HAZARDOUS WASTE

CONSTRUCTION AND OPERATING PERMIT APPLICATION

HAZARDOUS WASTE STORAGE FACILITY

SAFETY-KLEEN CORP.

SERVICE CENTER

BOYNTON BEACH, FL

APRIL 20, 1988

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ATTACHMENT I.A

EXISTING OR PENDING ENVIRONMENTAL PERMITS

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 [X] CONSTRUCTION [ ] OPERATION [ ] CLOSURE

3. DATE CURRENT OPERATION BEGAN (OR IS EXPECTED TO BEGIN): JUNE 1, 1989

4. FACILITY NAME: SAFETY-KLEEN CORP. (3-097-01)

5. EPA/DER I.D. NO.: (applied For)

6. FACILITY LOCATION OR STREET ADDRESS: Lot 46B, Quantum Industrial Park

7. FACILITY MAILING ADDRESS: 777 BIG TIMBER ROAD, ELGIN, ILLINOIS 60123
STREET OR P.O. BOX CITY STATE ZIP

8. CONTACT PERSON: PAUL PENDERSON TELEPHONE: (312) 697-8460
TITLE: REGIONAL ENVIROMENTAL ENGINEER
MAILING ADDRESS: 777 BIG TIMBER ROAD, ELGIN, ILLINOIS 60123
STREET OR P.O. BOX CITY STATE ZIP

9. OPERATOR'S NAME: SAFETY-KLEEN CORP. (3-097-01) TELEPHONE: (312) 697-8460

10. OPERATOR'S ADDRESS: 777 BIG TIMBER ROAD ELGIN, ILLINOIS 60123
STREET OR P.O. BOX CITY STATE ZIP

11. FACILITY OWNER'S NAME: SAFETY-KLEEN CORP. TELEPHONE: (312) 697-8460

12. FACILITY OWNER'S ADDRESS: 777 BIG TIMBER ROAD, ELGIN, ILLINOIS 60123
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 _____

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

16. IF AN INDIVIDUAL OR PARTNERSHIP, LIST OWNERS:
NAME: _____
ADDRESS: _____
STREET OR P.O. BOX CITY STATE ZIP
NAME: _____
ADDRESS: _____
STREET OR P.O. BOX CITY STATE ZIP
NAME: _____
ADDRESS: _____
STREET OR P.O. BOX CITY STATE ZIP
NAME: _____
ADDRESS: _____
STREET OR P.O. BOX CITY STATE ZIP

17. SITE OWNERSHIP STATUS: [X] OWNED [ ] TO BE PURCHASED [ ] TO BE LEASED ____ YEARS
[ ] PRESENTLY LEASED: EXPIRATION DATE _____ IF LEASED, GIVE:
LAND OWNER'S NAME _____
LAND OWNER'S ADDRESS _____
STREET OR P.O. BOX CITY STATE ZIP

18. ENGINEER: JOHN FORNEK REGISTRATION NO.: 39232
ADDRESS: WANG ENGINEERING, INC., 4300-P LINCOLN AVE,. ROLLING MEADOWS, IL 60008
STREET OR P.O. BOX CITY STATE ZIP
ASSOCIATED WITH: WANG ENGINEERING INC.

19. FACILITY LOCATED ON INDIAN LAND: [ ] YES [X] NO

20. EXISTING OR PENDING ENVIRONMENTAL PERMITS:

NAME OF PERMIT	AGENCY	PERMIT NUMBER	DATE ISSUED	EXPIRATION DATE

B. SITE INFORMATION

1. FACILITY LOCATION: COUNTY: PALM BEACH NEAREST COMMUNITY: BOYNTON BEACH
LATITUDE: 26° 32' 22"N LONGITUDE 80° 04' 55"W

2. AREA OF FACILITY SITE (ACRES): 2.2

3. ATTACH TOPOGRAPHIC MAPS WHICH SHOW ALL THE FEATURES INDICATED IN THE INSTRUCTION SHEET FOR THIS PART.

4. IS THE SITE LOCATED IN A 100-YEAR FLOOD PLAIN? [ ] YES [X] NO
ATTACH ALL INFORMATION INDICATED IN THE INSTRUCTION SHEET FOR THIS PART.

C. LAND USE INFORMATION

1. PRESENT ZONING OF THE SITE? PID

2. IF A ZONING CHANGE IS NEEDED, WHAT SHOULD NEW ZONING BE? N/A

3. PRESENT LAND USE OF SITE PLANNED INDUSTRIAL DEVELOPMENT

D. OPERATING INFORMATION

1. IS WASTE GENERATED ON SITE? [X] YES [ ] NO LIST THE SIC CODES (4-DIGIT)
7399 5172 5084 5013

2. ATTACH A DESCRIPTION OF THE OPERATION INCLUDING (a) A BRIEF DESCRIPTION OF THE NATURE OF THE BUSINESS; (b) A SPECIFICATION OF THE HAZARDOUS WASTE LISTED OR DESIGNATED IN 40 CFR PART 261 TO BE TREATED, STORED, OR DISPOSED AT THE FACILITY; (c) AN ESTIMATE OF THE ANNUAL QUANTITY OF SUCH WASTE; AND (d) PROCESSES USED FOR TREATING, STORING, OR DISPOSING OF HAZARDOUS WASTE AND THE DESIGN CAPACITY OF THOSE PROCESSES.

*3. ATTACH A COPY OF THE REPORTS OF THE CHEMICAL AND PHYSICAL ANALYSES OF THE HAZARDOUS WASTES HANDLED AT THE FACILITY, INCLUDING ALL INFORMATION WHICH MUST BE KNOWN TO TREAT, STORE, OR DISPOSE OF THE WASTES IN ACCORDANCE WITH §264.13(a).

*4. ATTACH A COPY OF THE WASTE ANALYSIS PLAN REQUIRED BY §264.13.

5. ATTACH A SCALE DRAWING OF THE FACILITY SHOWING THE LOCATION OF ALL PAST, PRESENT, AND FUTURE TSD AREAS. ALSO SHOW THE TRAFFIC PATTERN INCLUDING ESTIMATED VOLUME AND CONTROL.

*6. ATTACH A COPY OF THE PROCEDURES USED TO COMPLY WITH §264.12 AND 40 CFR PART 264, SUBPART E (MANIFEST SYSTEM, RECORD KEEPING, AND REPORTING).

E. FACILITY SECURITY INFORMATION

*1. ATTACH A DESCRIPTION OF THE SECURITY PROCEDURES AND EQUIPMENT REQUIRED BY §264.14.

*2. ATTACH A COPY OF THE CONTINGENCY PLAN REQUIRED BY 40 CFR PART 264, SUBPART D.

3. ATTACH A DESCRIPTION OF PROCEDURES, STRUCTURES, OR EQUIPMENT USED AT THE FACILITY TO:

   a. MITIGATE EFFECTS OF EQUIPMENT FAILURE AND POWER OUTAGES;

   b. PREVENT HAZARDS IN UNLOADING OPERATIONS (i.e., RAMPS, SPECIAL FORKLIFTS);

   c. PREVENT UNDUE EXPOSURE OF PERSONNEL TO HAZARDOUS WASTE (i.e., PROTECTIVE CLOTHING);

   d. PREVENT CONTAMINATION OF WATER SUPPLIES;

e. PREVENT RUN-OFF FROM HAZARDOUS WASTE HANDLING AREAS TO OTHER AREAS OF THE FACILITY OR ENVIRONMENT, OR TO PREVENT FLOODING (i.e., BERMS, DIKES, TRENCHES);

*f. PREVENT ACCIDENTAL IGNITION OR REACTION OF IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES.

*4. ATTACH A DESCRIPTION OF THE PREPAREDNESS AND PREVENTION PROCEDURES REQUIRED BY 40 CFR PART 264, SUBPART C, INCLUDING DESIGN AND OPERATION OF THE FACILITY, REQUIRED EQUIPMENT, TESTING AND MAINTENANCE OF EQUIPMENT, ACCESS TO COMMUNICATIONS OR ALARM SYSTEM, REQUIRED AISLE SPACE, AND ARRANGEMENTS WITH LOCAL AUTHORITIES.

*5. ATTACH AN OUTLINE OF BOTH THE INTRODUCTORY AND CONTINUING TRAINING PROGRAMS USED TO PREPARE PERSONS TO OPERATE OR MAINTAIN THE HWM FACILITY IN A SAFE MANNER AS REQUIRED TO DEMONSTRATE COMPLIANCE WITH §264.16.

F. FINANCIAL RESPONSIBILITY INFORMATION

1. ATTACH THE MOST RECENT CLOSURE COST ESTIMATES FOR THE FACILITY, PREPARED IN ACCORDANCE WITH §264.142*, PLUS A COPY OF THE FINANCIAL ASSURANCE MECHANISM ADOPTED IN COMPLIANCE WITH §264.143.

2. WHERE APPLICABLE, ATTACH THE MOST RECENT POST-CLOSURE COST ESTIMATE FOR THE FACILITY, PREPARED IN ACCORDANCE WITH §264.144, PLUS A COPY OF THE FINANCIAL ASSURANCE MECHANISM ADOPTED IN COMPLIANCE WITH §264.145, OR §264.146 IF APPROPRIATE.

3. WHERE APPLICABLE, ATTACH A COPY OF THE INSURANCE POLICY OR OTHER DOCUMENTATION WHICH COMPRISES COMPLIANCE WITH THE REQUIREMENTS OF §264.147. FOR A NEW FACILITY, DOCUMENTATION SHOWING THE AMOUNT OF INSURANCE MEETING THE SPECIFICATION OF §264.147(a) AND, IF APPLICABLE, §264.147(b), THAT THE OWNER OR OPERATOR PLANS TO HAVE IN EFFECT BEFORE INITIAL RECEIPT OF HAZARDOUS WASTE FOR TREATMENT, STORAGE, OR DISPOSAL. A REQUEST FOR A VARIANCE IN THE AMOUNT OF REQUIRED COVERAGE, FOR A NEW OR EXISTING FACILITY, MAY BE SUBMITTED AS SPECIFIED IN §264.147(c).

*THIS STANDARD IS SUBSTANTIALLY IDENTICAL TO THE CORRESPONDING 40 CFR PART 265 STANDARD.

PART II - CONTAINERS

A. 40 CFR PART 265

ALL PART 265 REQUIREMENTS ARE SUBSTANTIALLY IDENTICAL TO THOSE IN PART 264. APPLICANTS MUST COMPLY WITH THE REQUIREMENTS IN NUMBERS 2, 3, 4, 5, AND 6 IN SECTION B BELOW:

B. 40 CFR PART 264

1. ATTACH THE REQUIREMENTS OF EITHER (a) OR (b):

   (a) DEMONSTRATE COMPLIANCE WITH §264.175(c) BY ATTACHING:

   (1) TEST PROCEDURES AND RESULTS OR OTHER DOCUMENTATION OR INFORMATION TO SHOW THAT THE WASTES DO NOT CONTAIN FREE LIQUIDS; AND
   (2) A DESCRIPTION OF HOW THE STORAGE AREA IS DESIGNED OR OPERATED TO DRAIN AND REMOVE LIQUIDS OR HOW CONTAINERS ARE KEPT FROM CONTACT WITH STANDING LIQUIDS.

   (b) DESCRIBE THE CONTAINMENT SYSTEM TO SHOW COMPLIANCE WITH §264.175(b) BY ATTACHING:

   (1) BASIC DESIGN PARAMETERS, DIMENSIONS, AND MATERIALS OF CONSTRUCTION.
   (2) HOW THE DESIGN PROMOTES DRAINAGE OR HOW CONTAINERS ARE KEPT FROM CONTACT WITH STANDING LIQUIDS IN THE CONTAINMENT SYSTEM.
   (3) CAPACITY OF THE CONTAINMENT SYSTEM RELATIVE TO THE NUMBER AND VOLUME OF CONTAINERS TO BE STORED.
   (4) PROVISIONS FOR PREVENTING OR MANAGING RUN-ON.
   (5) HOW ACCUMULATED LIQUIDS CAN BE ANALYZED AND REMOVED TO PREVENT OVERFLOW.

*2. ATTACH SKETCHES, DRAWINGS, OR DATA DEMONSTRATING COMPLIANCE WITH §264.176 (SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES) AND §264.177(c) (SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES) WHERE APPLICABLE.

*3. WHERE INCOMPATIBLE WASTES ARE STORED OR OTHERWISE MANAGED IN CONTAINERS, ATTACH A DESCRIPTION OF THE PROCEDURES USED TO ENSURE COMPLIANCE WITH §§264.177(a) AND (b) (SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTE) AND §264.17 (GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE).

*4. ATTACH A DESCRIPTION OF THE PROCEDURES USED TO COMPLY WITH §264.171 (CONDITION OF CONTAINERS), §264.172 (COMPATIBILITY OF WASTE WITH CONTAINERS), AND §264.173 (MANAGEMENT OF CONTAINERS).

*5. ATTACH A COPY OF THE INSPECTION PROCEDURES AS REQUIRED IN §264.174 (INSPECTIONS) AND §264.15 (GENERAL INSPECTION REQUIREMENTS).

6. ATTACH A COPY OF THE CLOSURE PLAN AS REQUIRED BY §§264.112* and 264.178.

*THIS STANDARD IS SUBSTANTIALLY IDENTICAL TO THE CORRESPONDING 40 CFR PART 265 STANDARD.

PART III - TANKS

A. 40 CFR PART 265

1. ATTACH A DESCRIPTION OF THE DESIGN AND OPERATION PROCEDURES WHICH DEMONSTRATE COMPLIANCE WITH §265.192 INCLUDING:

    a. THE COMPATIBILITY OF WASTES OR REAGENTS WITH THE TANK OR ITS LINER.

    b. FOR UNCOVERED TANKS, DESCRIPTION OF THE FREEBOARD, CONTAINMENT STRUCTURE, DRAINAGE CONTROL, OR DIVERSION CONTROL SYSTEM.

    c. FOR TANKS WITH A CONTINUOUS FEED, A DESCRIPTION OF THE FEED CUT-OFF OR BY-PASS SYSTEM.

2. FOR TANKS USED TO TREAT OR STORE A DIFFERENT WASTE OR TREAT THE SAME WASTES BY DIFFERENT PROCESSES, ATTACH EITHER A WASTE ANALYSIS AND TRIAL TREATMENT OR STORAGE TESTS, OR ATTACH DOCUMENTED INFORMATION ON SIMILAR STORAGE OR TREATMENT, AS REQUIRED IN §265.193.

B. 40 CFR PART 264

1. ATTACH A DESCRIPTION OF DESIGN AND OPERATION PROCEDURES WHICH DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS OF §§264.191, 264.192, 264.198, 264.199 AND 264.17 INCLUDING:

    a. REFERENCES TO DESIGN STANDARDS OR OTHER AVAILABLE INFORMATION USED (OR TO BE USED) IN DESIGN AND CONSTRUCTION OF THE TANK.

    b. A DESCRIPTION OF DESIGN SPECIFICATIONS INCLUDING IDENTIFICATION OF CONSTRUCTION MATERIALS AND LINING MATERIALS (INCLUDE PERTINENT CHARACTERISTICS SUCH AS CORROSION OR EROSION RESISTANCE).

    c. TANK DIMENSIONS, CAPACITY, AND SHELL THICKNESS.

    d. A DIAGRAM OF PIPING, INSTRUMENTATION, AND PROCESS FLOW.

    e. DESCRIPTION OF FEED SYSTEMS, SAFETY CUT-OFF, BY-PASS SYSTEMS, AND PRESSURE CONTROLS (e.g., VENTS).

    *f. DESCRIPTION OF PROCEDURES FOR HANDLING INCOMPATIBLE IGNITABLE, OR REACTIVE WASTES, INCLUDING THE USE OF BUFFER ZONES.

2. ATTACH INSPECTION PROCEDURES INCLUDING:

    *a. THE DAILY AND WEEKLY INSPECTION OF THE EQUIPMENT OR OPERATIONS AS REQUIRED IN §264.194(a).

    b. THE INSPECTION SCHEDULE AND PROCEDURES REQUIRED IN §264.194(b) AND (c).

    *c. THE INSPECTION REQUIREMENTS IN §264.15.

*3. ATTACH A COPY OF THE CLOSURE PLAN AS REQUIRED BY §§264.112 AND 264.197.

*THIS STANDARD IS SUBSTANTIALLY IDENTICAL TO THE CORRESPONDING 40 CFR PART 265 STANDARD.

APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT
CERTIFICATION
TO BE COMPLETED BY ALL APPLICANTS

1. OPERATOR

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSON DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO BE THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY O. FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. FURTHER, I AGREE TO COMPLY WITH THE PROVISIONS OF CHAPTER 403, FLORIDA STATUTES, AND ALL RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL REGULATION. IT IS UNDERSTOOD THAT THE PERMIT IS ONLY TRANSFERABLE IN ACCORDANCE WITH SECTION 17-30, FAC, AND, IF GRANTED A PERMIT, THE DEPARTMENT OF ENVIRONMENTAL REGULATION WILL BE NOTIFIED PRIOR TO THE SALE OR LEGAL TRANSFER OF THE PERMITTED FACILITY.

David A. Dattilo
Scott E. Fore

SIGNATURE OF THE OPERATOR OR AUTHORIZED REPRESENTATIVE*

David A. Dattilo, Vice President, Sales and Service
Scott E. Fore, Vice President, Environment, Health and Safet

NAME AND TITLE (PLEASE TYPE OR PRINT)

DATE: 4/18/88 4/19/88 TELEPHONE NO. (312) 697-8460

*ATTACH A LETTER OF AUTHORIZATION

2. FACILITY OWNER

THIS IS TO CERTIFY THAT I UNDERSTAND THIS APPLICATION IS SUBMITTED FOR THE PURPOSE OF OBTAINING A PERMIT TO CONSTRUCT, OPERATE, OR CLOSE A HAZARDOUS WASTE MANAGEMENT FACILITY ON THE PROPERTY AS DESCRIBED. AS OWNER OF THE FACILITY, I UNDERSTAND FULL) THAT THE FACILITY OPERATOR AND I ARE JOINTLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF CHAPTER 403, FLORIDA STATUTES, AND ALL RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL REGULATION.

David A. Dattilo
Scott E. Fore

SIGNATURE OF THE FACILITY OWNER OR AUTHORIZED REPRESENTATIVE

David A. Dattilo, Vice President, Sales and Service
Scott E. Fore, Vice President, Environment, Health and Safe

NAME AND TITLE (PLEASE TYPE OR PRINT)

DATE: 4/18/88 TELEPHONE NO. (312) 697-8460

*ATTACH A LETTER OF AUTHORIZATION 4/19/88

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3 LAND OWNER

THIS IS TO CERTIFY THAT I, AS LAND OWNER, UNDERSTAND THAT THIS APPLICATION IS SUBMITTED FOR THE PURPOSE OF OBTAINING A PERMIT TO CONSTRUCT, OPERATE, OR CLOSE A HAZARDOUS WASTE MANAGEMENT FACILITY ON THE PROPERTY AS DESCRIBED. FOR HAZARDOUS WASTE DISPOSAL FACILITIES, I FURTHER UNDERSTAND THAT I AM RESPONSIBLE FOR PROVIDING THE NOTICE IN THE DEED TO THE PROPERTY REQUIRED BY 40 CFR §264.119 AND §265.119, AS ADOPTED BY REFERENCE IN CHAPTER 17-30, FAC.

SIGNATURE OF THE FACILITY OWNER OR AUTHORIZED REPRESENTATIVE*

David A. Dattilo, Vice President, Sales and Service
Scott E. Fore, Vice President, Environment, Health and Safet
NAME AND TITLE (PLEASE TYPE OR PRINT)

DATE: 4/18/88 TELEPHONE NO. (312) 697-8460

*ATTACH A LETTER OF AUTHORIZATION 4/19/88

4. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (WHERE REQUIRED BY CHAPTER 471, F.S.)

THIS IS TO CERTIFY THAT THE ENGINEERING FEATURES OF THIS HAZARDOUS WASTE MANAGEMENT FACILITY HAVE BEEN DESIGNED/EXAMINED BY ME AND FOUND TO CONFORM TO ENGINEERING PRINCIPLES APPLICABLE TO SUCH FACILITIES. IN MY PROFESSIONAL JUDGMENT, THIS FACILITY, WHEN PROPERLY CONSTRUCTED, MAINTAINED AND OPERATED, OR CLOSED, WILL COMPLY WITH ALL APPLICABLE STATUTES OF THE STATE OF FLORIDA AND RULES OF THE DEPARTMENT OF ENVIRONMENTAL REGULATION.

SIGNATURE _____ MAILING ADDRESS Wang Engineering, Inc.

NAME John T. Fornek (PLEASE TYPE) 4300-P Lincoln Ave. STREET OR P.O. BOX

Rolling Meadows, IL 60008
CITY STATE ZIP

(312) 991-0905 4/21/88
TELEPHONE NO. DATE

FLORIDA REGISTRATION NUMBER: 39232

(Please Affix Seal)

88-115

Please print or type in the unshaded areas only (fill–in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

EPA — GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F [illegible]

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill–in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill–in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

... to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any ... and the supplemental form ... following the question. Mark "X" in the box in the third column ... answer "no" ... submit any of these forms. You may answer "no" if your activity ... Section C of the instructions. See also, Section D of the instructions for definitions of bold–faced terms.

	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
		X				X	
		X				X	
	X		X			X	
		X				X	
		X				X	

III. NAME OF FACILITY

SAFETY-KLEEN CORP. (3-092-01)

IV. FACILITY CONTACT

NAME & TITLE	PHONE
PEDERSON, PAUL - REG ENV ENGR	312 697 8460

V. FACILITY MAILING ADDRESS

777 BIG TIMBER ROAD

CITY OR TOWN	STATE	ZIP CODE
ELGIN	IL	60123

VI. FACILITY LOCATION

QUANTUM IND. PARK-LOT 46B

B. COUNTY NAME

LEON

C. CITY OR TOWN	STATE	ZIP CODE
BOYNTON BEACH	FL	33435

CONTINUED FROM THE FRONT

7399	Business Services N.E.C.	5172	Petroleum Product Wholesalers
5084	Industrial Machinery & Equipment	5013	Automotive Parts and Supplies

SAFETY-KLEEN CORP. ELGIN IL

P | 312 | 697 | 8460

777 BIG TIMBER ROAD

ELGIN | IL | 60123

This location is primarily a local sales/service office and warehouse for Safety-Kleen products consisting of small parts cleaning equipment, solvent and allied products such as hand cleaner, floor cleaner, parts washing brushes, etc. Safety-Kleen collects used solvents from the customer (primarily SQG & VSQG's) for temporary storage at this facility. Once a sufficient quantity of materials is collected, the materials are moved off-site in a semi trailer or tanker quantity to a Safety-Kleen Recycling Center.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
SCOTT E. FORE, VICE PRESIDENT, ENVIRONMENT, HEALTH AND SAFETY	Scott E. Fore	6/27/88

EPA Form 3510-1 (6-80) REVERSE

88-176

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

1	2	3	4	5	6	7	8	9	10	11	12
F	A	P	P	L	I	E	D		F	O	R

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS
23	24 - 29	

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)* — 71

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

C	YR.	MO.	DAY
8			
15	73 74	75 76	77 78

[X] 2. NEW FACILITY *(Complete item below.)* — 72

FOR NEW FACILITIES PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY
8 9	0 1	0 1
73 74	75 76	77 78

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS — 72

[ ] 2. FACILITY HAS A RCRA PERMIT — 73

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
C	D	U	P										I	

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G	
X-2	T 0 3	20	E	
1	S 0 1	6,912	G	
	S 0 2	15,000	G	
3				
4				

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
5				
6				
7				
8				
9				
10				

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				*included with above*

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80C04

EPA I.D. NUMBER (enter from page 1): APPLIED FOR

FOR OFFICIAL USE ONLY: W DUP 2 DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	D001	1,000	T	S02 S01	Spent mineral spirits
2	D006 D008				Included with above
3	F002	31	T	S01	Spent immersion cleaner
4	F004				Included with above
5	F002	350	T	S01	Dry cleaner wastes
6	F003	50	T	S01	Paint wastes
7	F005				Included with above
8	D001				Included with above
9	D006				Included with above
10	D007				Included with above
	D008				Included with above
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)

	T/A	C
APPLIED FOR		G

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)	LONGITUDE (degrees, minutes, & seconds)
26 32 22 N	080 04 55 W

VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. (area code & no.)
	- -

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST	6. ZIP CODE
	G		

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

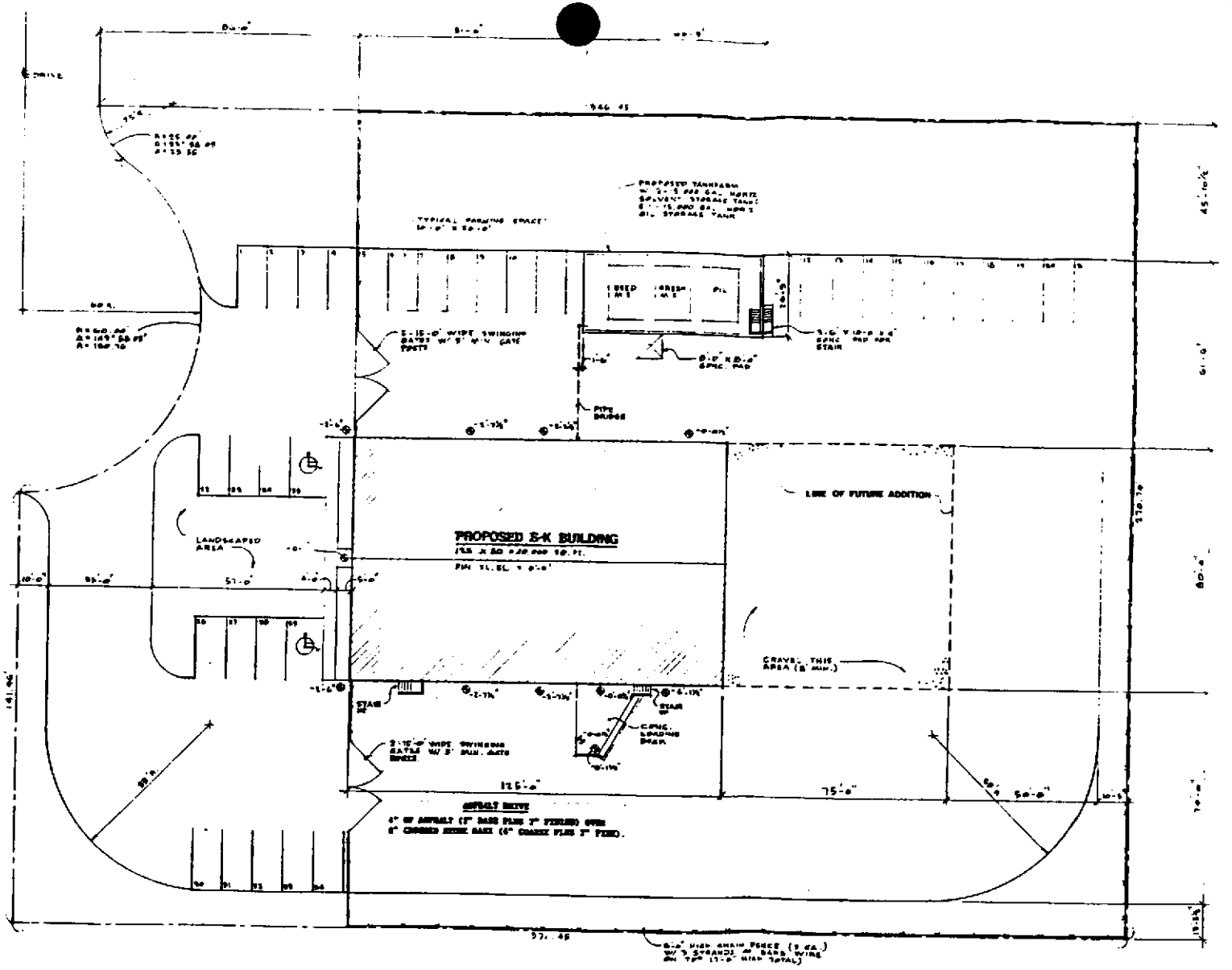
A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
SCOTT E. FORE, VICE PRESIDENT, ENVIRONMENT, HEALTH AND SAFETY	Scott E. Fore	6/27/88

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

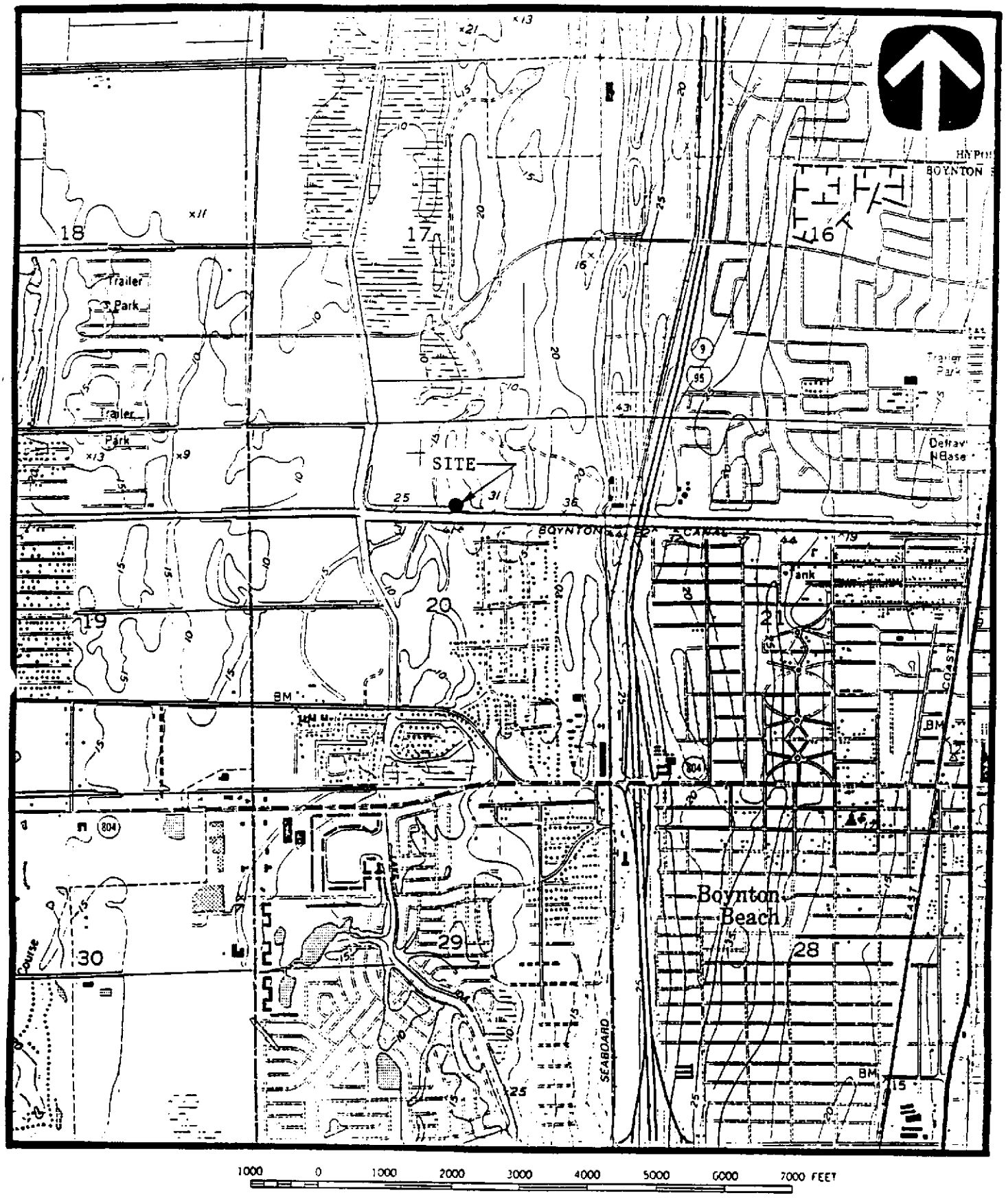
88-176

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
SCOTT E. FORE, VICE PRESIDENT, ENVIRONMENT, HEALTH AND SAFETY	Scott E. Fore	6/27/88

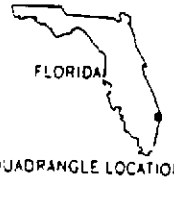


PROPOSED SITE PLAN

SCALE: 1"=20'-0"



U.S. Dept. of Commerce Coast
Lake Worth Quadrangle, Florida
7.7 minute series
Photorevised 1983

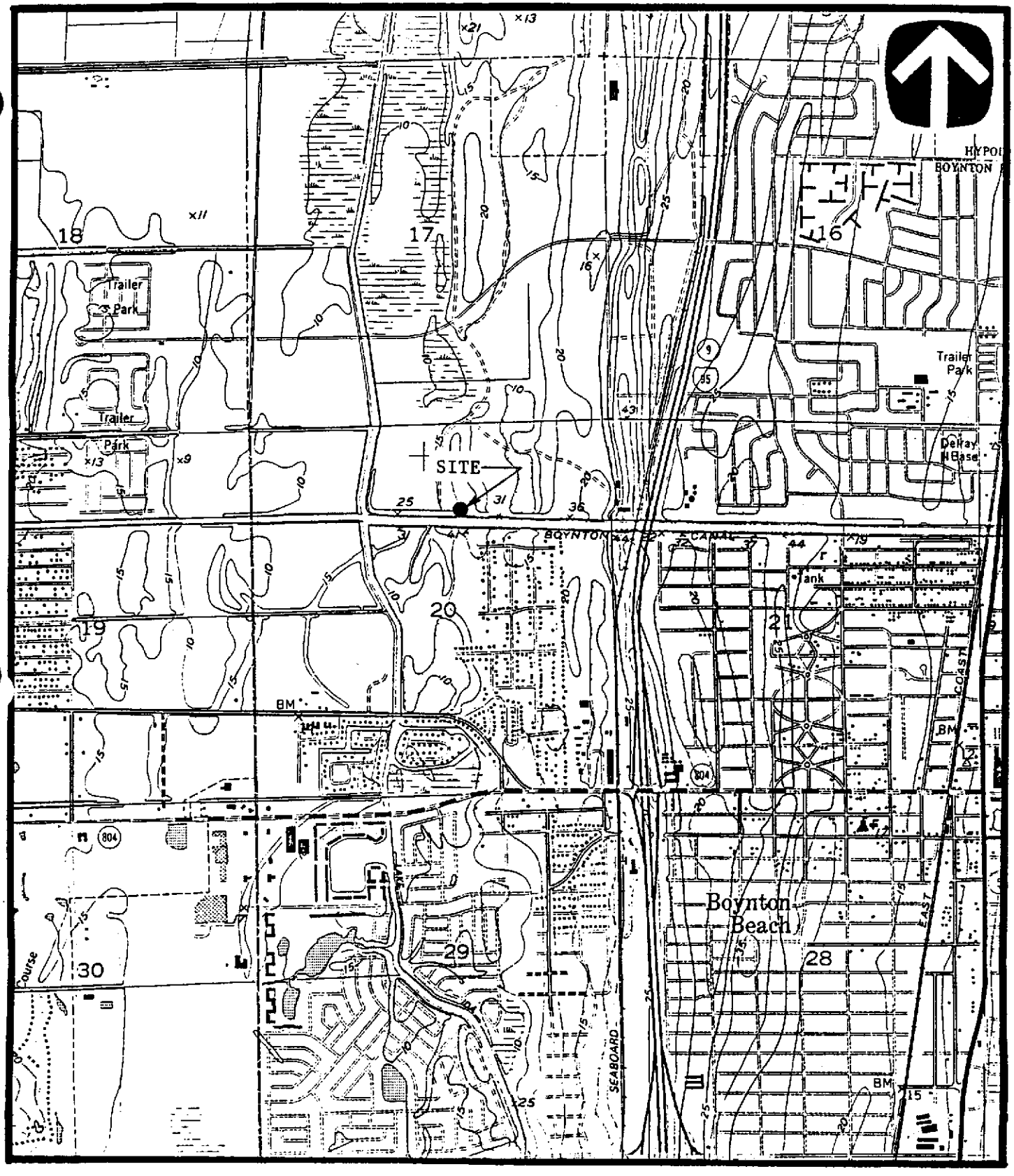


QUADRANGLE LOCATION

EXHIBIT I.B. 3-1
Topographic Map

ATTACHMENT I.B

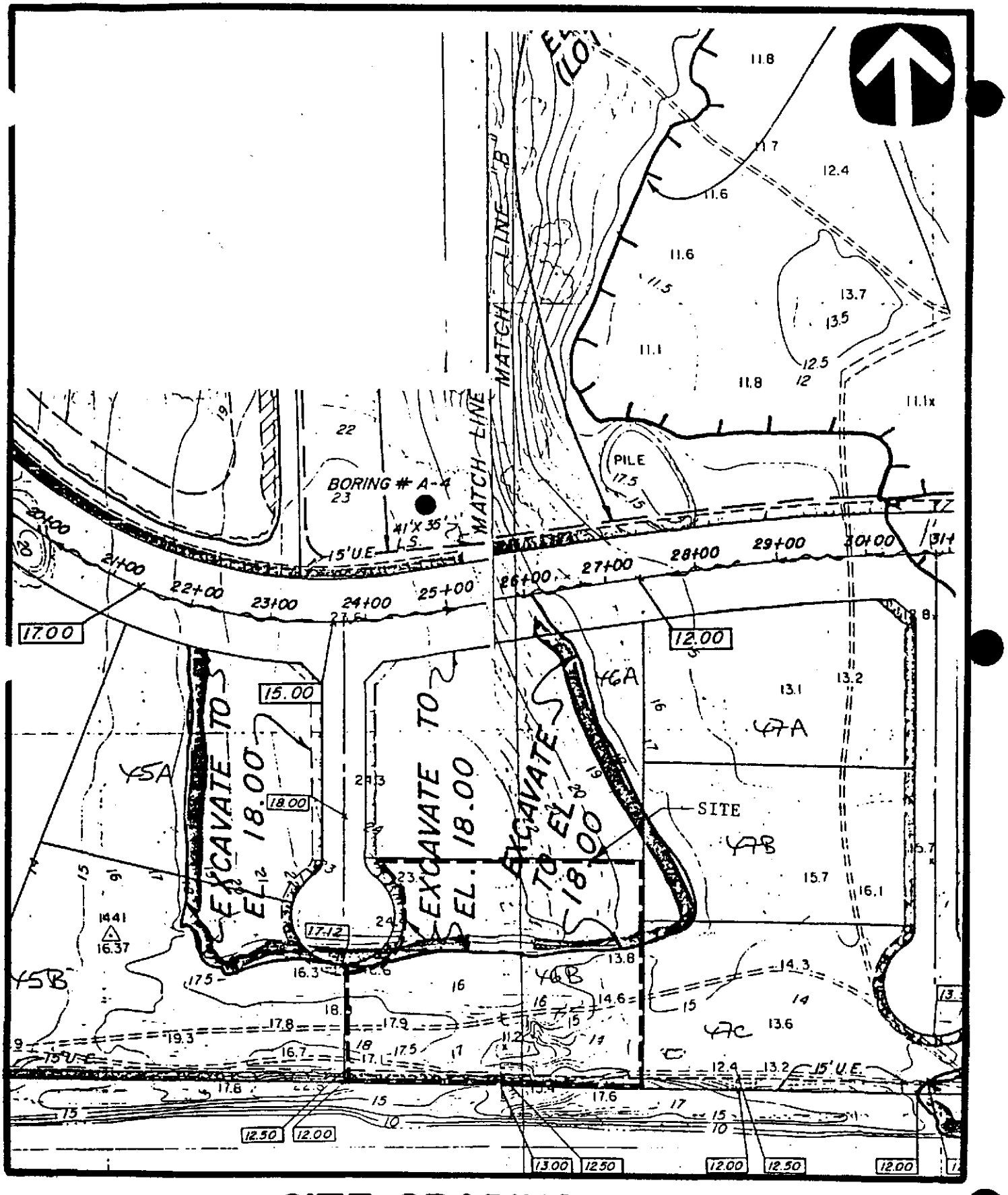
SITE INFORMATION



U.S. Dept. of Commerce Coast
Lake Worth Quadrangle, Florida
7.7 minute series
Photorevised 1983

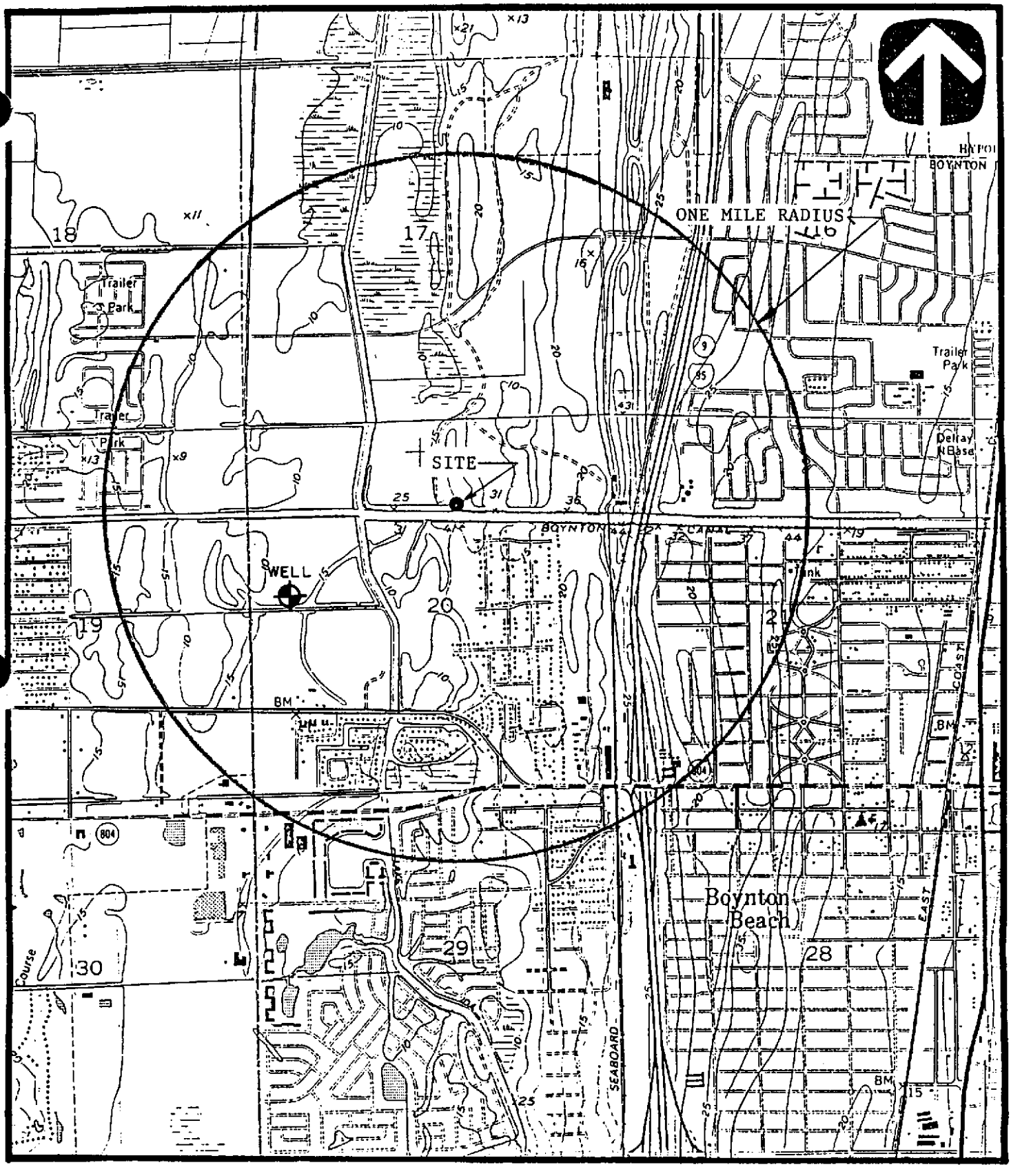
QUADRANGLE LOCATION

EXHIBIT I.B. 3-1
Topographic Map



SITE GRADING PLAN

EXHIBIT I.B. 3-2



U.S. Dept. of Commerce Coast
Lake Worth Quadrangle, Florida
7.7 minute series
Photorevised 1983

