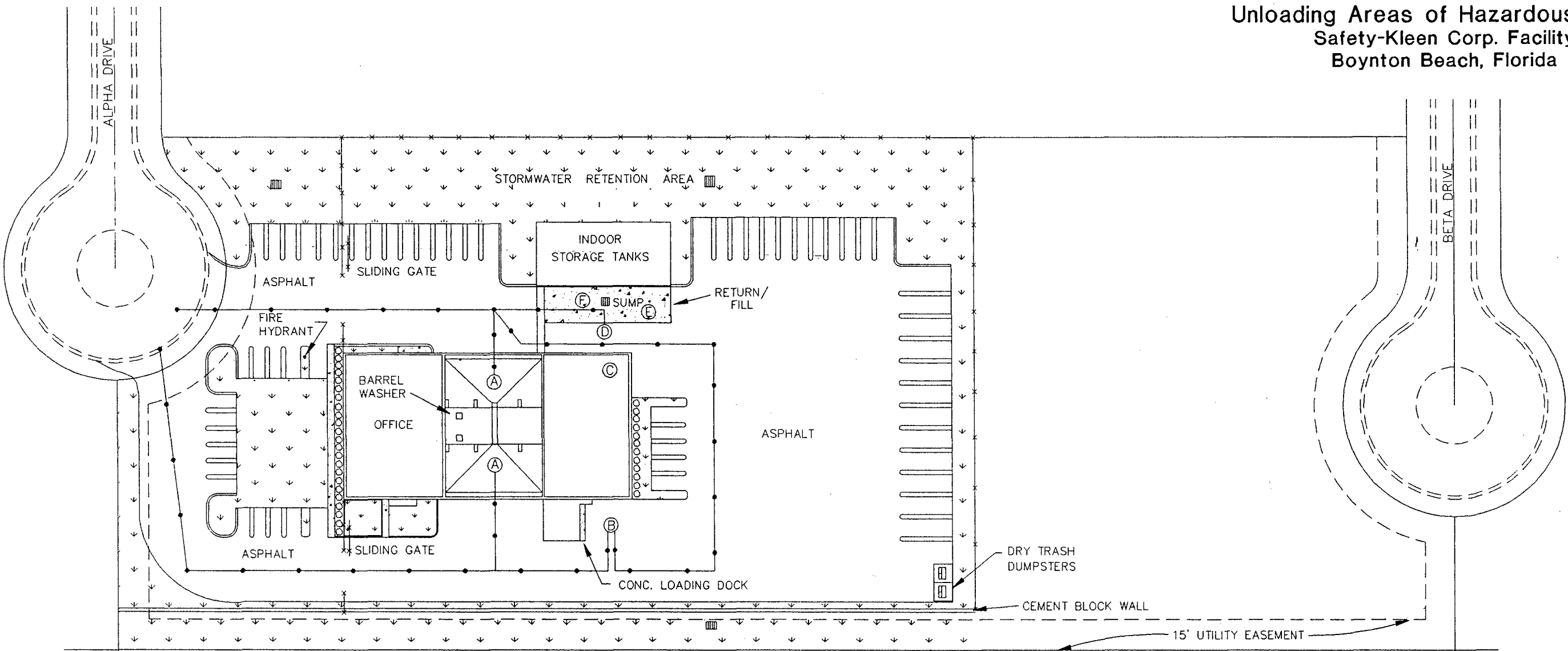
Dumpsters: 550 gallons (two 275-gallon dumpsters)

CLOSURE PROCEDURE

Container Storage Areas

- The container storage area houses containers of used immersion cleaner, parts washer solvent, dumpster mud, antifreeze, paint waste, dry cleaning wastes, and FRS wastes.
- At closure, all containers will be removed and transported to the recycle center with proper packaging, labeling, and manifesting where the contents in the containers will be reclaimed and the containers will be cleaned for reuse.
- The concrete floor and spill containment areas will be cleaned with detergent solution and the rinsate will be analyzed for mineral spirits, volatile organic compounds, lead, and cadmium, using SW-846 methods, to determine the effectiveness of decontamination. The area will continue to be washed and rinsed until levels are

Figure II.A.1(c)-1
 Truck Traffic Patterns and Loading/
 Unloading Areas of Hazardous Waste
 Safety-Kleen Corp. Facility
 Boynton Beach, Florida



LEGEND

- | | | |
|--|-----------------------------------|---|
| | GRASS | (A) PARTS WASHER SOLVENT DRUM DUMP/BARREL WASH/REFILL |
| | CONCRETE | (B) LOADING AND UNLOADING OF DRUMS CONTAINING SOLVENT FROM TRUCKS |
| | SHRUBS | (C) LOADING AND UNLOADING OF CONTAINERIZED WASTE (PERMITTED TRANSFER) FROM LOCAL AREA VANS AND TRUCKS |
| | STORM DRAIN | (D) LOADING AND UNLOADING OF PARTS WASHER SOLVENT FROM TANKER TRUCKS |
| | 6 FOOT CHAINLINK/ BARB WIRE FENCE | (E) TRUCK TO TRUCK TRANSFER OF FRS WASTES |
| | ENTRANCE/EXIT ROUTE | (F) TANKER TRUCK TO TANKER TRUCK TRANSFER OF ANTIFREEZE |
- NOTE: E & F OCCURS ON THE TRUCK PAD NORTH OF THE WAREHOUSE