EXHIBIT I.B. 3-3
Well Location Map

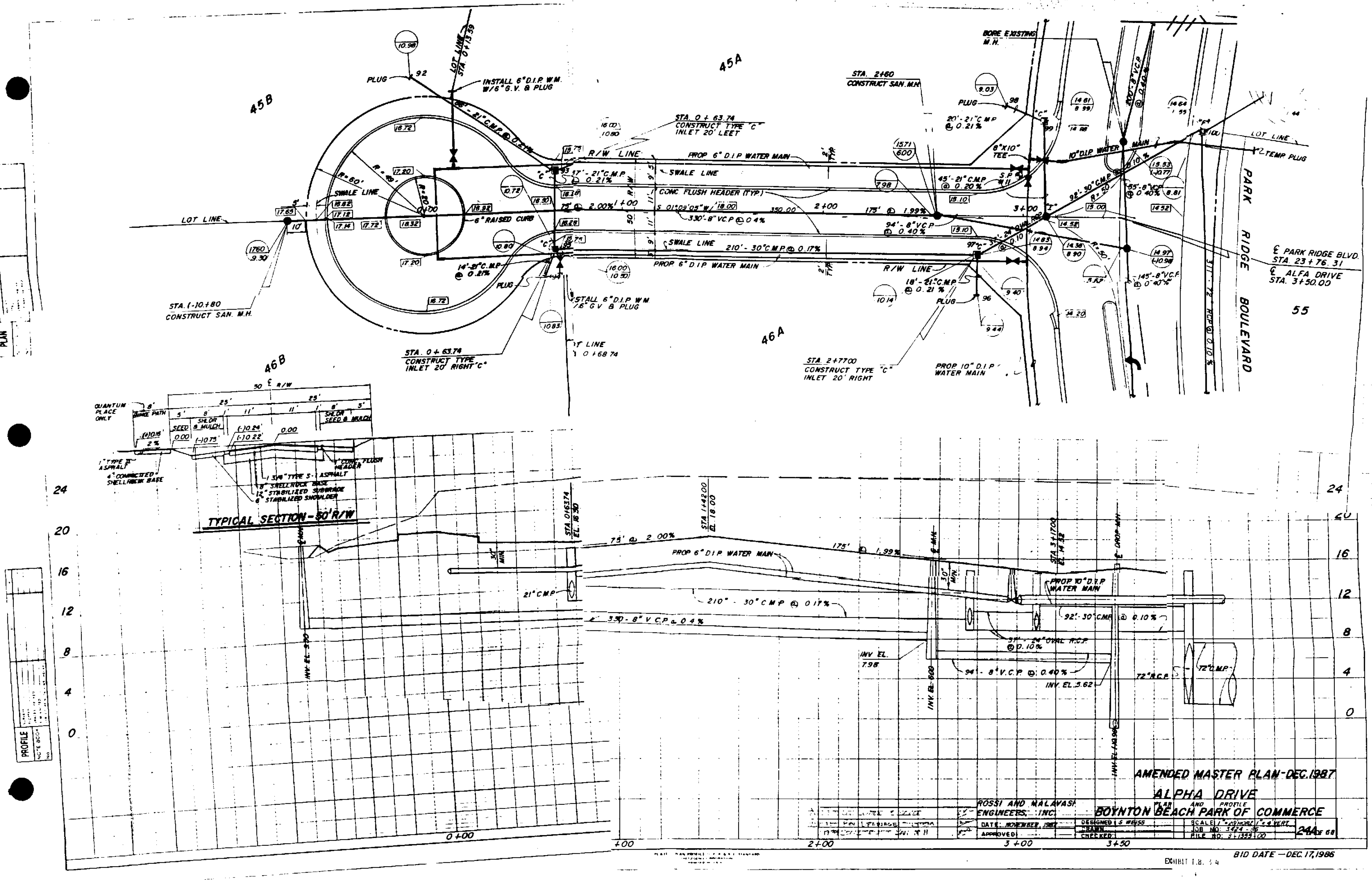
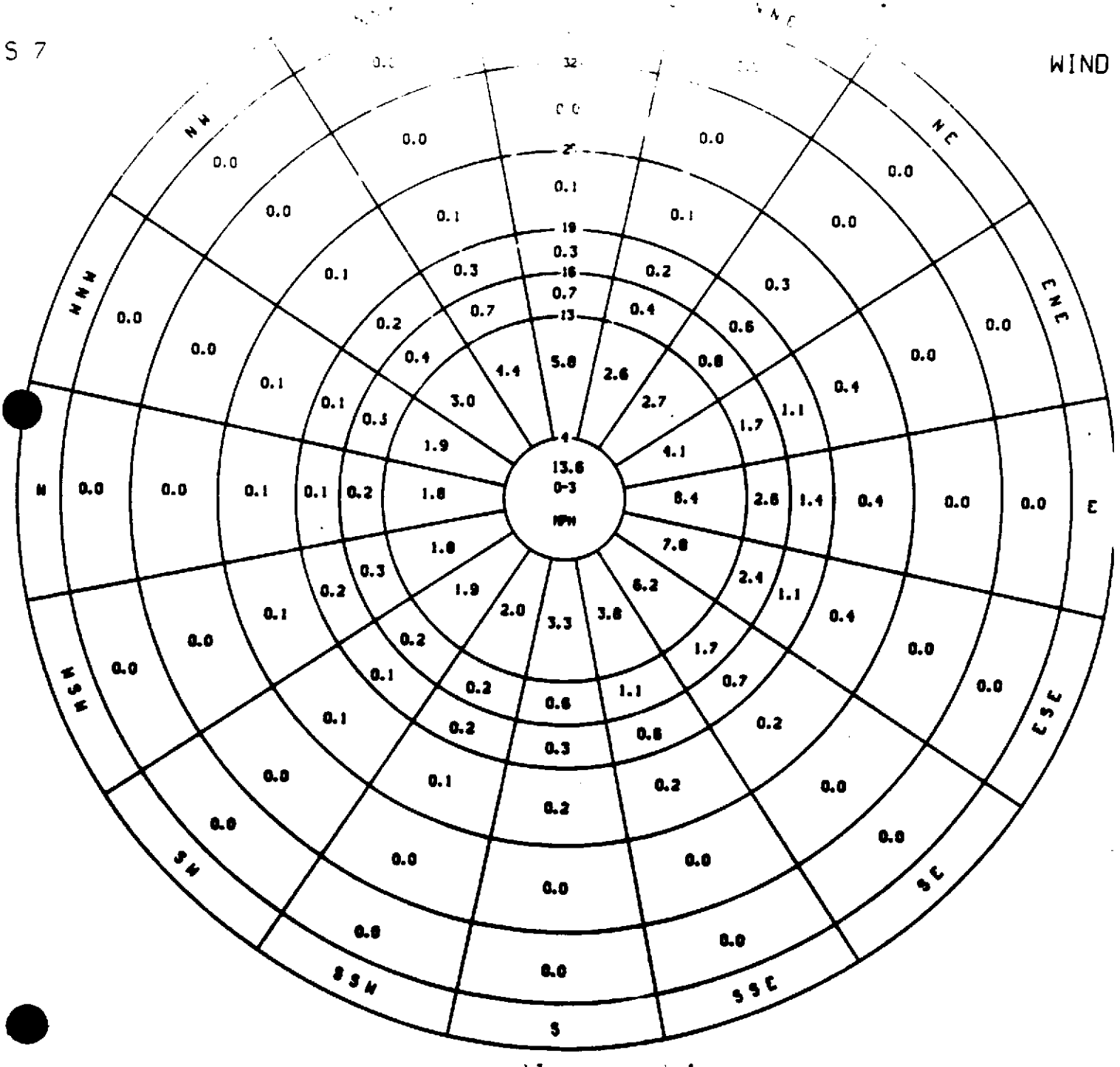
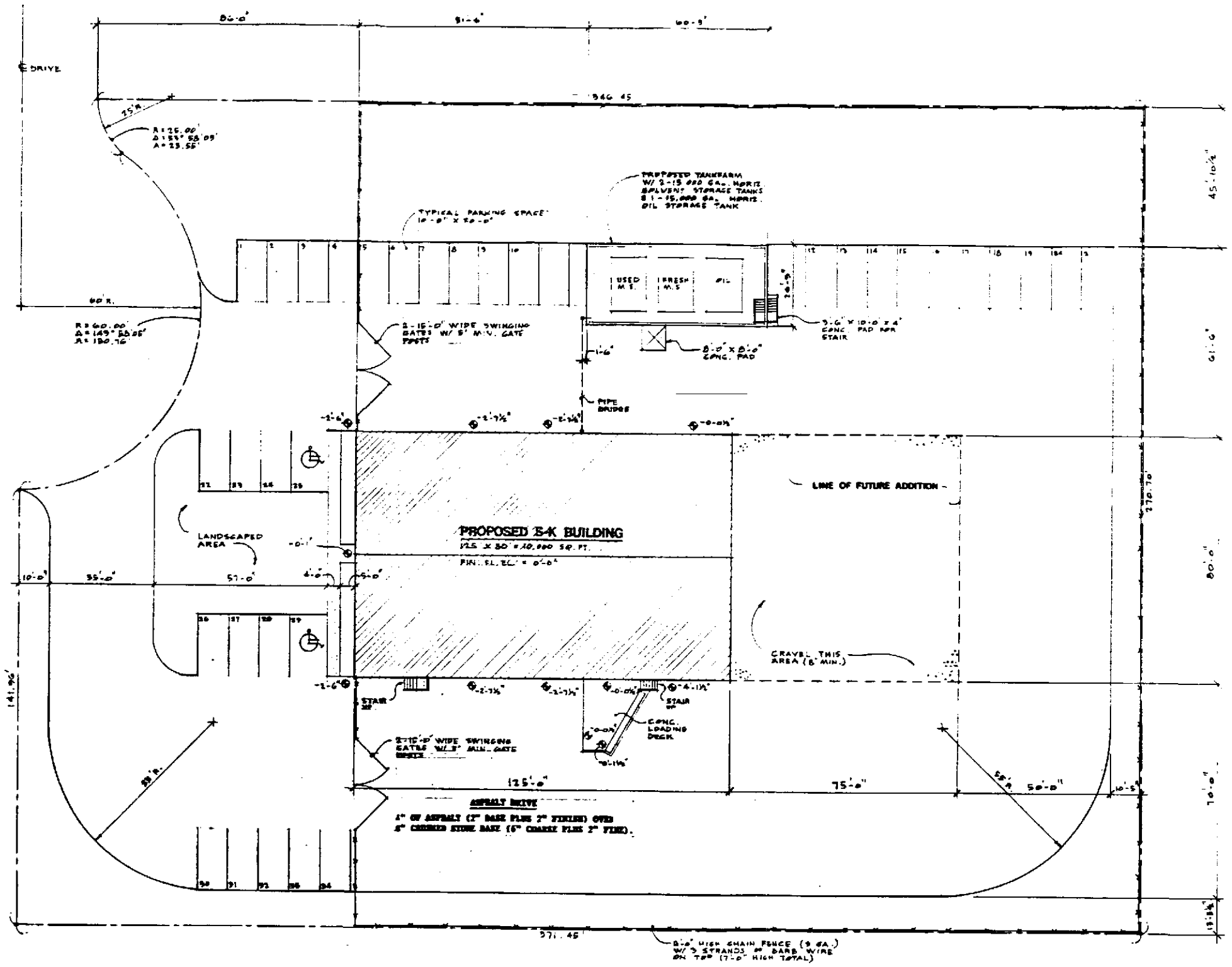

PARK RIDGE BOULEVARD
℄ PARK RIDGE BLVD. STA. 23+76.31
℄ ALFA DRIVE STA. 3+50.00
55
45A
45B
46A
46B
LOT LINE
TEMP PLUG
BORE EXISTING M.H.
STA. 2+60 CONSTRUCT SAN. M.H.
STA. 0+63.74 CONSTRUCT TYPE "C" INLET 20' LEFT
STA. 0+63.74 CONSTRUCT TYPE INLET 20' RIGHT "C"
STA. 2+77.00 CONSTRUCT TYPE "C" INLET 20' RIGHT
STA. (-)0+80 CONSTRUCT SAN. M.H.
INSTALL 6" D.I.P. W.M. W/6" G.V. & PLUG
PROP 6" D.I.P. WATER MAIN
PROP 10" D.I.P. WATER MAIN
10" D.I.P. WATER MAIN
8"X10" TEE
SWALE LINE
CONC. FLUSH HEADER (TYP)
6" RAISED CURB
R/W LINE
330'-8" V.C.P. @ 0.4%
210'-30" C.M.P. @ 0.17%
92'-30" C.M.P. @ 0.10%
94'-8" V.C.P. @ 0.40%
45'-21" C.M.P. @ 0.20%
20'-21" C.M.P. @ 0.21%
18'-21" C.M.P. @ 0.21%
14'-21" C.M.P. @ 0.21%
17'-21" C.M.P. @ 0.21%
311'-72" RCP @ 0.10%
200'-8" V.C.P. @ 0.40%
145'-8" V.C.P. @ 0.40%
55'-8" V.C.P. @ 0.40%
31'-24" OVAL R.C.P. @ 0.10%
PLUG
TYPICAL SECTION-50' R/W
QUANTUM PLACE ONLY
BIKE PATH
SEED & MULCH
1" TYPE II ASPHALT
4" COMPACTED SHELLROCK BASE
1 3/4" TYPE S-I ASPHALT
8" SHELLROCK BASE
12" STABILIZED SUBGRADE
6" STABILIZED SHOULDER
STA. 0+63.74 EL. 16.30
STA. 1+42.00 EL. 18.00
STA. 3+17.00 EL. 14.52
75' @ 2.00%
175' @ 1.99%
21" C.M.P.
72" R.C.P.
72" C.M.P.
INV. EL. 7.98
INV. EL. 5.62
AMENDED MASTER PLAN-DEC.1987
ALPHA DRIVE
PLAN AND PROFILE
BOYNTON BEACH PARK OF COMMERCE
ROSSI AND MALAVASI ENGINEERS, INC.
DATE: NOVEMBER 1982
DESIGNED: S. WEISS
SCALE: 1"=20' HORIZ. 1"=4' VERT.
JOB NO: 3424-36
244 OF 68
BID DATE — DEC. 17, 1986
EXHIBIT I.B. 3.4
PLAN
PROFILE

Exhibit I.B.3-5
Wind Rose





PROPOSED SITE PLAN

SCALE: 1" = 20'-0"

Safety-Kleen Corp. I. B. 3-6

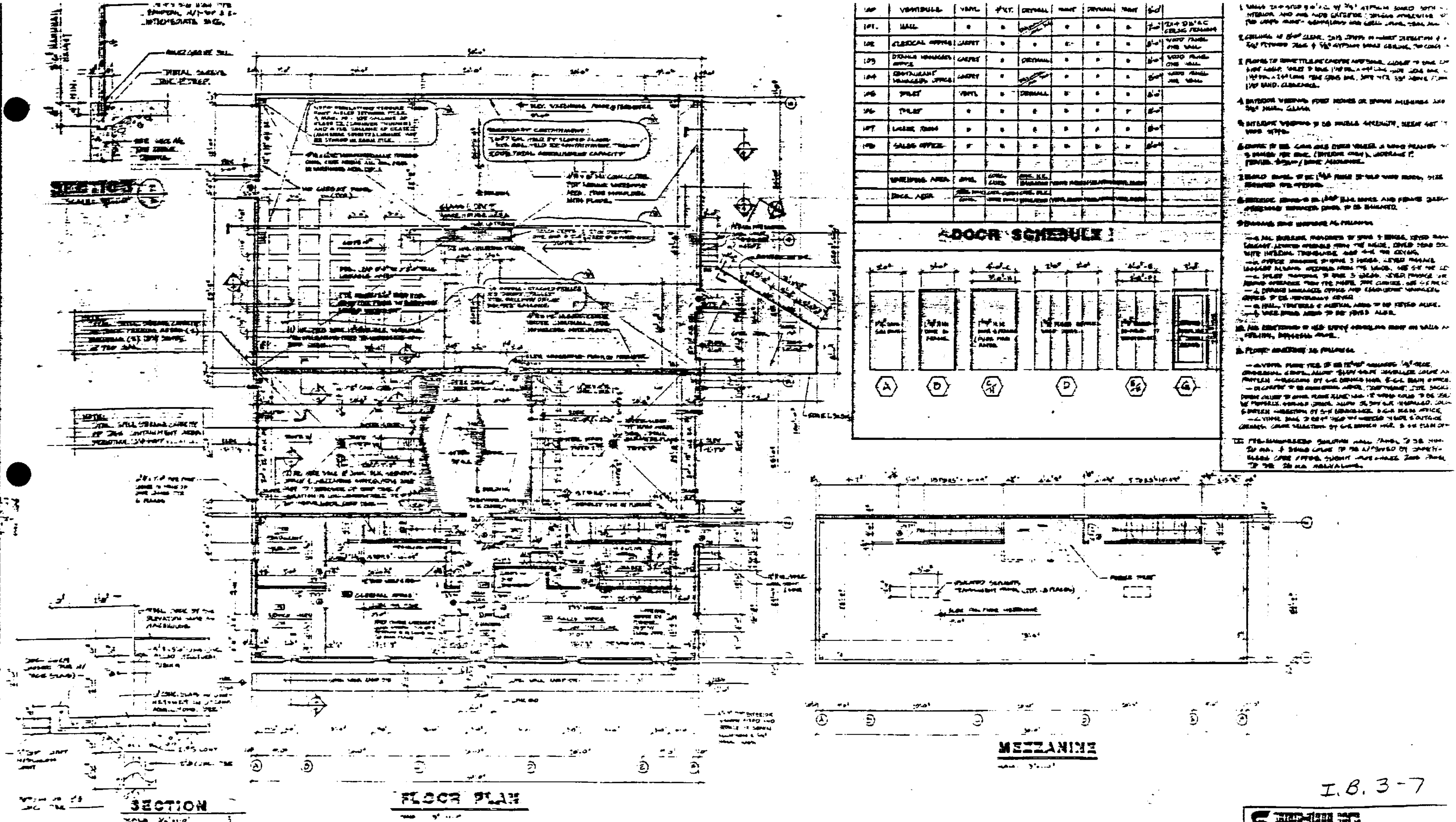
777 BIG TIMBER ROAD • ELGIN, ILLINOIS 60123 PHONE 312/697-8460

PROPOSED SITE PLAN

SCALE		BY	DATE
DATE			
DR'N	CHK'D		
APP'D			

TITLE: FOR SERVICE CENTER BRANCH

DWG. NO. D12020



I.B. 3-7

CONSTRUCTION CONTRACT REQUIREMENTS

FLOOR PLAN

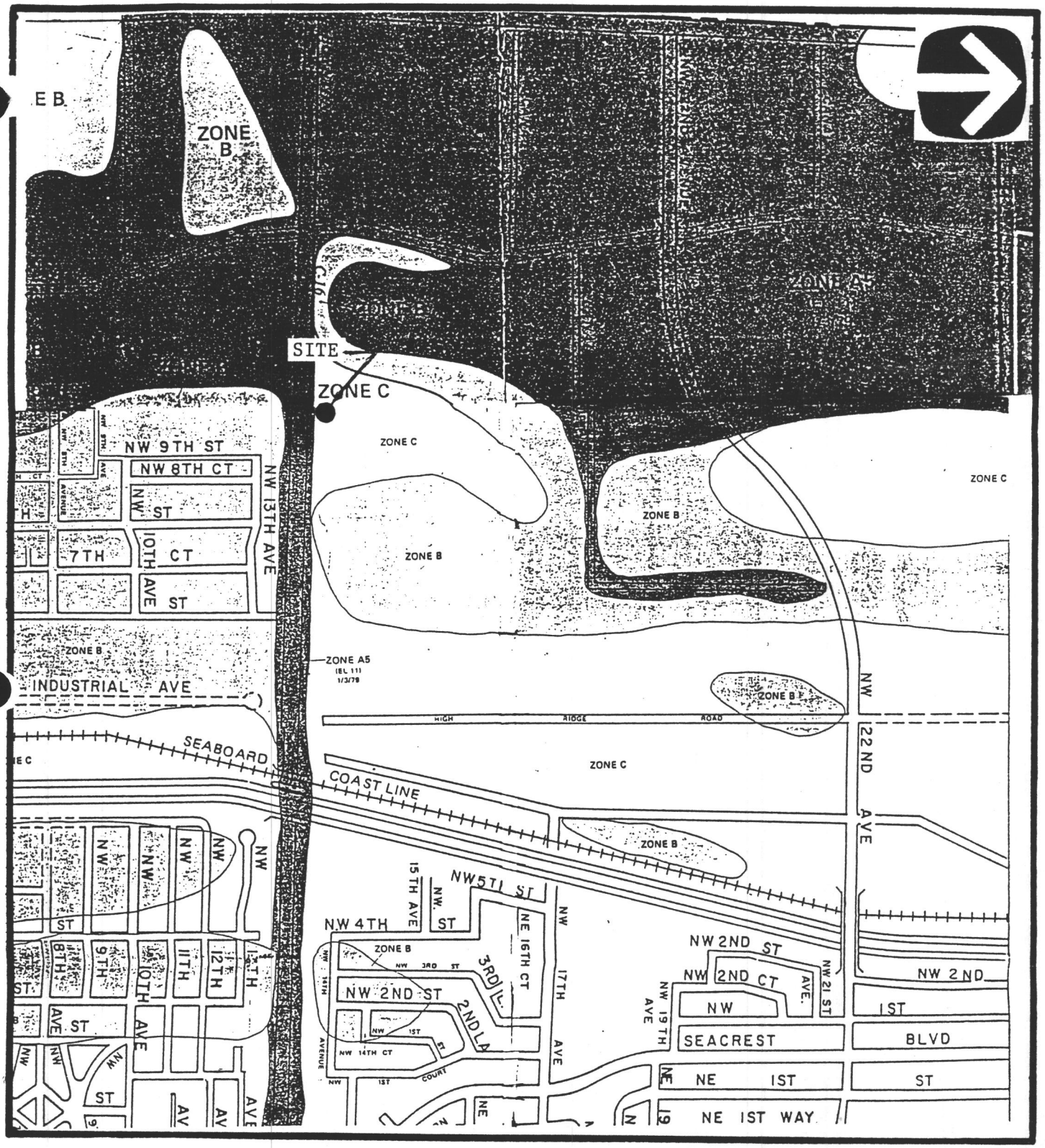
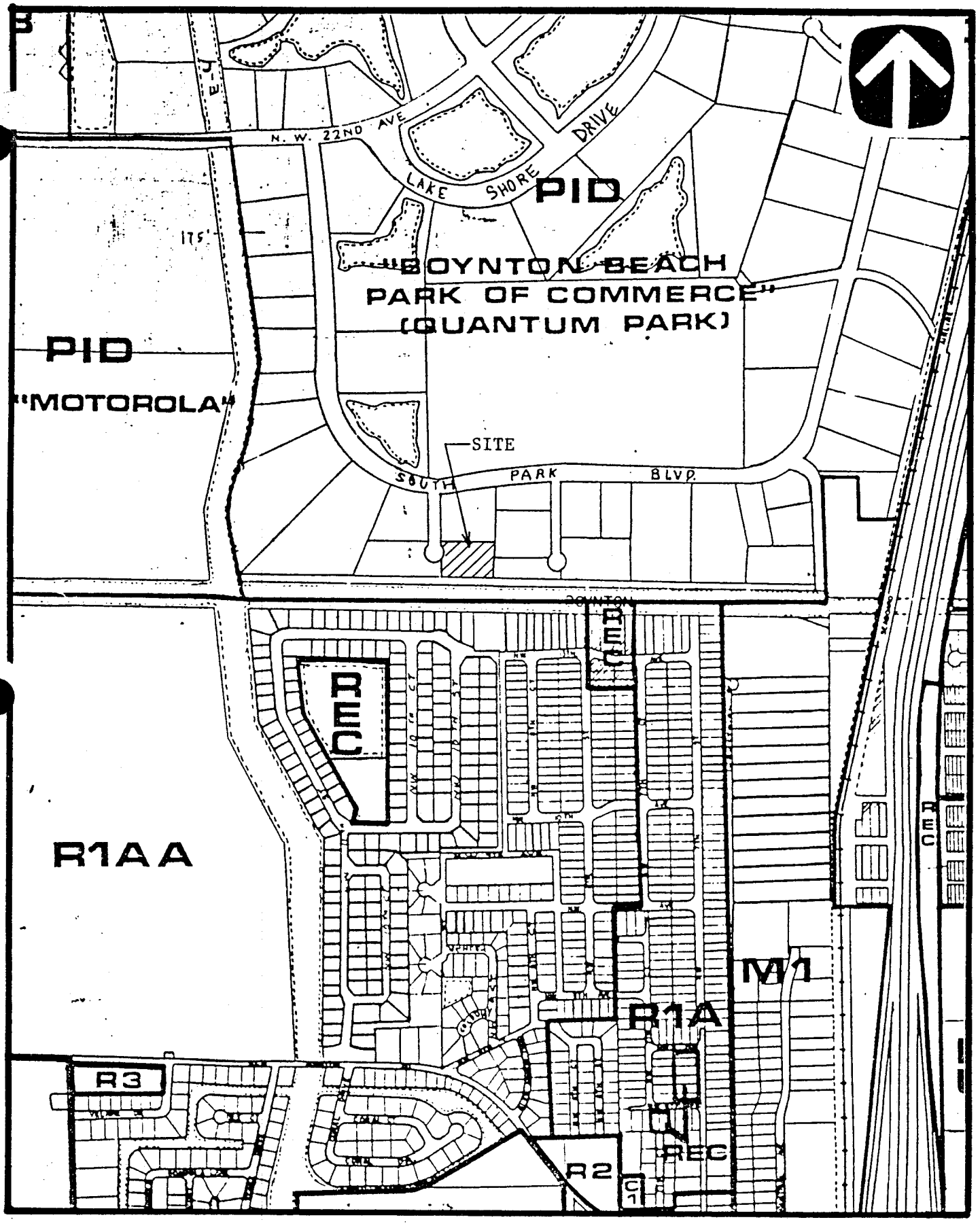


EXHIBIT I.B. 4-1
Flood Plain Map
Boyton Beach, FL

ATTACHMENT I.C

LAND USE INFORMATION



ZONING MAP

EXHIBIT I.C. 1-1

SCALE FT.

800 0 800' 1600

ATTACHMENT I.D

OPERATING INFORMATION

I.D.2.a 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, the company has offered a leasing service for hydrocarbon and chlorinated solvents and small parts washing equipment. A unique feature of the business concept is that the solvent is produced by recycling the used solvent that is leased to customers. Approximately two-thirds of the clean solvent leased has been previously used by customers.

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

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 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. The solvent is contained in partially filled 16- and 30-gallon drums which serve as the solvent reservoir of the parts washer.

Periodically, a company truck is dispatched from a Safety-Kleen solvent reclamation facility 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 and the chlorinated solvent remains in covered drums during transfers between the service centers and the reclamation centers. About 97 percent of the solvent handled in the parts washer business is mineral spirits, while the balance is immersion cleaner.

The solvent cycle is a closed loop going from the service center to the customer, from the customer to the service center, from the service center to the reclamation center, and from the reclamation center back to the service center. This closed loop provides Safety-Kleen with most of its solvent requirements and the resultant stabilized cost benefits are passed on to its customers. Ownership of the solvent remains with Safety-Kleen and the service center managers are accountable for the quantities of clean and used solvents handled by their branch operations.

In 1984, Safety-Kleen began providing a dry cleaning waste reclamation service whereby drums of dry cleaner wastes (usually perchloroethylene) are collected and stored at the service centers before reclamation. The reclaimed solvent is returned to Safety-Kleen customers.

In 1986, a paint waste reclamation program was initiated to service automobile body repair businesses. Wastes containing various lacquer thinners and paints are collected in 5-gallon pails and in 16-gallon drums on the customer's premises. The sales representative collects these containers and stores them in the drum storage area of the warehouse. These wastes are periodically shipped to a reclaimer and there claimed solvent is distributed to Safety-Kleen customers for use as product.

I.D.2.b and c **SPECIFICATIONS AND ANNUAL QUANTITIES OF HAZARDOUS WASTES**

In Accordance with U.S. EPA Hazardous Waste Regulations, five types of hazardous waste have been identified at the service center:

1. The used mineral spirits solvent which is stored in an aboveground tank before reclamation is considered to be an ignitable waste (D001) and an EP toxic waste (D008);
2. Mineral spirits dumpster sediment accumulates in the solvent return receptacles (wet dumpsters) and is regularly removed. It is considered to be an ignitable waste (D001) and an EP Toxic Waste (D006 and D008);

3. The used immersion cleaner is returned from customers in drums and remains in the same drum for shipment to the recycle center. It is considered to be a listed waste from nonspecific sources (F002 and F004);

4. The dry cleaning waste is collected in containers and remains in the same container for shipment to the recycle center. It is considered to be a listed waste from nonspecific sources (F002); and

5. Paint waste is considered to be a listed waste from nonspecific sources (F003 and F005).

A typical composition, and chemical and physical analysis for each of the waste streams listed above is shown in Exhibits ID2-1 through ID2-10.

USED MINERAL SPIRITS

The clean mineral spirits solvent is labeled under the trade-name of "Safety-Kleen 105 Solvent", so-named because the flash point of the solvent is a minimum of 105°F. Chemically, the solvent consists of a petroleum hydrocarbon fraction with boiling points between 310°F and 400°F. Impurities such as light aromatic hydrocarbons (LAHC) and chlorinated hydrocarbons usually constitute less than one percent of the total volume. A typical chemical composition of the used solvent is shown on Exhibit I.D.2-1 which lists analytical results of samples of spent mineral spirits solvent in 1987. The used mineral spirits solvent consists of mineral spirits solvent and water, solids, oil and grease.

The composition of the solvent fraction in the used mineral spirits solvent is essentially the same as the clean solvent.

An estimated 275,000 gallons of used mineral spirits are expected to be shipped to a recycle center from this facility annually.

MINERAL SPIRITS DUMPSTER SEDIMENT

This waste material is accumulated in the wet dumpsters when emptying the used mineral spirits from the drums into the aboveground storage tanks. The nature of this waste is similar to the used mineral spirits bottom sludge, except that it contains more solids. It is regarded as an ignitable EP toxic waste because of its lead and cadmium contents. A typical composition of the dumpster mud is presented in Exhibit I.D.2-2.

The sludge in the dumpsters is removed about once a month and the waste is drummed and shipped to Safety-Kleen's facility for recycling. About 150 drums (1,500 gallons) of dumpster mud will be removed from this service center each year.

USED IMMERSION CLEANER

Safety-Kleen's carburetor cleaner is labeled under the tradename of "Immersion Cleaner and Carburetor and Cold Parts Cleaner #609". It is a two-phase system consisting of an upper aqueous layer and lower solvent layer. The water phase consists of water and Dresinate TX (a sodium soap of tall oil). The solvent phase is

composed of methylene chloride, orthodichlorobenzene, cresylic acid, and an amines additive. A typical composition of the spent immersion cleaner is shown on Exhibits I.D.2-3 and I.D.2-8.

The used immersion cleaner contains varnish, gum, oil, grease and solids. It is regarded as toxic because it contains halogenated solvents and cresylic acid.

Less than five gallons of waste is returned in each drum. It is anticipated that 7,500 gallons of used immersion cleaner will be stored at this facility annually.

DRY CLEANING WASTES

80% of the solvent used in dry cleaning of clothing is tetrachloroethylene (or perchloroethylene) while 17% is mineral spirits and 3% is trifluorotrichloroethane. Hence, wastes generated from dry cleaning operations contain various concentrations of the solvent. Wastes generated by dry cleaning facilities are in the following forms:

1. Cartridge Filter: In addition to the construction materials consisting of steel, paper, clay & carbon, the used cartridge retains solvent, oil and grease, and undissolved elements such as lint and soil. Solvent retained in the filter cartridge generally amounts to less than 50% of the total cartridge weight.

2. Muck: At some dry cleaning facilities, a mixture of powdered materials is used as the filter medium for the dry cleaning solvent, in lieu of the cartridge filter. This filter medium normally consists of diatomaceous earth and carbon. In addition to lint, soil, oil and grease retained by this medium, between 40 and 50 percent by weight of the "muck" is absorbed solvent.

3. Still Residue: After filtration, the dry cleaning solvent is distilled by the dry cleaning machine to remove the dissolved materials from the used solvent. The dissolved materials (still residues) are in liquid form and consist of primarily detergent, oil and grease, vinyl acetate (a sizing compound) and up to 20 percent solvent.

This facility will ship about 80,000 gallons of dry cleaner wastes for reclamation annually. Exhibit I.D.2-4 shows the typcial composition for still bottoms and filter residues.

PAINT WASTES

Paint wastes consist of various lacquer thinners (F003 and F005) and paints. The waste is collected in black 5-gallon pails and 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. Analytical results for paint wastes are in Exhibit 2-5.

I.D.2.d **DESIGN CAPACITY**

All wastes managed at this facility are stored either in a tank or in containers, as follows:

Waste	Storage Unit
Spent Mineral Spirits	12,000-gallon tank
Dumpster Sediment	
Spent Immersion Cleaner	6,912 gallons in containers
Dry Cleaner Wastes	
Paint Wastes	

DELRAY BEACH, FL
3-097-90

LEXINGTON RECYCLE CENTER

Incoming Mineral Spirits

'88 Period Date	ER & RC Sample No.	Gallons	Solv.	Water	Bot.	°F. FP	% Volume LAHC	MC	1,1,1	Tri.	Tol.	Perc.	MS
1													
1-14	758D	4500	91	0	9	P	.036	0	0	0	.110	.063	99.792
1-18	768D	7000	92	0	8	P	.032	0	0	0	.102	.079	99.787
1-29	798D	7000	95	0	5	P	.025	0	0	0	.006	.108	99.861
2-02	807D	7000	94	0	6	P	.032	0	.019	.004	.090	.060	99.796
2-12	834D	7000	93	0	7	P	.018	0	0	0	.087	.046	99.849
2-16	843D	4000	94	0	6	P	.018	0	.028	0	.081	.112	99.760
2-24	862D	7000	95	0	5	P	.021	0	0	0	.070	.065	99.844
2-25	865D	7000	92	0	8	P	.018	0	0	0	.073	.048	99.861
3													
3-1	875D	7000	90	0	10	P	.020	0	0	0	.109	.056	99.814
3-14	904D	7000	94	0	6	P	.026	0	0	0	.133	.026	99.815
3-22	925D	5000	93	0	7	P	.037	0	.050	0	.221	.072	99.619
3-23	929D	7000	94	0	6	P	.021	0	0	0	.139	.071	99.769

Outgoing Mineral Spirits

'88 Period Date	ER & RC Sample No.	Gallons	°F. FP	% Volume LAHC	MC	1,1,1	Tri.	Tol.	Perc.	MS
1										
1-12	697C	4500	P	.024	0	.037	0	.072	.054	99.813
1-15	707C	7000	P	.023	0	.061	0	.083	.054	99.779
1-27	731C	7000	P	.022	0	.029	0	.066	.045	99.838
2-01	742C	2000	P	.272	0	.029	0	.078	.056	99.565
2-11	766C	7000	P	.020	0	.026	0	.073	.053	99.828
2-15	776C	7000	P	.019	0	.021	0	.080	.092	99.788
2-24	796C	4000	P	.017	0	.031	0	.068	.064	99.821
3										
2-29	806C	7000	P	.016	0	.027	0	.067	.049	99.841
3-11	833C	7000	P	.015	0	.036	0	.060	.043	99.847
3-21	851C	7000	P	.016	0	0	0	.180	.039	99.764
3-21	855C	3000	P	.021	0	0	0	.120	.075	99.784

Solv. = solvent
Bot. = bottoms oil
F/P = flash point
LAHC = light aromatic hydrocarbons
MC = methylene chloride
1,1,1 = 1,1,1-trichloroethane
Tri. = trichloroethylene
Tol. = toluene
Perc. = perchloroethylene
MS = mineral spirits

RESIDUALS MANAGEMENT TECHNOLOGY, INC.

LABORATORY REPORT

CLIENT: Safety Klean - DO Corporation DATE: 8-17-81

PROJECT #: 1038-L P.O. #: Verbal

SAMPLE #: 1376

SAMPLE DESCRIPTION: None available

Mineral Spirits Dumpster Mud

EP TOXICITY TEST

WEIGHT USED: 100.2 gms FINAL PH: 4.8 ACID USED: 45 mls

PARAMETER	RESULT	HAZARDOUS WASTE LIMITS
ARSENIC	0.008	5.0 mg/l
BARIUM	0.6	100.0 mg/l
CADMIUM	0.93	1.0 mg/l
CHROMIUM-TOTAL	<0.05	5.0 mg/l
LEAD	5.0	5.0 mg/l
MERCURY	0.0035	0.2 mg/l
SELENIUM	0.002	1.0 mg/l
SILVER	<0.02	5.0 mg/l
FLASH POINT	120°	140° F
pH	8.1	

Paul E. Duranceau

Paul E. Duranceau, Laboratory Director

All leaching tests and leachate analysis meet Environmental Protection Agency requirements as outlined in the May 19, 1980, Federal Register, 40 CFR 261.

safety-kleen corp.

I.D.2-3

Solvent Sample Analysis - Summary Report

SK Sample # 4.1820 Industrial Solvents Sales Sample # _____

Material Submitted as: I C Feed 6/84

Source or Origin: Clayton R/C

(Plant#, Site or Complete Address)

Submitted by: J. Breece

Sample Size 1gal Represents _____ Gallons, in ☐ Drum ☐ Bulk

☐ On Hand ☐ Per Year ☐ Other _____ (Per week, month, quarter, etc.)

Tests

API or Sp. Gr. @ 60°F. _____

Flash Point (ASTM D-56) _____

Boiling Point (ASTM D-86) _____

IBP _____ °F.

5 _____

10 _____

20 _____

30 _____

40 _____

50 _____

60 _____

70 _____

80 _____

90 _____

95 _____

EP _____

ODOR

FIA

Aromatics _____

Saturates _____

Olefins _____

K-B _____

Other (Specify) _____

Solids _____

(Centrifuge, distillation, or "Green Sheet" definition, or other) - specify:

*Type of Residue -

Distillate _____ vol %

Residue* _____ vol %

Water _____ vol %

COMPOSITION, (VOL. %)

	of total sample submitted (by distillation)	of solvent portion of distillate (by G.C.)
Bottoms	12.0	
cresol	15.0	
water	6.0	
* Chlorinated + ms	62.0	

Comments: * See attached G.C. Possible yield 77% vol

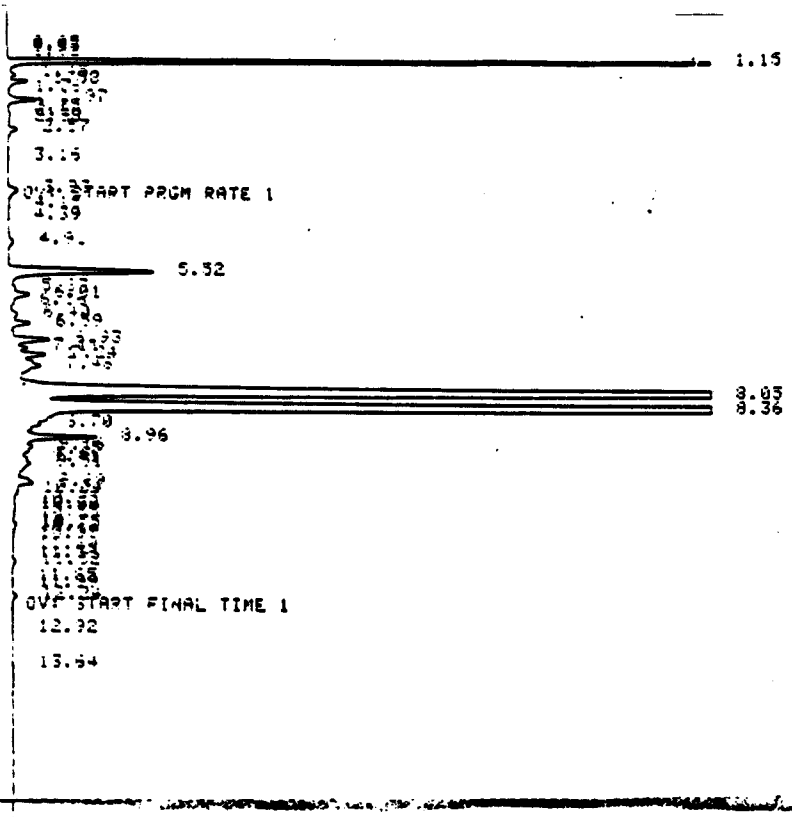
RECOMMENDED DISPOSITION:

Accept ☐ Reject ☐

Distribution: J. Breece
M. Levy

Report by: B. Blair

Rev. 10/82



RT: STOP RUN

093

[n>] 5980A SAMPLER INJECTION @ 17:04 JUN 14, 1984
SAMPLE # : ID CODE :
88 1820

NORM %

RT	EXP RT	AREA	TYPE	WIDTH	CAL	AMOUNT	NAME
0.00		BASELINE @ START RUN = 2.83					
0.00		THRESHOLD @ START RUN = 4					
0.00		PEAK WIDTH @ START RUN = 0.04					
0.00		RP: REJECT = 3000					
1.15	1.15	263420.00	VV	*0.044	1	29.298	MC
1.45		4402.11	VV	*-----		0.131	
1.58		7913.97	VV	-----*		0.235	
1.97	1.97	12436.00	VV	*-----	2	0.978	111
2.57	2.59	5396.02	VB	0.10 *	3	0.361	TRI
3.33	3.28	7958.58	PV	*0.146	4	0.175	TOL
4.91	4.99	4139.03	VV	*-----	5	0.322	PER
5.52	5.55	32446.50	VV	0.107	6	1.961	MONOCHLOR
7.98		RP: AREA SUM = ON					
8.80		RP: AREA SUM = OFF					
6.80	6.81	32812.10	++	-----	7	0.975	MS
6.93	6.94	24567.20	VV	*-----	8	0.584	MCTOLUENE
7.11		8616.59	VV	-----		0.256	
7.24		19092.80	VV	-----		0.568	
7.43		38666.20	VV	*-----*		1.150	
7.70		RP: AREA SUM = ON					
8.80		RP: AREA SUM = OFF					
8.58	8.80	2496280.00	++	-----	9	59.390	OMP DCB
8.81		RP: AREA SUM = ON					
16.80		RP: AREA SUM = OFF					
16.80	16.80	121595.00	++	-----	10	3.616	MS

MULTIPLIER = 1

I/C INCOMING CO[illegible]SITE ANALYSIS

Period 12, 1985

DEC [illegible] 1985

CLAYTON, NEW JERSEY

Date	Service Center	RC No.	MC	ODB	Tri 1,1,1	CA	MS	Water	Residue	Misc.	Canada
11-5-85	Mineola NY Niagra Falls NY Avon NY Waverly NY Erie PA	I.C. #277	27.41%	25.00%	0.76%	24.00%	2.46%	0	17.00%	3.37%	N/A
	Barre PA										
11-8-85	Tulleytown PA New Kingston PA Chester VA Chesapeake VA Silver Springs MD	I.C. #282	30.32%	23.68%	0.75%	25.00%	2.08%	0	15.00%	3.17%	N/A
11-13-85	Branford CT West Hartford CT Barre VT Latham NY	I.C. #288	25.91%	23.86%	0.65%	26.00%	2.57%	0	18.00%	3.01%	N/A
11-14-85	Congers NY Thornwood NY North Amityville NY	I.C. #289	17.51%	25.11%	0.58%	26.00%	2.87%	0	25.00%	2.93%	N/A
11-20-85	West Chester PA Malvern PA Tulleytown PA Waverly NY Mattydale NY	I.C. #290	29.23%	23.12%	1.83%	24.00%	2.00%	0	17.00%	2.82%	N/A
11-21-85	Baltimore MD Silver Springs MD Glen Burnie MD Chester VA Chesapeake VA	I.C. #291	28.34%	23.88%	1.86%	24.00%	2.09%	0	17.00%	2.83%	N/A
11-26-85	Vincentown NJ Boundbrook NJ Bridgewater MASS Marlboro MASS	I.C. #292	26.91%	23.56%	0.69%	28.00%	2.71%	0	15.00%	3.13%	N/A

I/C INCOMI[illegible]OMPOSITE ANALYSIS

Period 12 , 1985

CLAYTON, NEW JERSEY

Date	Service Center	RC No.	MC	ODB	Tri 1,1,1	CA	MS	Water	Residue	Misc.	Cana
11-27-85	Woodside NY Ancaster ONTARIO * Pickering ONTARIO * Concord ONTARIO * Nepean ONTARIO *	I.C. #293	31.58%	24.43%	0.10%	24.00%	2.48%	0	14.00%	3.41%	*

Date 5/16/83

TYPICAL CHEMICAL AND PHYSICAL ANALYSES FOR STILL RESIDUE

Solvent Sample Analysis - Summary Report

SK Sample # 3-955 Industrial Solvents Sales Sample # _____

Material Submitted as: Still Bottoms (Dry Cleaning)

Source or Origin: Miracle Drive Cleaners

(Plant#, Site or Complete Address)

Submitted by: W. Barnhardt

Sample Size 1 pt Represents 0.625 Gal as, in ☐ Drum ☐ Bulk

Basis: ☐ On Hand ☐ Per Year ☒ Other wkly (Per week, month, quarter, etc.)

Tests

API or Sp. Gr. @ 60°F. _____

Flash Point (ASTM D-56) _____

Boiling Point (ASTM D-86) _____

IBP _____ °F.

5 _____

10 _____

20 _____

30 _____

40 _____

50 _____

60 _____

70 _____

80 _____

90 _____

95 _____

EP 360

Distillate 40 vol %

Residue* 57 vol %

Water 3

Solids _____

(Centrifuge, distillation, "Green Sheet" definition, other) - specify:

ODOR

FIA

Aromatics _____

Saturates _____

Olefins _____

K-B _____

Other (Specify) _____

*Type of Residue - oil

COMPOSITION, (VOL. %)	of total sample submitted (by distillation)	of solvent portion of distillate (by G.C.)
Perc	39.4	98.6
MS	0.6	1.4
Bottoms	58.0	
water	2.0	

Comments:

Above material is water soluble

RECOMMENDED DISPOSITION:

Accept ☐ Reject ☐

Distribution:

Report by: B. Blair

Rev. 10/82

safety-kleen corp.
655 BIG TIMBER ROAD • ELGIN, ILLINOIS 60120
PHONE 312/697-8460

TECHNICAL SERVICE LABORATORY WORK REQUEST

(Complete All Applicable Blanks)

3-955

Date: May 9, 83

Project No.: _____

SUBMITTED BY: Wayne Buchholz

MATERIAL SUBMITTED: (Identify the sample or item and indicate its source or origin)
Still Bottoms from Mineral Driver Chemical (Peru)

Sample Size _____ Represents — ☐ Drum ☐ Bulk .625 Gallons ☑ Per Month ☐ Per Year

SPECIFIC INFORMATION REQUESTED:

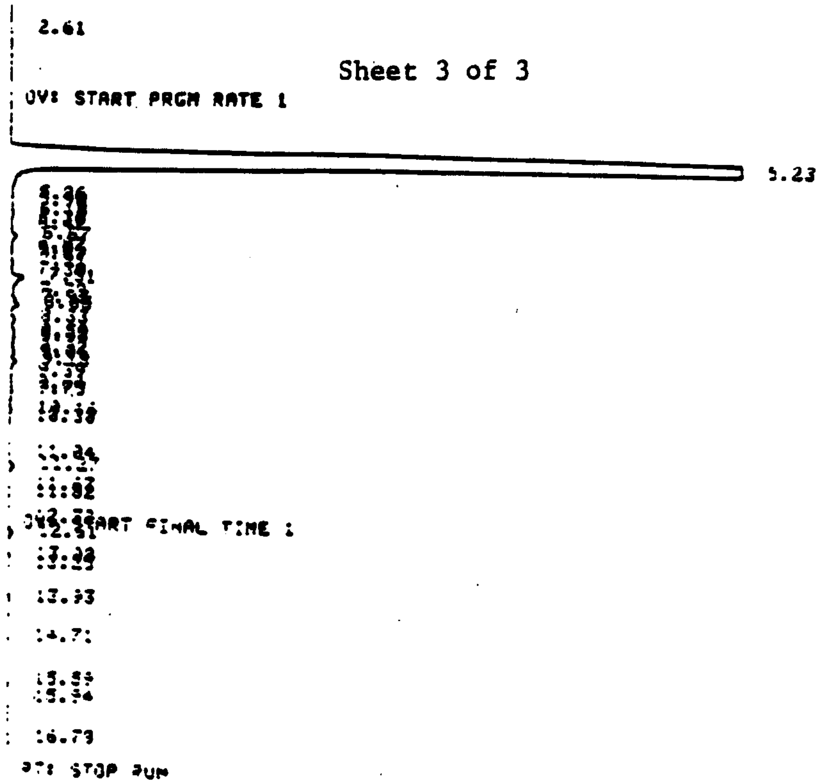
☐ SAFETY-KLEEN PRODUCT: (Explain, in detail - customer complaint, etc.)

☒ MISC. SOLVENTS: (NEW — Determine suitability for S-K use. SPENT or contaminated solvent or fuel — Determine suitability for S-K reclamation).

☒ OTHER MATERIALS: (New or Competitive product, or Miscellaneous items — tests to be performed or work to be done — List, in detail, information requested, i.e., performance evaluation, analyses, cost to duplicate, etc.)
Identify Contaminants. Determine amount (%) of "Peru" that S-K could accept.

SAFETY-KLEEN CORP.

Sheet 3 of 3



END 5890A SAMPLER INJECTION @ 10:35 MAY 10, 1983
SAMPLE # : ID CODE :
27 3955

NORM %

RT	EXP RT	AREA	TYPE	WIDTH	CAL	AMOUNT	NAME
0.00		BASELINE @ START RUN = 5.10					
0.00		THRESHOLD @ START RUN = 4					
0.00		PEAK WIDTH @ START RUN = 0.04					
0.00		RP: REJECT → 500					
5.23	5.23	1751250.00 →	BV	-------	5	39.444	PERC
5.60		RP: AREA SUM → ON					
16.30		RP: AREA SUM → OFF					
16.00	17.03	61165.00	**	-----	6	0.556	MS

MULTIPLIER = 0.4

DISTILLATE CONC OF SAMPLE LISTED BELOW
ID CODE 3955
END 5890A SAMPLER INJECTION @ 10:35 MAY 10, 1983
SAMPLE # : ID CODE :
27

NORM %

RT	AREA	TYPE	CAL	AMOUNT	NAME
5.23	1751250.00 →	BV	5	98.610	PERC
16.00	61165.00	**	6	1.390	MS

MULTIPLIER = 1

safety-kleen corp.