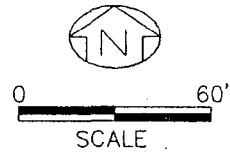
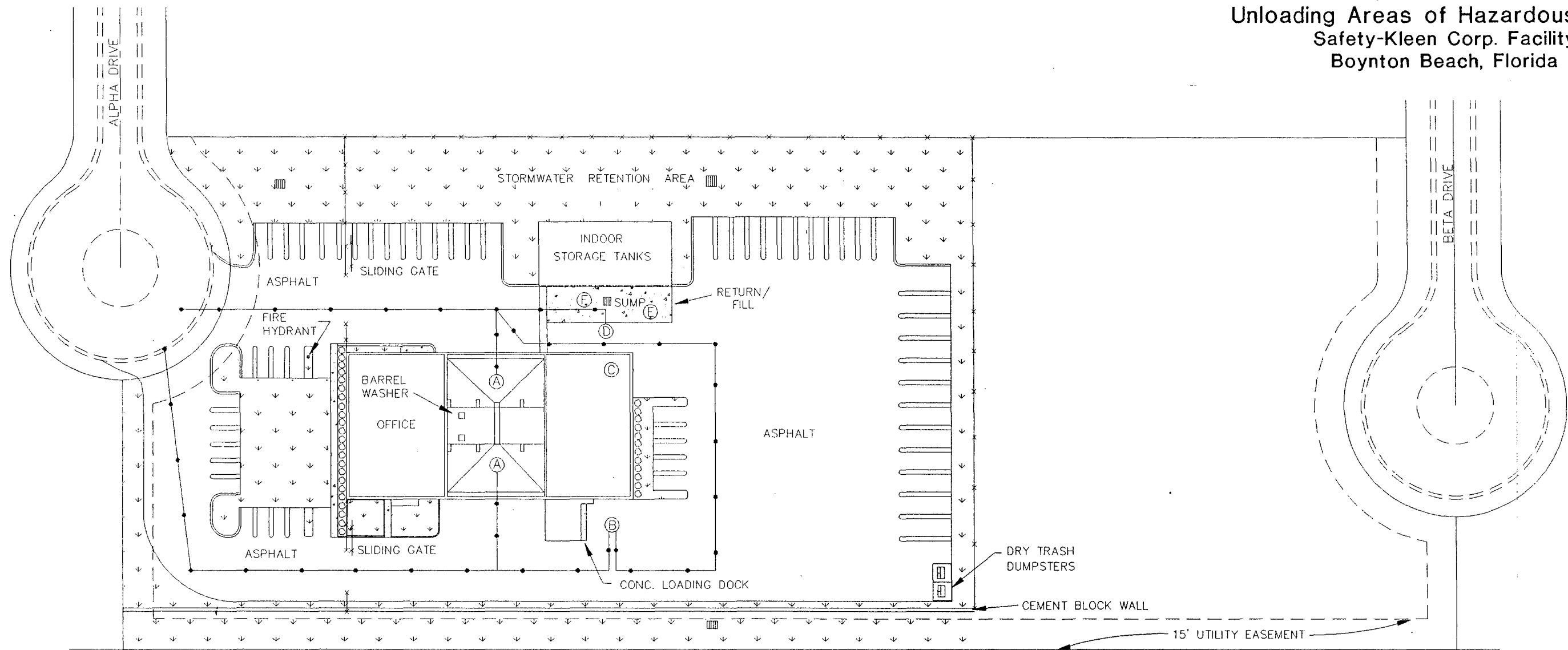


Figure I.B.3-2
Truck Traffic Patterns and Loading/
Unloading Areas of Hazardous Waste
Safety-Kleen Corp. Facility
Boynton Beach, Florida



LEGEND

- GRASS
- CONCRETE
- SHRUBS
- STORM DRAIN
- 6 FOOT CHAINLINK/
BARB WIRE FENCE
- ENTRANCE/EXIT ROUTE

- (A) PARTS WASHER SOLVENT DRUM DUMP/BARREL WASH/REFILL
- (B) LOADING AND UNLOADING OF DRUMS CONTAINING
SOLVENT FROM TRUCKS
- (C) LOADING AND UNLOADING OF CONTAINERIZED WASTE
(PERMITTED TRANSFER) FROM LOCAL AREA VANS AND TRUCKS
- (D) LOADING AND UNLOADING OF PARTS WASHER SOLVENT
FROM TANKER TRUCKS
- (E) TRUCK TO TRUCK TRANSFER OF FRS WASTES
- (F) TANKER TRUCK TO TANKER TRUCK TRANSFER OF ANTIFREEZE