Date 10/24/84

(3 Pages)

Solvent Sample Analysis - Summary Report

SK Sample # 3186 Industrial Solvents Sales Sample # _____

Material Submitted as: Dry Cleaning Filter Powder (Muck)

Source or Origin: T Mueller

(Plant#, Site or Complete Address)

Submitted by: T Mueller

Sample Size 7 qt Represents 4 Gallons, in ☒ Drum ☐ Bulk

☐ On Hand ☐ Per Year ☐ Other _____ (Per week, month, quarter, etc.)

Tests

API or Sp. Gr. @ 60°F. _____

Flash Point (ASTM D-56) _____

Boiling Point (ASTM D-86) _____

IBP _____ °F.

5 _____

10 _____

20 _____

30 _____

40 _____

50 _____

60 _____

70 _____

80 _____

90 _____

95 _____

EP _____

Distillate _____ vol %

Residue* _____ vol %

Water _____ vol %

ODOR

FIA

Aromatics _____

Saturates _____

Olefins _____

K-B _____

Other (Specify) _____

Solids _____

(Centrifuge, distillation, o "Green Sheet" definition, o other) - specify:

*Type of Residue -

COMPOSITION. (VOL. %)		
	of total sample submitted (by distillation) %wt	of solvent portion of distillate (by G.C.)
water	4.0	
LLC	0.14	
Int	0.13	
Tri	0.54	
Tol	0.3	
Dec	13.92	
xylene	0.21	
MS	1.55	
Unknowns MS	0.44	
Bottoms	78.04	

Comments:

RECOMMENDED DISPOSITION:

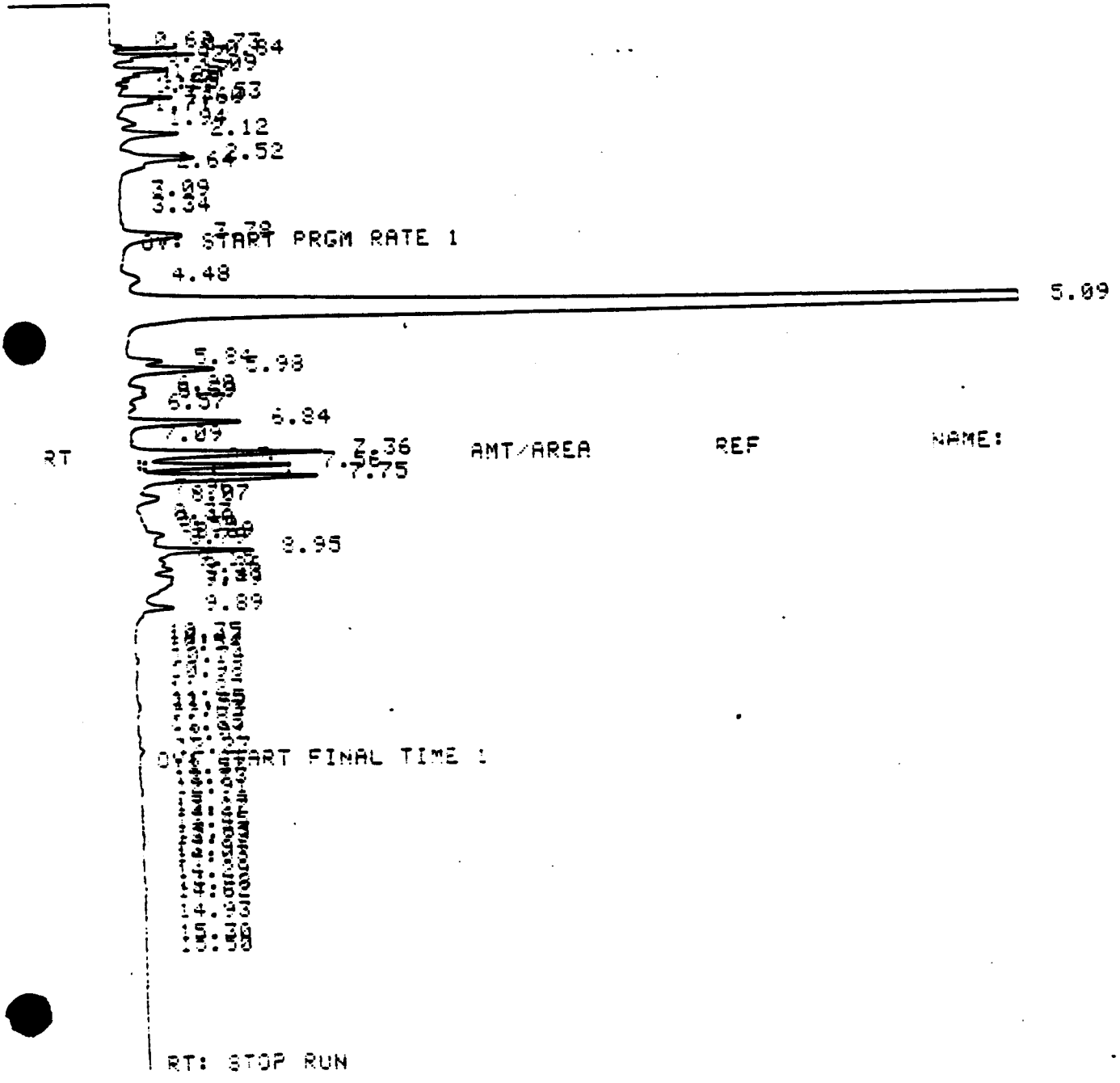
Accept ☐ Reject ☐

Distribution: T. Mueller, M. Levy

Report by: R. Blair

Rev. 10/82

SAFETY-KLEEN CORP.



SAFETY-KLEEN CORP.

REPORT
[illegible]0A SAMPLER INJECTION @ 13:31 OCT 24, 1984
. # : ID CODE :
30 3186

% COMPENSATED ANALYSIS

EXP RT	AREA	TYP	WIDTH	CAL	AMOUNT	NAME
		BASELINE @ START RUN = 2.68				
		THRESHOLD @ START RUN = 4				
		PEAK WIDTH @ START RUN = 0.04				
		RP: REJECT ÷ 500				
	1339.52	BV	-----		2.453E-03	
	6427.94	VV	0.025		1.177E-02	
	14479.70	VV	*-----		2.651E-02	
	4492.74	VP	-----		8.227E-03	
	16956.00	PV	-----		3.105E-02	
1.16	5315.12	VV	-----	1	5.440E-02	MC
	2715.13	VP	-----		4.972E-03	
	2225.60	PV	-----		4.075E-03	
	635.25	VV	-----		1.163E-03	
	11682.40	BV	-----		2.139E-02	
	9766.30	VV	-----		1.788E-02	
	1391.06	VP	-----		2.547E-03	
1.96	8129.70	PV	*-----	2	5.200E-02	111
	23457.20	VV	0.092		4.295E-02	
3.57	35808.00	VV	*-----	3	0.185	TRI
	8795.83	VB	-----		1.611E-02	
	544.93	BP	-----		9.979E-04	
	1141.43	PV	-----		2.090E-03	
3.82	42268.30	VV	*0.159*	4	7.440E-02	TOL
	13710.60	VV	-----		2.511E-02	
5.09	1[illegible]8210.00 +	VV	0.175*	5	4.304	PER
		RP: AREA SUM ÷ ON				
		RP: AREA SUM ÷ OFF				
6.49	74218.50	++	-----	7	0.120	XYLENE
		RP: AREA SUM ÷ ON				
		RP: AREA SUM ÷ OFF				
16.73	526315.00	++	-----	6	0.991	NS

[illegible]IER = 0.06

TBL NORM%
[illegible]E # : ID CODE : MULTIPLIER :

KDM company

(512) 333-4011

May 21, 1986

LABORATORY ANALYSIS

WASTE STREAM: Waste Paint Related Material

SOURCE: Safety-Kleen 5 gallon cans

METHOD(S): Dry weight determination
Dry distillation
Gas chromatograph

% RECOVERY: 90%

% SOLIDS: 1 %

ANALYSIS:

Water & Methanol	1.5%
Acetone	16%
M-E-K	24%
Lacquer Diluent	5%
MIBK	6%
Toluene	39%
Xylenes	6%
Others	2.5%
	100%

KDM company

(512) 333-4011

May 21, 1986

LABORATORY ANALYSIS

WASTE STREAM: Waste Paint Related Material

SOURCE: Safety-Kleen 16 gallon drums

METHOD(S): Dry weight determination
Dry distillation
Gas chromatograph

% RECOVERY: 72%

% SOLID: 9%

ANALYSIS:

H_2O	1%
Acetone	13%
IPA	8%
M-E-K	5%
Lacquer Diluent	4%
MIBK	3%
Toluene	40%
Xylene	20%
EE Acetate	3%
Others	3%
	100%

KDM company

(512) 333-4011

August 13, 1986

LABORATORY ANALYSIS

WASTE STREAM:	WASTE PAINT RELATED MATERIAL	
SOURCE:	SAFETY KLEEN	5 gallon cans
METHOS(S):	DRY WEIGHT DETERMINATION DRY DISTILLATION GAS CHROMATOGRAPH	
% RECOVERY:	84%	
% SOLIDS:	2%	
ANALYSIS:	H_2O	3%
	IP Acetate	.5%
	M-E-K	10%
	IPA	5.5%
	Acetone	5%
	Lacquer Dilvent	6%
	M-I-B-K	6%
	Toluene	45%
	n-Butyl Acetate	2.5%
	PM Acetate	3%
	Xylenes	12%
	Others	1.5%
		100%

KDM company

(512) 333-4011

August 13, 1986

LABORATORY ANALYSIS

WASTE STREAM:	WASTE PAINT RELATED MATERIAL	
SOURCE:	SAFETY KLEEN	16 gallon drums
METHOD(S):	DRY WEIGHT DETERMINATION DRY DISTILLATION GAS CHROMATOGRAPH	
% RECOVERY:	76%	
% SOLIDS:	12%	
ANALYSIS:	H_2O	1%
	IP Acetate	1%
	M E K	6%
	IPA	8%
	Acetone	8.5%
	Lacquer Dilvent	3.5%
	M-I-B-K	2%
	Toluene	38%
	n Butyl Acetate	4%
	PM Acetate	14.5%
	Xylenes	11.5%
	Others	2%
		100%

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●360 GLENWOOD AVENUE • EAST ORANGE, NEW JERSEY 07017 • (201) 673-4030

TO:

SAFETY-KLEEN CORP.
ATTN: BRUCE BLAIR
777 BIG TIMBER ROAD
ELGIN, IL 60120

UNIT INFORMATION

TOWER NUMBER: 4177
LOCATION: ELGIN
UNIT ID: "WASTE PAINT
MFG AND FUEL TYPE: THINNER"
MODEL:
LUBE MFG:
LUBE NAME:
LUBE GRADE:

COMMENTS/RECOMMENDA

TOTAL SULFUR, % - 0.0

TOTAL CHLORINE, % - 0.56

OPERATING INFORMATION

LAB NO.	SPECTRO NO.	DATE SAMPLED	OIL HRS./MI	UNIT HRS./MI	OIL ADDED	REPORT DATE
S-222	C9943	06/11/86				06/23/86

PHYSICAL DATA

% FUEL DILUTION	% SUSPENDED SOLIDS	% WATER	VISCOSITY	40°C 100°C	GRADE	SPECIAL TESTS
0.0	0.0	0.0	0.0	0		

SPECTROGRAPHIC DATA

IRON	CHROMIUM	ALUMINUM	COPPER	LEAD	TIN	SILVER	NICKEL	SILICON	BORON	SODIUM	MAGNESIUM	CALCIUM	PHOSPHORUS	ZINC	BARIUM	CADMIUM	TITANIUM	MOLYBDENUM	ANTIMONY
231	17	162	24	85	38	0	0	282	0	18	40	4	0	0	42	75	1339	5	0

I.D.2-5

INTERPRETATIONS AND APPLICA. .N OF ANAYLSIS RESULTS

MAINTENANCE RECOMMENDATIONS: These recommendations are based upon the assumption of testing representative samples and correct, complete operating data.

UNIT DESCRIPTION: This includes unit ID, type of equipment, type of system and lubricant information.

OPERATING DATA

Date Sampled is the date you indicate on ID slip or sample bottle cap when sample is taken.
Unit Life is the time in miles or hours since the unit was new or overhauled.
Oil Life is the time in miles or hours the oil has been in use when the sample was taken.
Oil Added is the amount of oil added since the last oil drain.

PHYSICAL DATA INTERPRETATIONS

Fuel Dilution is the amount of unburned fuel in the sample. It results from leaking internal fuel lines, injectors, pumps, cold running engines, carburetor malfunction, timing and ignition problems.
Suspended Solids measures solids held in suspension by natural detergency and chemical additives. It consists of oxidation products and blow-by residues. Fuel soot is a major contributor to solids in diesel engines.
Water-Glycol measures the amount of condensed water and coolant. Water may enter from contaminated lube oil supplies or internal coolant leaks.
Viscosity is reported in centistokes at 40°C and 100°C. Increase or decrease in grade is significant.
Fuel dilution will reduce viscosity. Oxidation products or contamination may increase viscosity.

TYPICAL SOURCES OF SPECTRO ELEMENTS

Iron: Rings, cylinders, shafts, gears, discs, drums, bearings, valve and gear trains, rust and residual assembly debris.

Aluminum: Pistons, bearings, blowers, airborne dirt, gears, pumps, thrust washers, impellers, pump bodies and housings.

Chromium: Rings, liners, shafts, cylinder rods, cooling system additives.

Copper: Bearings, bushings, wet clutches, gears, wrist pins, thrust washers, pump parts, oil coolers.

Lead: Bearings, bushings, leaded gasoline, gear lubes, grease.

Tin: Bearings, bushings, babbitt, platings.

Nickel: Bearings, shafts, valves.

Silver: Bearings, wristpin bushings, solder.

Silicon: Airborne dirt, coolant, anti-foam and sealant additives.

Sodium: Coolant and oil additives, salt water, sea atmosphere.

Boron: Coolant and oil additives, salt water.

Zinc: Oil additives, bearings, platings.

Phosphorous: Oil and coolant additives.

Calcium: Oil additives, water, grease.

Magnesium: Oil additives, salt water, bearings, aircraft engines.

Barium: Oil and diesel fuel additives, water, grease.

Titanium: Turbines, springs, valves.

Antimony: Bearings, grease.

Molybdenum: Oil additives, piston rings.

Cadmium: Bearings, platings.

SPECIAL TESTS - Includes Neutralization Number, reported as TAN or TBN. Also includes any unusual contamination of significance.

SPECTROGRAPHIC DATA — PARTS PER MILLION BY WEIGHT (PPM)

Spectro analysis measures very fine, dispersed wear metals, dust, oil additives and cooling system additives. Many of these particles are small enough to easily pass through conventional filters. Absolute PPM are not always significant. Sharp increases may indicate a problem developing. Equipment type, age, metallurgy, oil added between drains, oil and coolant additives all contribute to the significance of PPM values.

SAFETY-KLEEN CORP.
MATERIAL ACCEPTANCE SPECFICIATION

Material: Safety-Kleen Solvent #105(MS)

S-K Part No. 6617
Original Date April 8, 1976
Revision Date
Supersedes New
Written by L. Dean Hufsey
Approved by A. A. Manteuffel

SCOPE

This specification covers a high flash, hydrocarbon solvent suitable for use in a degreasing application.

REQUIREMENTS

The solvent shall conform to the following requirements:

	Typical Values	Control Values	Test Method
API Gravity, 60° F.	46-51	-	ASTM D-287-67
Specific Gravity 60/60° F.	0.775-0.797	-	-
Pounds/Gallon	6.46 -6.64	-	-
Initial Boiling Point, ° F.	310-320	310 Min.	ASTM D-86-67
50% recovered, ° F.	340	-	-
End Point, ° F.	380-400	400 Max.	ASTM D-86-67
Kauri Butanol Value	34	-	-
Aniline Cloud Point, ° F.	144	150 Max.	ASTM D-1012-69
Flash Point, ° F., TCC	109	105 Min.	ASTM D-56-70
Saturates, %	90	-	-
Olefins, %	1	-	-
Aromatics, %	9-12	17.0 Max.	ASTM D-1319-70
Odor	Clean - Mild	Must be acceptable	-

All lots or deliveries with properties outside the maximum or minimum "control values" will be considered of unsuitable quality.

The solvent shall contain the following additives:

1. Approximately 0.0028 Wt. % of Liquid Oil Green Dye (7.9 fluid ounces per 1,000 gallons of solvent). (May be purchased from DuPont, Petroleum Chemicals Division.)

2. Anti-Static Additive to be added by supplier. Any one of the following:

   A. Shell ASA-3 - One part per million (1 ppm) minimum (Shell Chemical Company)
   B. Ashland AC-5 - Five parts per million (5 ppm) minimum (Ashland Chemical Company)
   C. Ethyl 48 - Five parts per million (5 ppm) minimum (Ethyl Corporation)

SAFETY-KLEEN CORP. MATERIAL ACCEPTANCE SPECIFICATION	S-K Part No. 6631 Original Date June 24, 1977 Revision Date April 26, 1985 Supersedes August 20, 1979 Written by L. Dean Hufsey Approved by
Material: Immersion Cleaner & Cold Parts Cleaner 609	

SCOPE

The specification covers a two-phase liquid product consisting of an aqueous layer on top and a chlorinated solvent, cresylic acid layer on the bottom for cleaning carburetors and metal parts. The ratio of the two liquids that are combined to for the cleaning product is 1.0 parts by volume of the aqueous layer and 4.0 parts by volume solvent layer.

COMPOSITION

Immersion Cleaner and Carburetor and Cold Parts Cleaner =609 products consist of the following materials:

WATER PHASE		
Water	16.840 Wt.%	20.00 Vol.%
SOLVENT PHASE		
Inhibitor 60S	0.389 Wt.%	0.5 Vol.%
Triethanolamine	0.474 Wt.%	0.5 Vol.%
Petroleum Sulfonate	7.389 Wt.%	8.5 Vol.%
Methylene Chloride	31.691 Wt.%	28.5 Vol.%
Orthodichlorobenzene	31.345 Wt.%	28.5 Vol.%
Cresylic Acid	11.872 Wt.%	13.5 Vol.%
	100.000 Wt.%	100.0 Vol.%

Immersion Cleaner and Carburetor
and Cold Parts Cleaner #609

REQUIREMENTS

	Typical Values	Control Values	Test Method
Color (solvent phase)	Clear, light amber liquid	Clear, light amber liquid	
Specific Gravity, 60/60°F	1.24	1.2300-1.2500	ASTM D-1298
Pounds/Gallon, 60°F	10.33	10.25-10.41	-
Caustic Extraction	-	19 Vol.% min. cresylic acid	(Lab. Std. method "Extraction of cresylic Acids from Immersion Cleaner Solvent" May 9, 1979)
Emulsifiability	The quick breaking emulsion shall have a light tan creamy appearance. After the water has split out, the water layer should amount to only 17-18 ml.		(Lab. Std. "Emulsifiability of Immersior Cleaner and water)

SAFETY-KLEEN CORP.

Recycled Perchloroethylene for Dry Cleaning

Specifications

Physical Test	Specification
Specific Gravity 20°C/20°C	1.61 - 1.63
Pounds Per Gallon	13.4
Appearance	Clear, Free of Sediment Suspended Material
Color, APHA	25 maximum
Water, PPM	50 maximum
Purity: Perchloroethylene by Volume % G.C.	99.5 minimum
Impurities: Other halogenated	.5% maximum
Other hydrocarbon	.5% maximum
Odor	Characteristic; no residual
Spot Test	No Spot or Stain
Nonvolatile Residue, ppm	50 maximum
Acid Acceptance	.02 maximum

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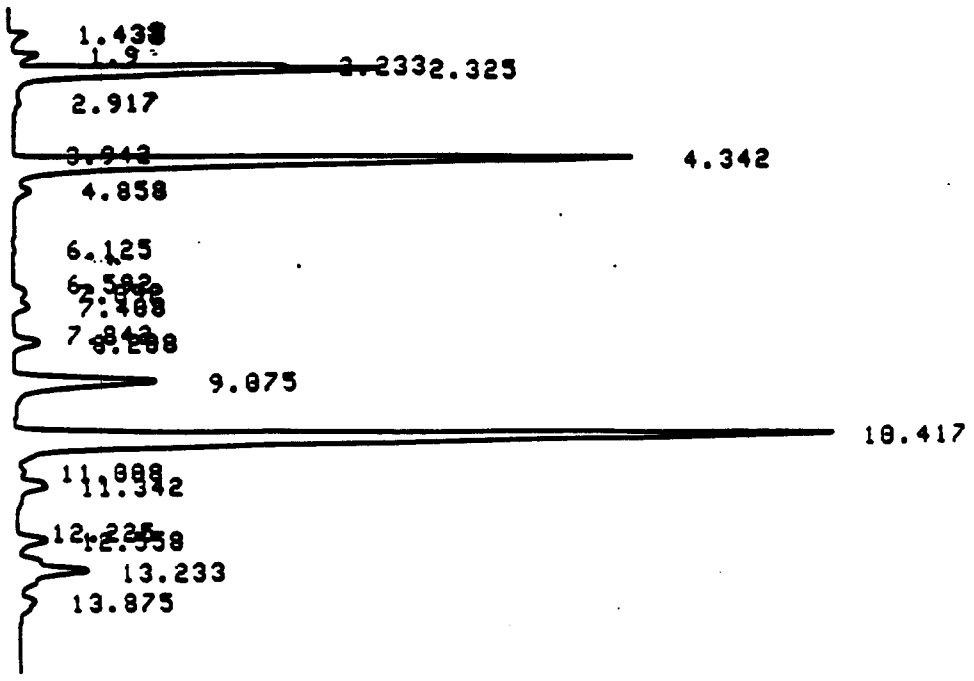


PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	2.233	41639	V		4.9381	ACETONE
2	2.325	86066	V		10.1985	ISOPROPYL ALCOHOL
3	4.342	228038			27.0004	METHYL ETHYL KETONE
4	9.075	64574			7.6457	METHYL ISOBUTYL KETONE
5	10.417	364216			43.1243	TOLUENE
6	11.342	14047			1.6632	n-BUTYL ACETATE
7	12.558	10277			1.2169	o-XYLENE
8	13.233	35716			4.2289	m- and p-XYLENE
	TOTAL	844573			100	

LACQUER THINNER COMPOSITION
Safety-Kleen Corp.

I.D.3 WASTE ANALYSIS REPORTS

Descriptions of the hazardous wastes handled at the facility are in section I.D.2. Waste analysis reports and product specifications are in Exhibits I.D.2-1 through I.D.2-9.

I.D.4 WASTE ANALYSIS - GENERAL

The used solvents are the primary feed stocks for Safety-Kleen's products and quality control of the used solvents is critical to the safe recycling of the material and to assuring 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 (e.g., 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 color, consistency and volume of material returned. 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 problem is not corrected, the machine is removed from the customer's place of business.

The dry cleaning and paint wastes are collected from facilities where a single chemical is handled and chances of cross contamination by other chemicals or wastes are minimal. In

addition, each shipment from these facilities is manifested with the signature of the owner (generator) certifying the types of materials in the containers.

WASTE ANALYSIS AT THE SERVICE CENTER

The Safety-Kleen facility in Boynton Beach services over 2,500 small quantity waste generator customers and over 28,000 drums of spent solvents are returned to the service center annually. Such large numbers of waste generators, performing quantitative waste analyses on each drum is logistically and economically unfeasible.

Furthermore, all the materials collected at the service center are either managed in the closed loop system or collected from a single waste generator. The general nature and qualities of these materials are known and Safety-Kleen's operating experiences have shown that the collected materials do not usually deviate from expectation. 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 quantitative waste analyses will be performed at the recycle center.

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 performed or the material must be rejected.

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.4-1	Parameters and Rationale for Hazardous Waste Selection
Exhibit I.D.4-2	Parameters and Test Methods
Exhibit I.D.4-3	Methods Used to Sample Hazardous Wastes
Exhibit I.D.4-4	Frequency of Analysis

WASTE ANALYSIS PLAN UPDATE

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

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

PARAMETERS AND RATIONALE FOR HAZARDOUS WASTE ANALYSES

Hazardous Waste	Parameter	Rationale
Used Mineral Spirits	Flash Point EP Toxicity (Lead)	Ignitable characteristic (D001). Lead content = 5 ppm (D008).
Mineral Spirits Tank Bottom Sediment and Free Water	Flash Point EP Toxicity (Cadmium, Lead)	The sediment has a flash point of less then 140° F (D001) and the sediment and free water may contain cadmium and lead at greater than EP Toxic levels (D006, D008).
Mineral Spirits Dumpster Sediment	Same as number 2.	Same as number 2.
Used Immersion Cleaner	Methylene Chloride Orthodichlorobenzene Cresylic Acid	Formula contains these ingredients: F002 and F004.
Dry Cleaning Wastes	Perchloroethylene	Contain this ingredient (F002).
Paint Wastes	Toluene, xylene, methyl ethyl ketone, methyl iso butyl ketone, acetone, isopropanol, methanol, ethanol, normal butyl acetate, iso butyl acetate, eadmium, chromium, lead	Contains these components: F003, F005, D001, D006, D007 and D008

PARAMETERS AND TEST METHODS

Parameter	Test Method	Reference
Flash Point	Setaflash closed cup tester	U.S.EPA Method 1020 (ASTM Method D327-78)
Boiling Range (to determine % water, mineral spirits and other solvents)	Distillation of Petroleum	ASTM Method D86-78
API Gravity	Hydrometer method	ASTM Standard D287-67
EP Toxicity	EP Toxicity test procedure	U.S.EPA Method 1310
Hydrocarbons and Volatile Organics	Gas Chromatography (GC)	U.S. EPA Methods 8010, 8015, 8020 and 8120

METHODS USED TO SAMPLE HAZARDOUS WASTES

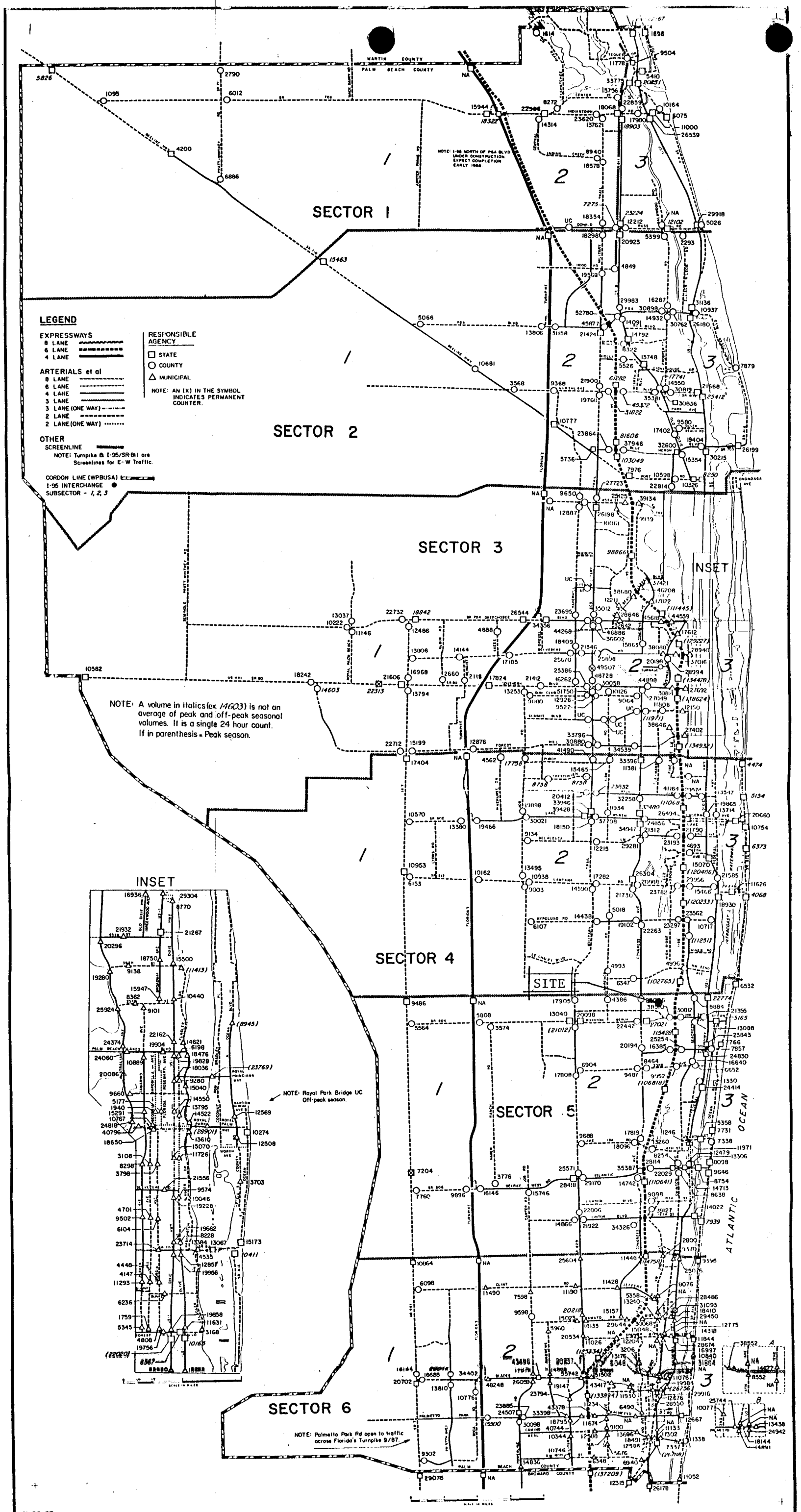
Hazardous Waste	Reference for Sampling	Description of Sampling Method	Sampler
Used Mineral Spirits	Sampling a tank "Samples & Sampling procedures for Hazardous Waste Streams" EPA-600/ 2-80-018	Test Methods for the Evaluation of Solid Waste Physical/ Chemical Methods, SW846, U.S. EPA Section 1.2.1.1	For tanks - Coliwasa Tube
Mineral Spirits Tank Bottom Sediment and free water	Same as number 1	Same as number 1	Same as number 1
Mineral Spirits Dumpster Sediment	Sampling a drum "Samplers & Sampling Procedures for Hazardous Waste Streams" EPA-600/ 2-80-018	Same as number 1	Representative composite sample using a Coliwasa tube
Used Immersion Cleaner	Same as number 3	Same as number 1	Same as number 3
Dry Cleaning Wastes	Same as number 3	Same as number 1	Same as number 3
Paint Waste	Same as number 3	Same as number 1	Same as number 3

FREQUENCY OF ANALYSIS

Hazardous Waste	Analysis	Frequency
Used Mineral Spirits	Flash Point EP Toxicity (Lead)	Flash Point/every load EP Toxicity/as required
Mineral Spirits Tank Bottom Sludge and Free Water	Flash Point EP Toxicity (Cadmium and Lead)	Flash Point/every month EP Toxicity/ every quarter
Mineral Spirits Dumpster Mud	Flash Point EP Toxicity (Cadmium and Lead)	Annually or as required
Used Immersion Cleaner	Methylene Chloride Orthodichlorobenzene Cresylic Acid	Every load
Dry Cleaning Wastes	Perchloroethylene	Annually or as required
Paint Waste	GC Scan (U.S.EPA Method 8010, 8015 and 8020) EP Toxicity	Annually or as required

I.D.5 TRAFFIC CONTROL AND VOLUMES

The non-building areas of the facility are paved with asphalt, concrete or gravel as noted on the site plan in Exhibit I.B.3-6. The majority of the vehicular traffic and loading/unloading operations occur at and near the return and fill area and it is paved with asphalt and concrete. 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 and pick up fresh and used solvents perform these activities at the aboveground tank area. Traffic from this facility is not expected to have a major effect on local traffic conditions. Exhibit I.D.5-1 presents anticipated 1987 average daily traffic counts for the entire region.



'METROPOLITAN PLANNING ORGANIZATION
OF
PALM BEACH COUNTY

WEST PALM BEACH URBAN STUDY AREA

1987 TRAFFIC VOLUMES

TRANSPORTATION SYSTEM SURVEILLANCE PROGRAM

EXHIBIT
I.D.5-1

I.D.6 PROCEDURE FOR RECORDKEEPING

Shipments of the product and used solvents are handled by invoices. In addition, the quantities of used solvents shipped to the recycle center and those shipped from regulated generators to the service center are manifested. Manifest copies are kept at the service center and the recycle center for three years.

In accordance with 40 CFR 264.76. unmanifested waste reports will be submitted to the DER's central office in Tallahassee should a shipment be received without a manifest.

ATTACHMENT I.E

FACILITY SECURITY INFORMATION

I.E.1 SECURITY MEASURES

In accordance with 40 CFR 264.14, access to the facility is controlled using the following methods:

1. Entry to the drum storage and return and fill areas are controlled through gates and doors. All gates and doors are locked when the facility is not in operation.

2. Warning signs are posted at the entrances to the facility. They are marked "Danger - Unauthorized Personnel Keep Out" and are legible from twenty-five feet.

The combination of doors and warning signs prevents unknowing entry and minimizes the potential for unauthorized entry of people or livestock into the facility.

I.E.2

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

SAFETY-KLEEN CORP.

BOYNTON BEACH, FL SERVICE CENTER

QUANTUM INDUSTRIAL PARK

GENERAL INFORMATION

The contingency plan and emergency procedures are designed to insure that Safety-Kleen is prepared to address emergency situations so as to prevent or minimize hazards to human health and the environment. Potential emergency situations include fire, explosion and any 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. This plan describes the actions facility personnel will take in response to an emergency.

The business activities carried on from the service center relate to the leasing and servicing of Safety-Kleen solvents and parts cleaning equipment. The clean solvents are distributed from and the used solvents are returned to the service center, where aboveground storage tanks and warehouse space are used for their storage.

The mineral spirits solvent is transported between the service center and customers in covered, 16-gallon and 30-gallon drums. Upon return to the service center, the used solvent is transferred from the drums into a wet dumpster (solvent return receptacle) where coarse solids in the mineral spirits are retained. The used mineral spirits in the wet dumpster is pumped into a 12,000-gallon aboveground tank for storage. It is picked up periodically by a bulk tank truck from a Safety-Kleen recycle center which also delivers a load of product.

The solids in the wet dumpster are periodically removed, drummed, and stored in the drum warehouse for shipment to a recycle center.

The immersion cleaner remains in 16-gallon, covered drums at all times during transportation and storage. The solvent is not transferred to another container while being used by the customer or while in storage at the service center.

The dry cleaning wastes are collected in 30- or 16-gallon drums, in nylon-lined, triple-thick boxes and in polyethylene filter tubes and are stored at the service center. The drums are picked up periodically for reclamation at the recycle center.

Paint wastes are collected in 5-gallon and 16-gallon drums and handled similarly to the immersion cleaner.

Exhibits I.B.3-6 and I.B.3-7 show the basic site and floor plans, particularly, the locations of waste management facilities and emergency equipment.

EMERGENCY NOTIFICATION

The branch manager is the emergency coordinator and the branch secretary is his alternate. Exhibit I.E.2-1 includes the names, home addresses, and both office and home telephone numbers of the primary emergency coordinator and his alternate. There is always one employee, either on the facility premises or on call, with responsibility for coordinating all emergency response measures. This primary emergency coordinator and alternate emergency coordinator are familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of materials handled, the location of all records within the facility and the facility layout. In addition, these coordinators have the authority to commit the resources needed to carry out the contingency plan.

The agencies and response team members to be notified whenever there is an imminent or actual emergency are presented in Exhibit I.E.2-1 and a Telephone Notification Log is shown as Exhibit I.E.2-2. The assigned task(s) of each employee during an emergency are in Exhibit I.E.2-3.

ACTIONS OF THE EMERGENCY COORDINATOR

Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

a. activate internal or communication systems to notify all facility personnel (the relatively small size of this facility makes direct verbal communication the most expedient form of emergency notification in most cases);

b. notify appropriate state or local agencies with designated response roles if their help is needed; and

c. summon the primary emergency coordinator, if he is absent.

Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and extent of any contamination. Because of the limited types of chemicals in storage, the identification processes can be done visually.

The following is a procedure for assessing possible hazards to the environment and human health:

a. After identification of the character, source, amount and extent of a release, fire, or explosion, the emergency coordinator must decide whether the situation can be contained or cleaned up by plant personnel and equipment.

b. If a fire or explosion is determined to be beyond the capabilities of plant personnel or it is threatening neighboring establishments or population, assistance from a

local emergency response agency shall be summoned immediately and an evacuation order be requested.

c. In case of a release outside of the containment area which is deemed immediately uncontainable or unrecoverable, a local emergency response agency and/or spill cleanup contractor will be called.

d. After termination of a fire or expolsion, and containment and preliminary cleanup of a spill, the emergency coordinator shall evaluate whether residues in the form of gas or liquid have become airborn, seeped into the ground water, and/or flowed into surface water bodies.

e. The emergency coordinator shall request assistance to determine whether the escaped materials are potentially harmful and whether the receiving medium is or will ultimately be a populated area, public water supply source, a private well or an environmentally sensitive area.

f. Additional steps shall then be taken to mitigate the potential impact on the environment and human health, in accordance with recommendations given.

If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health, or the environment outside the facility, the coordinator must report those findings as follows:

a. If the assessment indicates that evacuation of local areas may be advisable, the coordinator must immediately notify appropriate authorities. The coordinator must be available

to help appropriate officials decide whether local areas should be evacuated; and

b. The coordinator must immediately notify the Southeast District FDER, 3301 Gun Club Road, West Palm Beach, FL 33402, 305/689-5800; the South Florida Water Management District, 305/686-8800; and the National Response Center 800/424-8802, by telephone.

The report must include:

(1) name and telephone number of notifier;
(2) name and address of facility;
(3) time and type of incident (e.g., release, fire);
(4) name and quantity of material(s) involved, to the extent known;
(5) the extent of injuries, if any; and
(6) the possible hazards to human health, or the environment outside the facility.

Assistance in assessing and responding to an emergency can be obtained by calling the 24-hour emergency number of Safety-Kleen's Environmental Affairs Department (312/888-4660).

During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste management areas at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, and ruptures in valves, pipes, or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator must provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

The emergency coordinator must ensure that, in the affected area(s) of the facility:

a. no waste that may be incompatible with the released material is treated or stored until cleanup procedures are completed; and

b. all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

The owner or operator must notify the appropriate state and local authorities that the facility is in compliance with the above paragraph before operations are resumed in the affected area(s) of the facility.

The operator must note the time, date, and details of any incident that requires implementation of the contingency plan. Within 15

days of the incident, he must submit a written report to the Southeast District, Florida DER, West Palm Beach, FL. The report must include:

a. name, address, and telephone number of the owner or operator;

b. name, address, and telephone number of the facility;

c. date, time, and type of incident (e.g., fire, explosion);

d. name and quantity of material(s) involved;

e. the extent of injuries, if any;

f. an assessment of actual or potential hazards to human health or the environment, where this is applicable; and

g. estimated quantity and disposition of recovered material that resulted from the incident.

POTENTIAL SPILL SOURCES

The following is a list of activities that have the potential for a small scale (one for which clean up assistance is not required) pollution incident.

a. Moving of drums - Every time a drum is moved, a chance exists that it may tip over or be dropped. To minimize the possibility of spillage of solvent, all drums must be covered before being moved.

b. Delivery truck drum transfer - Individual delivery drums contain from 5 to 18 gallons of waste, a quantity which can be contained by sorbent clay or pads and each vehicle is equipped with a hoist and hand cart to ease the movement of solvent on and off the truck. Clamp type lids are on drums

during movement to prevent spills and each truck contains a shovel and enough sorbent material to contain a minor spill. The cargo must be secured with tie-down straps before transport.

c. Spills Inside Buildings - In the event of a spill indoors, the doors and windows should be opened to improve the ventilation in the area. Then, following the instructions on the Material Safety Data Sheet (Exhibits I.E.2-4 through I.E.2-7), the worker will enter the area wearing rubber gloves, boots, and/or respirator, collect the liquid and return it to storage. The cleanup is completed only when the workers have cleaned themselves and the emergency equipment with soap and water.

d. Spills on Concrete Pads - Concrete pads in loading and unloading areas are equipped with secondary containment. Under most spill conditions, the spill can be totally contained on the concrete surface and in the containment system. Upon containment, arrangements must immediately be undertaken to recover the material. Any soil that may be involved must be removed and treated as a hazardous waste.

e. Tank Spills or Leakage - Aboveground tanks are underlain by a concrete slab and surrounded by a 36" high concrete dike to contain any spilled or leaked solvent. The containment system has been sized in accordance with the regulations, and under most spill conditions, the solvent will be totally contained. Should a spill occur, arrangements must

be immediately undertaken to recover the material. In the event of a leak, tank repair or replacement will be initiated. Any soil that may be involved must be removed and treated as hazardous waste.

SPILL CONTROL PROCEDURES

If a harmful discharge occurs:

a. Stop the discharge from a drum, if possible, by immediately transferring the liquid to a good drum. It may be possible to stop discharges from tanks by manually closing valves.

b. Retain, contain or slow the flow of the solvent as much as possible, by diking with sorbent material or dirt. (Appropriate personal protective equipment should be worn). Pump and mop up the liquid from the floor into a good drum, and return the drum to storage. The area and equipment that comes in contact with the spill must be decontaminated with soap and water. All residues resulting from decontamination will be collected for proper disposal at licensed facilities.

c. If the spill escapes containment efforts, immediately call the emergency response team that specializes in spill cleanup (Exhibit I.E.2-1). Record the date, time and name of person taking the message. Call the primary emergency coordinator, if he is absent.

d. Immediately recover spilled solvent to reduce property and environmental damage using the equipment stored on site for such situations (Exhibit I.E.4-2) or call in emergency

response contractors (Exhibit I.E.2-1). Start recovery operations immediately.

e. After recovery of the spilled solvent, wash all contaminated impervious surfaces and equipment with soap and water. The residue, contaminated soils and waste waters must be removed and disposed of at licensed facilities. The recovered solvent will be sent to a Safety-Kleen recycle center for reclamation. Any equipment which cannot be decontaminated, and all rinse water, will be disposed of as hazardous waste.

f. Report any incident as soon as possible to Safety-Kleen's Environmental Affairs Department using the 24-hour telephone number: (312) 888-4660. If the Department does not respond within thirty minutes, call the National Response Center (telephone: (800) 424-8802); Southeast District, Florida DER, West Palm Beach, FL (305) 689-5800; and South Florida Water Management District (305) 686-8800.

The person reporting a spill should be prepared to give his name, position, company name, address and telephone number. The person reporting should also give the nature of the material spilled (e.g. immersion cleaner) and, if possible, some estimate of the amount, and whether it is near a stream or could enter a stream by flowing through ditches or storm sewers.

If assistance is needed, the emergency coordinator should describe the containment status and specify any additional equipment needed. When reporting a spill, record the data and time of the call and the name of the person answering the call at the above number.

Spill prevention plans are reviewed with facility personnel every year and records of the training are kept at the facility.

Every spill must be recorded on the spill report telephone log and reviewed with facility personnel to prevent similar spills in the future. A copy of this report is sent to the Environmental Affairs Department.

Reports of emergency incidents will be reported to the Northwest District, FDER, 3301 Gun Club Road, West Palm Beach, FL 32501, telephone 305/689-5800. The report shall include:

(a) name, address, and telephone number of the owner of operator;

(b) name, address, and telephone number of the facility;

(c) date, time, and type of incident (for example, fire explosion);

(d) name and quantity of materials involved;

(e) the extent of injuries, if any;

(f) an assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(g) estimated quantity and disposition of recovered material that resulted from the incident.

FIRE CONTROL PROCEDURES

In case of a fire, immediately call the Fire Department. Immersion cleaner (which is a mixture of chlorinated solvents and water) and dry cleaning wastes are not ignitable, but produce toxic gases (phosgene) and hydrochloric acid at elevated temperatures (about 1200°F).

Center aisles must be available in drum storage areas to permit firemen to pass with firefighting equipment. Act quickly with a fire extinguisher to put out a small fire before it spreads. Call the police department and local hospital (Exhibit I.F.2-1) should an injury occur and/or order of on-lookers and traffic is to be maintained.

AVAILABILITY AND REVISION OF THE CONTINGENCY PLAN

This plan and all revisions to the plan are kept at the facility and regularly updated throughout the operating life of the facility. Copies of this document are provided to local authorities and organizations which may be called upon to provide emergency services. This plan and all revisions to the plan are made readily available to employees working at the facility. The plan is reviewed and updated, if necessary, whenever:

a. the facility license is modified to allow new process wastes to be stored or treated, or applicable regulations are revised;
b. the list or location of emergency equipment changes;
c. the facility changes in its design, construction, operation maintenance, or other circumstances in a way that

(1) materially increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or

(2) changes the response necessary in an emergency;

d. the names, addresses, or phone numbers of emergency coordinators change;

e. the employee assigned to each emergency task changes; or

f. the plan fails when implemented in an emergency.

ARRANGEMENTS WITH LOCAL AUTHORITIES

Arrangements have been made to familiarize the police department, fire department and local emergency response teams with the layout of the facility, properties of hazardous materials handled at the facility, their associated hazards, places where facility personnel normally work, entrances to and roads inside the facility, and possible evacuation routes.

A spill control contractor is identified in Exhibit 2-1.

Arrangements have been made to familiarize the local hospital with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which would result from fires, explosions, or releases at the facility.

The following exhibits include copies of letters which have been

transmitted to local authorities for emergency response in the event of an incident where public health or environment is threatened:

Exhibit I.E.2-8	Letter to Local Police Department
Exhibit I.E.2-9	Letter to Local Fire Department
Exhibit I.E.2-10	Letter to Local Hospital

EVACUATION PLAN

In an emergency, all persons are to be evacuated from the area by means of a verbal cry and they are to assemble across from the entrance drive to the facility. The emergency coordinator must insure that all personnel are accounted for and out of the area. Primary and alternate evacuation routes are shown in Exhibit I.E.2-11. Clearly marked exits exist in the warehouse and office area.

The fire department must be notified at the time of evacuation either from a safe on-site building or from a neighboring facility.

REQUIRED REPORTS

Copies of all reports of spills must be kept onsite until closure.

EXHIBIT I.E.2-1

EMERGENCY NOTIFICATION

Emergency Coordinators

Primary: Thomas H. Sands
827 N.W. 9th Street
Boynton Beach, FL 33435
Home: (407) 576-9458
Office: (To Be Assigned)

Alternate: Sherry Warner
907 N.W. 9th Street
Boynton Beach, FL 33426
Home: (407) 736-6729
Office: (To Be Assigned)

Emergency Notification Phone Numbers

Safety-Kleen Environmental Affairs Department
Telephone (312) 888-4660 (24-hour number)

National Response Center
Telephone (800) 424-8802

Florida Dept. of Environmental Regulation, Southeast District, (305) 689-5800
South Florida Water Management District, West Palm Beach (305) 686-8800

Emergency Team to be Notified

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

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

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

Industrial Waste, Inc.
Ellyson Industrial Park, Box 34
Pensacola, FL 32514
(904) 479-1788

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. 1-800-323-5740 1-312-888-4660 (24 hr.)	Nat'l. Response Center 1-800-424-8802	State 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 _____

EXHIBIT I.E.2-3

EMPLOYEES' FUNCTIONS DURING AN EMERGENCY

	Title	Emergency Function
Thomas H. Sands	Branch Manager	Emergency Coordinator Notify Environmental Engineering Department Apply First Aid Notify Emergency Agencies, if necessary
Sherry Warner	Branch Secretary	Alternate Emergency Coordinator Supervise Evacuation
John Ahr	Sales Representative	Retain, contain or slow the flow of solvent Shut off electricity
Robert Uzzell	" "	" "
Richard Colvin	" "	" "
Frede Scherr	" "	" "
Mark Williams	" "	" "
John Byers	" "	" "
Vern Eckles	" "	" "
Mike Hodde	Warehouseman	" "
Janet Sands	Secretary	" "
Joan Uzzell	Secretary	" "

MATERIAL SAFETY DATA SHEET

SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60120

I.E.2-4

safety-kleen corp.

IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Safety-Kleen 105 Solvent-MS	

Section I Part #6617

Manufacturer's Name Safety-Kleen Corp.	Emergency Telephone Number 312/697-8460
Address (Number, Street, City, State, and ZIP Code) 777 Big Timber Road	Telephone Number for Information 312/697-8460
Elgin, Illinois 60120	Date Prepared 11/6/85
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Mineral Spirits	500 ppm	100 ppm	-	99.9+
Dye	Unk.	Unk.	-	0.003
Anti-Static Agent	Unk.	Unk.	100 est.	1 ppm

Section III — Physical/Chemical Characteristics

Boiling Point	310-400°F	Specific Gravity (H_2O = 1)	0.775-0.795
Vapor Pressure (mm Hg.) @ 68°F	2	Melting Point	N/A
Vapor Density (AIR = 1)	4.9	Evaporation Rate (Toluene = 1)	0.2

Solubility in Water
Negligible.

Appearance and Odor
Clear green liquid with characteristic hydrocarbon odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
105°F TCC		0.7	6.0

Extinguishing Media
CO_2, foam, dry chemical, water (mist only)

Special Fire Fighting Procedures
None.

Unusual Fire and Explosion Hazards
None.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		
	Stable	X	Heat, sparks, flame and fire.

Incompatibility (Materials to Avoid) Strong oxidizing agents.

Hazardous Decomposition or Byproducts
Normally none; however, incomplete burning may yield carbon monoxide.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	yes	no	yes

Health Hazards (Acute and Chronic)
Skin - can cause drying of skin. Eyes - severe irritant. Inhalation - excessive inhalation can cause headache, dizziness and nausea. Ingestion - harmful or fatal if swallowed.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?

Not a known or potential carcinogen.

Signs and Symptoms of Exposure
Drying of skin, eye irritation, headache, dizziness, nausea.

Medical Conditions Generally Aggravated by Exposure Unknown.

Emergency and First Aid Procedures
Skin - Wash with soap and water. Eyes - Irrigate with water. Inhalation - Remove to fresh air source and call a physician. Ingestion - DO NOT induce vomiting. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Catch and collect for recovery as soon as possible. Avoid exposure to sparks, fire, flame, hot surfaces.

Waste Disposal Method
Dispose of in accordance with company, local, state and federal regulations.

Precautions to Be Taken in Handling and Storing
Combustible. Keep away from heat, sparks, flame. Use with adequate ventilation. Avoid long and repeated contact with skin. If clothes are inadvertently saturated with solvent-

Other Precautions
DO NOT SMOKE- keep away from ignition sources. Keep out of reach of children.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Self-contained breathing apparatus for concentrations above TLV limits.

Ventilation		
	Local Exhaust: Normal room ventilation.	Special: None.
	Mechanical (General): None.	Other: None.

Protective Gloves	Eye Protection
In cases of prolonged contact, wear rubber gloves.	Yes - eyeglasses, safety glasses.

Other Protective Clothing or Equipment
N/A

Work/Hygienic Practices
Do not smoke while using this solvent.

MATERIAL SAFETY DATA SHEET

SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60120

I.E.2-5

safety-kleen corp.

IDENTITY (As Used on Label and List) Immersion Cleaner and Carburetor and Cold Parts Cleaner 609	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I Part #6631

Manufacturer's Name	Emergency Telephone Number
Safety-Kleen Corp.	312/697-8460
Address (Number, Street, City, State, and ZIP Code)	**Telephone Number for Information**
777 Big Timber Road	312/697-8460
Elgin, Illinois 60120	**Date Prepared** 11/6/85
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Cresylic Acids	5 ppm	5 ppm (skin)		11.9
Petroleum Sulfonate	Unk.	Unk.		7.4
Methylene Chloride	500 ppm	100 ppm	-	31.7
Ortho-di-chlorobenzene	50 ppm	50 ppm	-	31.3
Complex Amines	Unk.	Unk.	-	0.4
Triethanolamine	-	-	-	0.4
Water	-	-	-	16.8

Section III — Physical/Chemical Characteristics

Boiling Point	102-395°F	Specific Gravity (H_2O = 1)	1.19
Vapor Pressure (mm Hg.)	~ water	Melting Point	N/A
Vapor Density (AIR = 1)	~ water	Evaporation Rate (water = 1)	~ water

Solubility in Water
Completely miscible in all proportions.

Appearance and Odor
Clear, dark amber liquid-aromatic odor. Two distinct layers comprise the product.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Non-flammable	N/A	-	-

Extinguishing Media
N/A

Special Fire Fighting Procedures
Although product is non-flammable, flames, welding arcs or other high temperature sources can cause decomposition. This decomposition can yield corrosive and toxic fumes.

Unusual Fire and Explosion Hazards

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		Avoid smoke from any combustion product.
	Stable	X	

Incompatability (Materials to Avoid)
Strong oxidizing agents.

Hazardous Decomposition or Byproducts
Normally none; however, flames and welding arcs can produce corrosive and toxic fumes.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	yes	yes	yes

Health Hazards (Acute and Chronic)
This material is corrosive to living tissue. Excessive inhalation can cause headache, dizziness and nausea.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	no	no	no

Methylene chloride has been found to cause tumors in laboratory test animals.

Signs and Symptoms of Exposure
Burning of eyes and skin, headache, nausea.

Medical Conditions Generally Aggravated by Exposure Unknown.

Emergency and First Aid Procedures Eyes - Irrigate with water. Skin - Wash with soap and water and/or baking soda water. Inhalation - Remove to fresh air source. If ingested, administer plain water. DO NOT INDUCE VOMITING. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Absorb spill with sawdust or oil absorbent or soda ash. Catch and collect for recovery as soon as possible. Further flushing and cleaning with a weak alkaline solution (soda ash, baking soda, caustic soda) will aid in neutralizing cresylic acid from the spill.

Waste Disposal Method
Dispose of in accordance with company, local, state and federal regulations.

Precautions to Be Taken in Handling and Storing
Keep away from heat, sparks and open flame. Use adequate ventilation. Avoid contact with skin and eyes.

Other Precautions If cleaner contacts clothing, change clothes or wash off excess immediately to avoid possible skin irritation. Although product is non-flammable, open flames, welding arcs or other high temperature sources can cause product decomposition. This decomposition can yield corrosive and toxic fumes.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Self-contained breathing apparatus for concentrations above TLV limits.

Ventilation			
	Local Exhaust: Yes	Special: None.	
	Mechanical (General): None.	Other: None.	

Protective Gloves	Eye Protection
Rubber gloves.	Chemical face shield; goggles.

Other Protective Clothing or Equipment
Rubber apron to protect skin and clothing.

Work/Hygienic Practices
Do not smoke around this product.

MATERIAL SAFETY DATA SHEET

SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60120

I.E.2-6

safety-kleen corp.

IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Safety-Kleen Perchloroethylene	

Section I Dry Cleaning Grade Part #778

Manufacturer's Name Safety-Kleen Corp.	Emergency Telephone Number 312/697-8460
Address (Number, Street, City, State, and ZIP Code) 777 Big Timber Road	Telephone Number for Information 312/697-8460
Elgin, Illinois 60120	Date Prepared 11/25/85
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Perchloroethylene	100 ppm	50 ppm		

Section III — Physical/Chemical Characteristics

Boiling Point	250°F.	Specific Gravity (H_2O = 1)	1.6
Vapor Pressure (mm Hg.) @ 20°C.	13	Melting Point	N/A
Vapor Density (AIR = 1)	5.8	Evaporation Rate (toluene = 1)	0.09

Solubility in Water
Negligible.

Appearance and Odor
Colorless, clear liquid, mildly sweet.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) None (tag closed cup)	Flammable Limits N/A	LEL N/A	UEL N/A

Extinguishing Media
N/A

Special Fire Fighting Procedures
Self-contained breathing equipment should be used by firemen in building where perchloroethylene is stored. Keep container cool.

Unusual Fire and Explosion Hazards
Vapors can be ignited by high energy ignition source. Decomposes with fire or hot surfaces to acidic gases and other highly toxic substance.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		Contact with open flame, hot surfaces or emissions from
	Stable	X	welding arc.

Incompatability (Materials to Avoid)

Hazardous Decomposition or Byproducts
Hydrogen chloride, phosgene and other highly toxic substance.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	yes	yes	yes

Health Hazards (Acute and Chronic)
Overexposure can cause vomiting, nausea, drowsiness, unconsciousness and even death in extreme cases.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	no	no	no

Signs and Symptoms of Exposure
Vomiting, drowsiness, nausea.

Medical Conditions
Generally Aggravated by Exposure Unknown.

Emergency and First Aid Procedures Move to fresh air. Remove contaminated clothing. If breathing has stopped, administer artificial respiration. Keep warm and quiet. Call a physician.

Eye contact - Wash with copious amounts of water. Never administer adrenaline.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Evacuate the area, ventilate, avoid breathing vapor or coming in contact with liquid. Clean up area (wear protective clothing), contain spill, transfer by mopping or with absorbent material to storage container.

Waste Disposal Method
Dispose of in accordance with company, local, state and federal regulations.

Precautions to Be Taken in Handling and Storing
Avoid contact with skin and avoid vapors. Pipe vents outdoors. Store in cool, dry, ventilated area.

Other Precautions
Prevent moist air from entering storage. No smoking in presence of vapors.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
None required when used with adequate ventilation.

Ventilation	Local Exhaust	Special
	Sufficient to maintain below TLV.	N/A
	Mechanical (General)	Other
	N/A	N/A

Protective Gloves	Eye Protection
Neoprene, viton, PVC coated.	Chemical safety goggles.

Other Protective Clothing or Equipment
Protective headgear and apron when splashing is a problem.

Work/Hygienic Practices
Do not smoke when using this product.

MATERIAL SAFETY DATA SHEET

SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60120

I.E.2-7

safety-kleen corp.

IDENTITY (As Used on Label and List)	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Safety-Kleen Lacquer Thinner	

Section I Part #6782

Manufacturer's Name Safety-Kleen Corp.	Emergency Telephone Number 312/697-8460
Address (Number, Street, City, State, and ZIP Code) 777 Big Timber Road	Telephone Number for Information 312/697-8460
Elgin, Illinois 60120	Date Prepared 12/13/85
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Toluene	200 ppm	100 ppm	-	-
Xylene	100 ppm	100 ppm	-	
Methyl Ethyl Ketone	200 ppm	200 ppm	-	
Methyl Iso Butyl Ketone	100 ppm	50 ppm	-	
Acetone	1000 ppm	750 ppm	-	
Isopropanol	400 ppm	400 ppm	-	
Methanol	200 ppm	200 ppm	-	
Ethanol	1000 ppm	1000 ppm	-	
Normal Butyl Acetate	150 ppm	150 ppm	-	
Iso Butyl Acetate	200 ppm	200 ppm	-	

Section III — Physical/Chemical Characteristics

Boiling Point	131-347°F.	Specific Gravity (H_2O = 1)	~0.840
Vapor Pressure (mm Hg.) @ 68°F.	185	Melting Point	N/A
Vapor Density (AIR = 1)	2.0	Evaporation Rate (Ether = 1)	slower than ether

Solubility in Water
Appreciable.

Appearance and Odor
Clear colorless liquid with characteristic solvent odor.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
<20°F. TCC		1.1	12.8

Extinguishing Media
CO_2, foam, dry chemical, water (mist only)

Special Fire Fighting Procedures
Liquid water may be used to cool containers and firefighters. However, due to differences in specific gravity, water could cause the free solvent to spread and a fire to spread.

Unusual Fire and Explosion Hazards
Extremely flammable.

Page 1 (Continued on Reverse Side)

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		
	Stable	X	Heat, sparks, flame and fire.

Incompatability (Materials to Avoid)
Strong oxidizing agents.

Hazardous Decomposition or Byproducts
Normally none; however, incomplete burning may yield carbon monoxide.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	yes	yes	yes

Health Hazards (Acute and Chronic)
Skin - Can cause drying of skin. Eyes - Severe irritant. Inhalation - Excessive inhalation can cause headache, dizziness and nausea. Ingestion - Harmful or fatal if swallowed.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	no	no	no

None of the ingredients are known or suspected carcinogens.

Signs and Symptoms of Exposure
Drying of skin, eye irritation, headache, dizziness, and nausea.

Medical Conditions Generally Aggravated by Exposure Unknown.

Emergency and First Aid Procedures
Skin - Wash with soap and water. Eyes - Irrigate with water. Inhalation - Remove to fresh air source and call a physician. Ingestion - DO NOT INDUCE VOMITING. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Catch and collect for recovery as soon as possible. Avoid exposure to sparks, fire, flame, hot surfaces.

Waste Disposal Method
Dispose of in accordance with company, local, state and federal regulations.

Precautions to Be Taken in Handling and Storing
Extremely flammable. Keep away from heat, sparks, flame. Use with adequate ventilation. Avoid long and repeated contact with skin. If clothes are inadvertently saturated with solvent - DO NOT SMOKE - Keep away from ignition sources. Keep out of reach of children.

Other Precautions

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Respirator as recommended by NIOSH for concentrations above TLV limits.

Ventilation		
	Local Exhaust: Sufficient to keep concentration below lowest TLV.	Special: None.
	Mechanical (General): None.	Other: None.

Protective Gloves: In cases of prolonged contact, wear rubber gloves.	Eye Protection: Yes - eyeglasses, safety glasses.

Other Protective Clothing or Equipment
N/A

Work/Hygienic Practices
Do not smoke while using this solvent. Wash hands thoroughly after use and before eating.

safety-kleen®

Certified Mail-Return Receipt Requested

June 21, 1988

Police Chief
Boynton Beach Police Department
135 N.E. 1st Avenue
Boynton Beach, FL 33435

Subject: Safety-Kleen Corp. (3-097-01)
1855 SW 4th Ave.
Bldg B Bay 30
Delray Beach, FL 33444

Dear Sir:

Under terms of U.S. EPA Regulations 40 CFR 265, Safety-Kleen Corp. must make arrangements to familiarize local authorities with the layout of the facility, places where facility personnel work, entrances to the facility and possible evacuation routes.

A copy of the Contingency Plan is enclosed for your files. It includes Material Safety Data Sheets for the solvents handled at the subject site: mineral spirits, carburetor cleaner, dry cleaning solvents and paint thinners. These documents describe the properties and associated hazards of the materials at the facility. A facility layout plan is also included to show where facility personnel normally work, entrances to the facility and possible evacuation routes.

If you have any questions or desire to visit our facility, please contact Mr. Thomas Sands at 407/276-8886.

Sincerely,

Ellen J. Jurczak, P.E.
Permits Manager

EJJ:dfs

cc: T. Sands, Br. Mgr. (3-097-01)

safety-kleen®

Certified Mail-Return Receipt Requested

June 21, 1988

Fire Chief
Boynton Beach Fire Department
150 E. Boynton Beach Blvd.
Boynton Beach, FL 33435

Subject: Safety-Kleen Corp. (3-097-01)
1855 SW 4th Ave.
Bldg B Bay 30
Delray Beach, FL 33444

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Sincerely,

Ellen J. Jurczak, P.E.
Permits Manager

EJJ/dfs

cc: T. Sands, Br. Mgr. (3-097-01)

777 BIG TIMBER ROAD ELGIN, ILLINOIS 60123 PHONE 312/697-8460 TELEX 910 251 4479

safety-kleen®

Certified Mail-Return Receipt Requested

Jume 21, 1988

Hospital Administrator
Bethesda Memorial Hospital
2815 S. Seacrest Blvd.
Boynton Beach, FL 33435

Subject: Safety-Kleen Corp. (3-097-01)
1855 SW 4th Ave.
Bldg B Bay 30
Delray Beach, FL 33444

Dear Sir or Madam:

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Sincerely,

Ellen J. Jurczak, P.E.
Permits Manager

EJJ:dfs

cc: T. Sands, Br. Mgr. (3-097-01)

777 BIG TIMBER ROAD ELGIN, ILLINOIS 60123 PHONE 312/697-8460 TELEX 910 251 4479

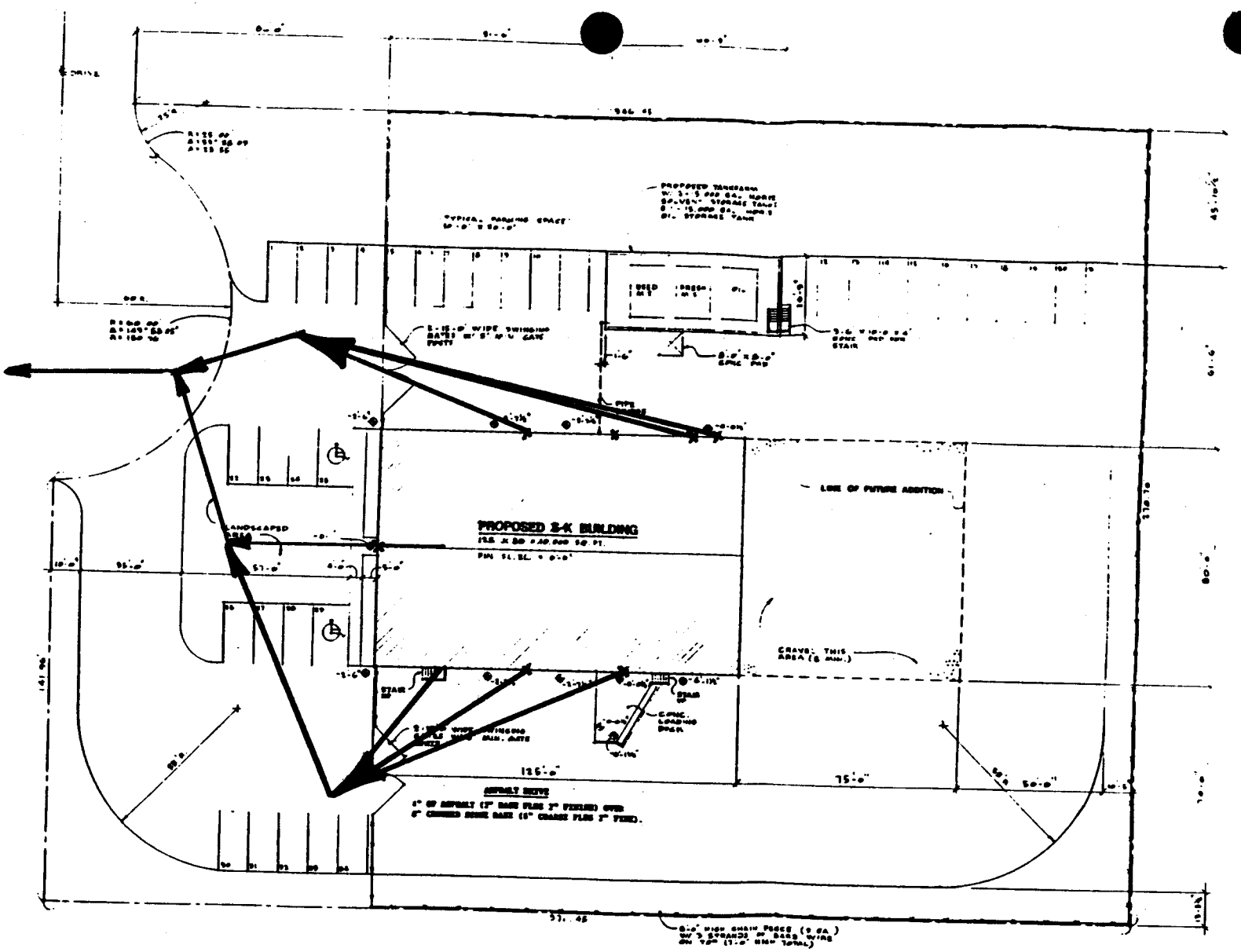


EXHIBIT 2-11
EVACUATION PLAN

State of Florida
Department of Environmental Regulation

District Routing Slip

To: Bob Igleski / Ignor McKee Date: 5/8/91

			C.C. To:
	Pensacola	**Northwest District**	
	Panama City	Northwest District Branch Office	
	Tallahassee	Northwest District Branch Office	
	Apalachicola	Northwest District Satellite Office	
	Tampa	**Southwest District**	
	Bartow	Southwest District Satellite Office	
	Venice	Southwest District Satellite Office	
	Orlando	**Central District**	
	Melbourne	Central District Satellite Office	
	Jacksonville	**Northeast District**	
	Gainesville	Northeast District Branch Office	
	Fort Myers	**South District**	
	Punta Gorda	South District Branch Office	
	Marathon	South District Branch Office	
X	**West Palm Beach**	**Southeast District**	
	Port St. Lucie	Southeast District Branch Office	

Reply Optional ☐ Reply Required ☐ Info Only ☐
Date Due _____ Date Due: _____

Comments:

Violations of S.K. Tampa facility

RECEIVED
MAY 13 1991
Dept. of Environmental Reg.
West Palm Beach

From: Bill Nevins Tel.: Suncom 278-0300

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

To: _____ Location: _____
To: _____ Location: _____
To: _____ Location: _____
From: _____ Date: _____

RECEIVED
JUL 13 1990
PERMITTING

TO: Beth Knauss

THRU: Victor San Agustin, P.E. VSA 7/3
Bill Crawford VSA for 7/3

FROM: Lynne R. Milanian lynne 7/3

DATE: June 22, 1990

SUBJECT: Safety-Kleen Corp., FLD 980 847 271 Tampa
Permit Application HO29-158820
Tampa, Florida Service Center

On June 19, 1990 the RCRA permitting staff conducted an inspection to verify completion of construction of the Safety-Kleen Tampa Service Center. After careful examination of the facility, in comparison with the application submitted, it was determined that the nature of the discrepancies warranted enforcement action.

Attached is a description of each deviation.

LRM/ab
Attachment

cc: Satish Kastury, DER/Tallahassee
James Scarbrough, EPA/Atlanta Region IV

RECEIVED
MAY 13 1991
Dept. of Environmental Reg.
West Palm Beach

Noted Discrepancies

North Building

1. Hazardous waste storage area described via calculations, diagrams and narrative to possess 2 containment trenches, thus able to support a storage capacity of 6,192 gallons of liquid hazardous waste.

Actual storage area has 1 containment trench, in field measurements were approximately 93 inches X 20.5 inches X 23 inches, therefore actual containment capacity is roughly 189 gallons. As such, liquid hazardous waste storage capacity is only 1,890 gallons.

THIS DOES NOT TAKE INTO ACCOUNT SLOPED FLOOR

See attached Diagram.

Regulatory Reference

a. 40 CFR 264.175(b)(3) A containment system having sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater, has not been provided.

b. Section 403.161(1)(c), F.S. Applicant has willingly submitted false documentation (i.e. calculations, diagrams and narrative) which was utilized to support the permit application.

2. A grated manhole adjacent to the hazardous waste storage area and a floor drain at the base of the stair well were noted in the north building. It was originally believed that these 2 drainage systems tied into the city sewer system, however, facility contacts indicated that each system transfers any collected liquids to the on-site septic-system.

Regulatory Reference

a. 40 CFR 264.31 Facility must be designed to minimize unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or waters which could threaten human health or the environment.

Solvent Return/Fill Area

1. Transfer of liquid hazardous wastes (spent mineral spirits), product dispensing area (Mineral spirits) and drum washing area. Again diagrams, calculations and narrative submitted documenting 6 containment sumps and a larger concrete curb containment area.

Actual containment provided included only 2 sumps and the area defined by concrete curbing was smaller - thus reducing available containment capacity. In-field measurements were not taken as it became evident that it would be necessary to re-survey the entire facility. Also sloping (to facilitate drainage to collection sumps and trenches) is questionable. ✓

See attached Diagram.

Regulatory Reference

a. Section 403.161(1)(c), F.S. Applicant has willingly submitted false documentation (i.e., calculations, diagrams and narrative) which was utilized to support the permit application.

b. 40 CFR 264.193(e)(1)(i) Applicant originally stated that a containment volume of 1,120 gallons would be provided by the 4 outer sumps. As the 4 outer sumps do not exist and the curbing present is providing containment for a much smaller area, containment able to hold 100 percent of the capacity of the largest tank (dumpster) within the containment boundary may not have been constructed.

2. The three dumpsters receiving the hazardous waste for transfer to the storage tank contained the wastes (both liquid and sludge) and were serving as storage units which contradicts narrative stating that the dumpsters would not be utilized for storage. The three dumpsters are part of the ancillary equipment of the tank system and they are being utilized as storage units.

Regulatory Reference

a. 40 CFR 264.192(a)(1) A written assessment, reviewed and certified by an independent professional engineer detailing the integrity of the ancillary equipment has not been submitted. OK

b. 40 CFR 264.192(a)(5) Design considerations detailing the ancillary equipment have not been provided. OK

c. 40 CFR 264.192(b) A report detailing proper installation of ancillary equipment was not submitted. OK

d. 40 CFR 264.192(d) A report establishing tightness was not submitted for the ancillary equipment. OK

e. 40 CFR 264.192(g) Written statements certifying the design of the entire tank system were not on file at the facility. ✓ CHECK THIS

South Building

1. One available containment trench in this area was not even presented on the diagram.

2. Two outlets from the building are provided in the event that the system's containment capacity is exceeded. Overflow will not directly proceed to the retention pond but will flow in a disorderly fashion down the parking lot to the drainage ditch to the pond. Excess run-off will cause backflow in the ditch which will enter a concrete spillway and flow off-site.

See attached diagram.

Regulatory Reference

a. Section 403.161(1)(c), F.S. Applicant has willingly submitted false documentation (i.e., calculations, diagrams and narrative) which was utilized to support the permit application.

b. 40 CFR 264.31 Facility has not been designed to minimize unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or waters which could threaten human health or the environment.

Conclusion

1. An independent, certified, surveyor should perform the in-field measurements pertaining to all sumps, trenches, curbing and sloping. Results and diagrams should be submitted to the Department.

2. A warning should be issued to the P.E. who certified the application.

3. Tightness tests should be performed on the piping conveying material from the manhole in the north building to the septic system as well as the piping from the floor drain in the stair well. If testing verifies the integrity of the piping, soil sampling will only need to be secured at the discharge point. Groundwater sampling may also be advisable. The pipes should then be removed or filled with concrete and sealed.

4. A complete assessment of the ancillary equipment which supports the storage tank must be provided.

5. Facility should not be authorized to utilize the pond for storage of liquids which exceed the containment system's capacity. Pond overflow will allow waste waters to proceed off-site and enter the county drainage ditch. Also, an assessment of the ponds drawdown rate, average and seasonal high groundwater levels, groundwater quality, etc., would be necessary.

6. Consider denial of this permit - I have drafted 3 NOD's to Safety, each time I repeatedly requested diagrams for the same areas (i.e., solvent/fill return area, service center storage area particularly for containment, and the accumulation center storage area also for containment). Further, I clearly stated that all calculations and diagrams must be signed and sealed. Safety-Kleen only managed to seal the first set of documents (in a response to my first NOD) and that occurred because the original application was not signed or sealed.

The final diagram Safety submitted was still incorrect (for the fourth time) so I finally called and told them to correct the diagram which was revised and faxed. The problem had to do with reported containment capacities.

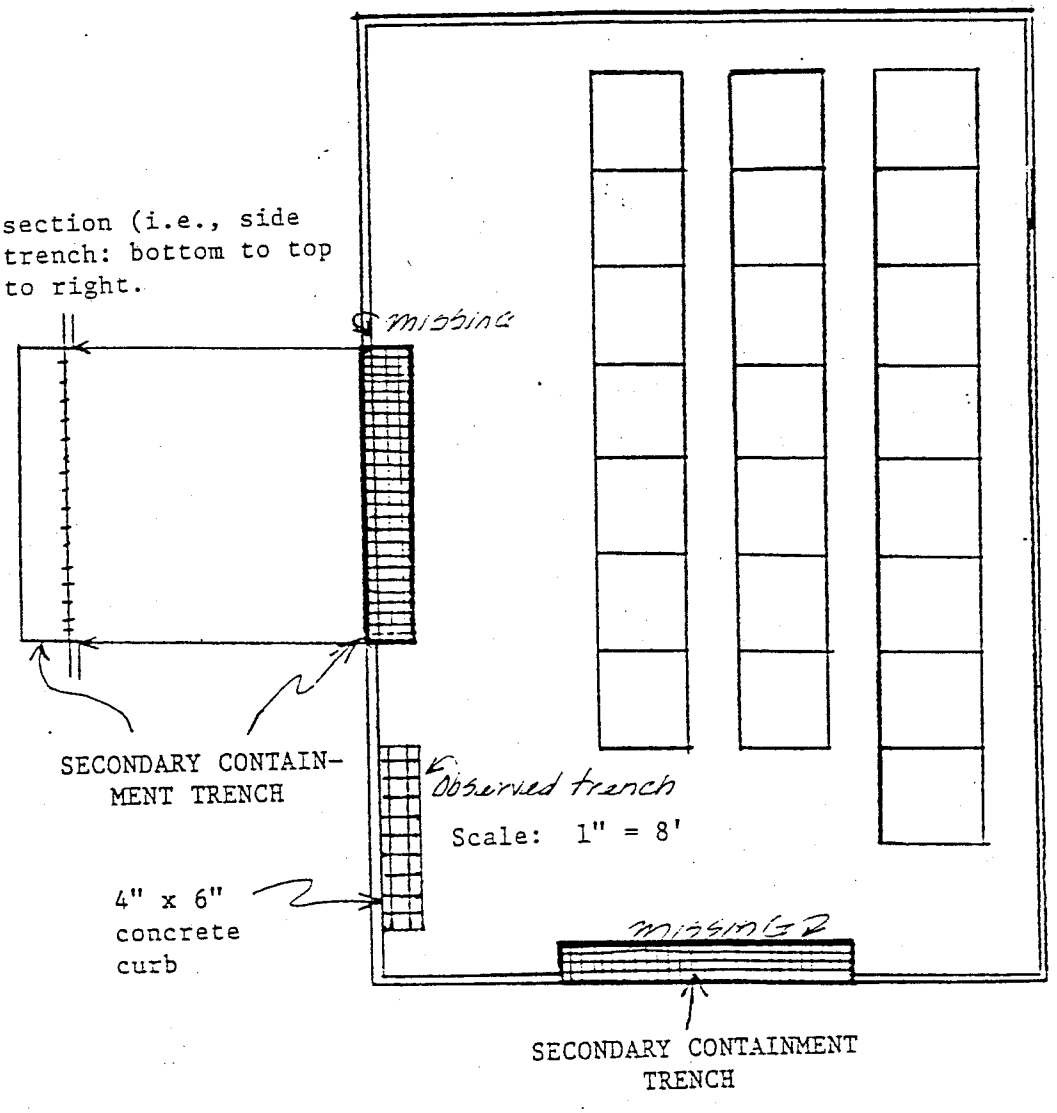
Safety-Kleen has not displayed a professional attitude in presenting their application nor in providing additional information. They have exhibited a nonchalant behavior and the Department is justified in assessing penalties and fines as well as denying the operating permit.

SAFETY-KLEEN CORPORATION

TAMPA, FLORIDA FACILITY

SECONDARY CONTAINMENT CALCULATIONS

This a cross-section (i.e., side view) of the trench: bottom to top is from left to right.



The secondary containment system is closed; no piping is associated with it. There is no slope to the floor. All containers will be stored on pallets.

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

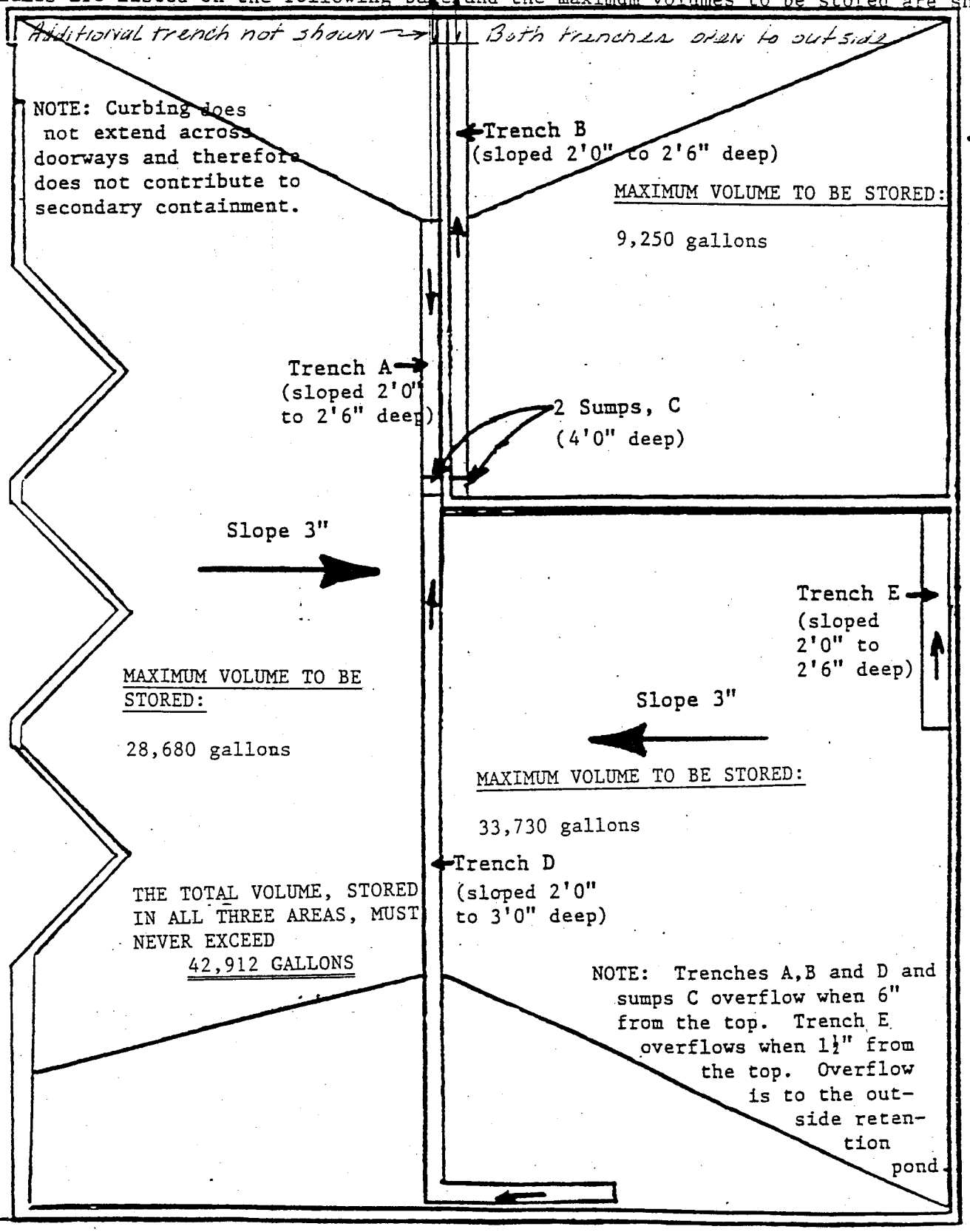
Amount to Be Stored:

43 single or double stacked pallets x 9 drums/pallet x 16 gallons/drum = 6,192 gallons. While the volume of each type of waste stored may vary, the total volume stored will never exceed 6,912 gallons.

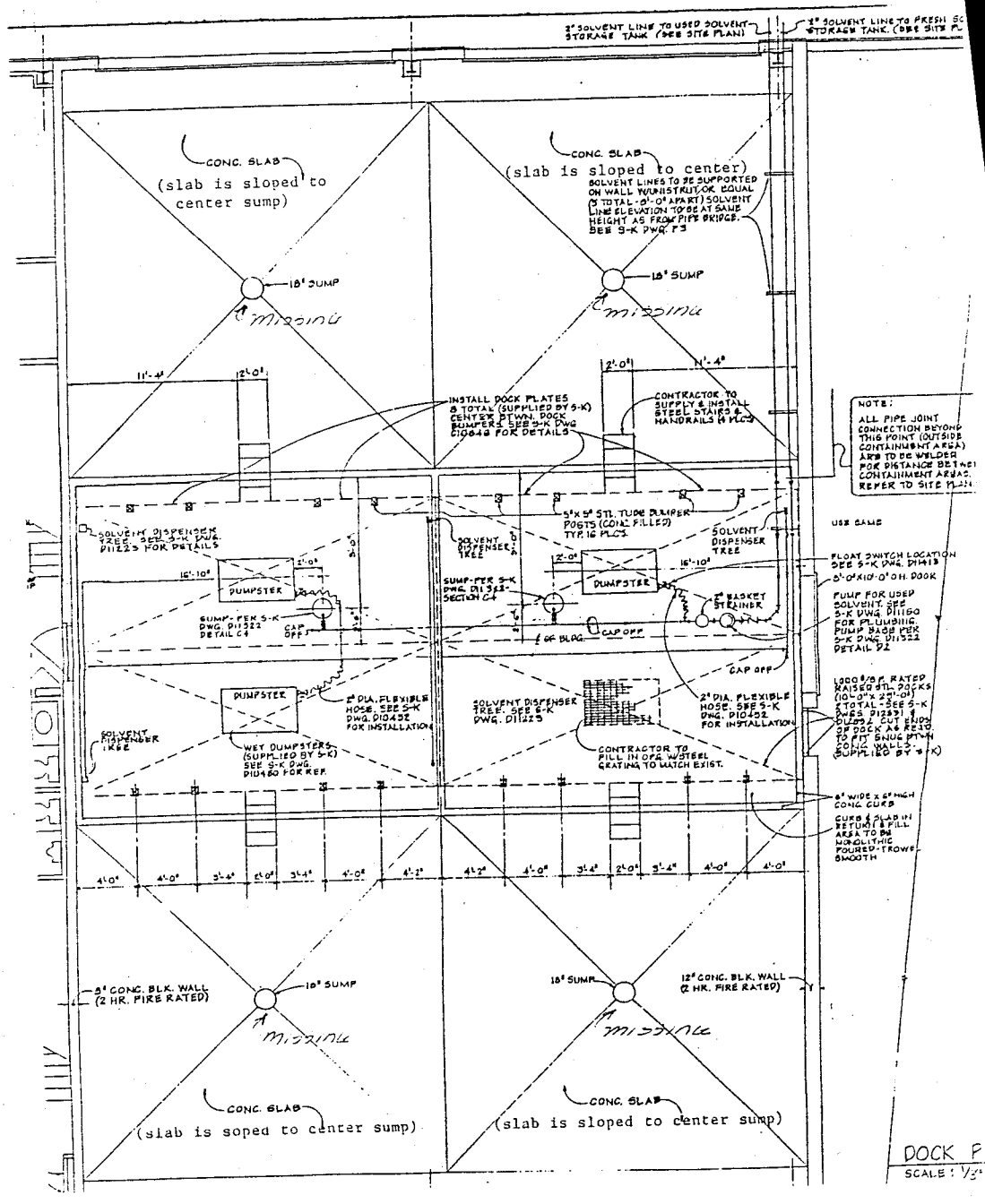
Accumulation Center Schematic

Scale: 1" = 12'

The trenches delineate three separate areas in this building. The square room in the upper right corner is designed to hold flammable material; flammable material may not be stored in any area but this room. The remaining two areas are actually one L-shaped room which may be used for the storage of any non-flammable material. The secondary containment volumes are listed on the following page and the maximum volumes to be stored are shown below.



Solvent Return / Fill Area



Revised 4/25/90

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: A 50' x 80' structure between the the service and accumulation centers. It contains three dumpsters which facilitate the flow of solvent to the tank. These dumpsters are not intended for storage but can hold a maximum of 1,125 gallons.

D1129-RV77

UNIFORM COMPLAINT FORM

ease return to: DPR Consumer Complaints
Northwood Centre, 1940 North Monroe Street
Tallahassee, FL 32399-0782

Type or print

our name Bill Crawford

ddress FL Dept. of Environmental Reg.
4520 Oak Fiar Boulevard
Tampa, Florida 33610-7347

elephone (813) 623-5561 (Business) (388) N/A (Residence)

our Occupation Engineer

Contact (other than yourself)

Name Lynne R. Milanian

Address FL Dept. of Environmental Reg.
4520 Oak Fair Boulevard
Tampa, Florida 33610-7347

Telephone (813) 623-5561 (389)

SUBJECT OF COMPLAINT

ame Harold J. Farchmin representating Safety-Kleen Corp. (Person and/or Company)

ddress 345 North 95th Street

Telephone (414) 259-1500

Occupation Professional Engineer

y Milwaukee

State Wisconsin

53226

License # (if known) 37817

ve you contacted subject concerning complaint? [X] Yes [ ] No Date 6-20-90
(See Attachment I)

e there documents involved? [X] Yes [ ] No
Attached: [X] Yes [ ] No To Follow: [ ] Yes [ ] No

vate Attorney
pplicable)

( ) Name / Telephone — Address / City / State / ZIP

nesses (Please give full name and addresses)

Please see other side

R/REG 001 (1/90)

I.E.3.a PROCEDURE TO MITIGATE EQUIPMENT FAILURE AND POWER OUTAGES

Equipment failure will be mitigated using the procedure described in the contingency plan, should a release occur. Otherwise, use of failed equipment will be immediately discontinued and the equipment replaced.

In case of a power failure, all activities requiring the use of electricity must cease.

I.E.3.b UNLOADING OPERATIONS - DRUM STORAGE AREA

The immersion cleaner, dumpster sediment, dry cleaner wastes and paint wastes are always held in covered containers. Unless a drum is leaking, the drummed solvent is never transferred to another container. The drums containing the used solvents are returned to the service center and stored in a designated area before shipment to a reclaimer.

The unloading/loading area and drum storage area are shown on Exhibit I.B.3-7. They occupy portions of the building which have sloped concrete floors, and interceptor trenches which form a spill containment system. 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 capacity of the containment system is designed to be greater than 10% of the total liquid storage capacity.

All drums are transported, moved, and stored in upright positions. The route trucks are equipped with an electric hoist to assist loading/unloading. In the warehouse area, the drums are moved with 2-wheel hand trucks or a pallet jack, and stacked. All drums are 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 shown in Exhibits I.E.3-1 to I.E.3-5.

The drum storage facility has been designed to handle 6,912 gallons waste. Spill containment in the drum storage area has a secondary containment capacity of 2,775 gallons. This is significantly greater than 10% of total liquid storage in the area.

UNLOADING OPERATIONS - STORAGE TANK

The facility consists of two 12,000-gallon capacity aboveground steel tanks. Drummed mineral spirits are transferred via the wet dumpster into one of these two storage tanks. The other 12,000-gallon tank is used to store mineral spirits product.

The tanks are designed and constructed to be compatible with the materials stored in them. 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.3-8 and I.E.3-9.

The aboveground tanks are protected by a 3' high concrete retaining dike. Therefore, no run-on or runoff will occur and no runoff collection management system is deemed necessary. Equipment used in the operation of the aboveground tanks for used mineral spirits will be liquid level gauges and automatic high level alarms. A suction pump on 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.

I.E.3.c PERSONAL PROTECTIVE EQUIPMENT

All personnel must wear the following when handling hazardous materials:

a. steel-toed boots
b. safety glasses
c. protective gloves
d. protective aprons

In addition, the following equipment must be readily available:

a. fire extinguisher
b. eyewash
c. first aid kit
d. sorbent material
e. shovel
f. hand-held pump

I.E.3.d-e PROTECTION OF WATER SUPPLIES

All waste handling and storage units are aboveground and have secondary containment. In addition, the drum storage area and loading area are enclosed to prevent rain water from coming in contact with them. Therefore, surface and ground waters will be protected from run on, run off and other releases.

I.E.3.f IGNITABLE WASTE HANDLING METHODS

The following is a list of fire prevention and minimization measures:

I. All wastes and products are kept away from ignitable sources--Personnel must confine smoking and open flames to remote areas, separate from any solvent (e.g., the office or locker room). The mineral spirits return and fill station and storage tanks are separate from the warehouse building area to minimize the potential for a fire to spread or injury to personnel to occur.

II. Ignitable wastes are handled so that they do not:

A. become subject to extreme heat or pressure, fire or explosion, or a violent reaction--The mineral spirits waste is stored in a tank or in drums, none of which are near sources of extreme heat, fire, potential explosion sources or subject to violent reactions. The tanks are vented and the drums kept at room temperature to minimize the potential for pressure build-up.

B. produce uncontrolled toxic mists, fumes, dusts or gases in quantities sufficient to threaten human health--The vapor pressure of mineral spirits is low (2 mm) and it is reactive with strong oxidizers only. Toxic mists, fumes, dusts or gases will not form in quantities sufficient to threaten human health since strong oxidizers are not handled at this facility and the solvent vaporization will be minimal under normal working conditions.

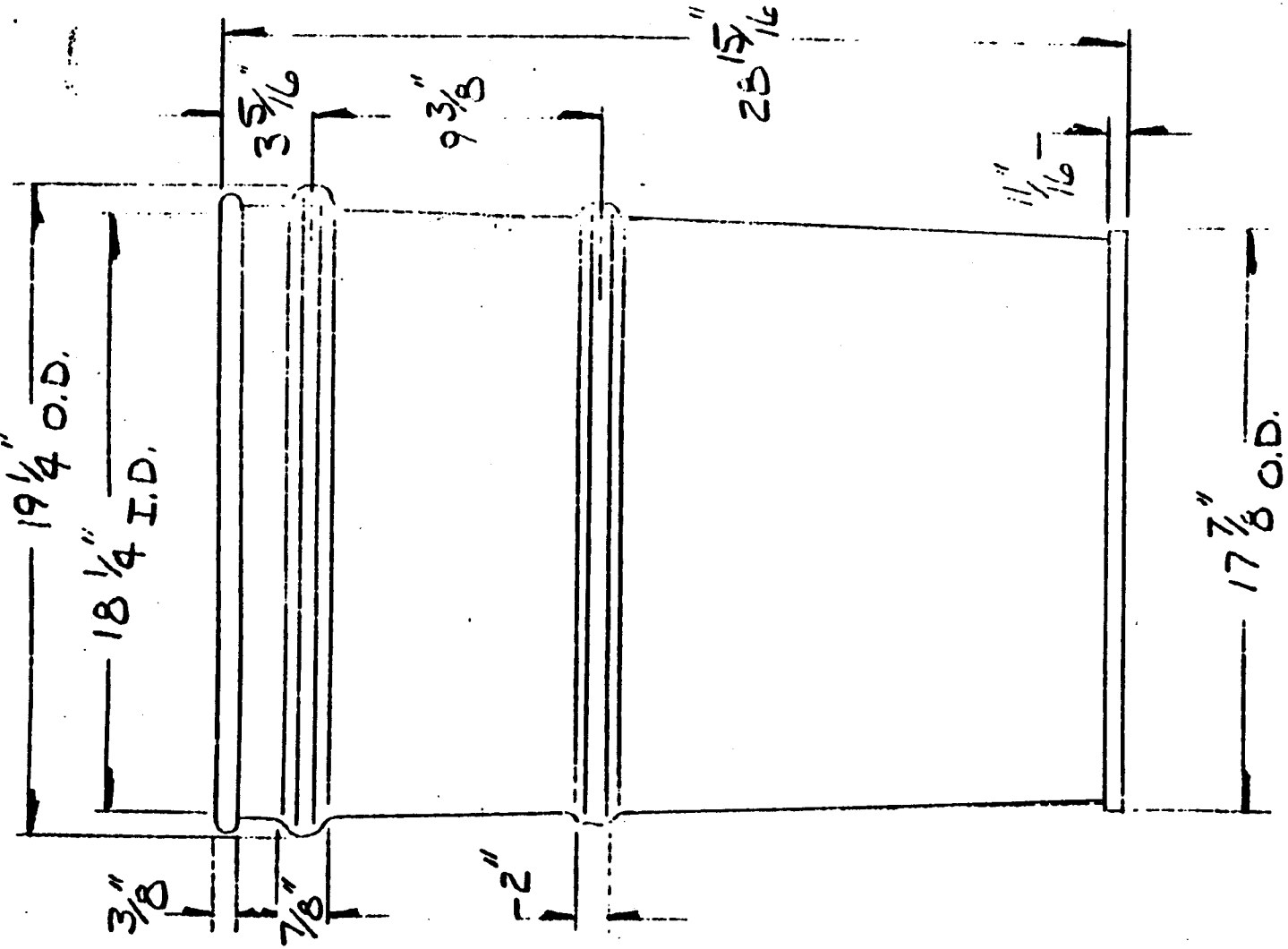
C. produce uncontrolled fires or gases in quantities sufficient to pose a risk of fire or explosion--See 'a' above and 'c' below.

D. damage the structural integrity of the Safety-Kleen facility--The mineral spirits and paint wastes will not cause deterioration of the tank, drums or other structural components of the facility.

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

IV. "No Smoking" signs are posted in areas where solvents are handled or stored.

V. Fire extinguishers must be checked once per week and tested by the fire extinguisher company once per year.



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

I.E.3-1

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.

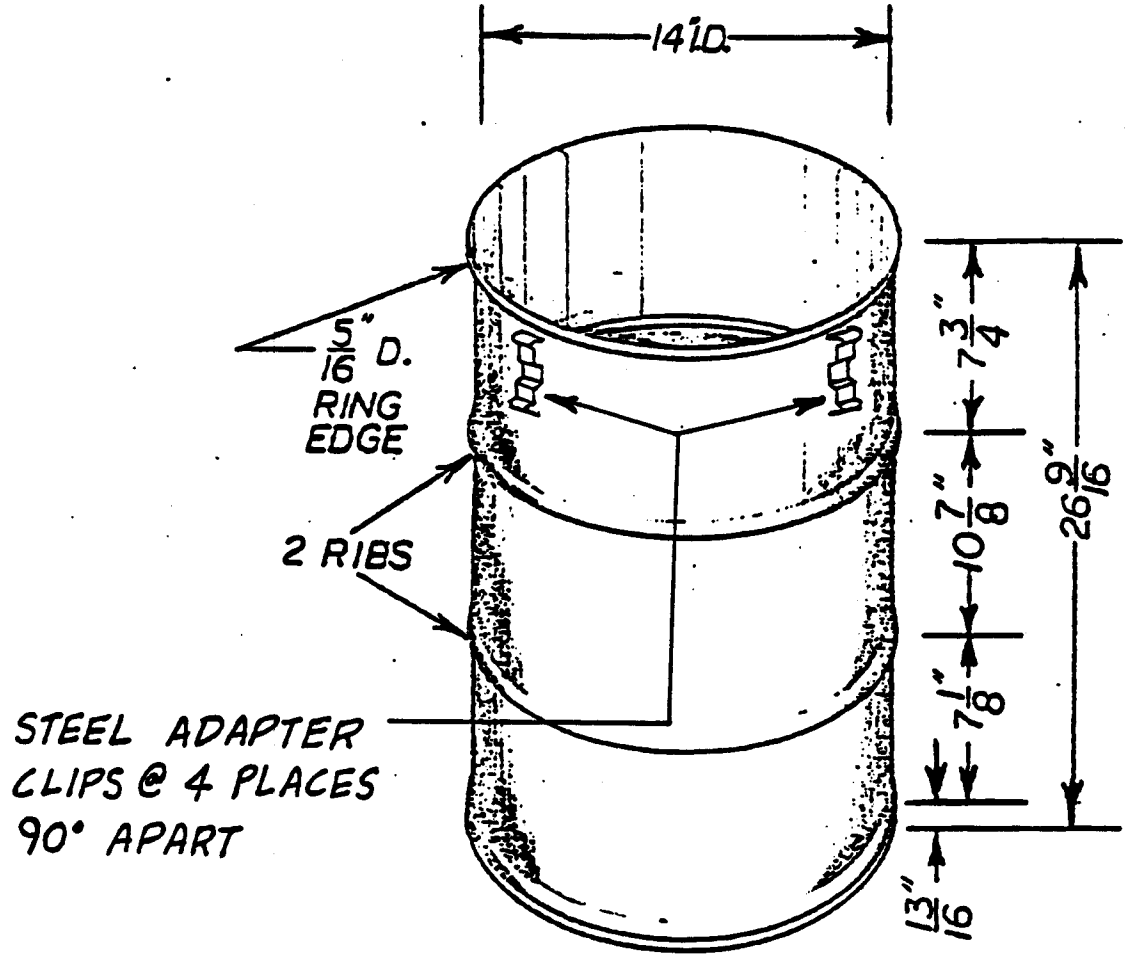
SCALE [illegible]
DATE [illegible]
APPROVED BY [illegible]
DRAWN BY [illegible]
REVISED

safety-kleen corp.

REV A
DRAWING NUMBER [illegible]49

H P INC

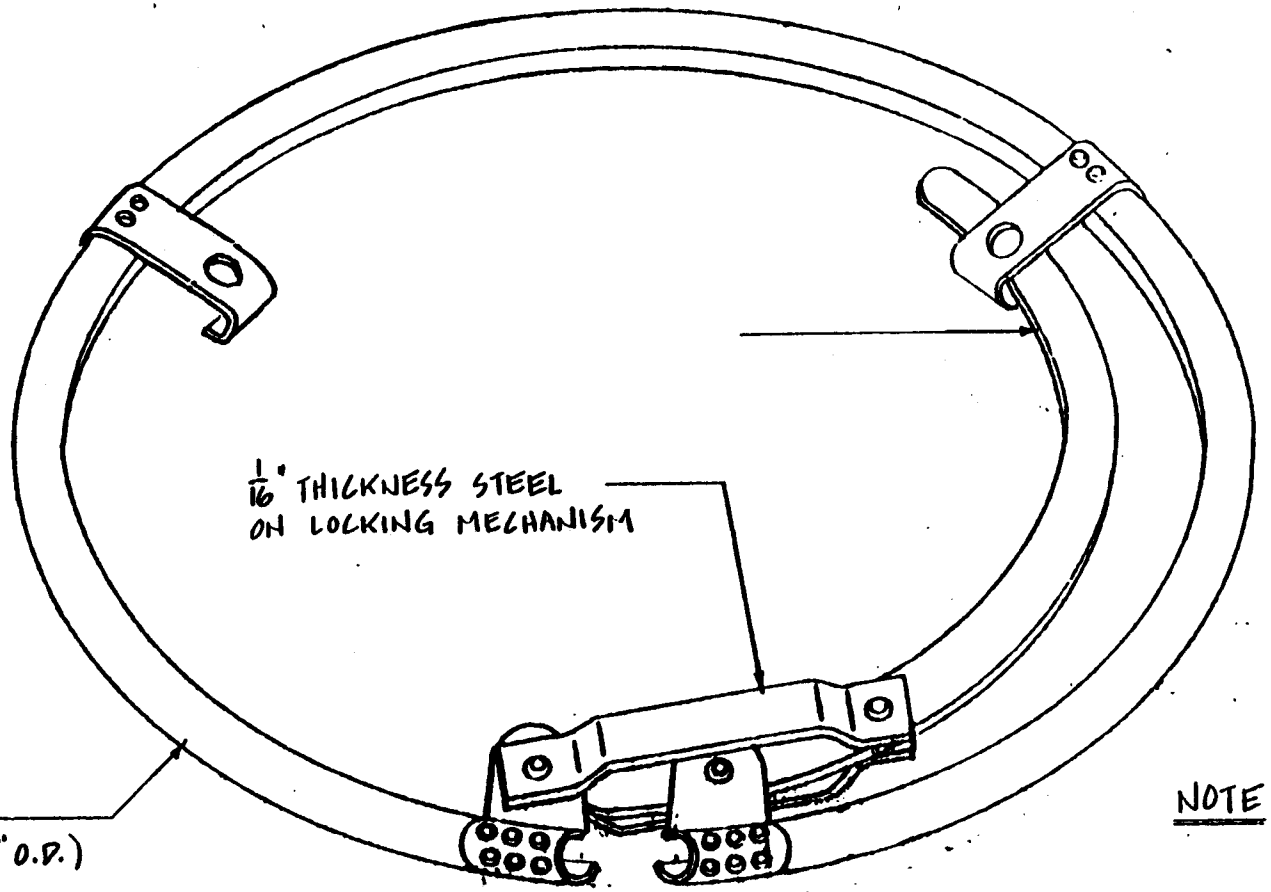
CONSTRUCTION SPECIFICATIONS
16 GALLON STEEL BARREL
PART NO. 3317



ADDITIONAL SPECIFICATIONS

1. No Bungs or Bungholes
2. Rust Preventive Coating Interior
3. Without Top Cover or Locking Ring
4. Open Head Top
5. Leak Proof - Airtest (7 Lb. pressure)
6. 20 Gauge Steel

2-23-71
100-11-07

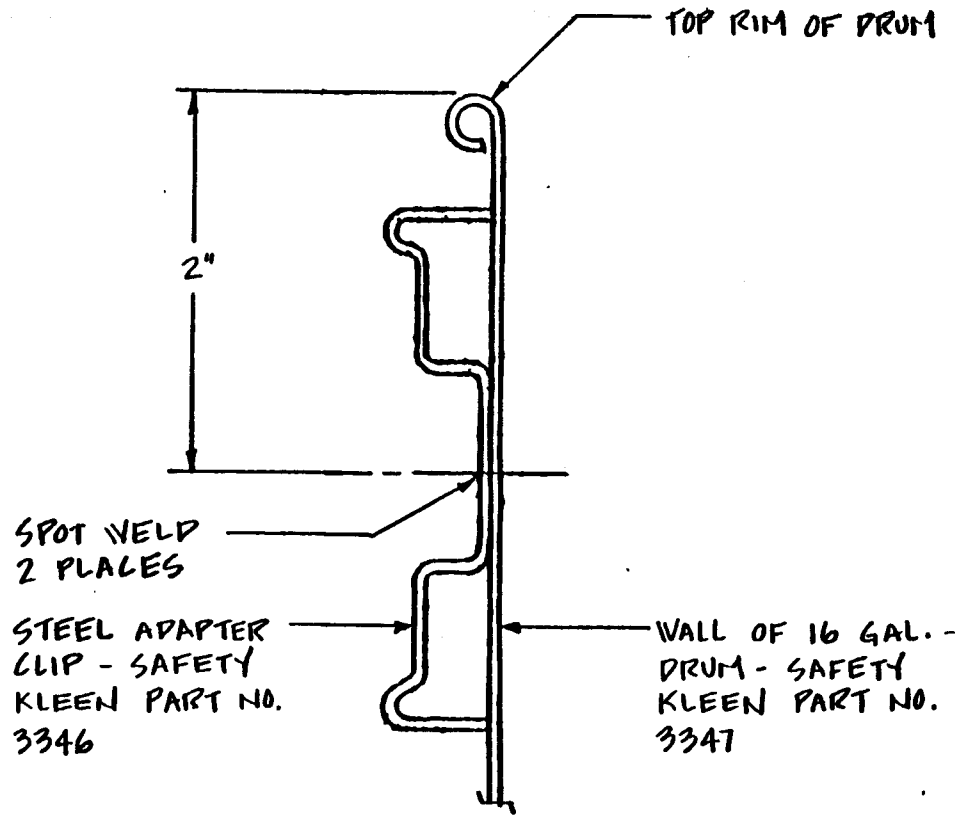


NOTE: ONE SHOP COAT OF SILVER PAINT

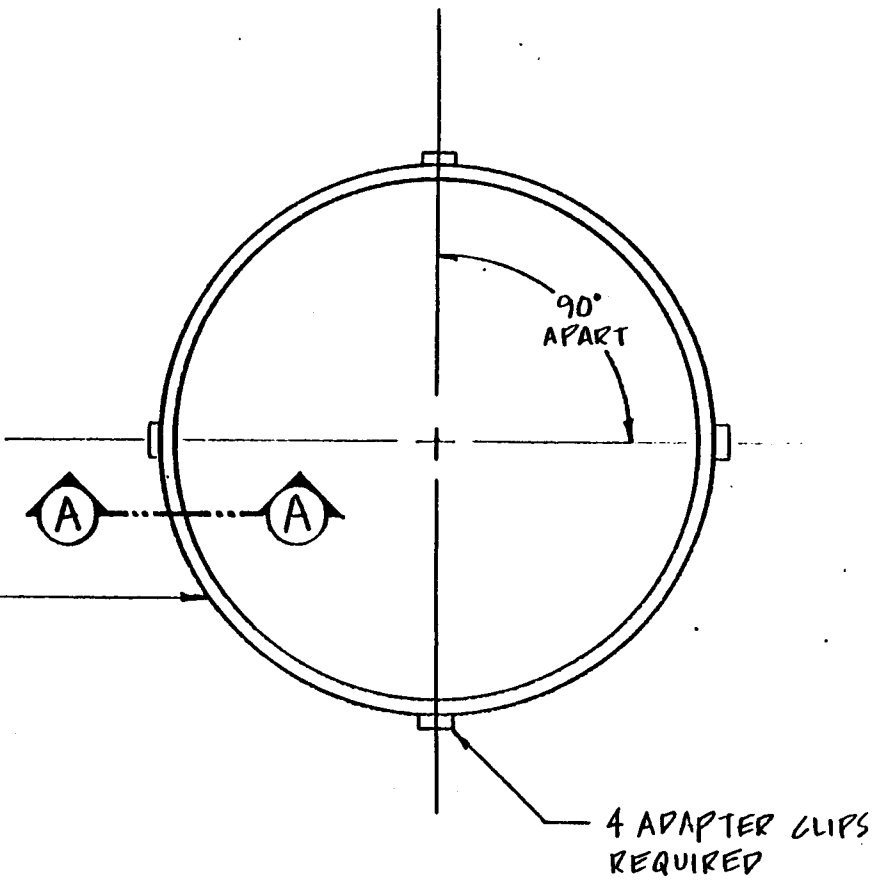
I.E.3-1

• CLAMP RING FOR 16 GALLON DRUM DETAILS •

SAFETY · KLEEN PART NO. 3319

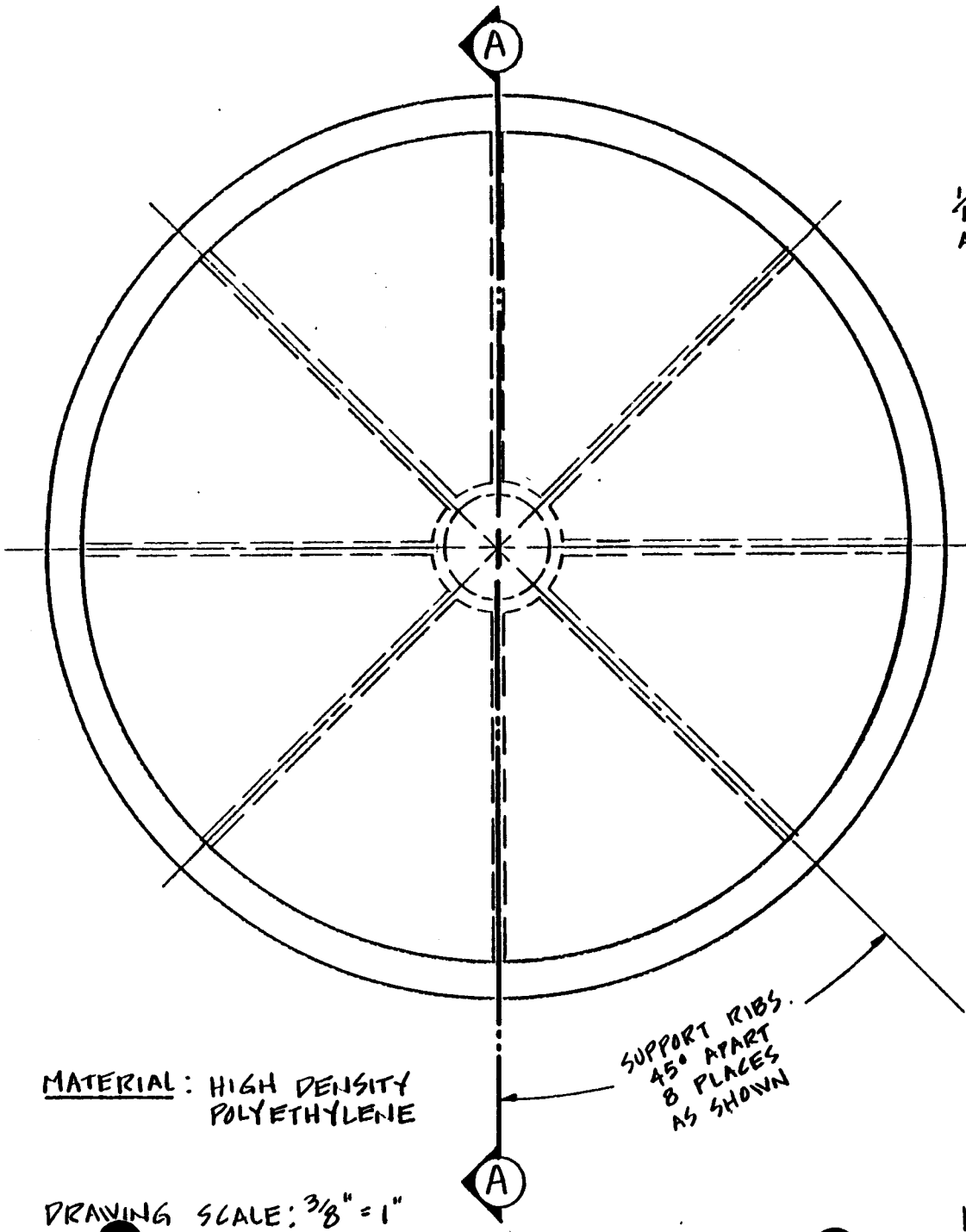


-SECTION A·A-
FULL SCALE



-TOP VIEW OF DRUM-

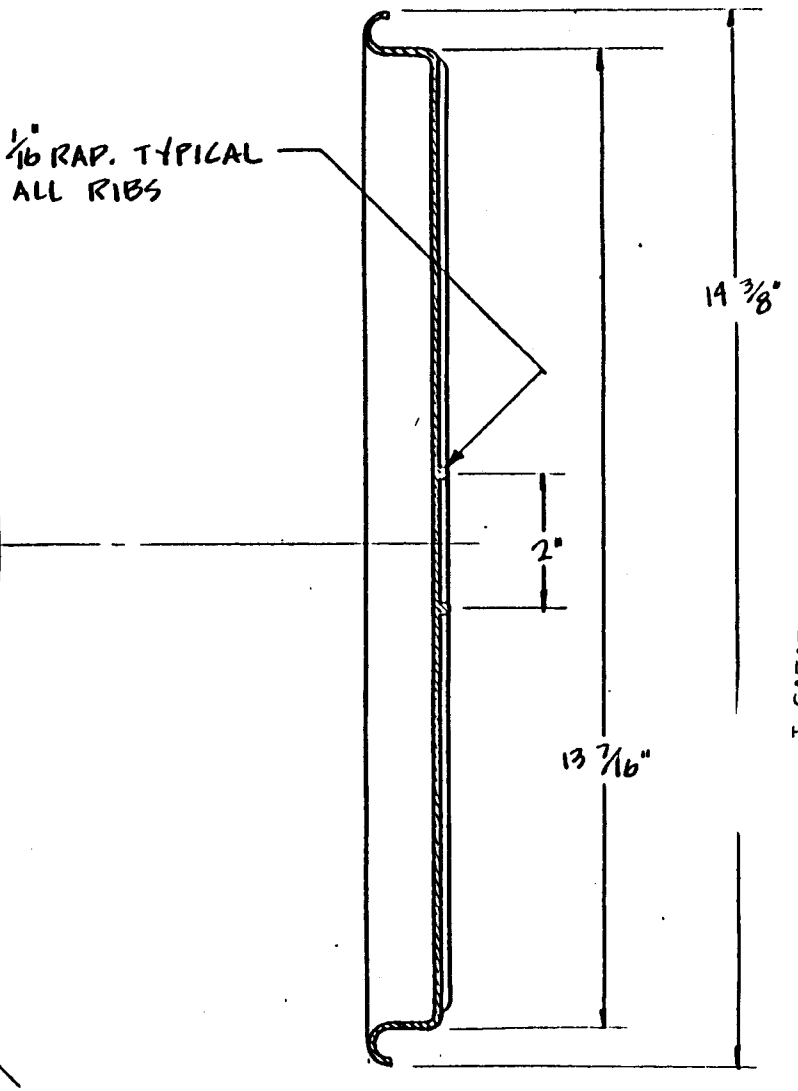
I.E.3-1



SUPPORT RIBS 45° APART 8 PLACES AS SHOWN

MATERIAL: HIGH DENSITY POLYETHYLENE

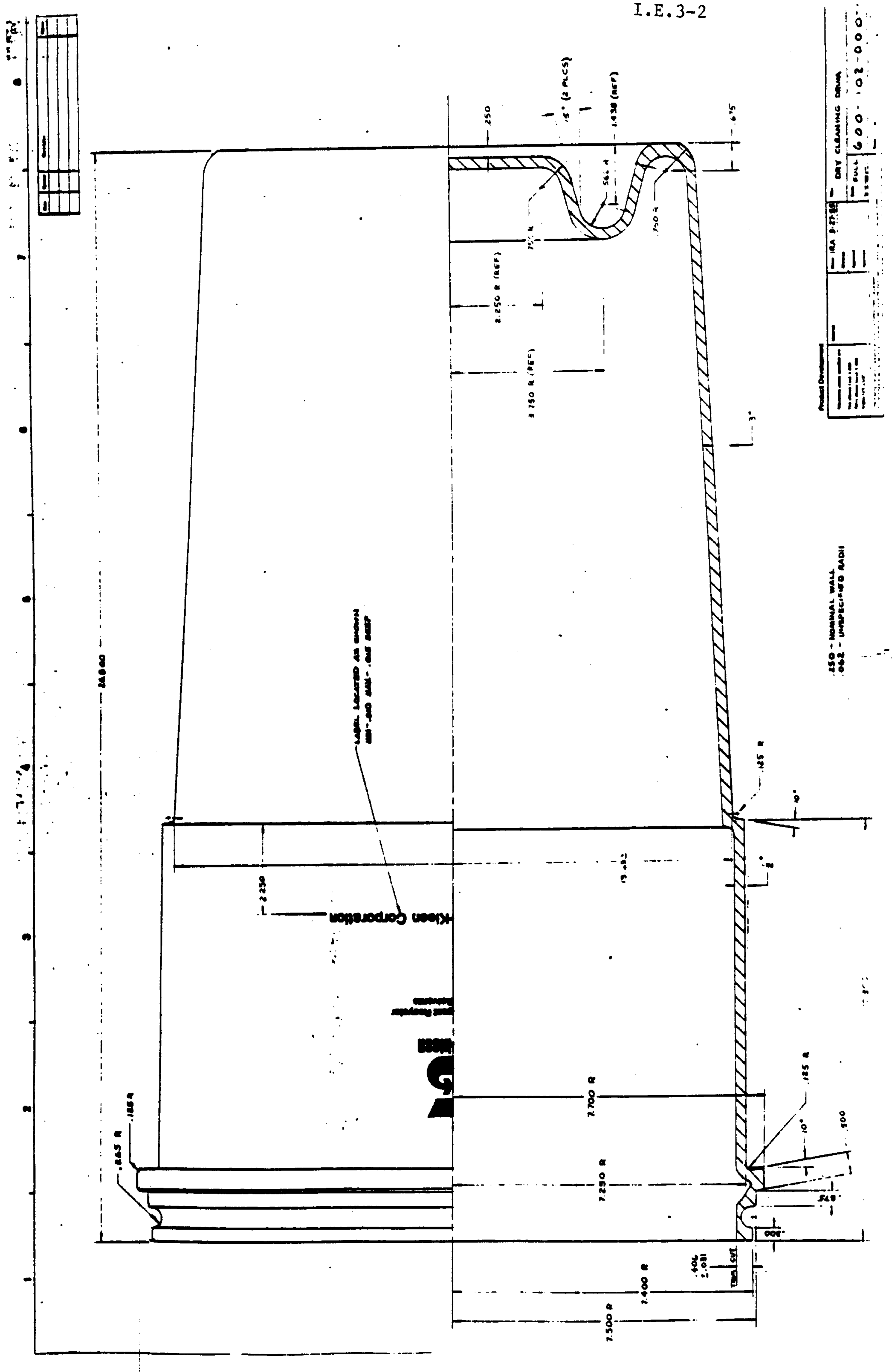
DRAWING SCALE: 3/8" = 1"

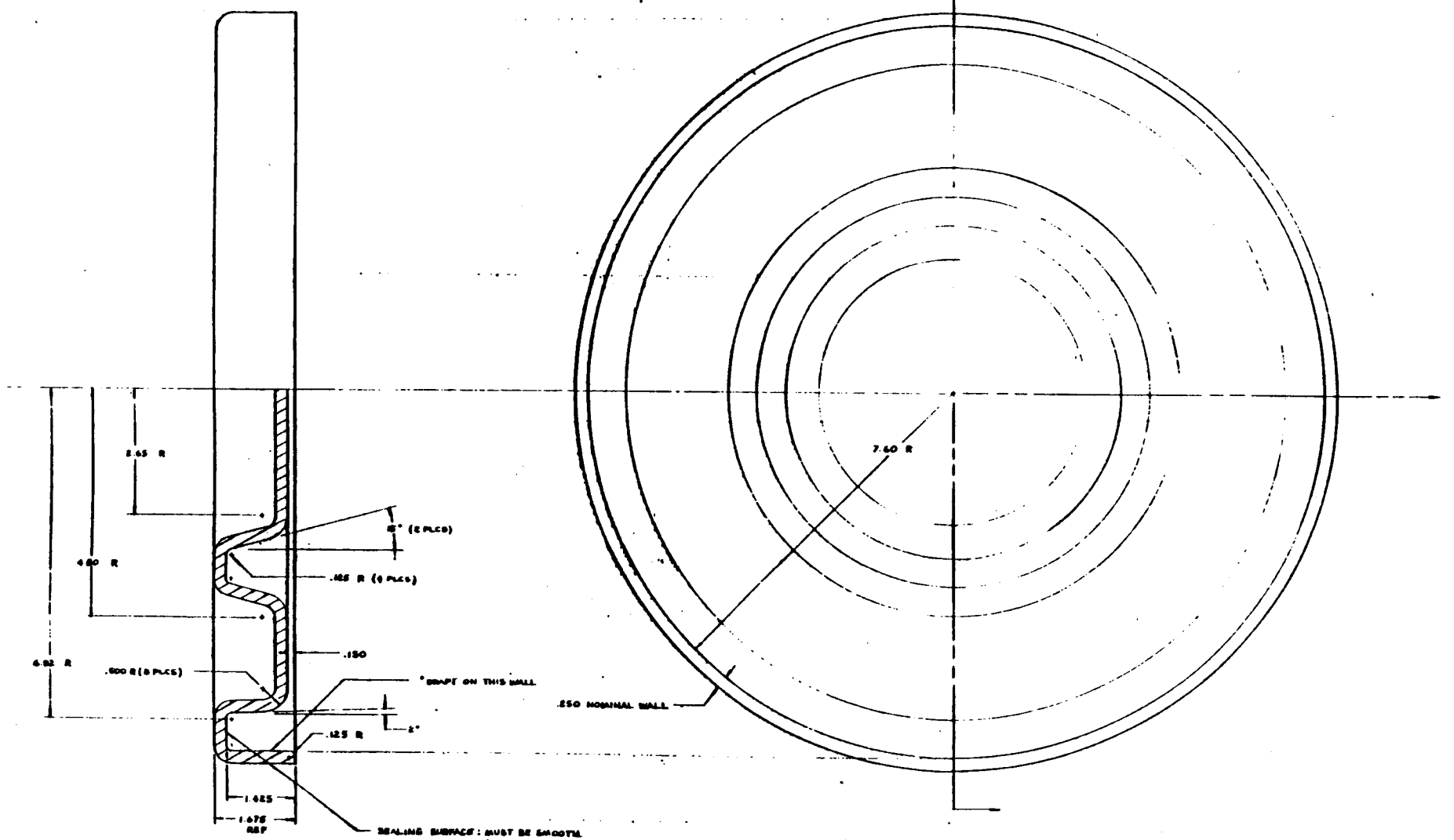


- SECTION A-A -

I.E.3-1

16 GAL. DRUM LID DETAILS
SAFETY-KLEEN PART NO. 3344


DRY CLEANING DRUM
600-102-000
FULL
Product Development
.250 - NOMINAL WALL
.062 - UNSPECIFIED RADII
24.800
2.250
7.700 R
7.250 R
7.400 R
7.500 R
TRIM CUT
.125 R
.125 R
10°
10°
3°
2°
.250
.675
.500
.750 R
15° (2 PLCS)
1.438 (REF)
-Kleen Corporation



I.E.3-2

Product Development

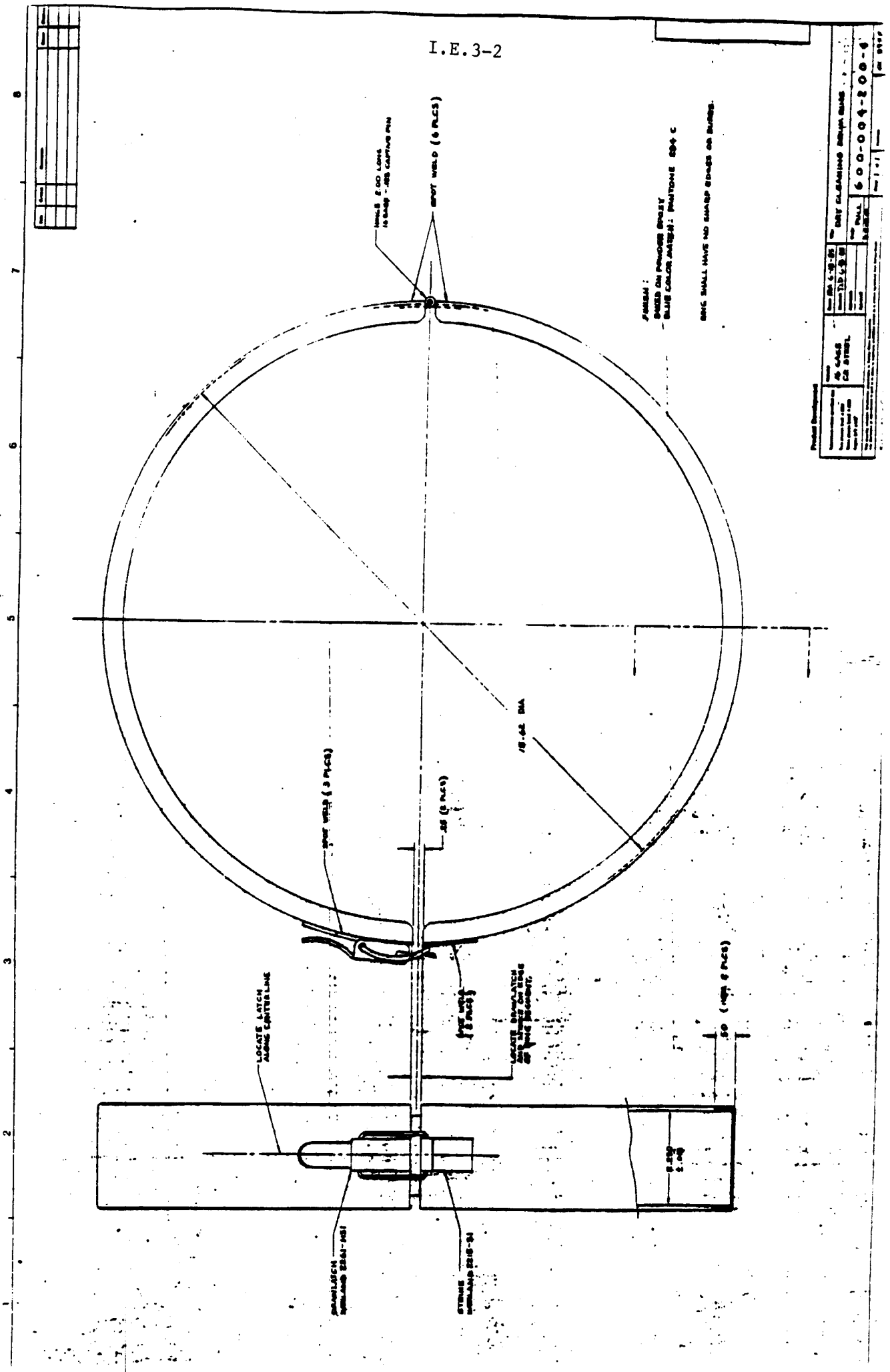
HIGH DENSITY POLYETHYLENE
BLACK SANDSTONE FINISH

DRY CLEANING DRUM COVER

FULL

6 0 [illegible] 0 5 - 1 0 1 - 4

Safety Kleen Corporation 777 Big Timber Road Elgin, Illinois 60120


SPOT WELD (6 PLCS)
LOCATE LATCH ALONG CENTERLINE
SPOT WELD (3 PLCS)
18.44 DIA
600-004-200-4

SAFETY KLEEN CORP.

ENGINEERING CHANGE ORDER

E.C.O. NO: 402

DATE: 4/18/86

PAGE: 1 OF [redacted]

CHANGE: ☐ RELEASE: ☒

REQUESIED BY:		
John Lucks	John Paul Kusz	John Paul Kusz

REASON FOR REQUEST:

New product to replace steel drum

DISTRIBUTION CHART

DESTINATION	E.C.O.	B.O.M.	DWG.	C.N.
PRODUCTION	X	X	X	X
INVENTORY CONT.	X	X		X
Q.C.	X			X
PRODUCT DEV.	X	X	X	X
PURCHASING	X		X	X
MARKETING	X			X
PRODUCT. SUPPORT	X			X

DESCRIPTION:

3302	R	603-001-100-11	Box, Std DC Filt	sheet 1 of 3
		603-001-100-32	Printing Layout	sheet 2 of 3
		603-001-100-33	Assembly Instructions	sheet 3 of 3
3303	R	603-002-100-1	Bag, Std DC Filt Bx	
3307	R	603-003-100-1	Tray, Std DC Filt Bx	
3305	R	603-004-100-1	Tape, Std DC Filt Bx	
3310	R	603-005-100-1	Disp. Filt Bx Tape	

Date	Symbol	Description	Drawn	Checked
4/18/86	--	Released ECO 402	SRT	JPK

BOX -- STANDARD DRY-CLEANING FILTER

Configuration: Die-cut, turkey-fold lock container requiring no taping.

Material: 275-pound-test, double-wall craft glued cartons with Michelman coating for water resistancy.

Size: Inside dimensions to be 16 9/16" x 16 9/16" x 15" deep.

Other Required Features: Container to have instructions for proper assembly on two upper flaps as indicated in Safety-Kleen drawing # 603-001-100-32 (sheet 2) and # 603-001-100-33 (sheet 3).

Qualified Vendor(s): Mack Chicago Container Corp., Chicago, Illinois.

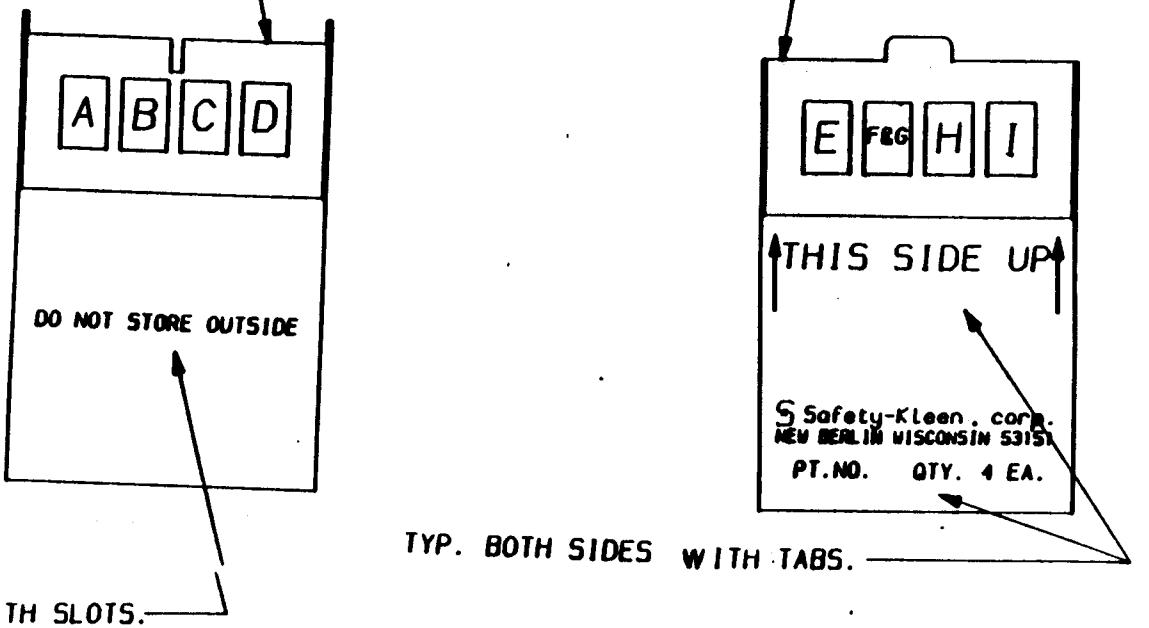
I.E.3-3

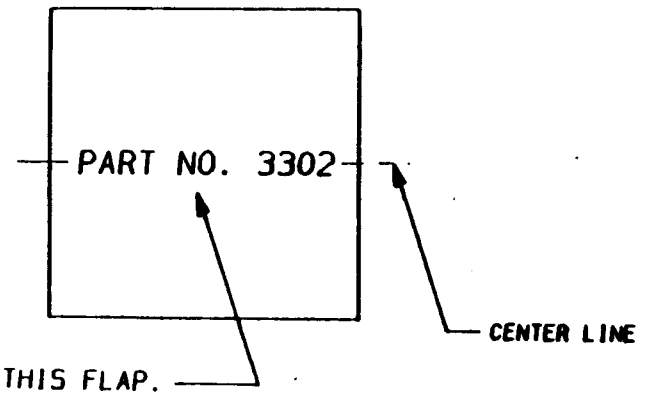
Product Development

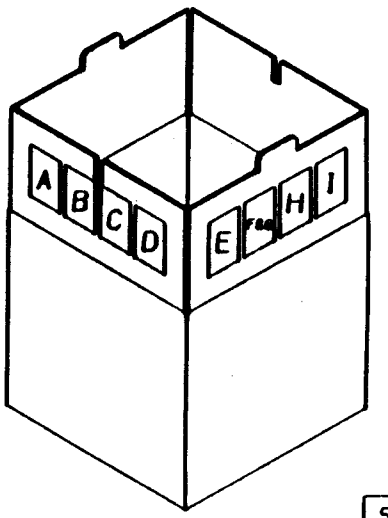
Tolerances unless specified are: Two places (xx) ±.020 Three places (xxx) ±.005 Angles (x°) ±1/2°	Material:	Drawn: SRT Checked: JPK Approved: JPK Approved:	Title: Box, Std DC Filt Scale: Do not scale print	603 – 001 – 100 – 11

Sheet 1 of 3 | Revision: | P/N 3302

REVISIONS				
ECO	REV	DESCRIPTION	DATE	APPROVED
402	-	RELEASED	4-18-86	VPK





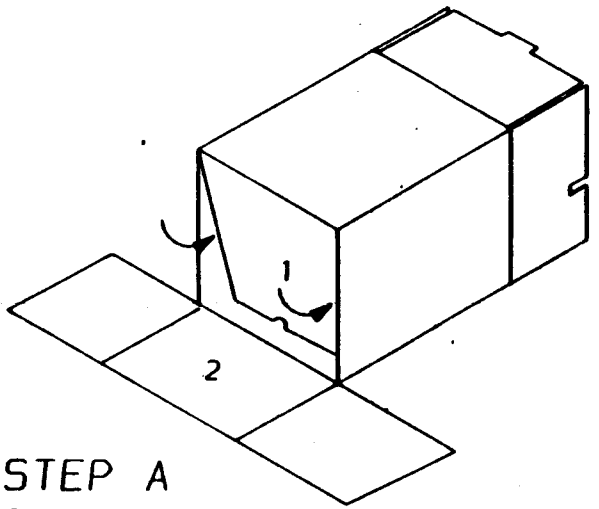


I.E.3-3

603-001-100-32 2 -

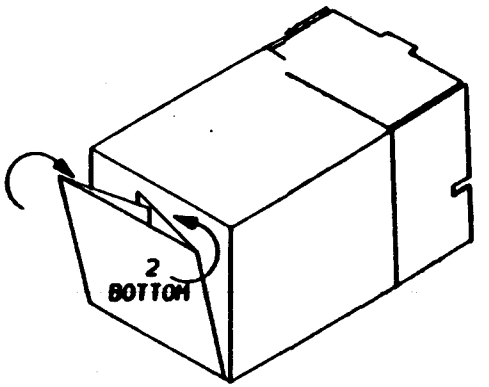
Safety-Kleen Corporation 777 Big Timber Rd. Elgin IL. 60120 (312)697-8460	Product Development	
	BOX, STD. D.C. FILT.	
T. Donowski 3-11-86	C 603	603-001-100-32
NONE	3302	SHEET 2 OF 3

REVISIONS				
ECO	REV	DESCRIPTION	DATE	APPROVED
402	-	RELEASED	4-10-86	JAE



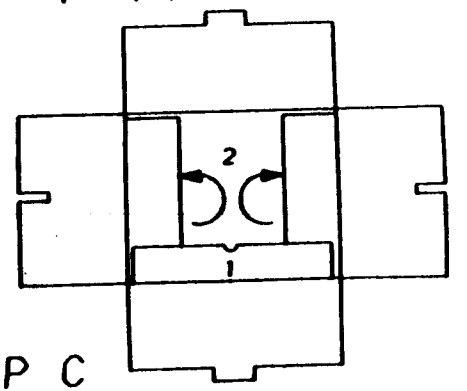
STEP A

SQUARE UP BOX ON ITS SIDE.
FOLD FLAP 1 INSIDE.



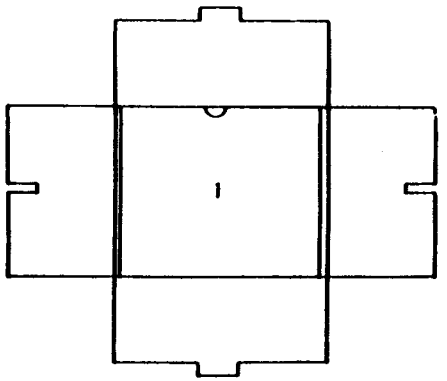
STEP B

FOLD OVER FLAPS ON BOTTOM 2 AND FOLD TO CLOSED POSITION.



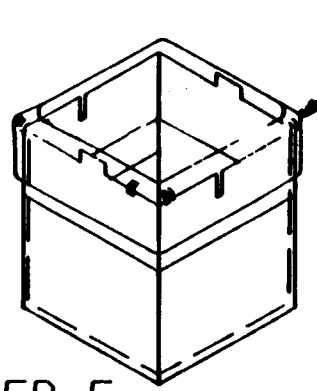
STEP C

LIFT FLAP 1 TO UPRIGHT POSITION THEN PUSH FLAPS ON BOTTOM 2 AGAINST SIDES OF BOX.



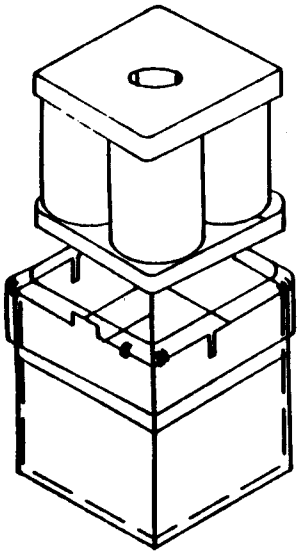
STEP D

PUSH FLAP 1 TO BOTTOM OF BOX.



STEP E

STAND BOX WITH FLAPS UP AND INSERT BAG DRAPING OVER FLAPS.

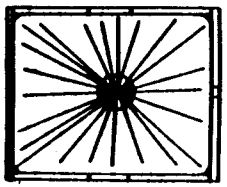


STEP F

INSERT TRAY INTO BOTTOM OF BOX WITH TRAY SIDES FOLDED UP.

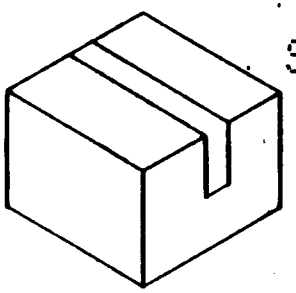
STEP G

DRAIN FILTERS.
PLACE FILTERS INTO TRAY AND COVER WITH SECOND TRAY SIDES FOLDED DOWN.



STEP H

LIFT SIDES OF BAG, TWIST AND INSERT INTO CENTER HOLE OF TOP TRAY TO SEAL.



STEP I

CLOSE BOX AND SEAL SEAM WITH TAPE. OVERLAPPING SIDE AT LEAST 6 INCHES.

603-001-

I.E.3-3

Safety-Kleen Corporation 777 Big Timber Rd. Elgin IL. 60120 (312)697-8460	Product Development		
	BOX, STD. D.C. FILT.		
T. DANOWSKI 3-10-86	C	603	603-001-100-33 -
	NONE	3302	SHEET 3 OF 3

Date	Symbol	Description	Drawn	Checked
4/18/86	--	Released ECO 402	SRT	JPK

BAG -- STANDARD DRY CLEANING FILTER BOX

Configuration: Bags to be made of extruded material with seamless sides. Bottom of bag is to be triple-seamed with heat sealing.

Material: Tri-extruded polyethylene-nylon-polyethylene. 1 3/4 mill polyethylene and 1 mill nylon and 1 3/4 mill polyethylene.

Size: Outside dimensions of the bag shall be 35" wide x 45" long.

Other Required Features: Seaming in the bottom of the bag should be in an area covering the last 1¼" of the bag. There shall be three bar seals in this space covering the entire width of the bag.

Qualified Vendor(s): Vonco Products, Lake Villa, Illinois.