NOTE: E & F OCCURS ON THE TRUCK PAD
NORTH OF THE WAREHOUSE

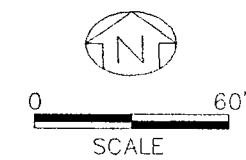
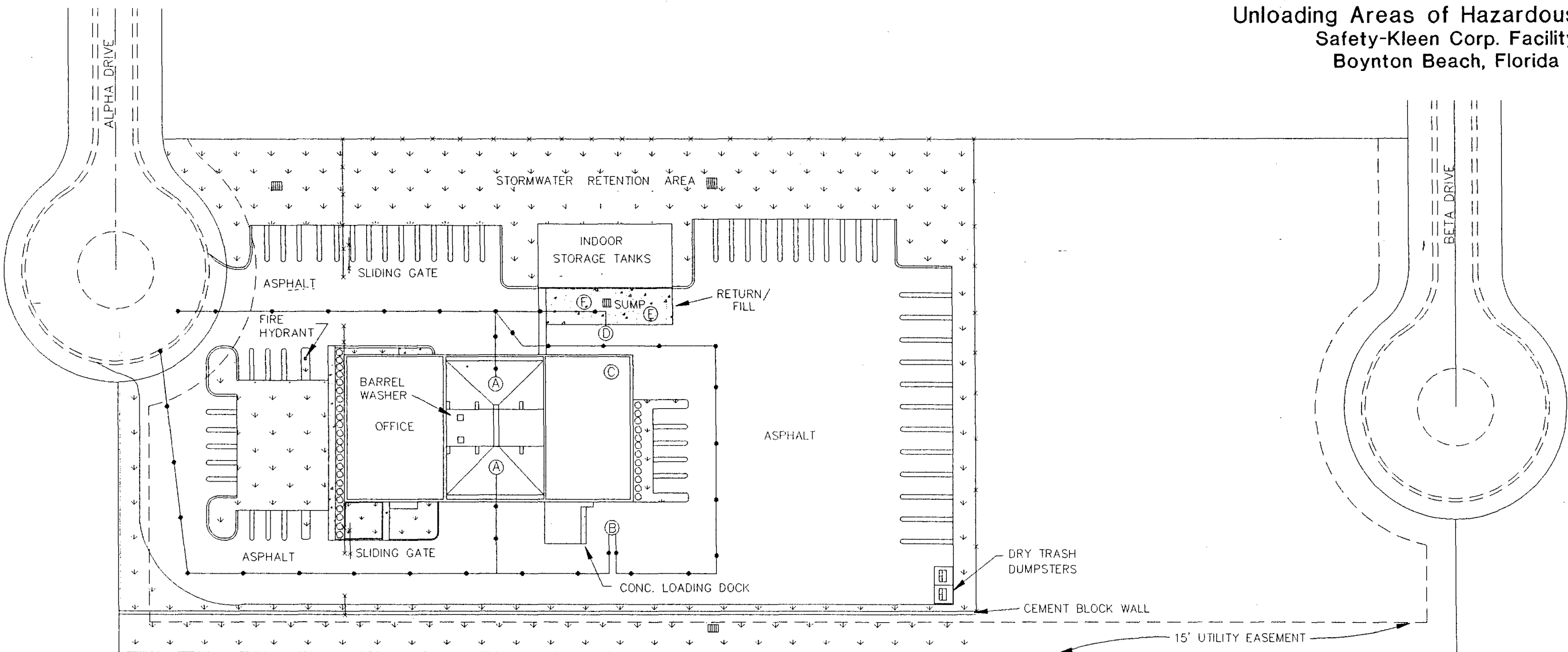


Figure II.A.1(a)-7
 Truck Traffic Patterns and Loading/
 Unloading Areas of Hazardous Waste
 Safety-Kleen Corp. Facility
 Boynton Beach, Florida



LEGEND

- | | | |
|--|--------------------------------------|---|
| | GRASS | (A) PARTS WASHER SOLVENT DRUM DUMP/BARREL WASH/REFILL |
| | CONCRETE | (B) LOADING AND UNLOADING OF DRUMS CONTAINING SOLVENT FROM TRUCKS |
| | SHRUBS | (C) LOADING AND UNLOADING OF CONTAINERIZED WASTE (PERMITTED TRANSFER) FROM LOCAL AREA VANS AND TRUCKS |
| | STORM DRAIN | (D) LOADING AND UNLOADING OF PARTS WASHER SOLVENT FROM TANKER TRUCKS |
| | 6 FOOT CHAINLINK/
BARB WIRE FENCE | (E) TRUCK TO TRUCK TRANSFER OF FRS WASTES |
| | ENTRANCE/EXIT ROUTE | (F) TANKER TRUCK TO TANKER TRUCK TRANSFER OF ANTIFREEZE |
- NOTE: E & F OCCURS ON THE TRUCK PAD NORTH OF THE WAREHOUSE