I.E.3-3

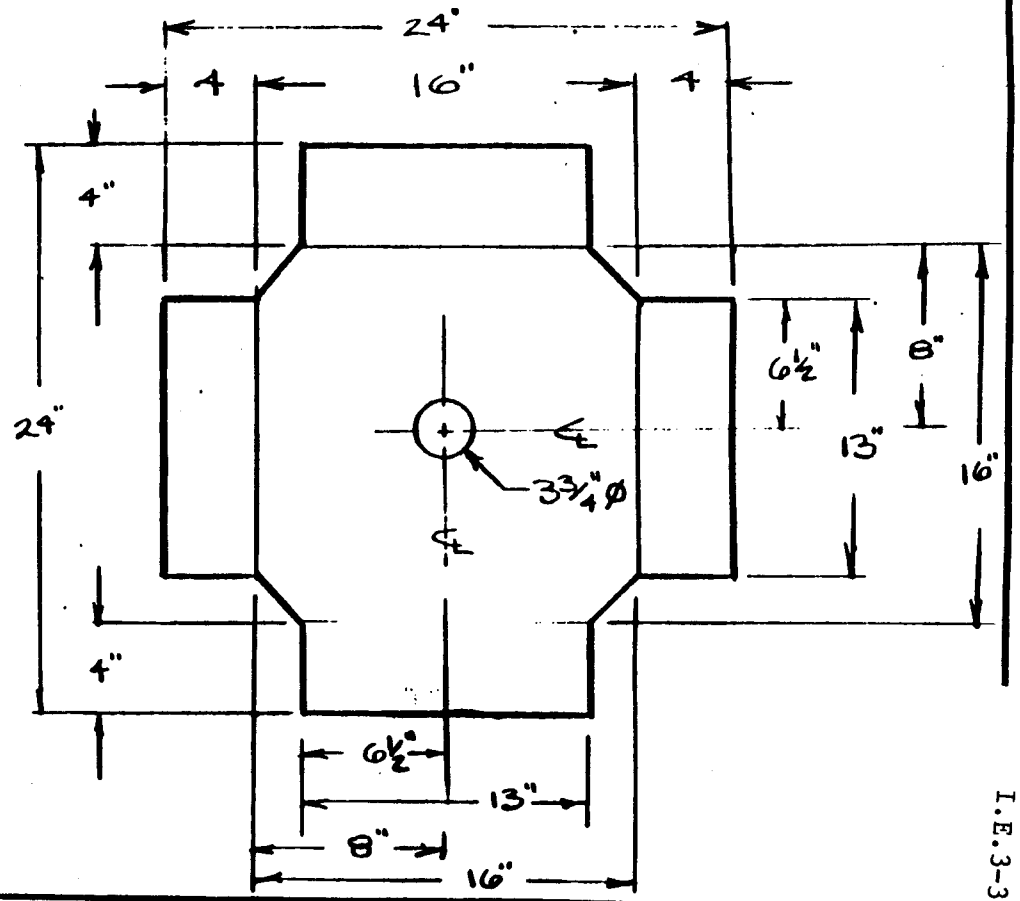
Product Development

Tolerances unless specified are: Two places (xx) ±.020 Three places (xxx) ±.005 Angles (x°) ±1/2°	Material:	Drawn: SRT Checked: JPK Approved: JPK Approved:	Title: Bag, Std DC Filt Bx Scale: Do not scale print	603 — 002 — 100 — 1
This drawing contains information proprietory to Safety-Kleen Corporation. Any disclosure or reproduction in part or in whole is expressly prohibited except by a written agreement from Safety-Kleen			Sheet 1 of 1	Revision: P/N 3303

Safety-Kleen Corporation, 777 Big Timber Road, Elgin, Illinois 60120

Date	Symbol	Description	Drawn	Checked
4/18/86	--	Released ECO 402	JPK	DAL

TRAY -- STANDARD DRY CLEANING FILTER BOX



Configuration: A flat scored tray with broken corners when folded into position, with a 3/34" diameter hole in the center of the tray.

Material: 275-pound-test, C-fluted corrugated.

Size: 16" x 16" x 4" deep.

Other Required Features: Corners of the tray shall be broken so as not to tear the poly-nylon-poly bag into which the tray is inserted.

Qualified Vendor(s): Mack Chicago Container Corp., Chicago, Illinois.

I.E.3-3

Product Development

Tolerances unless specified are: Two places (xx) ±.020 Three places (xxx) ±.005 Angles (x°) ±1/2°	Material: SEE ABOVE	Drawn: Checked: DHL Approved: Approved:	Title: Tray, Std DC Filt Bx Scale: Do not scale print	603 – 003 – 100 – 1

Sheet 1 of 1 | Revision: | P/N 3307

Safety-Kleen Corporation, 777 Big Timber Road, Elgin, Illinois 60120

Date	Symbol	Description	Drawn	Checked
4/18/86	--	Released ECO 402	SRT	JPK

TAPE -- STANDARD DRY CLEANER FILTER BOX

Materials: Filament tape

Size: 2" wide x 110 yards long/roll, 2.1 mil. thick.

Qualified Vendor(s): Elgin Paper Co., Elgin, Illinois. (Vendor's product # 701)

I.E.3-3

Product Development

Tolerances unless specified are: Two places (xx) ±.020 Three places (xxx) ±.005 Angles (x°) ±1/2°	Material:	Drawn: SRT Checked: JPK Approved: JPK Approved:	Title: Tape, Std DC Filt Bx Scale: Do not scale print	603 — 004 — 100 — 1 Sheet 1 of 1 Revision: P/N 3305

Date	Symbol	Description	Drawn	Checked
4/18/86	--	Released ECO 402	SRT	JPK

DISPENSER -- FOR TAPE FOR STANDARD DRY CLEANER BOX

Configuration: 2" tape dispenser

Qualified Vendor(s): Elgin Paper Co., Elgin, Illinois. (Vendor's product # H180)

I.E.3-3

Product Development

Tolerances unless specified are: Two places (xx) ±.020 Three places (xxx) ±.005 Angles (x°) ±1/2°	Material:	Drawn: SRT Checked: JPK Approved: JPK Approved:	Title: Disp, Filt Bx Tape Scale: Do not scale print	603 — 005 — 100 — 1
This drawing contains information proprietory to Safety-Kleen Corporation Any disclosure or reproduction in part or in whole is expressly prohibited except by a written agreement from Safety-Kleen			Sheet of	Revision: P/N 3310

Safety-Kleen Corporation, 777 Big Timber Road, Elgin, Illinois 60120

GAYNES TESTING LABORATORIES, INC.

1642–52 West Fulton Street • Chicago, Illinois 60612 • Area Code 312/421-5257

Member: American Council of Independent Laboratories

March 7, 1986

Safety-Kleen Corporation
777 Big Tiber Road
Elgin, Illinois 60120

Attention: Mr. J.P. Kusz
RE: Transporation Tests on Shipping Container
Our Job No. 86211

Dear Mr. Kusz:

This is to verify the results of Drop and Vibration Tests conducted on Shipping Containers used for Metal Filters.

MATERIAL SUBMITTED:

Six (6) corrugated fibreboard shipping containers, with inside top and bottom trays, and "Plastic" bags.

CONTAINER INFORMATION -

All six (6) identical containers were marked from 1 thru 6.

Size (approximately)	- 17 1/2 x 17 x 15 3/4 inches
Style	- Special Designed type of container, with a interlocking & reinforcing type of bottom flaps, and locking top flaps.
Manufacturer's Joint	- Glued
Closures	- Top Flaps Taped
Inner Packing	- Corrugated Fibreboard Material top and bottom trays, and a "Plastic" bag.
Contents	- Four (4) Metal Filters

GAYNES TESTING LABORATORIES, INC.

Container Set-Up:

1. Four (4) Filters drained for 1 hour
2. One (1) assemble container
3. One (1) Plastic Bag placed in the container
4. A bottom tray was placed in the plastic bag
5. The four (4) filters were placed in the bag and in the tray
6. The top tray was placed over the four (4) filters
7. The plastic bag was closed and the twisted end was stuffed in a center hole of the top tray
8. The top flaps of the container were closed and taped with 2" plastic tape.

Test Procedure & Results:

Drop Test -

Using a Gaynes Free Fall Drop Tester, each container was subjected to three (3) drops from a height of 12 inches as follows:
1st. Drop flat on the Bottom, 2nd. Drop on a Bottom edge and 3rd. Drop on a Bottom corner.

Results - All containers ok; no immediate indication of leakage.

All six (6) containers were stored for 48 hours to determine if leaking would develop during that period.

Inspection after 48 hours indicated that containers no. 4 and no. 5 were leaking. This leakage in each package was caused by a small tear in the plastic bag. (See Photo no. 1).

Rotary Motion Vibration -

The four (4) remaining containers were placed in their normal upright shipping positions on the table of a Gaynes Rotary Motion Vibration Tester having a table displacement of 1.0 inch (See Photo no. 2). With the containers side by side and one end against the back stop, the machine was activated and the speed was increased until it was possible to move a 1/16 inch steel shim about 4 inches between the bottom of the container and the table surface. This occurred at a frequency of 220 rpm. After 15 minutes, the machine was stopped and the packages were inspected, and then were rotated 90° for a 2nd. 15 minutes of vibration at 220 rpm.

Results - All containers ok; no indication of leaking.

GAYNES TESTING LABORATORIES, INC.

Vertical Linear Vibration-High Displacement

The four (4) containers were placed in their normal up-right shipping positions on the table of a Gaynes Vertical Linear Vibration Machine having a table displacement of 1.0 inch (See Photo No. 3). The machine was activated and the speed was increased until it was possible to move a 1/16 inch thick steel shim 4 inches between the bottom of the container and the table surface. This occurred at 278 rpm. The containers were vibrated for 30 minutes.

Results - All containers ok; no indication of leaking.

Vertical Linear Vibration - Low Displacement

The containers were moved to a L.A.B. Vibration machine and were positioned in their normal upright positions on the table. The table displacement was set for 0.1 inch. (See Photo no. 4). The machine was activated and the speed was increased until a resonant frequency was reached. This occurred at 840 rpm (14 Hz.) The containers were vibrated for 30 minutes at this speed.

Results - All containers ok; no indication of leaking

Drop Test -

The containers were moved to the Drop Tester and subjected to six (6) additional drops from a height of 12 inches in the following order: (See Photos no. 5,6, & 7).

1st. Drop on a Top Corner, 2nd. Drop on a edge radiating from the dropped corner, 3rd. on a 2nd. edge radiating from the dropped corner, 4th. drop on a end, 5th. on a side, and 6th. on the top.

Results - All containers ok; no indication of leaking

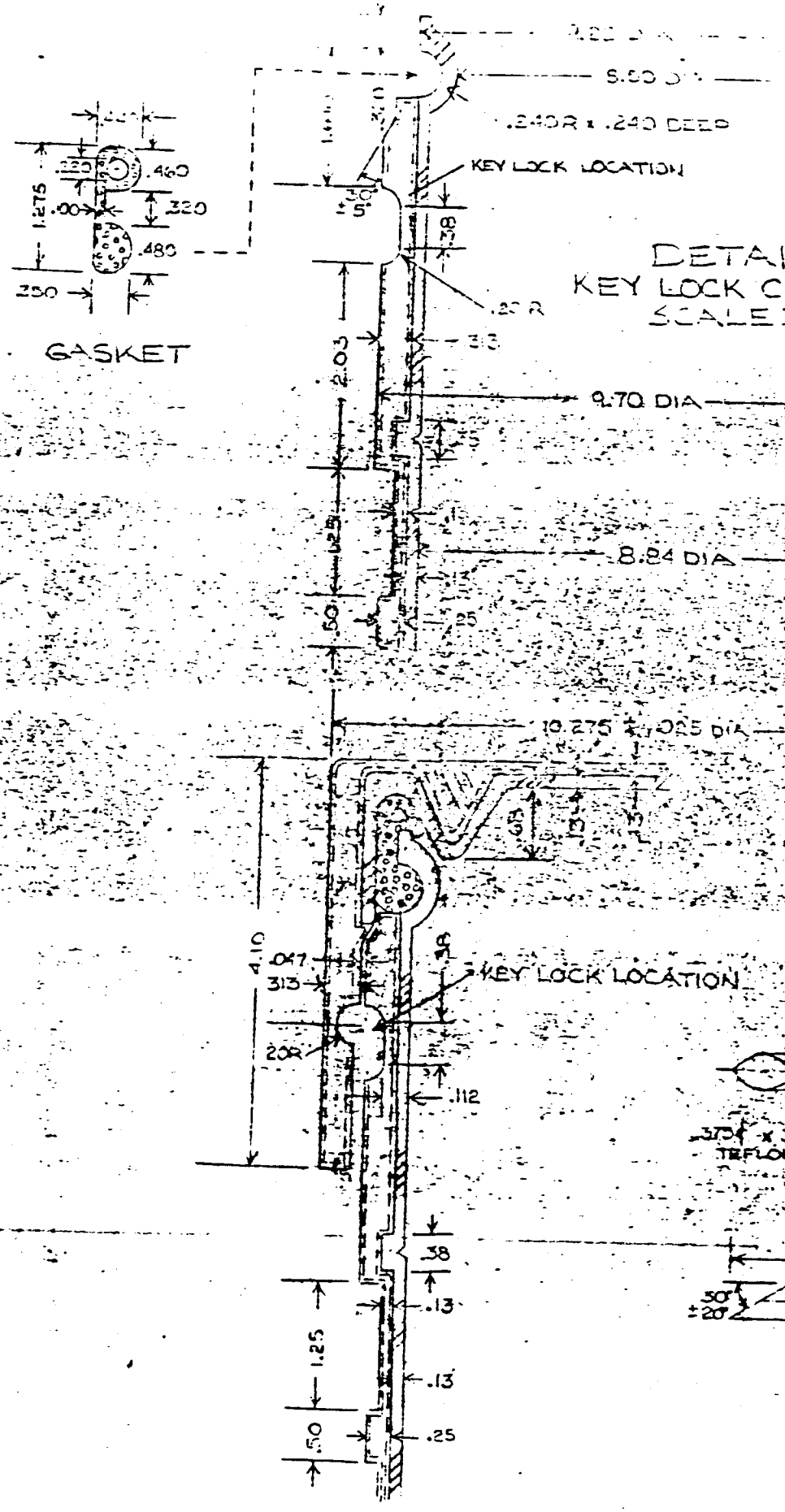
It should be noted that video tape recordings were made of the entire test and the tapes were submitted to Safety-Kleen, Inc.

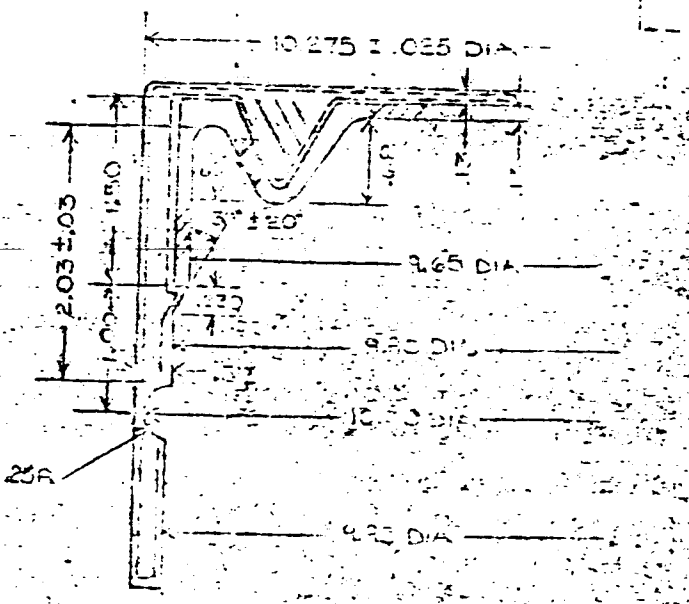
Should you have any questions regarding the testing conducted, please contact us.

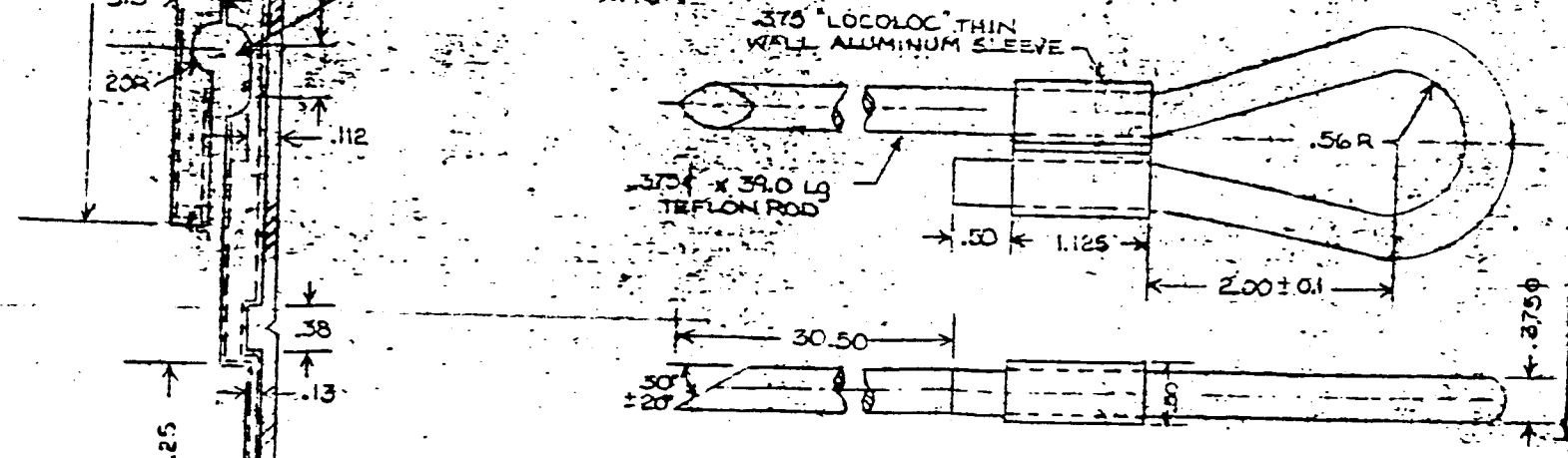
Very truly yours,

GAYNES TESTING LABORATORIES, I

F.T. Wittenrood

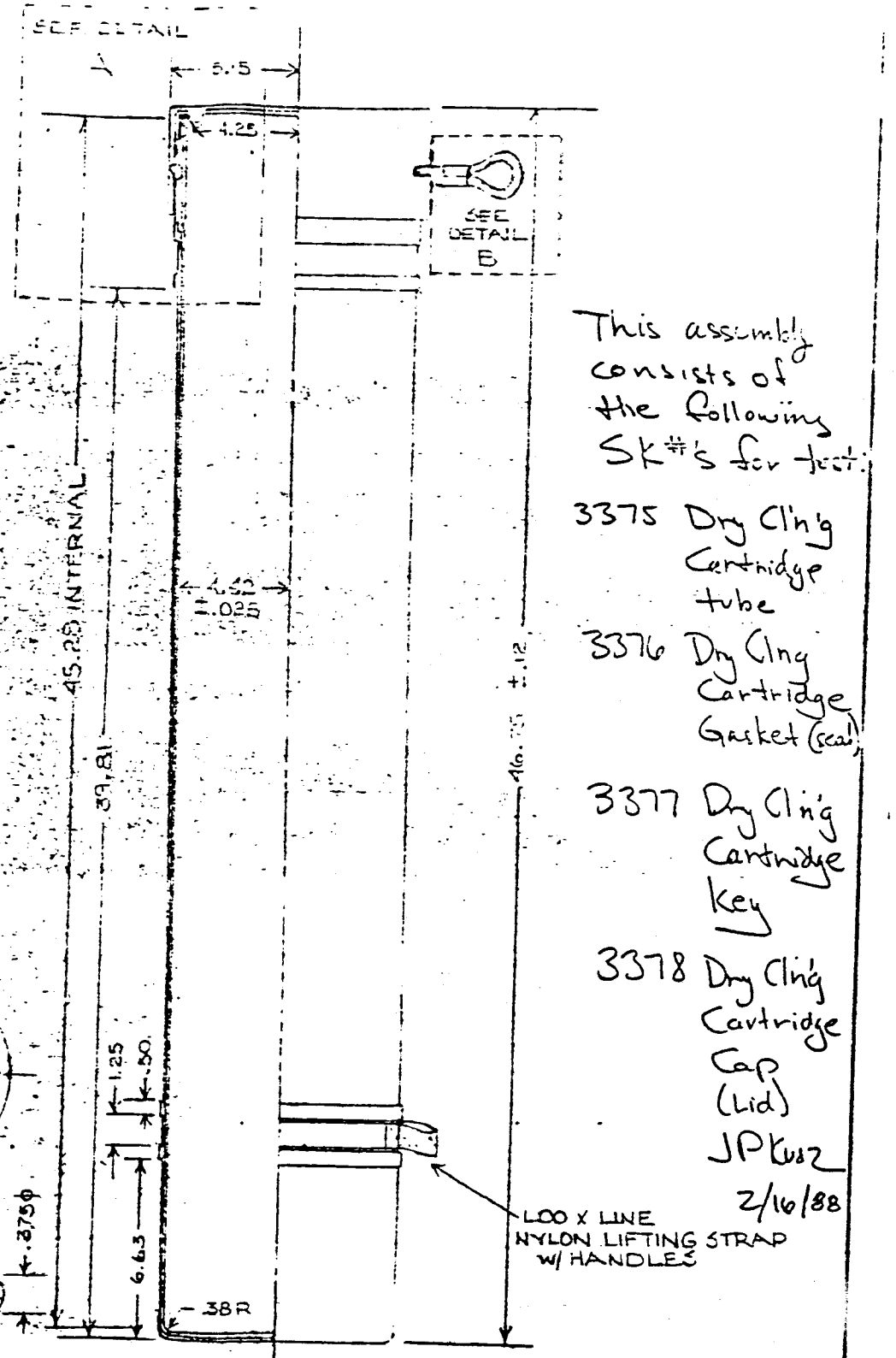






DETAIL B
KEY
SCALE: FULL

PRELIMINARY



This assembly consists of the following SK#'s for test:

3375 Dry Cling Cartridge tube

3376 Dry Cling Cartridge Gasket (seal)

3377 Dry Cling Cartridge Key

3378 Dry Cling Cartridge Cap (Lid)

JPK 2/16/88

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

FRP
P.E.

NO.	CORRECTION	DATE	CHK

BONDICO, INC.

SCALE: 1/4 | APPROVED BY: | DRAWN BY: CC
DATE: 12-0-87 | REVISED:

BONDICO NO. 1 CYLINDER

SAFETY-KLEEN | DRAWING NUMBER

605 DEV-TEST

I.E.3-4

BONDICO

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.

Bondic [redacted] nc.
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

PAINT WASTE CONTAINER

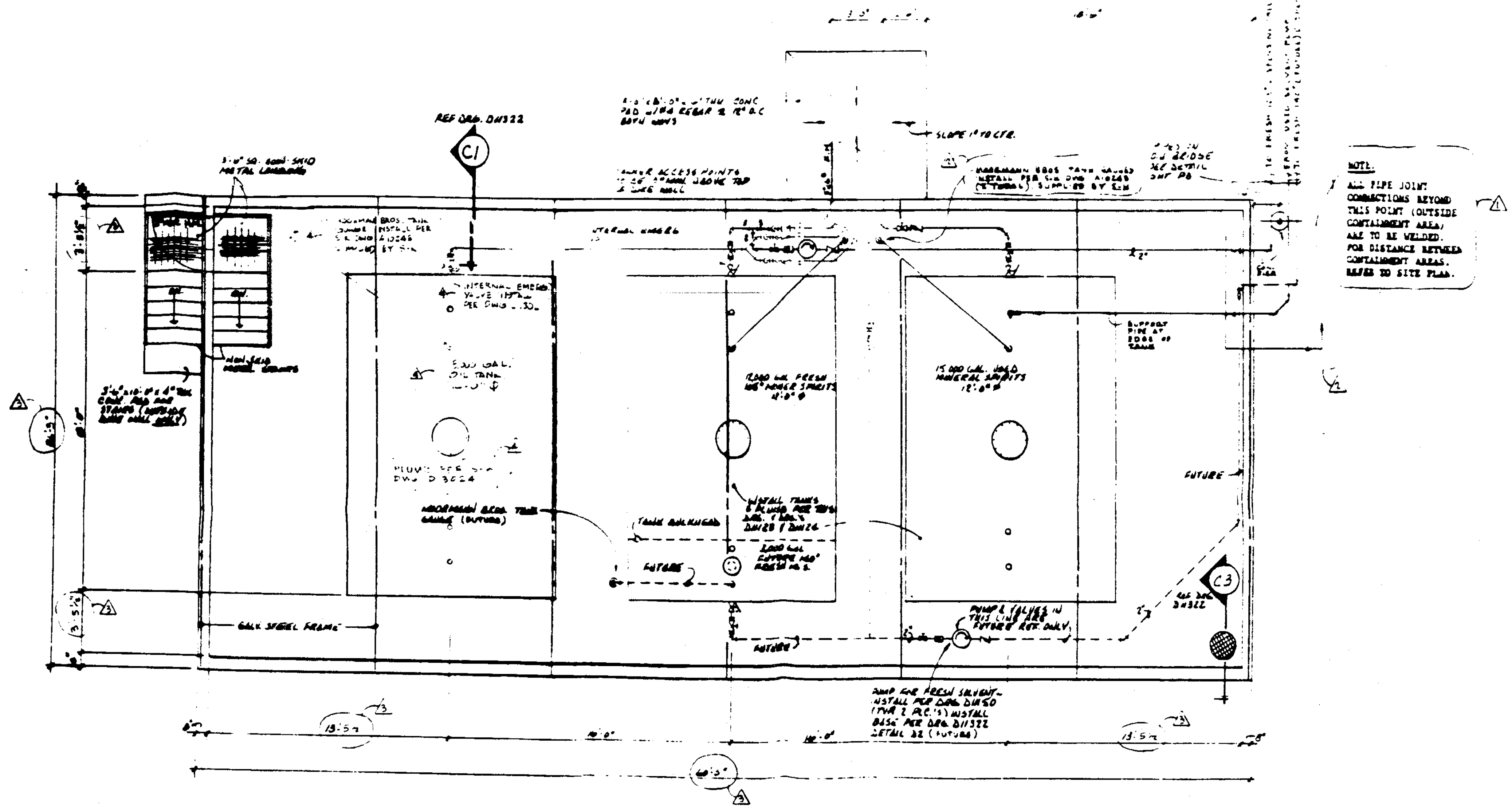
SPECIFICATIONS

The empty 5 gallon pail is ordered under Safety-Kleen part number 9986, per the following specification:

> 5 gallon, 24 gage steel tighthead pail, black exterior, rust inhibited interior, DOT17E, with handle and 2" flange and plug.
>
> 11" outer diameter x 13-19/32" high

The current empty 16 gallon drum is ordered under Safety-Kleen part number 3362, per the following specification:

> 16 gallon, 19 gage steel closed head drum, with 2" bung and 3/4" bung, per DOT17E
>
> 14-7/8" outer diameter x 26-7/8" high



DIKE VOLUME CALCULATION

DIKE VOLUME 25'-2" x 58'-6" x 3'-0"
4429 ft³ x 7.48 GAL'S./ft³ = 33,130 GAL'S.

TANK DISPLACEMENT VOLUME
AREA OF THE SEGMENT (A) x LENGTH OF TANK (16'-0")

$A = R^2 \cos^{-1} d/R - d\sqrt{R^2 - d^2}$

R = 6'-0"

h = (3'-0") - (0'-6") = 2'-6"

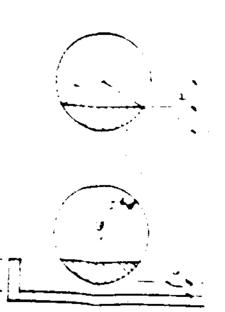
d = (6'-0") - (2'-6") = 3'-6"

A = 17.032 ft²

DISPLACEMENT VOLUME = (17.032 ft²)(2 TANKS)(18'-0")
= (613.15 ft³)(7.48 GAL'S./ft³)
= 4,586 GAL'S.

VOLUME LARGEST TANK = 15,000 GAL'S.

DIKE CONTAINMENT VOLUME	33,130 GAL'S.
DISPLACEMENT VOLUME	- 4,586
	28,544
VOLUME LARGEST TANK	- 15,000
TOTAL EXCESS	13,944 GAL'S.



TANKFARM PLAN

SCALE 1/4"=1'-0"

NOTE
ALL DWG'S SUPPLIED TO CONTRACTOR CONTAINING S-K PART # REFERENCES THOSE ITEMS WILL BE SUPPLIED BY SAFETY-KLEEN.

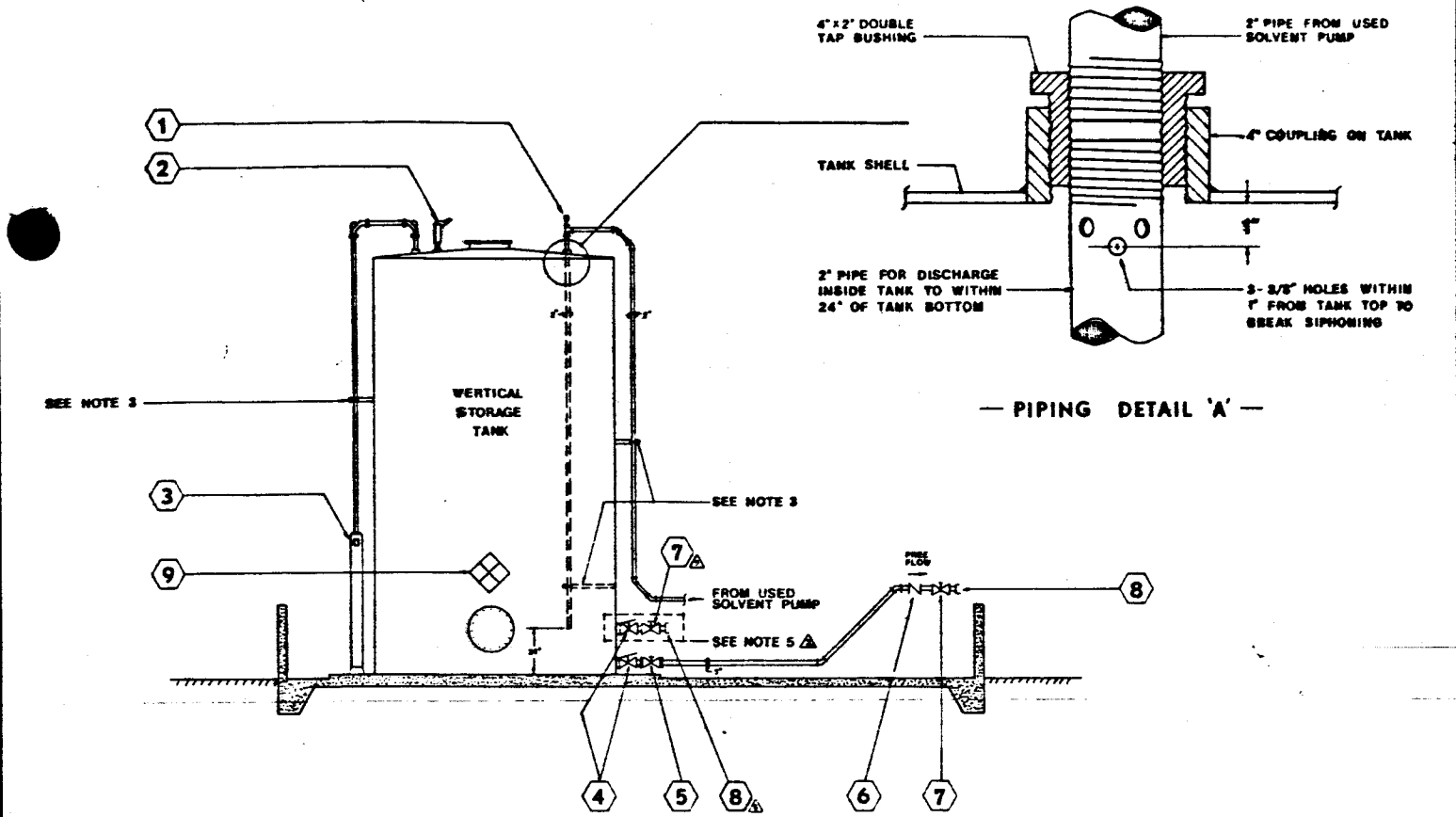
4 ADDED 15,000 GAL. O. TANK

safety-kleen corp.
777 BIG TIMBER ROAD • ELGIN, ILLINOIS 60120

TANKFARM PLAN — P4

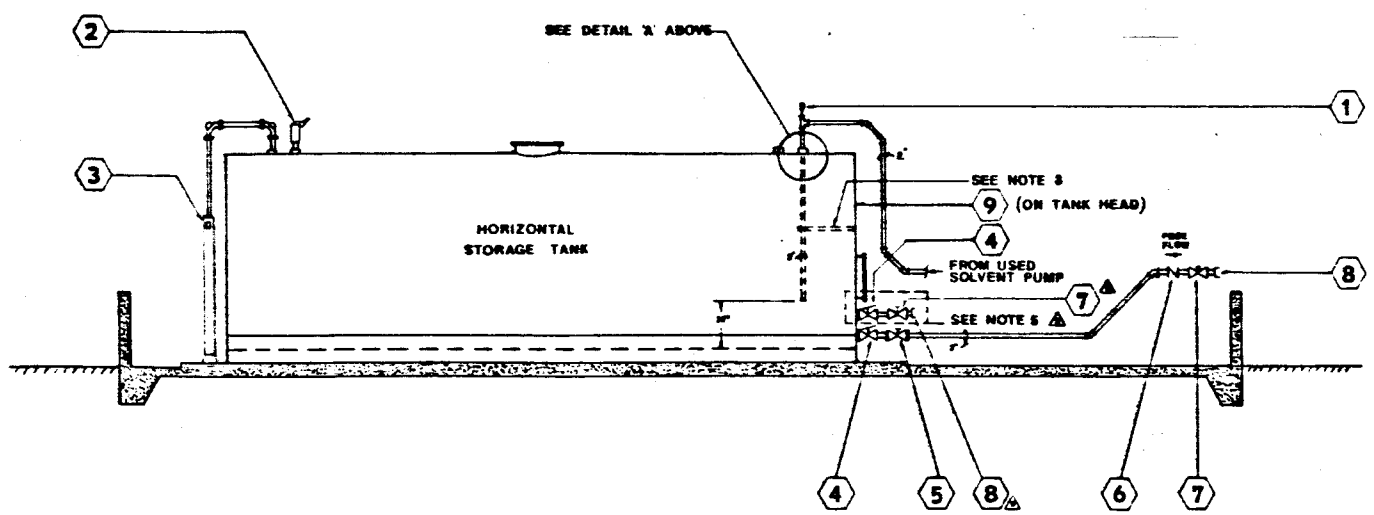
		REVISIONS	BY	DATE
SCALE	1/4"=1'-0"			
DATE	5-22-87	1 ADDED NOTE	C.S.	9/11/87
DR BY	RD	2 MOVED PIPE BRIDGE & MAHRMANN BROS TANK GAUGES	C.S.	10/29/87
AP'VD		3 CHANGED TANK FARM SIZE	C.S.	11/18/88

TITLE: SERVICE CENTER BRANCH
BOYNTON BEACH FL (2-077-00) — D14055



— PIPING DETAIL 'A' —

— VERTICAL INSTALLATION —



— HORIZONTAL INSTALLATION —

— EQUIPMENT / FIXTURE SCHEDULE —

MARK	SIZE	DESCRIPTION	SK PART NO.	REMARKS
1	3/8"	3/8" AUTOMATIC VACUUM BREAKERS MORRISON BROS. FIG. 134-A	5274	—
2	2"	2" SCREWED PRESSURE/VACUUM VENT MORRISON BROS. FIG. 548 (2 OZ. PRESSURE - 1 OZ. VACUUM)	5273	—
3		TANK GAUGE - MOORMAN BROS. MODEL NO. 7-S	5277	SEE INSTALLATION DETAILS ON SAFETY-KLEEN DWG. A10243
⬡				
4	3"	3" INTERNAL EMERGENCY VALVE MORRISON BROS. FIG. 272-HO W/212°F FUSIBLE LINK	5267	SEE INSTALLATION DETAILS ON SAFETY-KLEEN DWG. C11302 △5
5	3"	3" DUCTILE IRON GATE VALVE W/ROUND FLANGED ENDS - MORRISON BROS. FIG. 234-DI	5276	SEE INSTALLATION DETAILS ON SAFETY-KLEEN DWG C11302 △5
6	3"	3" BRONZE CHECK VALVE - MORRISON BROS. FIG. 246-A	5266	—
7	3"	3" BRONZE GATE VALVE - MORRISON BROS. FIG. 235-B LOCKING TYPE	5265	—
8	3"	3" ALUMINUM CAMLOCK QUICK COUPLING - MORRISON BROS. MALE ADAPTER PART F W/DUST CAP & CHAIN	5264	COUPLING TO BE INSTALLED SIX (6) INCHES ABOVE & SIX (6) INCHES INSIDE TOP OF DIKE WALL.
△4 9	—	NFPA MATERIAL IDENTIFICATION PLACARD	2452	DISPLAY IN PLAIN SIGHT ABOVE DIKE WALL

— GENERAL NOTES —

1. THIS DRAWING SUPERCEDES SAFETY-KLEEN CORP. DRAWINGS C10235 & C10236.
2. SEE INDIVIDUAL SERVICE CENTER SITE PLANS FOR DIKE DIMENSIONS AND RELATED INFORMATION AND ALSO LOCATION AND ARRANGEMENT OF THESE PIPING DETAILS.
3. ALL PIPING TO BE SCHEDULE 40 GALVANIZED AND BE SUPPORTED EVERY EIGHT (8) RUNNING FEET - CONTRACTOR TO SUPPLY ALL BRACKETS, CLAMPS, ETC. AS REQUIRED FOR SUPPORTING PIPE - ALL EXPOSED THREADS AT JOINTS TO BE PAINTED WITH A RUST RESISTANT EXTERIOR GRADE PAINT. PIPING SUPPORT HARDWARE TO BE UNISTRUT BRAND OR APPROVED EQUIVALENT.
4. ALL DIRECTION CHANGES IN DIRTY SOLVENT LINES TO BE MADE USING A COMBINATION OF 45° ELBOWS OR LONG SWEEP 90° ELBOWS.
△5 △1 5. THIS INSTALLATION TO BE MADE WHERE NEW TANKS ARE TO BE INSTALLED AT ANY LOCATIONS PRONE TO FREEZING. SEE INSTALLATION DETAILS ON SAFETY-KLEEN DWG. C11302
△5 6. ALL ITEMS WITH SAFETY-KLEEN PART NO. REFERENCES WILL BE SUPPLIED TO CONTRACTOR.

NO.	REVISION DESCRIPTION	BY	DATE
△	REMOVED 3" PLUG - ADDED VALVE/CAMLOCK	WLJ	[illegible]
△1	ADDED ITEM 9 TO SCHEDULE & DRAWING	WLJ	11-5-84
△2	ADDED NOTE 6	WLJ	10-25-84
△3	REVISED DETAIL IN NOTE 5 SHOWN ON DWG.	WLJ	12-5-85
△4	ADDED NOTE 5 TO NOTES & TO DRAWING	WLJ	9-30-85

safety-kleen corp. EXHIBIT 2-7

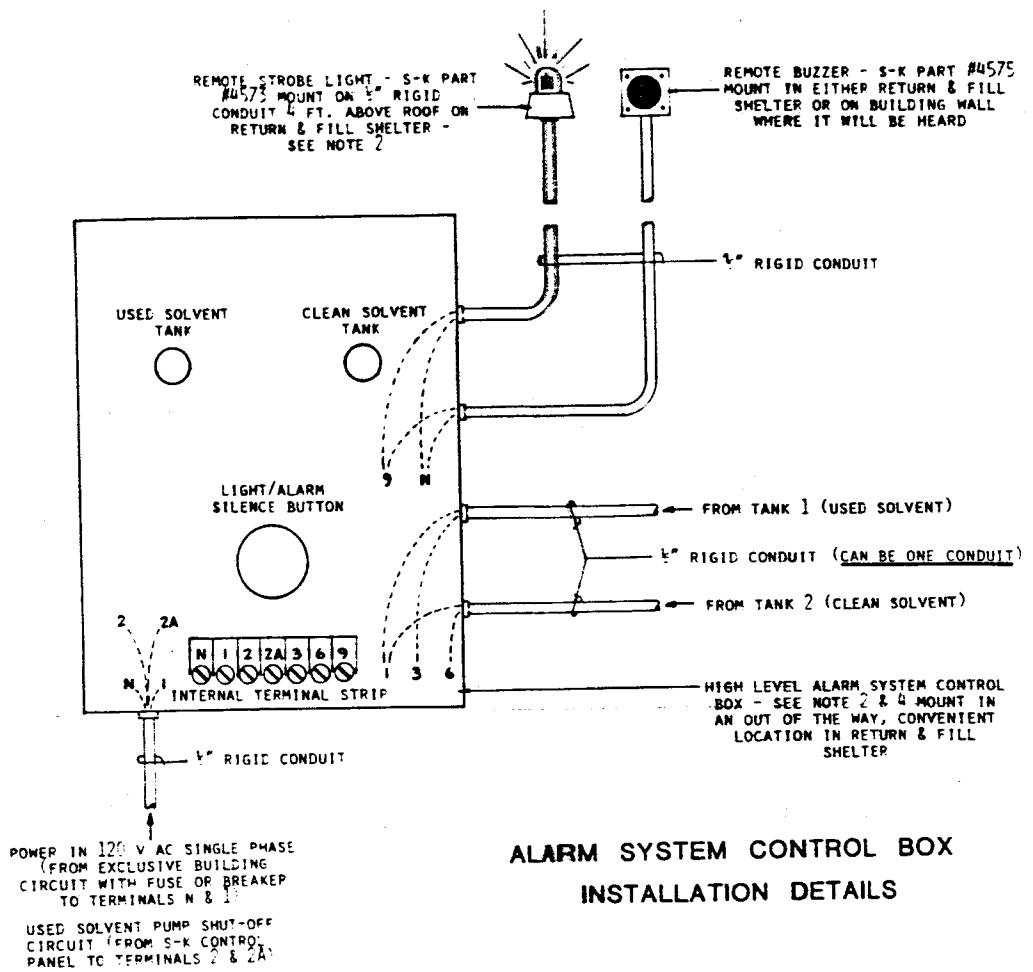
USED SOLVENT STORAGE TANK INSTALLATION DTL'S

SCALE: NO SCALE

DRAWN: WLJ 8-31-83

FOR: SERVICE CENTER BRANCH IMPROVEMENTS & OR CONSTRUCTION

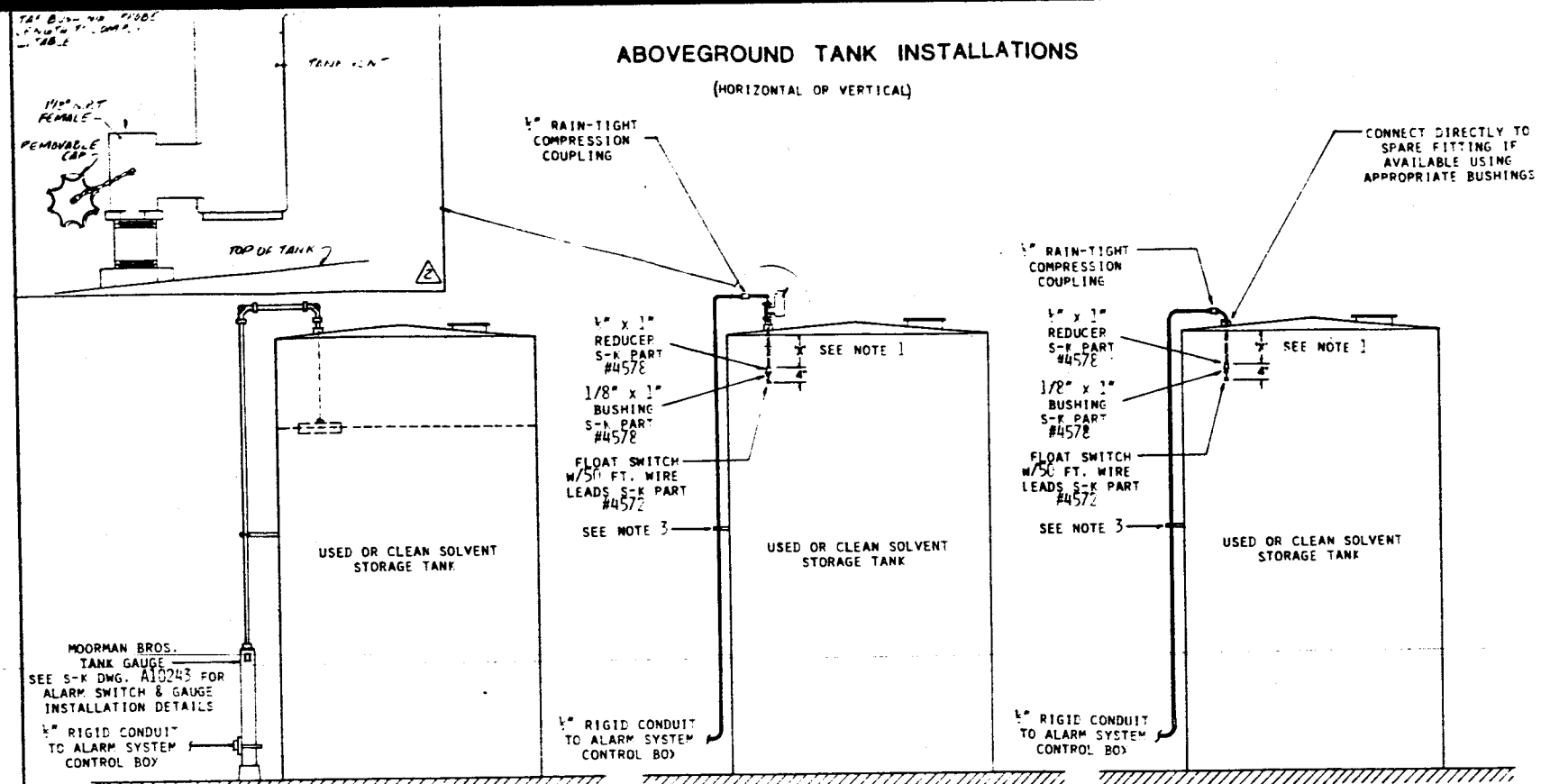
D11124

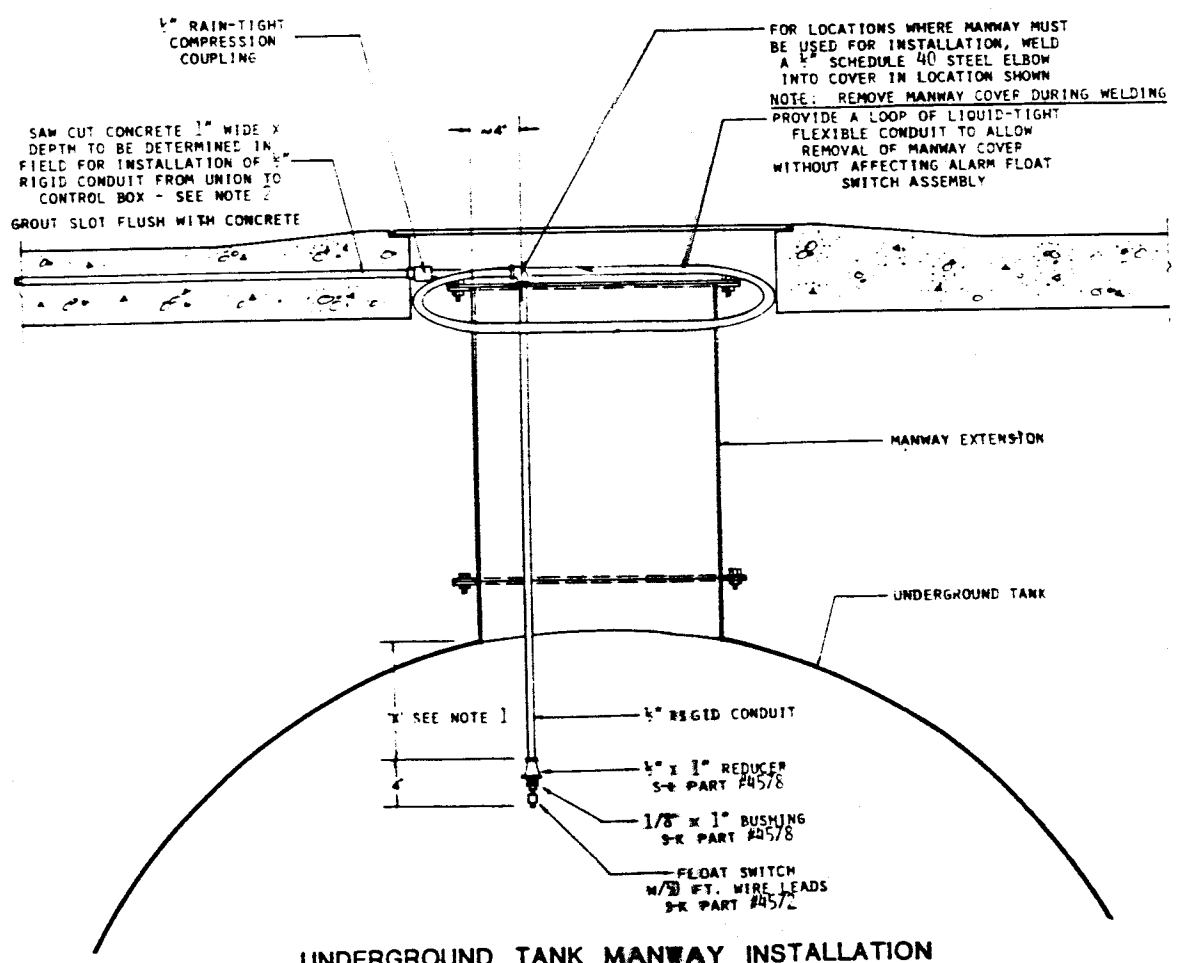


ALARM SYSTEM CONTROL BOX INSTALLATION DETAILS

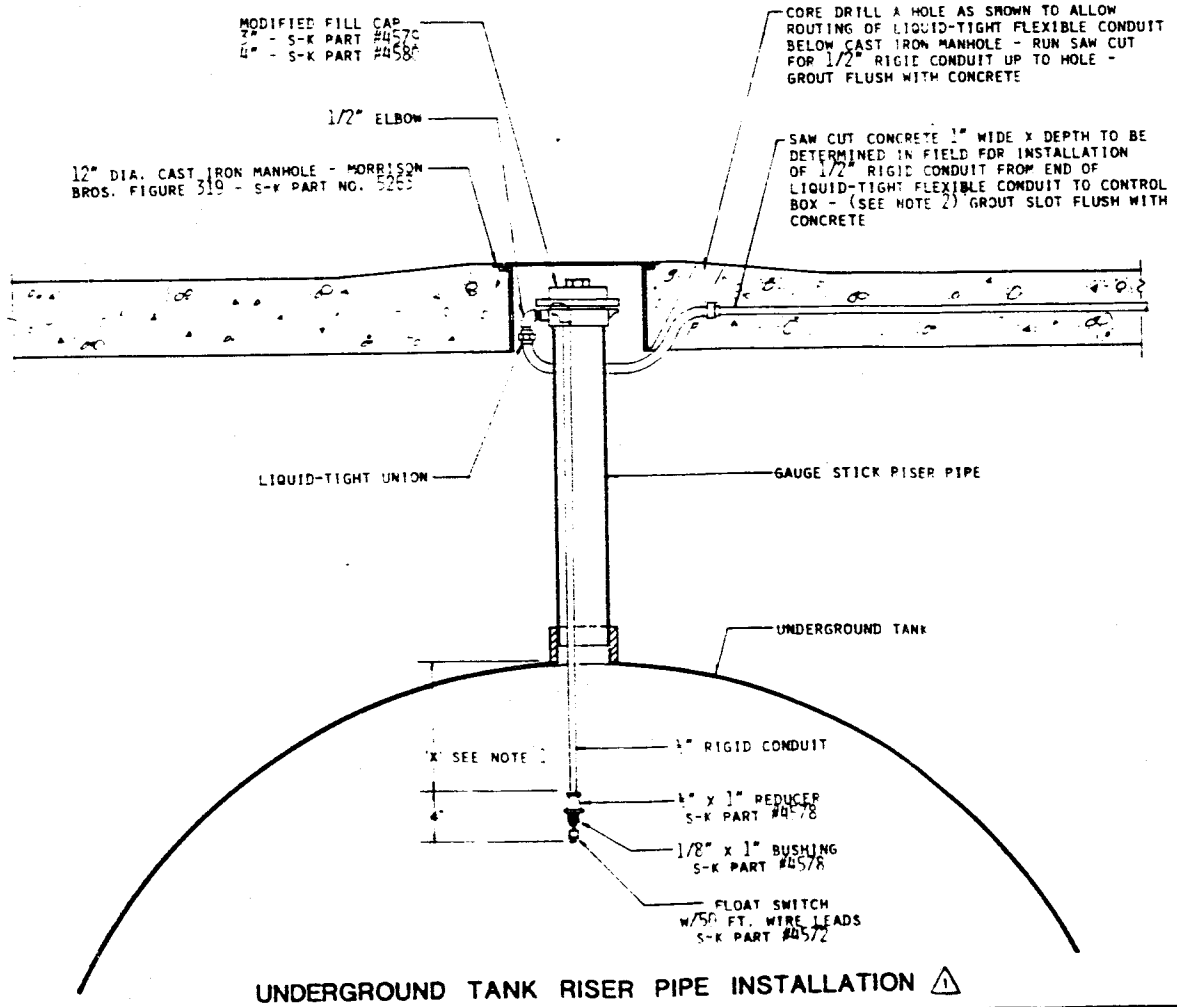
ABOVEGROUND TANK INSTALLATIONS

(HORIZONTAL OR VERTICAL)





UNDERGROUND TANK MANWAY INSTALLATION



UNDERGROUND TANK RISER PIPE INSTALLATION ⚠1

—GENERAL NOTES—

1. THE 'X' DIMENSION SHOWN IS VARIABLE & IS DIFFERENT FOR VARIOUS TANK TYPES & SIZES. FOR TABLE OF THESE VALUES REFER TO SAFETY-KLEEN DWG. D11554.
2. SEE INDIVIDUAL SERVICE CENTER SITE PLANS FOR RELATIVE LOCATIONS OF THESE DETAILS.
3. CONTRACTOR TO SUPPLY & INSTALL CONDUIT SUPPORTS &/OR BRACKETS AS REQUIRED.
4. KITS FOR INITIAL INSTALLATION OF HIGH LEVEL ALARM SYSTEMS ARE AVAILABLE FROM NEW BERLIN THROUGH THE TECHNICAL SERVICES DEPT. AS FOLLOWS:

TANK KIT — S-K PART #4577	
4	FLOAT SWITCHES W/COUPLING & BUSHING
1	CONTROL BOX (2 TANK SIZE)
1	STROBE LIGHT
1	BUZZER

TANK KIT — S-K PART #4577	
4	FLOAT SWITCHES W/COUPLING & BUSHING
1	CONTROL BOX (4 TANK SIZE)
1	STROBE LIGHT
1	BUZZER

5. THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.
6. ALL ITEMS SHOWN WITH A SAFETY-KLEEN PART NUMBER WILL BE SUPPLIED BY SAFETY-KLEEN CORP.
7. IF INDIVIDUAL SERVICE CENTER CONDITIONS ARE NOT COVERED BY DETAILS SHOWN HERE, PLEASE CONTACT TECHNICAL SERVICES AT THE CORPORATE OFFICE FOR ASSISTANCE.

REV	DESCRIPTION	BY	DATE
⚠	ADDED TANK TEXT DETAIL	WLJ	10-26-94
1	REVISED U.G. TANK RISER INSTALL'N	WLJ	6-26-94

safety-kleen corp.

HIGH LEVEL ALARM SYSTEM INSTALLATION DETAILS

FOR: SERVICE CENTER BRANCH IMPROVEMENT

NO SCALE

WLJ 6-26-94

D11533

—TABLE OF VARIABLE 'X' DIMENSION—

ABOVEGROUND HORIZONTAL CLEAN SOLVENT TANKS OR UNDERGROUND HORIZONTAL CLEAN & USED SOLVENT TANKS

CAPACITY (GAL.)	DIAMETER (FT.)												
	4'	5'	6'	7'	8'	9'	10'	10'6"	11'	12'	13'	14'	15'
1000	20"	26"											
2000		14"											
3000		10"	11"										
4000		8"	9"	12"									
5000				10"	12"								
6000				8"	10"								
7000													
8000				6"	6"		14"						
9000													
10000					8"	6"	14"	14"					
11000													
12000					4"	4"	10"	10"					
13000													
14000							6"						
15000							8"	6"	4"				

ABOVEGROUND VERTICAL CLEAN SOLVENT TANKS

'X' DIMENSION (REGARDLESS OF CAPACITY)	DIAMETER (FT.)												
	4'	5'	6'	7'	8'	9'	10'	10'6"	11'	12'	13'	14'	15'
					12"	8½"	6"	5"	4½"	3"	2"	1"	½"

ABOVEGROUND VERTICAL OR HORIZONTAL USED SOLVENT TANKS

NOTE: THE 'X' DIMENSION SHOWN ON S-K DRAWING D11533 FOR ALL ABOVEGROUND VERTICAL OR HORIZONTAL USED SOLVENT TANKS WILL BE 5".

—GENERAL NOTES—

1. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING DRAWINGS & SCOPE OF WORK TO INSURE COMPLIANCE WITH ALL LOCAL, STATE & NATIONAL CODES - ANY ALTERATIONS &/OR ADDITIONS MUST BE RELAYED TO & APPROVED BY TECHNICAL SERVICES AT CORPORATE OFFICE PRIOR TO &/OR DURING INSTALLATION. FAILURE TO COMPLY WITH THE ABOVE WILL RELIEVE SAFETY-KLEEN CORP. OF ANY & ALL RESPONSIBILITIES.

2. WORK THIS DRAWING WITH SAFETY-KLEEN DRAWING D11533 FOR TYPICAL INSTALLATION DETAILS - IF INDIVIDUAL SERVICE CENTER CONDITIONS ARE NOT COVERED HEREIN OR OR DRAWING D11533 PLEASE CONTACT TECHNICAL SERVICES AT THE CORPORATE OFFICE FOR ASSISTANCE.

3. WORK THIS DRAWING WITH SAFETY-KLEEN DRAWINGS BELOW FOR ELECTRICAL SCHEMATICS OF VARIOUS SYSTEMS AS FOLLOWS:

   D11529 - ALARM SYSTEM ELECTRICAL SCHEMATIC FOR TWO TANKS
   D11539 - ALARM SYSTEM ELECTRICAL SCHEMATIC FOR FOUR TANKS

4. LIQUID-TIGHT COMPRESSION OR FLEXIBLE CONDUIT COUPLINGS ARE USED AT CONDUIT CONNECTION TO TANK - TYPICAL - SEE S-K DWG. D11533. THESE ARE REQUIRED FOR SERVICING &/OR REPLACEMENT OF FLOAT SWITCH UNITS AFTER INITIAL INSTALLATION.

   TO REPLACE A FLOAT SWITCH, THE CONTRACTOR SHOULD DISCONNECT THE CONDUIT COUPLING & CUT THE 2 WIRE LEADS. THIS WILL ALLOW REMOVAL OF MANWAY COVER, MODIFIED FILL CAP, COUPLING ADAPTER, ETC. (DEPENDING ON THE TYPE OF INSTALLATION) IN ORDER TO REMOVE OLD FLOAT SWITCH & INSTALL NEW SWITCH. THE NEW 50 FT. LEADS WILL BE PULLED THROUGH TO THE COUPLING AT THIS TIME & UNIT REINSTALLED ON TANK. IT IS AT THIS POINT THAT OLD WIRE LEADS FROM THE COUPLING BACK TO THE CONTROL BOX SHOULD BE TIED TO THE ENDS OF THE NEW WIRE LEADS - THE OLD WIRES WILL SERVE AS PULL WIRES FOR PULLING THE NEW LEADS THROUGH THE CONDUIT TO THE BOX WHERE THEY WILL BE ATTACHED TO THE APPROPRIATE TERMINALS.

5. TESTING OF THE FLOAT SWITCH & SYSTEM IS MANDATORY FOLLOWING INSTALLATION. ACTIVATING THE FLOAT SWITCH DEVICE MAY BE ACCOMPLISHED AS FOLLOWS:

   UNDERGROUND TANKS
   A) PRIOR TO INSTALLING MANWAY COVER ON MANWAY INSTALLATIONS.
   B) BY DRIVING A NAIL OF APPROPRIATE LENGTH CROSSWISE THROUGH THE END OF THE GAUGE STICK OR SIMILAR PROBE AND REACHING DOWN UNDER FLOAT SWITCH ON RISER PIPE INSTALLATIONS.

   ABOVEGROUND TANKS
   A) REACH IN THROUGH MANWAY ON TOP OF TANKS. OTHER METHODS MAY BE USED AT THE DISCRETION OF THE ELECTRICAL CONTRACTOR.

6. THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.

safety-kleen corp.

HIGH LEVEL ALARM SYSTEM INSTALLATION INFORMATION

NO SCALE

WLJ 8-27-94

I.E.4 INSPECTION OF WASTE MANAGEMENT FACILITIES

The purpose of the inspection plan is to establish a procedure and schedule for the systematic monitoring and inspection of hazardous waste management areas and other material management facilities to insure proper operation and maintain compliance. The branch manager or his designate is responsible for carrying out the inspections of all hazardous waste management facilities in accordance with the following procedure and schedule.

Daily inspections of containers consist of the following:

a. Physically examine the container (drum) storage area to verify that there have been no leaks which have occurred since the last inspection.
b. Verify that there are no drums that have been damaged or rusted to the point of near leakage.
c. Replace or adjust damaged, missing or loose fasteners.
d. Examine and verify that all container identification, dates, loading data, hazardous waste labels are attached and current.
e. Inspect containment areas to detect signs of deterioration and failure of the containment system such as cracks, breakage, settlement, spillage.

f. Check container placement and stacking such as aisle space, height and stability of stacks.

Daily inspections of aboveground tanks consist of the following:

a. Check the automatic high level alarm. In addition, measure the liquid level of the solvent in the aboveground tanks in inches to double checking the proper functioning of the automatic alarm system and to determine any unexpected deviation in data or a sudden drop in the liquid level.
b. Inspect solvent dispensing hoses, connections and valves for any leaks, damage or wear that could cause a leak to develop.
c. The hose and unloading pipe should be drained so that all of the solvent is returned to storage.
d. Valves should be inspected for proper seat. Stem leaks from worn glands and warped valve bodies should be repaired. If the valve cannot be repaired, replace the unit.
e. Pumps should be inspected for packing leaks and cool, quiet operation.
f. The inspection of solvent return receptacle (wet dumpster) consists of the inspection for leaks and excess dumpster mud build-up.

The tanks will be periodically inspected and tested. This inspection and testing will involve withdrawal of contents, a squeegie cleaning,

visual inspection, and performance of a leak detection test. Frequency and method of future inspection and testing will be determined based upon results of prior evaluations.

INSPECTION OF EMERGENCY AND SPILL CONTROL EQUIPMENT

A weekly inspection of fire extinguishers must be performed to insure that the tag date has not expired and the units are properly charged and accessible. The unit must be inspected by a fire extinguisher supplier on a yearly basis.

Weekly inspection of eye wash stand must be performed to assure accessibility and operation. The inventory of first aid kit must be checked on a weekly basis.

There must be a weekly check of the supply of spill control equipment (absorbent material) and the conditions and inventory of other emergency equipment (gloves, aprons, goggles, respirators and other personal protective equipment).

INSPECTION OF TRANSPORTATION EQUIPMENT

The purpose of this inspection plan is to establish a procedure and schedule for the systematic monitoring and inspection of the route trucks to insure proper operation and safety of the equipment.

The branch manager or his designate is responsible for the daily

inspection of each route vehicle to insure the proper operation of brakes, lights, turn signals, emergency flashers and wipers. Trucks dispatched from recycle center should also be noted for their operation.

Daily inspection of safety equipment such as sorbent, eyewash, fire extinguisher, first aid kit, and reflector kits on the route vehicles must be performed.

Any equipment that is inoperative or unavailable shall be immediately repaired or replaced.

VERIFICATION OF THE SITE SECURITY AND INSPECTION RECORDS

The facility security (gates, locks) is inspected weekly for any evidence of sticking, corrosion, or uncommon activity. The fence itself is checked for deterioration, gaps under it and broken wire ties.

The facility inspection plan described in the earlier sub-sections of this chapter are summarized in Exhibit I.E.4-1. This exhibit provides a record for the inspection-related activities. These records verify that the facility inspection is properly carried out and corrective actions, when necessary, are taken.

CORRECTIVE ACTION

Any discrepancies or deficiencies found during the facility

inspection must be corrected expediently 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 facility inspection.

AVAILABLE EQUIPMENT AND COMMUNICATION

Due to the small size of the facility, routine communication is usually accomplished by voice; however, an intercom is also available. Telephones are used in case of a spill or fire emergency to summon assistance. Emergency telephone numbers are posted by each phone in the office. Included with these phone numbers is the 24-hour emergency number which connects to the Corporate Environmental Affairs Department in Elgin, Illinois. See Exhibit I.B.3-7 for locations of telephones, fire extinguishers, the first aid kit, and the emergency eyewash. Other emergency response equipment is kept in a small storage area inside the warehouse near the return and 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 Boynton Beach water supply is accessible for domestic use, decontamination, and fire fighting. Adequate aisle space is provided in the drum storage area for ease of

movement in an emergency situation.

The equipment available at the service center for emergency situations has shown to be adequate for most cases. Emergency situations may require the assistance of local or special emergency response teams 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. Air quality surveys conducted by independent industrial hygienists at various service centers have shown that the air quality is within Threshold Limit Values (TLV) as specified by OSHA and no respirator or special protection unit is required.

RESPONSIBILITY FOR PREPAREDNESS AND PREVENTION PLAN

The training of employees for this plan's implementation is the responsibility of the branch manager and the corporate staff. The training program is described in the Personnel Training Plan (Section I.E.5)

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

INSPECTOR'S NAME/TITLE: _____ I.E.4-1

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**

I.E.4-1

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.): _____

I.E.4-1

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)

ATTACHMENT I.E.4-2

EMERGENCY RESPONSE EQUIPMENT

Description	Type/Capacity	Location	Quantities
Fire Extinguisher	ABC (10 lb.)	Warehouse	3
Eyewash	Fountain	Warehouse	1
First Aid		Warehouse	1
Telephone	Standard	Managers Office	1
Telephone	Standard	Secretary's Desk	1
Telephones	Standard	Warehouse	2
Gloves	Rubber	Emergency Equip. Area	1 pr.
Boots (optional)	Rubber	Emergency Equip. Area	1 pr.
Protective Clothing	Apron	Emergency Equip. Area	1/employee
Eye Protection	Goggles/Safety Glasses	Emergency Equip. Area	1 pr.
Sorbent Material	Oil Absorbing	Emergency Equip. Area	1 bale
Shovel	Standard	Emergency Equip. Area	1
Mop & Bucket	Standard	Emergency Equip. Area	1
Pump	Handheld,Electric	Emergency Equip. Area	1
Wet/Dry Vacuum	Portable,Electric	Emergency Equip. Area	1
Water	For Firefighting	Office & Warehouse	N/A

I.E.5 OUTLINE OF TRAINING PROGRAM

Employees are trained to be able to operate or maintain the facility safely, and to give instructions with respect to hazards unique to the employee's job assignment. New employees must complete a introductory training program within six months, with an annual review and update thereafter.

Exhibit I.E.5-1 presents the training program outline which provides the basic training for employees who work with hazardous waste. The same outline is used for both the introductory and the continuing training programs.

I.E.5.b JOB TITLES, QUALIFICATIONS AND DUTIES OF EMPLOYEES

The titles of employees and descriptions of their qualifications and duties are provided in Exhibit I.E.5-2.

Records of type and amount of training received for all personnel are kept until closure. Exhibit 1.E.5-3 the Record of Personnel Training is used to record the training provided for each individual employee. The employee must sign the training form each time training is provided. Signing of the training "record" indicates that the employee has been adequately trained and all questions have been satisfactorily answered.

Signing of the training record by the employee certifies that the employee has been properly trained. This creates an obligation on the part of the employee to comply with the rules and regulations applicable to his activities. Failure of the employee to discharge his duties in accordance with the applicable regulations may result in civil and criminal penalties against the employee.

DESCRIPTION OF THE TRAINING PROGRAM

Type of Training:

Employee training is implemented in two forms: on-the-job and classroom training. Initially the new employee accompanies an experienced employee in his daily activities. This ensures that the new employee is exposed to daily operating procedures and conditions. Classroom training is undertaken by the branch manager with the assistance of Environmental Affairs Department.

Content of Training:

Because of the small size of the facility and limited functions of personnel, all personnel are trained with the same program content, as detailed in the following subsections.

Amount of Training:

a. Introductory Training

Branch Manager - At least eight hours of training at his branch.

Secretaries, Sales Representatives and Warehousemen - On-the-job training for one week. Two hour classroom training by branch manager.

b. Continuing Training

Branch Manager - Two hour classroom training provided by the corporate environmental staff.

Alternate Emergency Coordinator, Secretaries, Sales Representatives and Warehousemen - One day of classroom training provided by the corporate environmental staff.

TRAINING DIRECTOR AND STAFF

Safety-Kleen Corp. provides numerous training activities to its personnel under the direction of the Environmental Affairs Department. Training specific to hazardous waste management is assisted by staff from the Corporate Environmental Affairs Department who are trained in hazardous waste management procedures and familiar with hazardous waste and other environmental regulations. Qualifications of the key personnel carrying out the actual hazardous waste management training activities are attached herewith as Exhibit I.E.5-4.

RELEVANCE OF TRAINING TO JOB POSITION

Employees have available a chemical description and a Material Safety Data Sheet (OSHA Form 20) for each of the solvents they handle. The information on these sheets is also important in case of a release.

If additional solvents and chemicals are added, Product Bulletins and Material Safety Data Sheets are available from the Technical Services Department and are provided to employees.

Personnel are to be made aware of the hazards associated with each waste and taught proper response actions for spills, fires, or accidents. Applicable personnel are familiarized with non-compatible materials, inspection procedures, required recordkeeping (training records, manifests, inspections records, etc.), required reports and pre-packaging and labeling of containers.

PREPAREDNESS, PREVENTION, AND CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Personnel are instructed in the classroom and on-the-job in:

a. contingency plan and emergency response procedure;

b. using, inspecting, repairing, and maintaining emergency and monitoring equipment;

c. key parameters for feed shut-off, facility valving and segregation of tanks;

d. communication and alarm systems;

e. response to surface water and ground water contamination incidents;

f. response to fires, spills, or explosions, and notification procedures;

g. shutdown of operations; and

h. normal operating responsibilities.

The training program includes training in preparedness and prevention. This includes:

a. importance of safety on the job and the use of safety equipment;
b. routine inspections as a prevention tool;
c. separation of ignitable waste from other waste; and
d. use of the manifest system.

The training program includes instructions which teach facility personnel hazardous waste management procedures. Personnel are instructed in general first aid and in procedures for handling products and waste. Personnel receive on-the-job training concerning the storage equipment.

The plant manager is kept informed of current regulations by the Safety-Kleen Environmental Affairs Department. Applicable regulatory information on hazardous waste handling, processing and storage are explained to personnel. Personnel are to be informed of safe operating and correct procedures before handling hazardous materials and wastes.

OTHER SPECIFIC TRAINING ITEMS

Measurement of the volume of solvent in aboveground tanks is done at least once a day to insure timely scheduling of tanker truck deliveries.

Personnel must also inspect solvent dispensing and collecting equipment for leaks, and damage or wear that could cause a leak to develop. If spent solvent tanks are 85% full, a pickup must be immediately scheduled. Any fault observed during inspection must be repaired as soon as possible. Order replacement parts as soon as deterioration or wear is detected.

All personnel must be able to carry out the branch manager's responsibility of the notification procedure for a spill and they must make sure that a spill is cleaned up properly. For assistance in spill cleanup a list of cleanup contractors is supplied in Exhibit I.E.2-1.

The branch manager should also make sure that the facility is generally clean and well ordered; he should see that all spills are cleaned up promptly and that all refuse is placed in the refuse container. No open drums of solvent should ever be left unattended inside or outside.

The branch manager should also inform all of his employees of their anti-pollution responsibilities. These include:

a. Prompt reporting and clean up of any spill.
b. Prompt reporting of any situation which could lead to a spill.
c. Exercise of care in any action during which a spill could occur.

d. The contingency plan must be reviewed with employees every year and records of the training kept at the facility.

Transport drivers will be instructed by the Transportation Manager in the proper handling of the trucks, unloading lines and valves.

All employees are trained to be aware of all potential escape routes during an emergency.

The branch manager and his designate are trained to use the inspection form.

IMPLEMENTATION OF THE TRAINING PROGRAM

New employees must complete a training course within six months of his initial date of employment with annual reviews and updates thereafter. Until they successfully complete training, facility personnel will work only in supervised positions.

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
- Conducting Training Sessions

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.

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

JOB DESCRIPTIONS

REGIONAL MANAGER

JOB DESCRIPTION

The Regional Manager has overall responsibility for the branch operations within a certain geographic area defined by the Corporate Marketing Department. He is responsible for the proper operations and profitability of several (six to eight) service centers in his region.

REPORTS TO:

Divisional Vice President of Sales

QUALIFICATION:

Minimum high school graduate with Safety-Kleen management experience.

PRINCIPAL RESPONSIBILITIES:

1. Plan, direct, and monitor activities of branch managers.

2. Training of branch managers and branch secretaries.

3. Assist branch managers with their administrative and sales activities, when necessary.

4. Monitor sales and inventory figures and report them to the corporate offices.

5. Insure that the facility and equipment are inspected regularly, and necessary repairs or remedial actions are implemented.

6. Represent Safety-Kleen Corp. in local community affairs and public relation activities.

7. Coordinate with corporate Technical Services and Environmental Engineering Departments and implement necessary actions or plans for regulatory compliance.

BRANCH MANAGER

JOB DESCRIPTION

The Branch Manager has overall responsibility for the facility operations and maintenance, and directs sales activities within a certain geographic area defined by the Corporate Marketing Department. He is responsible for the proper operations and profitability of the service center.

REPORTS TO:

Regional Manager of Sales

QUALIFICATION:

Minimum high school graduate with Safety-Kleen sales experience.

PRINCIPAL RESPONSIBILITIES:

1. Plan, direct, and monitor activities of Sales Representatives.
2. Training of sales representatives and other branch personnel.
3. Assist or accompany sales representatives during their sales activities, when necessary.
4. Tabulate daily sales and inventory figures and report them to the corporate offices.
5. Maintain adequate inventory of solvents, allied products, and equipment.
6. Carry out corporate policies and standards regarding facilities, equipment operation and maintenance.
7. Inspect facility and equipment regularly, and implement necessary repairs or initiate remedial actions.
8. Represent Safety-Kleen Corp. in local community affairs and public relation activities.
9. Coordinate with corporate Technical Services and Environmental Engineering Departments and implement necessary actions or plans for regulatory compliance.

BRANCH SECRETARY

JOB DESCRIPTION

Performs duties to assist the branch manager, sales representatives, and customers with billing, scheduling and recordkeeping. Performs secretarial duties at the branch.

REPORTS TO:

Branch Manager

QUALIFICATION:

Attended high school

PRINCIPAL RESPONSIBILITIES:

1. Maintain records in an orderly manner.
2. Assist sales representatives in scheduling services.
3. Insure that all hazardous waste manifests are complete, and manage distribution and filing of copies.
4. Maintain Personnel Training Record files.
5. Maintain Facility Inspection Records.
6. Answer customer inquiries.
7. Manage customer billing.
8. Perform other related duties as assigned.

SALES REPRESENTATIVE

JOB DESCRIPTION

The Sales Representative is charged with the responsibility of generating new business and servicing established accounts within a certain defined geographic area.

REPORTS TO:

Branch Manager

QUALIFICATION:

Minimum high school graduate

PRINCIPAL RESPONSIBILITIES:

1. Maintain his route truck and replenish his products on the truck before beginning his route sales.

2. Contact potential customers for the purpose of selling Safety-Kleen services and allied products.

3. Exchange used solvents with fresh solvent and replenish the inventory of Safety-Kleen's products for existing customers.

4. Make minor repairs of Safety-Kleen's parts washer equipment or lease new equipment to the customer.

5. Prepare the necessary paper work for each service, and bill or credit the customer, as necessary.

6. At the end of each day, return the truck to the branch for cleaning and maintenance, and summarize the day's activities so the branch manager can tabulate the daily figures and forward them to the corporate office.

WAREHOUSEMAN

JOB DESCRIPTION

Performs duties to assist the sales representatives in loading and unloading the trucks. Performs janitorial duties at the warehouse.

REPORTS TO:

Branch Manager

QUALIFICATION:

Attended high school.

PRINCIPAL RESPONSIBILITIES:

1. Maintain warehouse in clean and orderly manner.
2. Assist sales representatives in loading trucks and replacing solvent.
3. Refurbish drums as needed.
4. Park or move trucks as needed.
5. Stock inventory.
6. Replenish trucks with inventory.
7. Perform other related duties as assigned.

PROTECTING YOU AND THE ENVIRONMENT

Training Record for New Employees

Branch Number __/___/__

Branch Manager _____

New Sales Representative _____ Date Hired _____

Module Title	Initials	Date Seen
1. Accidental Product Releases-Transportation & Customer Related		
2. Accidental Product Releases at the Branch		
3. Material Safety Data Sheets - Overview		
4. Material Safety Data Sheets - Safety & Health Related Information		
5. The Manifest		

Certification by the employee that training has been received obligates the employee to discharge his duties in accordance with the training provided. Failure to comply with the requirements established during the training program may result in civil or criminal penalties against the employee.

White Copy - Branch Files
Yellow Copy - Regional Files
Pink Copy - Sales Training and Development

Form ST101

PROTECTING YOU AND THE ENVIRONMENT

Training Record

Module _____ Title _____

Branch Number __/___ ___ ___/___ ___

Branch Manager _____

Sales Representative

Print Name Clearly	Initials	Date Seen

White Copy - Branch Files
Yellow Copy - Regional Files
Pink Copy - Sales Training and Development

Certification by the employee that training has been received obligates the employee to discharge his duties in accordance with the training provided. Failure to comply with the requirements established during the training program may result in civil or criminal penalties against the employee.

RECORD OF PERSONNEL TRAINING

Certification by the employee that training has been received obligates the employee to discharge his duties in accordance with the training provided. Failure to comply with the requirements established during the training program may result in civil or criminal penalties against the employee.

DATE	DESCRIPTION OF TRAINING	JOB TITLE	EMPLOYEE NAME	EMPLOYEE SIGNATURE

RESUME

THOMAS R. HEATON

Position: Environmental Engineer
Environmental Affairs Department - Safety-Kleen Corp.

Education: M.S., Department of Technology & Human Affairs, Sever Institute of Technology, Washington University, St. Louis, MO (1978).

B.S., Zoology & Environmental Affairs, Butler University, Indianapolis, IN (1976).

Employment Experience:

Senior Environmental Specialist, Borden Inc., Columbus, OH, Nov. 1980 - Sept. 1986

Environmental Scientist, Ohio Environmental Protection Agency, Nov. 1978 - Nov. 1980

Additional Training:

Underground Storage Tank Management, Ohio Petroleum Council, Worthington, OH, 1986

Groundwater Contamination Seminar, Center for Energy and Environmental Management (CEEM), Schaumburg, IL, 1984

Uncontrolled Waste Site Workshop, Vanderbilt University continuing education, Indianapolis, IN, 1981

Various seminars on RCRA and Superfund

Publications:

"Public Participation in the National Pollutant Discharge Elimination System in Missouri", M.S. Degree Thesis, Washington University, 1978

"Brine Disposal from the Oil and Gas Industry in Ohio", Ohio EPA, 1980

RESUME

ELLEN J. JURCZAK

Position: Environmental Engineer - Permits Manager
Safety-Kleen Corp.

Education: Master of Business Administration, Loyola University (1984)

B.S. Environmental Engineering, Northwestern University (1979)

Employment Experience:

Environmental Engineer
Safety-Kleen Corp.
July, 1984 - Present

Senior Project Engineer
Ecology and Environment, Inc., Chicago
September, 1980 - July, 1984

Assistant Project Engineer
U.S. EPA National Enforcement Investigation Center
Denver, Colorado July, 1979 - September, 1980

Student-In-Training
U.S. EPA, Chicago
August, 1977 - July 7, 1979

Professional Affiliations:

Professional Engineer, Registered in the State of Illinois

Member of the American Chemical Society

Member of the American Society of Civil Engineers

Additional Training:

Attended the National Conference on Environmental Engineering in 1982 and 1983

Completed an ASCE course on Hazardous Waste Management, 1982

Trained in methods of air, surface water, groundwater and soil sampling

Attended various seminars on RCRA and Superfund

Conducted training of branch personnel:
Kansas City Region, Chicago Region, Detroit Region, and San Francisco Region in September - October, 1985

Participated in training of regional managers, May 1985

Conducted training of Minnesota branch personnel, July 1985

Conducted training of Missouri branch personnel, February, 1985

Conducted training of Hebron Recycle Center personnel, March, 1985

Conducted training of Elgin Recycle Center personnel, November, 1984

RESUME

SUZANNE A. RYAN

Position: Regional Environmental Engineer - North Central Region
Safety-Kleen Corp.

Education: B.S. Chemical Engineering, University of Michigan (1981)

Employment Experience:

Environmental Engineer
Safety-Kleen Corp.
December 1985 - Present

Project Engineer
Ecology and Environment, Inc., Chicago
August, 1981 - December 1985

Associate Chemist
Atlantic Richfield Co., Harvey, Illinois
Summer 1979 and Summer 1980

Professional Affiliations:

Member of the American Institute of Chemical Engineers

Engineer-in-Training; in the State of Illinois

Additional Training:

Attended annual meeting of the American Institute of Chemical Engineers

Attended seminars on underground storage tank regulations in 1984 and 1986

Trained in methods of air, surface water, groundwater, and soil sampling

Attended various EPA seminars on Superfund programs

Conducted training of Regional Managers, August, 1986

RESUME

JEFFREY E. SIMPSON

Position: Regional Environmental Engineer - South Central Region
Safety-Kleen Corp.

Education: B.S. Engineering and Public Policy (B.S. EPP)
Washington University, St. Louis, Missouri, School of Engineering and Applied Science. (May, 1980)
Curriculum Focus: Environmental Engineering and Policy Analysis.

Employment Experience:

Environmental Engineer
Safety-Kleen Corp., May, 1980 - Present

Employed as an Environmental Engineer with responsibility for handling Environmental Affairs in 8 states. Includes training of employees, preparation of contingency plans and regulatory affairs.

Professional Organizations:

Government Refuse Collection and Disposal Association

Additional Training:

Conducted training of Regional Managers, August, 1986

Hazardous Waste Incineration Today, sponsored by Georgia Institute of Technology, February 13-14, 1986

1984 Hazardous Material Spills Conference, sponsored by Association of American Railroads/Bureau of Explosives, Chemical Manufacturers Association, U.S. Coast Guard, U.S. EPA, April 9-12, 1984

1983 Source Reduction Conference, sponsored by Massachusetts Department of Environmental Management, October 13, 1983

1983 Hazmat Conference, sponsored by Pollution Engineering Magazine, July 12-14, 1983

Northeast Conference on Hazardous Waste, sponsored by Environmental Hazards Management Institute, November 9-12, 1982

1982 Hazardous Material Spills Conference, sponsored by Bureau of Explosives, Chemical Manufacturers Association, U.S. Coast Guard, U.S. EPA, April 19-22, 1982

Hazardous Waste Management Technologies and Practices, sponsored by Government Refuse Collection and Disposal Association, March 29-31, 1982

A Review of the Resource Conservation and Recovery Act, sponsored by DOW Chemical Company, October, 1980

Research Experience:

Trash-to-Energy Project - Bi-State Development Agency, St. Louis, Missouri (1979-1980). Involved with project to prepare and implement a trash-to-energy plan for the Bi-State area of Illinois and Missouri.

Center for Technology Assessment and Policy Studies - Rose-Hulman Institute of Technology, Terre Haute, Indiana (1978). Awarded a fellowship to participate in a summer program in Technology Assessment. Studied the tools and methods of technology assessment. A Technology Assessment entitled, "The Impact of the Surface Mining Control and Reclamation Act of 1977 Upon the State of Indiana: An Assessment", was prepared and presented to coal company officials and state and federal officials.

Public Policy Decision-making Under the Delaney Amendment (1978). Compiled and analyzed data relating incidence of carcinogenesis to treatment of laboratory animals with saccarin. Estimated probabilities of carcinogenesis using techniques of Bayesian statistics.

St. Louis County Ambulance Study (1978). Responsible for collecting and analyzing data for a cost-effectiveness study of ambulance service in St. Louis County for the Greater St. Louis Health Systems Agency.

Publications:

The Impact of the Surface Mining Control and Reclamation Act of 1977 Upon the State of Indiana: An Assessment, Center for Technology Assessment and Policy Studies, August 11, 1978. Co-author.

RESUME

ROBERT WACHSMUTH

Position: Regional Environmental Engineer - Western Region
Safety-Kleen Corp.

Education: B.S. Civil Environmental Engineering,
Michigan Technological University (1976)

Employment Experience:

Environmental Engineer,
Safety-Kleen Corp., January 18, 1982 - Present

Senior Environmental Engineer, Ecology and Environment
June 1, 1980 - January 15, 1982

Project Engineer, Aquatechnics, Inc.
September, 1978 - June, 1980

Project Engineer, RJN Environmental Associates, Inc.
March, 1978 - September, 1978

Designer, Illinois Central Gulf Railroad
November, 1976 - March, 1978

Junior Engineer, Dames & Moore
April, 1976 - November, 1976

Registrations and Memberships:

American Society of Civil Engineers
Water Pollution Control Federation

Training Experience:

Underground Tank Storage of Hazardous Materials
Sacramento, California in August, 1984

Seminar on Hazardous Waste Management in Phoenix, Arizona
February, 1983

Hazardous Materials Workshop & Exposition, Cincinnati, Ohio
October, 1982

Hazardous Materials Spill Conference, Milwaukee, Wisconsin
April, 1982

RCRA Training Course, U.S. EPA Region V, Chicago, Illinois
February, 1981

Generators & Transporters Training Course (New England Research), Chicago, Illinois, February, 1981

EPA Field Investigation Team Training Program Ecology and Environment, Chicago, Illinois, July, 1980

Safety and Health in EPA Field Activities, U.S. EPA Region V (Norman Steare and Assoc.), June, 1980

Conducted Recycle Center Manager Training, April, 1986

Conducted Branch Manager and Secretary Hazardous Waste Training in Western Division, September, 1985

Conducted Branch Personnel Training at three (3) branches in Southern California, March, 1984

Conducted Branch Personnel Training in Oregon and Washington, October, 1983

Conducted training of Regional Managers, August, 1986

RESUME

STANLEY A. WALCZYNSKI

Position: Regional Environmental Engineer - Atlantic Region
Safety-Kleen Corp.

Education: Masters in Business Administration, University of Chicago
B.S. Civil Engineering, Bradley University

Employment Experience:

Environmental Engineer,
Safety-Kleen Corp., July, 1985 - Present

Regional Engineer - Environmental Management
Waste Management, Inc., 1982 - July, 1985

Project Engineer
Donohue & Associates, Inc./Warren & Van Praag, 1978 - 1982

Project Engineer/Associate Engineer
PRC - Consoer Townsend, 1974 - 1978

Professional Affiliations:

Registered Professional Engineer in Illinois, Indiana and Kansas

American Society of Civil Engineers (Education Committee Chairman)

American Public Works Association

Additional Training/Seminars:

Hazardous Waste Regulations Course, Government Institutes, 1983

Wetlands Preservation & Conservation Planning, 1980

Hazardous Materials Conference, 1984

Alternate Hazardous Waste Management Conference, 1985

Training Experience:

Conducted training of Branch Managers and Secretaries - Safety-Kleen Corp., August-October, 1985

Conducted environmental training of compliance officers - Waste Management, Inc., 1983 - 1984

Conducted training in public works engineering including emergency response management, 1982 - 1984

Conducted training of Regional Managers, August, 1986

ATTACHMENT I.F

CLOSURE AND FINANCIAL RESPONSIBILITY INFORMATION

I.F.1 INTRODUCTION

The Safety-Kleen Corp. has constructed each service center with the intent that it 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 beyond the year of 2000.

In the event that some presently unforseen circumstance(s) would result in the termination 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 the tank, drum storage area and ancillary 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 the cleaning up of spills and repair/decontamination of the facility or equipment.

An anticipated closure schedule is in Exhibit I.F.1-1. An anticipated maximum waste inventory for the facility is presented in the following section.

MAXIMUM INVENTORIES OF WASTES

a. Aboveground Storage Tank

A 12,000-gallon steel tank for the storage of used mineral spirits solvent (D001, D006, D008).

b. Drum Storage Area:

One 38'x 78' area with a sloped floor and collection sump. The maximum volume stored is 6,912 gallons (432 16-gallon drums).

c. Solvent Return and Fill Shelter:

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

CLOSURE PROCEDURE

1. Drum Storage Area

a. The drum storage area contains drums of used immersion cleaner, mineral spirits dumpster mud, dry cleaning wastes and paint wastes.

b. At closure all the drums will be removed and shipped to a reclaimer, implementing proper packaging, labeling and manifesting procedures. The used solvents 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.

d. The wash water and all other wastes generated in the closure process, after testing whether it is hazardous, will be properly disposed of.

2. Solvent Return and 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 sediment 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 Tank and Associated Piping

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

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

(2) Remove remaining material from tanks and ship the materials to a reclaimer.

(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.

b. PHASE I - OPEN THE TANK

(1) Access to aboveground tanks is obtained by opening manways.

(2) Prior to opening the tanks the personnel should have full face respiratory protection and protective clothing. Once the tanks have been opened they will be provided with positive ventilation. The tanks will then be inspected to determine the approximate quantity and physical conditions of the remaining material.

c. PHASE II - REMOVING WASTE AND CLEANING TANK

(1) Before removing the waste from the tank, all piping and appurtenant equipment will be flushed first with clean mineral spirits followed by detergent solution.

(2) The method to remove the waste material from the tanks will depend on the physical properties and quantities of that material. Prior to any person entering the tank, an effort will be made to remove as much liquid and sludge as possible.

(3) Subsequent to vacuuming the majority of the material from the tanks, it may be necessary to use a high pressure wash system using clean solvent and detergent solution to rinse residual material from the walls and bottom of the tanks. The evacuated material and the rinse solution will be returned to the Recycle Center for reclamation. The quantity of wash fluid used will be kept to a minimum in order to limit the amount of unnecessary material.

(4) Storage tanks are considered confined spaces (i.e., spaces open or closed having a limited means of egress in which poisonous gases or flammable vapors might accumulate or an oxygen deficiency might occur).

(5) Confined space entry requires special operating procedures:

(a) Tanks are to be washed, neutralized and/or purged (where flammable atmosphere is present) prior to being entered.

(b) Supply valves must be closed and "tagged" and bleeder valves left open; or supply piping should be disconnected.

(c) Pumps or motors normally activiated by automatic controls shall be operated manually to be sure they have been disconnected. Instrument power switches should be tagged "Off".

(d) In tanks where flammable vapors may be present, all sources of ignition must be removed.

(e) All tanks must be tested for flammable vapors, toxic gases or oxygen deficiency in that order as applicable. The results of such tests should be displayed on the job site.

[1] In all tank entering situations, an oxygen deficiency test shall be performed prior tank entry.

[2] Under circumstances where "hot work" (welding, burning, grinding, etc.) is to be performed in or on the vessel, a test for combustible gases shall be taken. This is referred to as a "flash test".

[3] In most circumstances, flash tests and oxygen deficiency tests will be performed by the supervisor of the area in which the work is being done.

[4] Under any conditions where there exists a possibility (no matter how remote) of toxic vapors being present in the tank to be entered, the supervisor will arrange to have the air tested.

(f) There must be a set of wristlets or a rescue harness and sufficient rope at the job site to effect a rescue. Any other rescue equipment considered necessary must also be on the job site.

(g) Workers should wear a rescue harness if entering a tank with a large enough opening to easily effect a rescue. In tanks with small openings, only wristlets may be used. (However, in cases where there are agitator shafts, drums or other hazards in which the man's life-line would be entangled and

the supervisor in charge feels that wearing the lifeline may entrap a man and increase the hazard, the wearing of a harness or wristlets may be eliminated.)

(h) A constant source of fresh air must be provided to insure a complete change of air every few minutes. In cases of short term entry for inspection or removal of objects, an air mask is recommended. In cases of long term entry (generally for repair) the use of an air mover should be considered.

(i) When a ladder is required to enter a tank, the ladder must be secured and not removed while anyone is in the vessel. In cases where a rigid ladder could become an obstacle, a chain ladder may be used.

(j) Adequate illumination must be provided.

[1] A flashlight or other battery operated light must also be on hand to provide illumination for safety exit in the event of an electrical power failure.

[2] In any tank used to store flammable liquids, explosion-proof lighting must be used.

(k) All electrical equipment to be used inside the tank must be in good repair and grounded.

(l) Others working in the immediate area shall be informed of the work being done; and they shall inform the watcher or supervisor immediately of any unusual occurrence which may make it necessary to evacuate the tank.

(6) The "Buddy" (Watcher of Standby Observer) System:

(a) Men working inside a confined space must be under the constant observation of a fully instructed watcher.

(b) Before anyone enters the tank, the watcher will be instructed by the person in charge of the entry that:

[1] An entry authorization must be obtained from the person in charge by anyone entering the tank.

[2] A rescue harness or wristlets must be on the job.

[3] He (the watcher) must know the location of the nearest:

[a] Telephone (with emergency numbers posted).

[b] Safety Eyewash/Shower.

[c] Fire Extinguisher.

[d] Oxygen Inhalator.

[4] For all "hot work" inside a tank, the watcher must be instructed how to shut down welding/burning equipment.

[5] As long as anyone is inside the vessel, the watcher must remain in continuous contact with the worker. HE IS NOT TO LEAVE THE JOB SITE EXCEPT TO REPORT AN EMERGENCY.

[6] UNDER NO CIRCUMSTANCES SHOULD THE WATCHER ENTER THE VESSEL. If the worker(s) in the tank becomes ill or injured, the watcher is to put in effect the emergency plan described in the attached Standard Operating Procedure.

[7] The watcher still DOES NOT ENTER THE TANK until help is available.

(c) After being instructed in his responsibilities, the watcher will sign an instruction form indicating his understanding.

(7) Welding and Burning Within a Tank

(a) All welding and burning equipment must be provided with a shutoff under control of the watcher; and the watcher must be shown how to shut off the equipment if it becomes necessary.

(b) Welding and burning equipment will only be taken into a tank immediately prior to its use and must be removed from the tank immediately after the job is finished.

(c) For all "hot work" inside a tank, a properly executed flame permit if needed, must be displayed at the job site.

(d) Standard welding and burning safety precautions will always be followed.

d. PHASE III - REMOVE TANK

(1) Disconnect and cap all appurtenant piping.

(2) Disconnect and decontaminate all appurtenant pumping equipment.

(3) The vessels shall be removed and reused by Safety-Kleen or cut up and sold as scrap.

(4) Contaiminated soil surrounding the tank, when it exists, shall be removed and properly disposed of.

e. PHASE IV - BACKFILLING AND REGRADING

(1) Backfill any excavation with previously excavated material with proper compaction.

(2) Add additional backfill with proper compaction if necessary. The material must be of clean materials and easily compacted in place.

(3) Regrade the site to proper topography.

(4) Remove and dispose of non-useable debris.

FACILITY CLOSURE SCHEDULE AND CERTIFICATION

1. Safety-Kleen may amend the closure plan at any time during the active life of the facility. (The active life of the facility is that period during which wastes are periodically received.) Safety-Kleen shall amend the plan any time changes in operating plans or facility design affect the closure plan or whenever

there is a change in the expected year of closure of the facility. The plan must be amended within 60 days of the changes.

2. Safety-Kleen shall notify the State authority at least 180 days prior to the date closure is expected to begin, except in cases where the facility's permit is terminated or if the facility is otherwise ordered by judicial decree or compliance order to cease receiving wastes or to close. The date when Safety-Kleen "expects to begin closure" should be within 90 days after the date on which Safety-Kleen expects to receive the final volume of wastes.

3. Within 90 days after receiving the final volume of hazardous wastes, or 90 days after approval of the closure plan, if that is later, Safety-Kleen shall remove from the site, all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period if Safety-Kleen demonstrates that:

   The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

   The following requirements are met:

   - The facility has the capacity to receive additional wastes;

- There is a reasonable likelihood that a person other than Safety-Kleen will recommence operation of the site;
- Closure of the facility would be incompatible with continued operation of the site; and Safety-Kleen has taken and will continue to take all steps to prevent threats to human health and the environment.

4. Safety-Kleen shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes or 180 days after approval of the closure plan, whichever is later.

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.

BOYNTON BEACH, FLORIDA SERVICE CENTER
CLOSURE COST ESTIMATE

1. TANK CLOSURE - Open, remove contents of, clean, remove, and dispose of, a 12,000-gllon aboveground storage tank.

Phase I - Remove Contents and Clean

1. Ship contents to a reclaimer.	
Crew:	
2 Truck Dr. $17.56/hr. x 8 hrs. =	$ 280.96
2 Trucks $500 lump sum	500.00
Tank size = 12,000 gal. ÷ 7,500 gal/truck = 2 trucks	
2 trucks x 80 miles x 1.75/mile =	315.00
Reclamation cost ($0.30/gal.)	3,600.00
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 1,250 miles x $1.75/mile =	2,187.50
6. Analysis of rinsate sample	200.00
Total - Phase I	$8,983.00

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
		$ 47.38
	Total - Phase III =	$ 97.00

Summary of Closure Cost for 12,000-gallon Tank:

Phase I =	8,983
Phase II =	1,216
Phase III =	97
	$10,296

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

a.	3 Truck Dr. $17.56/hr. x 8 hrs.	$ 421.44
	3 Trucks $750 lump sum	500.00
	Hauling cost = 180 miles x $1.75/mile =	315.00
b.	Clean drum storage area	
	Crew:	
	1 Foremen $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 700 gallons x $0.12/gallon =	84.00
d.	Dispose of used solvents - 432 drums x $30.00/drum	12,960.00
e.	Testing for contamination 2 samples x $75.00/each	150.00
	Total Drum Closure Cost =	$14,313.00

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. & $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. & $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

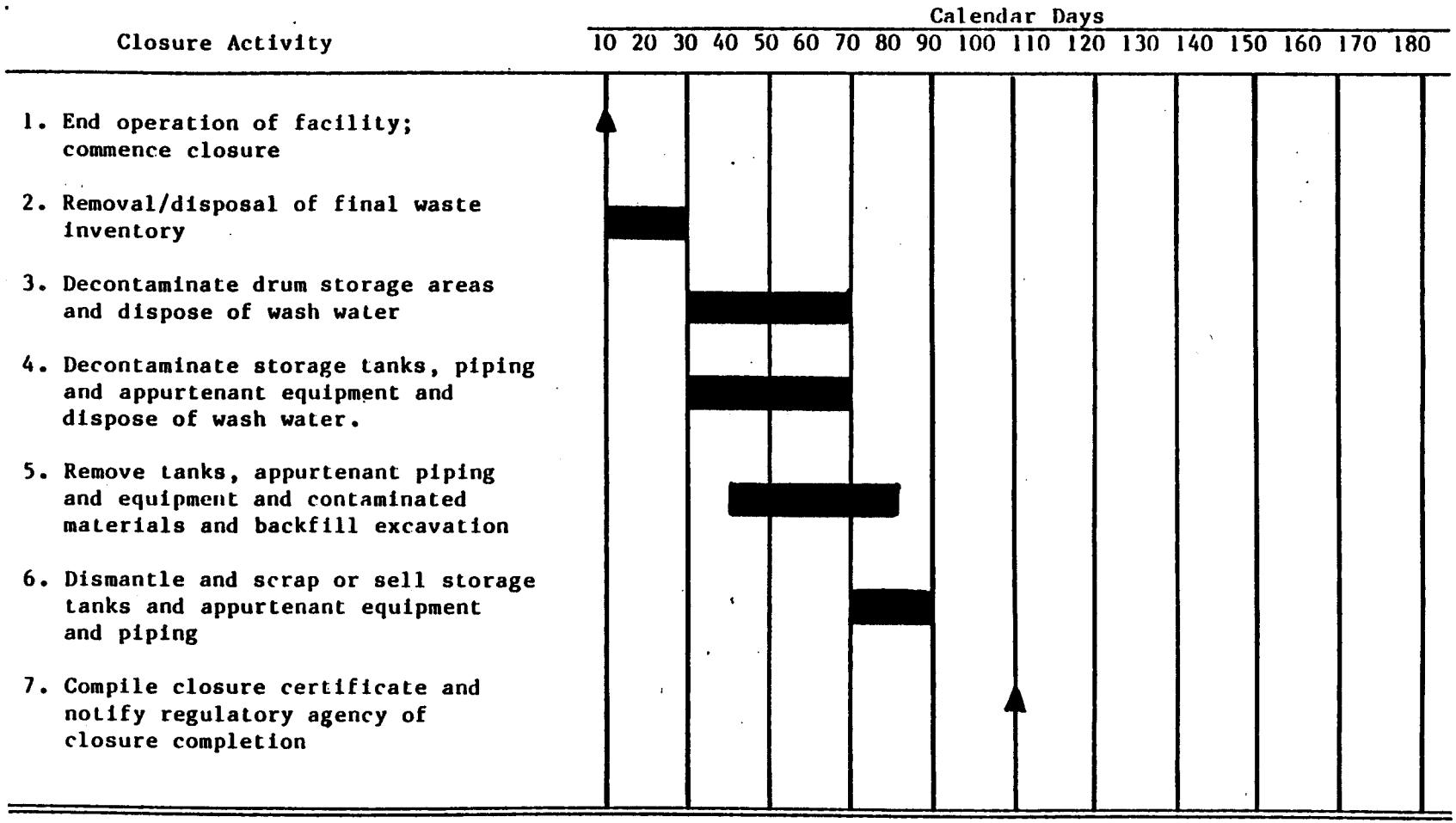
d.	Dispose of dumpster mud	
	16 55-gallon drums x $300/drum =	4,800.00
e.	Testing for contamination	
	3 samples x $75 each =	225.00
f.	Torch, disassemble, and remove dumpster and dock	
	Crew:	
	1 Foreman $18.30/hr. x 16 hrs. =	292.80
	2 Laborers $17.00/hr. x 16 hrs. =	578.00
	Equipment $5.20/hr. x 8 hrs. =	41.60
	1 Truck Dr. $17.56/hr. x 2 hrs. =	35.12
	Total Dock Closure Cost =	$ 7,594.00

5. PE CERTIFICATION - $ 500.00

6. TOTAL CLOSURE COST:

12,000-gallon tank =	$10,296.00
Drum storage area =	14,313.00
Dock and dumpster area =	7,594.00
P.E. certification =	500.00
Total	$32,703.00

CLOSURE SCHEDULE



FINANCIAL ASSURANCE

Administrator
Florida Department of Environmental Regulation
Solid and Hazardous Waste Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Dear Sir:

I am the chief financial officer of Safety-Kleen Corp., 777 Big Timber Road, Elgin, Illinois, 60123. This letter is in support of this firm's use of the financial test to demonstrate financial assurance as specified in Subpart H of 40 CFR Parts 264 and 265.

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure costs estimates covered by the test are shown for each facility: total per attached listing - $1,290,000.

2. This firm guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by subsidiaries of this firm. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: $10,000.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 or 265, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure care cost estimates covered by such a test are shown for each facility: total per attached listing - $5,140,000.

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care is <u>not</u> demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: total per attached listing -0-.

(con't)

777 BIG TIMBER ROAD ELGIN, ILLINOIS 60120 PHONE 312/697-8460 TELEX 910 251 4479

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: -0-.

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on the Saturday closest to December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended January 3, 1987.

Alternative I

1.	Sum of current closure and post-closure costs estimates (total of all costs estimates shown in four paragraphs on the previous page)	$ 6,440,000
*2.	Total liabilities	75,317,000
*3.	Tangible net worth	134,451,000
*4.	Net worth	137,445,000
*5.	Current assets	79,085,000
*6.	Current liabilities	37,097,000
*7.	Net working capital (line 5 minus line 6)	41,988,000
*8.	The sum of net income plus depreciation, depletion, and amortization	43,016,000
*9.	Total assets in U.S.	195,029,000

		YES	NO
10.	Is line 3 at least $10 million?	X	
11.	Is line 3 at least 6 times line 1?	X	
12.	Is line 7 at least 6 times line 1?	X	
*13.	Are at least 90% of firm's assets located in the U.S.?	X	
14.	Is line 9 at least 6 times line 1?	X	
15.	Is line 2 divided by line 4 less than 2.0?	X	
16.	Is line 8 divided by line 2 greater than 0.1?	X	
17.	Is line 5 divided by line 6 greater than 1.5?	X	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 462.151(f) as such regulations were constituted on the date shown immediately below.

Robert W. Willmschen

Robert W. Willmschen
Vice President - Finance
March 20, 1987

RWW/jl

CLOSURE ASSURANCE - FINANCIAL TEST

CATEGORY #1 (See Transmittal Letter for Description)

STATE OF ALABAMA

Dolomite ($20,000)	(3-019-01)	1002 Hoke Avenue Dolomite, AL 35061	ALD 077640001
Gurley ($20,000)	(3-019-02)	201 Section Line Street Gurley, AL 35748	ALD 000776807
Huntsville ($50,000)	(0-007-49)	Colemont Ind. Site US 72 East, Huntsville, AL	ALD 981028798
Montgomery ($20,000)	(3-019-21)	4815 N. Birmingham Montgomery, AL 36308	ALT 020010997
Whistler ($20,000)	(6-133-01)	3023 Dials Street Whistler, AL 36612	ALD 071951628

STATE OF CALIFORNIA

El Monte ($20,000)	(7-088-06)	10625 Hickson Street Unit A El Monte, CA 91731	CAT 000613893
Fresno ($20,000)	(7-015-01)	3561 S. Maple Street Fresno, CA 93725	CAD 066113465
Gardena ($20,000)	(7-088-04)	139 E. 157th Street Gardena, CA 90248	CAT 000613919
Highland ($20,000)	(7-172-01)	7979 Palm Ave., Unit E Highland, CA 92346	CAT 000613927
Los Alamitos ($20,000)	(7-088-05)	3876 Florista Street Los Alamitos, CA 90270	CAD 066177783
Los Angeles ($20,000)	(7-088-02)	2918 Worthen Avenue Los Angeles, CA 90039	CAT 000613935
Oakland ($20,000)	(7-178-01)	404 Market Street Oakland, CA 94607	CAD 053044053
Pomona ($10,000)		2750 Thompson Creek Rd. Pomona, CA 91767	CAD 980894562
Reedley Recycle Center ($100,000)		1000 South I Street Reedley, CA 93654	CAD 093459485
Rohnert Park ($20,000)	(7-178-03)	5750 Commerce Blvd. Rohnert Park, CA 94928	CAT 000613943
Rancho Cordova ($20,000)	(7-157-01)	2576 Mercantile Drive Rancho Cordova, CA 95670	CAT 000613950

Salida ($20,000)	(7-165-01)	3050 Salida Blvd. Salida, CA 95368	CAT 000613968
San Diego ($20,000)	(7-175-01)	499 Raven Street San Diego, CA 92114	CAD 980892475
San Diego ($20,000)	(7-175-01)	6306 Federal Blvd. San Diego, CA 92114	CAD 080916968
Santa Ana ($20,000)	(7-088-07)	2120 South Yale Street Santa Ana, CA 92704	CAT 000613976
Santa Barbara ($20,000)	(7-177-01)	214 E. Montecito Street Santa Barbara, CA 93103	CAT 000613984
Santa Barbara ($20,000)	(7-177-01)	5310 Overpass Road Goleta, CA 93103	CAD 981374077
San Jose ($20,000)	(7-178-02)	1147 N. 10th Street San Jose, CA 95112	CAD 980817159
Sylmar ($20,000)	(7-088-01)	13024 Bradley Avenue Sylmar, CA 91342	CAT 000613992
STATE OF CONNECTICUT			
Branford ($20,000)	(2-112-01)	11 Tipping Drive Branford, CT 06405	CTD 980667927
West Hartford ($20,000)	(2-070-01)	24 Brixton Street West Hartford, CT 06110	CTD 000845982
STATE OF IDAHO			
Boise ($20,000)	(1-183-08)	514 E. 45th Street Boise, ID 83704	IDD 000712026
Pocatello ($20,000)	(1-183-28)	2610 Garrettway Pocatello, ID 83201	IDD 991281270
STATE OF IOWA			
Davenport ($20,000)	(5-047-01)	3035 West 73rd Street Davenport, IA 52806	IAD 098027592
Grimes ($20,000)	(5-053-01)	5318 NW 111 Drive, RR #2 Grimes, IA 50111	IAD 083489773
Mason City ($20,000)	(5-093-01)	16 SW 11th Street Mason City, IA 50401	IAD 000678326
STATE OF MAINE			
Leeds ($20,000)	(2-011-01)	Route 202, RFD 3, Box 1990 Leeds, ME 04263	MED 980667810

STATE OF OHIO

Kent ($50,000)	(4-040-03)	4341 Mogadore Road Kent, OH 44240	OHD 981099401
Brunswick ($20,000)	(4-040-02)	1169 Industrial Parkway Brunswick, OH 44212	OHD 000720987
Hamilton ($20,000)	(4-037-01)	4579 Port Union Road Hamilton, OH 45011	OHD 084750579
Heath ($10,000)		2041 James Parkway Heath, OH 43056	OHD 981188840
Hebron Recycle Center ($270,000)		581 Milliken Drive SE Hebron, OH 43025	OHD 980587364
Groveport ($20,000)	(4-046-01)	4465 Marketing Place Groveport, OH 43125	OHD 981000664
Oregon ($20,000)	(4-190-01)	161 North Lallendorf Oregon, OH 43616	OHD 000721001
Reynoldsburg ($20,000)	(4-046-01)	6400 North Taylor Road SW Reynoldsburg, OH 43068	OHD 000720995
Tallmadge ($20,000)	(4-040-03)	2929 Mogadore Road Tallmadge, OH 44278	OHD 000720136
Warrensville Heights ($20,000)	(4-040-01)	26309 Miles Road, Unit M1 Warrensville Heights, OH 44128	OHD 000810275
Tipp City ($20,000)	(4-037-02)	4205 Lisa Drive Tipp City, OH 45371	OHD 980683155
Toledo ($20,000)	(4-190-01)	5148 Tractor Road Toledo, OH 43616	OHD 981097876
Youngstown ($20,000)	(4-196-01)	1171-1/2 N. Meridian Road Youngstown, OH 44509	OHD 980990162
Sharonville ($20,000)	(4-037-01)	11919 Tramway Drive Sharonville, OH 45241	OHD 981187313
$1,290,000			

CATEGORY #2 (See Transmittal Letter for Description.)

Phillips Manufacturing Co. 7334 N. Clark Street Chicago, IL 60626 ($10,000)		ILD 005474143

CATEGORY #3 (See Transmittal Letter for Description)

STATE OF ARIZONA

Phoenix ($20,000)	(7-142-01)	4401 E. University Phoenix, AZ 85034	AZD 089308803

Tucson ($20,000)	(7-142-02)	4161 E. Tennessee Tucson, AZ 85714	AZD 980892897

STATE OF ARKANSAS

Little Rock ($20,000)	(6-086-01)	11727 Arch St. Pike Little Rock, AR 72206	ARD 054575238
Fort Smith ($20,000)	(6-063-01)	2511 Johnson Street Fort Smith, AR 72904	ARD 000709733
West Memphis ($20,000)	(6-094-01)	309 Mound City Road Between I 55 and 40 West Memphis, AR 72301	ARD 056855232

STATE OF COLORADO

Commerce City ($20,000)	(6-052-01)	4980 Locust Street Commerce City, CO 80022	COD 000716613
Englewood ($50,000)	(6-052-02)	2801 S. Tejon Englewood, CO 80110	COD 000716621
Grand Junction ($20,000)	(6-052-21)	368 Bonny Grand Junction, CO 81501	COT 090010851
Pueblo ($20,000)	(6-052-04)	2841 East Fourth Street Pueblo, CO 81001	COD 000716639

STATE OF FLORIDA

Casselberry ($20,000)	(3-130-01)	464 A Pulmosa Drive Casselberry, FL 32707	FLD 097837983
Delray Beach ($20,000)	(3-097-01)	16086 SW 4th Ave., Bldg. B Delray Beach, FL 33444	FLD 000776757
Orange Park ($20,000)	(3-079-01)	161 Industrual Loop South Orange Park, FL 32073	FLD 980847214
Miami ($20,000)	(3-097-02)	7875 NW 54th Street Miami, FL 33166	FLD 980840086
Port Charlotte ($20,000)	(3-163-02)	19200 Peachland Blvd. Bachman Blvd. Port Charlotte, FL 33949	FLD 000776716
Tallahassee ($20,000)	(3-079-02)	3082 West Tharpe Street (Rear) Tallahassee, FL 32303	FLD 000776773
Tampa ($20,000)	(3-163-01)	4701 North Manhattan Tampa, FL 33614	FLD 049557408
Tampa ($50,000)	(0-007-50)	5309 24th Avenue South Tampa, FL 33619	FLD 980847271

STATE OF GEORGIA

Columbus ($20,000)	(3-106-01)	5920 Coca Cola Blvd. Columbus, GA 31909	GAD 000823096
Garden City ($20,000)	(3-179-01)	5217 Augusta Road P.O. Box 7036 Garden City, GA 31408	GAD 000776781
Hapeville ($20,000)	(3-013-01)	3440 Lang Avenue Hapeville, GA 30354	GAD 000823070
Macon ($20,000)	(3-106-21)	6850 Hawkinsville Road Macon, GA 31207	GAD 980709257
Norcross ($50,000)	(3-013-02)	480 S. Old Peachtree Road Norcross, GA 30071	GAD 980842777
Ringgold ($20,000)	(3-019-22)	RR #5, Dietz Road Ringgold, GA 30736	GAD 980842835

STATE OF ILLINOIS

Arlington Heights ($20,000)	(5-034-03)	306 Campus Drive Arlington Heights, IL 60004	ILD 000805929
Elgin Recycle Center ($300,000)		1500 E. Villa Street Elgin, IL 60120	ILD 000805911
Caseyville ($50,000)	(5-160-02)	20 Tucker Drive Caseyville, IL 62232	ILD 981097819
Chicago Plant ($275,000)		1445 W. 42nd Street Chicago, IL 60609	ILD 005450697
Franklin Park ($20,000)	(5-034-04)	412 Domenic Court Franklin Park, IL 60131	ILD 000665869
Mokena ($20,000)	(5-034-05)	9631 West 194th Place Mokena, IL 60448	ILD 000665851
Pekin ($20,000)	(5-136-01)	RR #3 Pekin, IL 61554	ILD 093862811
Schaumburg ($20,000)	(5-034-01)	728 Morse Avenue Schaumburg, IL 60193	ILD 079749073
Urbana ($20,000)	(5-033-01)	500 Anthony Drive Urbana, IL 61801	ILD 981088388

STATE OF INDIANA

Evansville ($20,000)	(5-060-01)	4417 St. Joe Street Evansville, IN 47712	IND 000815894
Fort Wayne ($20,000)	(5-068-01)	2112 Production Road Ft. Wayne, IN 46808	IND 000715466

Indianapolis-E ($20,000)	(4-076-02)	8418-26 Brookville Road Indianapolis, IN 46239	IND 000815886
Portage ($20,000)	(5-034-06)	6050 Eagle Drive Portage, IN 46368	IND 000714428
South Bend ($20,000)	(5-082-01)	2217 Western Avenue South Bend, IN 46628	IND 000715474
STATE OF KANSAS			
Kansas City ($20,000)	(5-085-01)	11565 K-32 Highway Kansas City, KS 66111	KSD 000687681
Dodge City ($20,000)	(6-195-21)	600 East Trail Dodge City, KS 67801	KSD 980686844
Wichita ($20,000)	(6-195-01)	1311 South Anna Wichita, KS 67209	KSD 000809723
Edwardsville ($20,000)	(5-085-01)	9317 Woodend Road Edwardsville, KS 66022	KSD 980973515
STATE OF KENTUCKY			
Ashland ($20,000)	(4-075-01)	1592 Wolohan Drive Ashland, KY 41101	KYD 000776724
Ashland ($20,000)	(4-075-01)	West Virginia & Kevin Aves. Ashland, KY 41105	KYD 981027451
Lexington ($20,000)	(4-090-01)	264 Big Run Road Lexington, KY 40503	KYD 020440459
Lexington ($20,000)	(4-090-01)	550 Blue Sky Parkway Lexington, KY 40509	KYD 981027469
Louisville ($20,000)	(4-091-01)	751 Grade Lane Louisville, KY 40213	KYD 091514653
STATE OF LOUISIANA			
Pineville ($20,000)	(6-073-04)	4200 Shreveport Highway Pineville, LA 71360	LAD 000757708
Tioga ($50,000)	(6-073-04)	518 Ryder Drive Pineville, LA 71360	LAD 981057441
Kenner ($20,000)	(6-115-01)	14 26th Street Kenner, LA 70062	LAD 089841902
STATE OF MARYLAND			
Baltimore ($20,000)	(2-016-01)	1448 Desoto Road Baltimore, MD 21230	MDD 981034291

Glen Burnie ($20,000)	(2-010-02)	130 Penrod Court Section G & H Glen Burnie, MD 21061	MDD 000737106
Silver Springs ($20,000)	(2-058-01)	12164 Tech Road Silver Springs, MD 20904-1980	MDD 000737395

STATE OF MASSACHUSETTS

Bridgewater ($20,000)	(2-022-03)	128 Elm Street Bridgewater, MA 02324	MAD 000846006
Marlborough ($20,000)	(2-022-02)	50A Brigham Marlborough, MA 01752	MAD 088978143
Salisbury ($20,000)	(2-022-01)	189A Willow Street Salisbury, MA 01950	MAD 060095569
West Brookfield ($20,000)	(2-184-01)	P.O. Box C Route 9 West Brookfield, MA 01585	MAD 096287354

STATE OF MICHIGAN

Dearborn Heights ($10,000)		5316 Cummings Avenue Dearborn Hts., MI 48125	MID 980792998
Saginaw ($20,000)	(4-059-01)	3899 Wolf Road Saginaw, MI 48601	MID 981000607
Grand Rapids ($20,000)	(5-061-01)	2700 Mullins Grand Rapids, MI 49505	MID 981000615
Mt. Clemens ($20,000)	(4-055-01)	44043 North Grosebeck Mt. Clemens, MI 48043	MID 981091838
Pontiac ($20,000)	(4-055-02)	751 Orchard Lake Road Pontiac, MI 48053	MID 000722686
Romulus ($20,000)	(4-055-03)	35201 Crane Road Romulus, MI 48174	MID 000772694
Mason ($50,000)	(4-010-01)	700 Zimmerman Road Mason, MI 48854	MID 981000359

STATE OF MINNESOTA

Burnsville ($20,000)	(5-103-02)	1401 Cliff Road Burnsville, MN 55337	MND 000686188
Cloquet ($20,000)	(5-050-01)	1302 18th Street Cloquet, MN 55720	MND 000686170
St. Paul ($20,000)	(5-103-01)	180 Ryan Drive St. Paul, MN 55117	MND 000823823
Eagan ($20,000)	(5-103-02)	3227 Terminal Drive Eagan, MN 55121	MND 981097884

STATE OF MISSISSIPPI

Jackson ($20,000)	(6-078-01)	120 Richardson Drive Jackson, MS 39209	MSD 000776765
Southhaven ($50,000)	(0-007-44)	7217 Airways Avenue Southhaven, MS 38671	MSD 981030894

STATE OF MISSOURI

Blue Springs ($20,000)	(5-085-02)	24016 East 40 Highway Blue Springs, MO 64015	MOD 000669077
Cape Girardeau ($20,000)	(5-030-01)	Route 2, Box 549-D Cape Girardeau, MO 63701	MOD 000669051
Columbia ($20,000)	(5-042-01)	2405 Highway 63 North Columbia, MO 65201	MOD 000669085
St. Charles ($20,000)	(5-160-03)	4526 Towne Court, Lot #22 Harvestowne Industrial Park St. Charles, MO 63301	MOD 095486312
Springfield ($20,000)	(6-193-02)	734 Northwest Bypass 66 Springfield, MO 65802	MOD 000669069
Independence ($50,000)	(5-085-02)	901 Yuma Independence, MO 64056	MOD 980973564

STATE OF NEBRASKA

Gering ($20,000)	(6-052-03)	RR 1, Box 15E Gering, NB 69341	MED 000687178
Grand Island ($20,000)	(5-065-01)	Highway 281 South Behind Grand Island Dodge Grand Island, NB 68801	MED 000687186
Omaha ($20,000)	(5-127-01)	14564 Grover Street Omaha, NB 68144	NED 020185138
Omaha ($50,000)	(5-127-01)	Lamont & 139th St. Omaha, NB 68144	NED 981495724

STATE OF NEVADA

North Las Vegas ($20,000)	(7-087-01)	1655 Stocker Street North Las Vegas, NV 89030	NVD 007096761

STATE OF NEW JERSEY

Bound Brook ($20,000)	(2-118-04)	515 E. Main Street Bound Brook, NJ 08805	NJD 000768077
Newark ($20,000)	(2-118-02)	32 Tompkins Parkway Newark, NJ 07114	NJD 000768092

Vincentown ($20,000)	(2-139-04)	Rd. 4, Red Lion Road Vincentown, NJ 08088	NJD 000768101
Clayton Recycle Center ($155,000)		Box 215, Almo Ind. Park Clayton, NJ 08312	NJD 069039626
Edgewater Park ($20,000)		1520 Village Court Edgewater Park, NJ 08010	NJD 980773477

STATE OF NEW MEXICO

Albuquerque ($20,000)	(7-008-01)	2720 Girard NE Albuquerque, NM 87107	NMD 000804294
Farmington ($20,000)	(7-008-21)	4200A Hawkins Road Farmington, NM 87401	NMD 980698849

STATE OF NEW YORK

Avon ($20,000)	(2-028-02)	1525 West Henrietta Road Avon, NY 14414	NYD 980753784
Colonie ($20,000)	(2-004-01)	Green Mountain Drive Colonie, NY 12110	APPLIED FOR
Congers ($20,000)	(2-118-01)	68 North Harrison Avenue Congers, NY 10920	NYD 000708164
Amityville ($20,000)	(2-118-08)	80 Seabro No. Amityville, NY 11701	NYD 000708198
Latham ($20,000)	(2-004-01)	72 Sicker Road Latham, NY 12110	NYD 000708206
Mattydale ($20,000)	(2-187-01)	Factory & Mitchell P.O. Box 56 Mattydale, NY 13211	NYD 000824581
Lackawanna ($20,000)	(2-028-01)	75 N. Gates Avenue P.O. Box A Lackawanna, NY 14218	NYD 981556541
Thornwood ($20,000)	(2-118-05)	9 Walnut Place Thornwood, NY 10594	NYD 000708172
Waverly ($20,000)	(2-074-01)	Route 34 North Road #1 Waverly, NY 14892	NYD 000708156
Woodside ($20,000)	(2-118-06)	58-05 52nd Avenue Woodside, NY 11377	NYD 980785760

STATE OF NORTH CAROLINA

Charlotte $20,000)	(3-031-01)	2320 Yadkin Avenue Charlotte, NC 28205	NCD 079060059

Raleigh ($20,000)	(3-171-01)	Sommerville Industrial Building Route 3, 6225 Old State Road Raleigh, NC 27603	NCD 000776740
High Point ($50,000)	(3-064-01)	High Point Building, Inc. Mendenhall Road High Point, NC 27263	NCD 077840148
St. Pauls ($20,000)	(3-031-02)	Hwy. 301 North St. Pauls, NC 28384	NCD 980846935
STATE OF NORTH DAKOTA			
Fargo ($20,000)	(1-183-03)	1537-1/2 First Avenue South Fargo, ND 58103	NDD 000716738
Bismarck ($20,000)	(1-183-23)	3704 Saratoga Bismarck, ND 58501	NDD 980957070
STATE OF OKLAHOMA			
Oklahoma City ($20,000)	(6-124-01)	7825 State Hwy. 152 Wheatland, OK 73097-0128	OKD 980878474
Tulsa ($20,000)	(6-193-01)	16215 East Marshall Street Tulsa, OK 74138	OKD 000763821
Oklahoma City ($10,000)		2 NE 9th Street Oklahoma City, OK 73104	OKD 018115469
STATE OF OREGON			
Springfield ($20,000)	(7-054-01)	550 Shelley Street Space C & D Springfield, OR 97477	ORD 000712067
Clackamas ($20,000)	(7-148-01)	11843 SE Highway 212 Clackamas, OR 97015	ORD 092895481
Clackamas ($50,000)	(7-148-01)	16540 S.E. 130th Street Clackamas, OR 97015	APPLIED FOR
STATE OF PENNSYLVANIA			
Kuhnsville ($50,000)	(2-007-01)	SEMA Building, Main Street Kuhnsville, PA 18104	PAD 980552020
Clairton ($20,000)	(4-145-02)	670 Cochran Mill Road Clairton, PA 15025	PAD 000738815
Erie ($20,000)	(4-057-01)	1606 Pittsburgh Avenue Erie, PA 16505	PAD 086673407
Malvern ($20,000)	(2-139-02)	Rear 147 West King Street Malvern, PA 19355	PAD 099081812

New Kingstown ($20,000)	(2-067-01)	10 Eleanor Drive New Kingstown, PA 17072	PAD 000738823
Stoystown ($20,000)	(4-077-01)	Rt. 30, 1 Mile East of Stoystown Stoystown, PA 15563	PAD 000738831
Tullytown ($20,000)	(2-139-01)	Bldg. PP, #9 River Road Tullytown, PA 19007	PAD 065716813
Westchester ($20,000)	(2-139-03)	1142 Greenhill Road Westchester, PA 19380	PAD 000738849
Wilkes-Barre ($20,000)	(2-180-01)	131 Second Street Plains Township Wilkes-Barre, PA 18705	PAD 084872043

STATE OF SOUTH CAROLINA

Greer ($20,000)	(3-066-01)	Old Gilreath Road Greer, SC 29651	SCD 981031040
Lexington Recycle Center & Branch ($300,000)		Route 5, Box 319 A Lexington, SC 29072	SCD 077995488
Florence ($20,000)	(3-043-21)	Highway 301 South Florence, SC 29501	SCD 980842785
Summerville ($20,000)	(3-179-21)	P.O. Box 2053 Rt. 17 A South Summerville, SC 29483	SCD 980709299

STATE OF SOUTH DAKOTA

Sioux Falls ($20,000)	(1-183-05)	2000 North Westport Avenue Sioux Falls, SD 57107	SDD 000716696

STATE OF TENNESSEE

Dyersburg ($20,000)	(6-051-01)	2010 Brewer Rd. Dyersburg, TN 38024	TND 981027410
Knoxville ($20,000)	(3-080-01)	826 Stewart Knoxville, TN 37917	TND 079025698
Nashville ($20,000)	(3-109-01)	215 Whitsett Road Nashville, TN 37210	TND 981474125

STATE OF TEXAS

Abilene ($20,000)	(6-002-01)	4234 Oil Belt Lane Abilene, TX 79605	TXD 062287883
Amarillo ($20,000)	(6-009-02)	3811 Interstate 40 East Amarillo, TX 79104	TXD 000747410

Corpus Christi ($20,000)	(6-048-01)	3820 Bratton Road Corpus Christi, TX 78415	TXD 000747402
Denton Recycle Center ($520,000)		1722 Cooper Creek Road Denton, TX 76201	TXD 077603371
El Paso ($20,000)	(6-056-01)	900A Hawkins Blvd. El Paso, TX 79905	TXD 000747394
Haltom City ($20,000)	(6-049-02)	6529 Midway Road Haltom City, TX 76117	TXD 981053416
Irving ($20,000)	(6-049-01)	2130A East Grauwyler Irving, TX 75061	TXD 981052061
Longview ($20,000)	(6-194-01)	202 Michael Place Longview, TX 75602	TXD 000747378
Lubbock ($50,000)	(6-009-01)	1 Mile East of Loop 289 On Highway 62 & 82 Lubbock, TX 79408	TXD 000747436
McAllen ($20,000)	(6-048-02)	1/4 Mile North Jackson Road 1/8 Mile West International McAllen, TX 78501	TXD 083145656
Midland ($20,000)	(6-002-02)	10043-B County Rd. 125-W Midland, TX 79711	TXD 981054617
Missouri City ($70,000)	(6-073-02)	1580 Industrial Road Missouri City, TX 77459	TXD 010803203
Orange ($20,000)	(6-073-03)	3304 Womack Road Orange, TX 77630	TXD 061290276
Pasadena ($20,000)	(6-073-01)	3333 Federal Road Pasadena, TX 77504	TXD 000747386
San Antonio ($20,000)	(6-169-01)	5243 Sinclair Road San Antonio, TX 78222	TXD 000729400
Waco ($20,000)	(6-049-03)	Rt. 12, Box 911 Highway 84 West Waco, TX 76710	TXD 980876015
Wichita Falls ($20,000)	(6-049-04)	1606 Missile Road Wichita Falls, TX 76306	TXD 000747428
STATE OF UTAH			
Salt Lake City ($20,000)	(7-166-01)	394 Ironwood Drive Salt Lake City, UT 84115	UTD 052430741
Salt Lake City ($20,000)	(7-166-01)	1066 Pioneer Road Salt Lake City, UT 84104	UTD 980957088

STATE OF VERMONT

Barre ($20,000)	(2-105-01)	23 West Second Street Barre, VT 05641	VTD 000791699

STATE OF VIRGINIA

Bristol ($20,000)	(3-026-01)	2146 King Mill Road Bristol, VA 24201	VAD 981042955
Chesapeake ($20,000)	(3-121-01)	4545 Bainbridge Blvd. Chesapeake, VA 23320	VAD 000737346
Chester ($20,000)	(3-154-01)	1200 West 100 Road Chester, VA 23831	VAD 981043011
Vinton ($20,000)	(3-155-01)	Route 24 East of Vinton at O'Neal Drive Vinton, VA 24179	VAD 000737361

STATE OF WASHINGTON

Auburn ($20,000)	(1-181-01)	3210 C Street NE, Unit G Auburn, WA 98002	WAD 000712059
Lynwood ($20,000)	(7-092-01)	6303 212th Street SW, Suite C Lynwood, WA 98036	WAD 000712042
Pasco ($20,000)	(1-183-02)	814 E. Ainsworth Pasco, WA 99301	WAD 980978746
Spokane ($20,000)	(1-183-01)	9516 East Montgomery, Unit 16 Spokane, WA 99206	WAD 000712034

STATE OF WEST VIRGINIA

Nitro (Charleston) ($20,000)	(4-075-02)	Rock Branch Industrial Park Nitro, WV 25143	WVD 000737387
Fairmont ($20,000)	(4-145-23)	345 Locust Fairmont, WV 26554	WVD 980510895
Wheeling ($20,000)	(4-145-03)	10 Industrial Park Dr. Wheeling, WV 26003	WVD 981034101

STATE OF WISCONSIN

La Crosse ($20,000)	(5-150-01)	2109-1/2 Ward Avenue La Crosse, WI 54601	WID 980896641
North Prairie ($20,000)	(5-100-01)	113 Oakridge Drive, Lot 7 North Prairie, WI 53153	WID 045130713
Shawano ($20,000)	(5-176-01)	P.O. Box 266 Shawano, WI 54166	WID 000668822

Madison ($20,000)	(5-197-01)	2325 Daniels Street Madison, WI 53704	WID 980896633
New Berlin ($10,000)		16675 W. Glendale Road New Berlin, WI 53151	WID 066869751
Kaukauna ($20,000)	(5-176-01)	Kaukauna Ind. Park Kaukauna, WI 54130	WID 981187297
Waukesha ($20,000)	(5-100-01)	2200 S. West Avenue Waukesha, WI 53186	WID 981097769
$5,140,000			

ARTHUR ANDERSEN & CO.

CHICAGO, ILLINOIS

To Safety-Kleen Corp.:

We have examined the consolidated balance sheets of SAFETY-KLEEN CORP. and SUBSIDIARIES (the "Company") as of January 3, 1987, and December 28, 1985, and the related consolidated statements of earnings and changes in financial position for the years then ended and expressed an unqualified opinion on those statements in our report dated February 6, 1987. We have not performed any auditing procedures since that date. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

At your request, we have read the letter dated March 20, 1987, from your chief financial officer to the various administrators of the Federal and state Environmental Protection Agencies to demonstrate both liability coverage and assurance of closure care required by EPA regulations and have compared the data therein that are specified as having been derived from the audited financial statements for the years ended January 3, 1987, and December 28, 1985, referred to above with the corresponding amounts in those financial statements. In connection with this procedure, no matters came to our attention that caused us to believe that the specified data should be adjusted.

This report relates only to the data specified above and does not extend to the financial statements of the Company, taken as a whole, for the fiscal years ended January 3, 1987 and December 28, 1985. It is furnished solely for the use of the Company and the Company's distribution to the various administrators of the Federal and state Environmental Protection Agencies and is not to be used for any other purpose.

Arthur Andersen & Co.

Chicago, Illinois,
March 6, 1987.

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Safety-Kleen Corp.:

We have examined the consolidated balance sheets of Safety-Kleen Corp. (a Wisconsin corporation) and Subsidiaries as of January 3, 1987 and December 28, 1985, and the related consolidated statements of earnings, changes in financial position and shareholders' equity for each of the three fiscal years in the period ended January 3, 1987. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the consolidated financial statements referred to above present fairly the financial position of Safety-Kleen Corp. and Subsidiaries as of January 3, 1987, and December 28, 1985, and the results of their operations and the changes in their financial position for each of the three fiscal years in the period ended January 3, 1987, in conformity with generally accepted accounting principles which, except for the change (with which we concur) in fiscal 1985 in the method of accounting for investment tax credits as discussed in Note 1, were applied on a consistent basis.

Our examinations were made for the purpose of forming an opinion on the basic consolidated financial statements taken as a whole. The supplemental schedules I, V, VI, VIII, and X are presented for purposes of complying with the Securities and Exchange Commission's rules and are not part of the basic consolidated financial statements. The supplemental schedules have been subjected to the auditing procedures applied in the examinations of the basic consolidated financial statements and, in our opinion, fairly state in all material respects the financial data required to be set forth therein in relation to the basic consolidated financial statements taken as a whole.

ARTHUR ANDERSEN & Co.

Chicago, Illinois,
February 6, 1987.

I.F.2 FINANCIAL ASSURANCE FOR CLOSURE

Safety-Kleen Corp. is the operator of the Boynton Beach, Florida Service Center. The cost for closure of the facility as estimated above is assured through the use of the financial test specified in Subpart H of 40 CFR Part 264. Exhibit I.F.1-2 shows the letter from the Chief Financial Officer of Safety-Kleen Corp. to demonstrate the financial responsibility for closure through the financial test.

I.F.3 LIABILITY INSURANCE

In accordance with the liability requirements of 40 CRF 264.147 and 265.147, Safety-Kleen Corp. has acquired insurance coverage for sudden accidental occurrences arising from operations of the service center facility. Exhibit I.F.3-1 presents the Hazardous Waste Facility Liability Endorsement from the National Union Fire Insurance Company of Pittsburgh, Pennsylvania. The coverage from this insurance policy is in the amount of $2 million per occurrence with an annual aggregate of $2 million; this combined coverage exceeds the minimum required in 40 CFR 264.147 and 265.147 for the protection of the environment and the health, safety and welfare of the people of the State of Florida.

EXHIBIT I.F.3-1

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. National Union Fire Insurance Company (the "Insurer") of Pittsburgh, PA hereby certifies that it has issued liability insurance covering bodily injury and property damage to Safety-Kleen Corp., (the "Insured"), of 777 Big Timber Road, Elgin, Illinois 60120 in connection with the insured's obligation to demonstrate financial responsibility under Florida Administrative Code Rule #17-30.17. The coverage applies at

(SEE ATTACHED LIST) (FLORIDA)

for sudden accidental occurrences. The amounts of liability are $2 million per each occurrence with annual aggregate of $2 million, exclusive of legal defense costs. The coverage is provided under policy number GLA1579328 issued on October 1, 1985 to satisfy the requirements of Florida Administrative Code Rule #17-30.17. The effective date of said policy is October 1, 1985 and the ending date of said policy is October 1, 1986.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

   (a) Bankruptcy or insolvency of the Insured shall not relieve the Insurer of its obligations under the policy.

   (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.

   (c) Whenever requested by the Director of the Environmental Resources, the Insurer agrees to furnish to the Department of Environmental Resources a signed duplicate original of the policy and all endorsements.

   (d) Cancellation of the insurance, whether by the Insurer or the Insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Department of Environmental Resources.

   (e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Department of Environmental Resources.

I hereby certify that the wording of this instrument is identical to the wording specified in the Florida Administrative Code Rule #17-30.17. as such regulations was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

John T. Kelly, Senior Vice President
Authorized Representative
National Union Fire Insurance Co.
222 South Riverside Plaza
Chicago, Illinois 60606

STATE OF FLORIDA

Safety-Kleen Corporation 3-079-01
161 Industrial Loop South
Orange Park, Florida 32073
FLD 980 847 214

Safety-Kleen Corporation 3-079-02
3082 West Thorpe Street
Tallahassee, Florida 32303
FLD 000 776 773

Safety-Kleen Corporation 3-097-01
16086 SW 4th Avenue
BLDG B, Bay 30
Delray Beach, Florida 33447
FLD 000 7776 757

Safety-Kleen Corporation 3-097-02
7875 NW 54th Street
Miam, Florida 33166
FLD 980 840 846

Safety-Kleen Corporation 3-130-01
464A Plumosa Drive
P. O. Box 835
Casselberry, Florida 32707
FLD 097 837 983

Safety Kleen Corporation 3-163-01 (Old)
4701 N. Manhattan
Tampa, Florida 33614
FLD 049 557 408

Safety-Kleen Corporation 3-163-0 (New)
24th Avenue and 54th Street
Tampa, Florida 33605
FLD 980 847 271

Safety-Kleen Corporation 3-163-02
19200 Peachland Boulevard
Port Charlotte, Florida 33949
FLD 000 776 716

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 receipt at the recycle center, 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 lined boxes and in polyethylene filter tubes. Paint wastes are stored in 5-gallon and 16-gallon drums. These containers are managed similarly to the used immersion cleaner drums and contents within the drums will not be transferred or processed at the service center. They are not removed from the containers until receipt by a reclaimer.

The drum storage area as shown on Exhibit I.B.3-7 occupies a portion of a building area which has a sloped concrete floor and interceptor trench which form a 2,464 gallon spill containment system. 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 are designed to be greater than 10% of the total liquid storage capacity in the drum storage area. Since the characteristics of the stored wastes are known, no quantitative analyses are performed for the materials stored in the containment area.

All containerized wastes are sent to a reclaimer. The materials that can not be effectively reclaimed are 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 sediment drums, dry cleaning and paint waste containers are moved either with 2-wheel hand trucks and stacked by hand or with a pallet jack or forklift. 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 the specifications in Exhibits I.E.3-1 to I.E.3-5.

The drum storage area has adequate secondary containment capacity (2,464 gallons) for handling the 6,912 gallons of waste to be stored.

Since none of the wastes handled by Safety-Kleen react with metal or polyethylene, compatibility is assured. Immersion cleaner, dry cleaning waste, and paint waste containers 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 blue steel or black polyethlene drums, in boxes or in polyethylene filter tubes and only paint waste in black steel containers.

The drum storage areas is located indoors and containment system consists of a sloped concrete floor and a sump which prevent both run-on and run-off.

II.B.2. WASTE COMPATIBILITY

The used mineral spirits immersion cleaner, dry cleaning and paint wastes are not incompatible with each other, or with other materials handled at this facility as far as reactivity is concerned. However, they are the primary source of feed stock for regenerating the clean solvents. Separation of these used solvent and dry cleaning wastes is a standard practice at the service center.

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

Drum storage configurations are shown of Exhibit I.B.3-7.

II.B.3 INCOMPATIBLE WASTES

See above, Section II.B.2., eighth paragraph.

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

TANK STORAGE

III.A.1 MATERIAL COMPATABILITY

The facility consists of two aboveground steel tanks. Used mineral spirits in drums is transferred into a 12,000-gallon tank via the wet dumpster. The used solvent is transported, by bulk shipment, to the recycle center. Another 12,000-gallon tank is used to store mineral spirits product.

Mineral spirits 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. Mineral spirits has a specific gravity less than water (0.8) and any water will accumulate in the bottom of the tank. There is the potential for corrosion of the tank at the mineral spirits/water interface; however, the material is pumped from the bottom of the tank so corrosion is minimized.

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 them. Typical construction and installation standards for the aboveground tanks are shown in Exhibits I.E.3-6 and I.E.3-7, 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.3-8 and I.E.3-9.

All tanks are aboveground, underlain by a 6" concrete slab, and surrounded by a 36" 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. Gauges are used to measure liquid levels in tanks and automatic high level alarms will signal the tank's being 95% full. A suction pump equipped with the tanker truck is used to withdraw the content from the tank. No other equipment or standby equipment is 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.