safety-kleen®

September 14, 1989
JL89-114

Mr. Nick Van Kleeck
New Mexico Environmental Improvement Division
New Mexico Health and Environment Department
Harold Runnels Building
1190 St. Francis Dr.
Santa Fe, N.M. 87503

RE: Assessment of Waste Tank -- Safety-Kleen NMD000804294

Mr. Van Kleeck:

I am submitting the referenced document at this time. Please excuse the delay.

A 1989 test will be performed before year's end. Closure of the the tank will be during or prior to 1992. We believe that it will be replaced with another underground tank system.

I can be contacted at 713/261-0429 for questions or comments.

Sincerely,

J.L. Lanahan
Environmental Engineer

enclosure

cc: Ellen Jurczak
Wayne Olson

SEP 18 1989

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

87-168-09

# HAZARDOUS WASTE TANK INTEGRITY ASSESSMENT

SAFETY-KLEEN CORP.
Albuquerque, New Mexico

EPA ID No.: NMD 000804294

TERA, inc.

**TERA, inc.**

6440 Hillcroft, Suite 200
P.O. Box 740038, Houston, Texas 77274, Tel. 713/772-0876, Telex 516-720

## TANK SYSTEM CERTIFICATION

I have supervised or performed a portion of the attached design and integrity assessments of the Dirty Solvent Storage tank at the Safety-Kleen Corp. facility in Albuquerque, New Mexico. The EPA ID No. for this facility is: NMD 000804294. I have reviewed the design and directed the integrity assessment of the tank system. The assessement report documenting this project is dated April 28, 1988.

With regard to the above duties, I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document with all related attachments and that, based on my observations and my inquiry of those individuals immediately responsible for obtaining the information, I believe that the 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.

John W. Cox

Registered Professional Engineer

New Mexico No. 10317

TERA, Inc.

P.O. Box 740038

Houston, Texas 77274

JOHN WEST COX
NEW MEXICO
10317
REGISTERED PROFESSIONAL ENGINEER

Signed John W. Cox

Date 5/9/88

**TERA, inc.**

6440 Hillcroft, Suite 200
P.O. Box 740038, Houston, Texas 77274, Tel. 713/772-0876, Telex 516-720

April 28, 1988
87-168-09

Safety-Kleen Corp.
777 Big Timber Road
Elgin, Illinois 60123

Attention: Mr. Jeff Simpson

Subject: Tank System Assessment
Albuquerque Branch

Submitted here is our tank system assessment report for the dirty solvent storage tank system at your Albuquerque facility. The main report body summarizes assessment results in a format corresponding to the rules being addressed. Appendices are used for presenting detailed information.

We have enjoyed working with you on this interesting project, and look forward to another opportunity to be of service to Safety-Kleen. Please contact us at 713/772-0876 if you have any questions.

Very truly yours,

TERA, Inc.

Thomas H. Wimbrow, P.E.
Project Engineer

John W. Cox

John W. Cox, P.E.
Vice-President

JOHN WEST COX
NEW MEXICO
10317
REGISTERED PROFESSIONAL ENGINEER

JWC/THW/lm
Enclosure: 4 copies

87-168-09

# HAZARDOUS WASTE TANK INTEGRITY ASSESSMENT

*  *  *

To

SAFETY-KLEEN CORPORATION
Albuquerque, New Mexico

*  *  *

By

TERA, Inc.
Houston, Texas

April, 1988

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## ILLUSTRATIONS


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Appendix B - Waste System Documentation

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# WASTE SYSTEM ASSESSMENT

This report documents the Design and Integrity assessments of the Dirty Solvent storage system at the Safety-Kleen, Corp. facility in Albuquerque, New Mexico. The EPA ID NO. for this facility is: NMD 000804294. These assessments were performed and this report was written to address the requirements of 40 CFR 264.191.

## SYSTEM DESCRIPTION

Used mineral spirits solvent material is poured from containers into an open-top, aboveground steel solvent return receptacle (wet dumpster). The dumpster is located within a spill containment pan. The used solvent material flows by gravity from the dumpster through aboveground and belowground piping to a 12,000 gallon capacity, underground steel storage tank. Accumulated used solvent and sludge material are periodically removed from this "dirty solvent storage tank" for off-site recycling/disposal. Solvent removal is performed by a tank truck flexible hose which is connected to a dip tube inserted into the tank through a 4-inch standpipe. Sludge and solids are removed through a 20" manway. The dirty solvent storage tank is vented to the atmosphere through pipe connections to an aboveground vent. The dirty solvent storage tank is equipped with an alarm which provides audible and visual signals when the tank liquid level approaches the tank capacity.

For the purposes of this assessment, the waste system has been defined to include the wet dumpster, the underground dirty solvent storage tank, and the aboveground and belowground piping which connects them.

## CONSIDERATIONS OF ASSESSMENT

### 1. Design Standards

Copies of documentation associated with this waste system are included in Appendix B. Documentation of the system design or of any design standards according to which the tank and ancillary equipment were constructed was not available.

Design standards which would be applicable to this system are the editions of Underwriters Laboratories (UL) Standard for Safety 58 "Steel Underground Tanks for Flammable and Combustible Liquids, and ANSI/NFPA 30 "Flammable and Combustible Liquids Code" which were in effect when the system was installed. The only conflict with the above standards disclosed during visual inspection of the aboveground portions of the system (documented in Appendix C) was that the level alarm connection through the manway cover was not liquid tight.

Full compliance of the system design and construction with the appropriate codes and standards can not be determined from the above information and investigations.

### 2. Hazardous Characteristics of the Waste

The waste material collected and stored by the system is a used mineral spirits solvent which consists primarily of a petroleum distillate product, plus solids, oil, and grease picked up in various cleaning and degreasing operations. Documentation describing the waste material is included in Appendix A. The primary hazardous characteristic of the liquid waste is ignitability. The sludge and solid material may also contain toxic metals.

## 3. Existing Corrosion Protection Measures

The exterior of the dumpster is protected from corrosion by paint. The aboveground portions of the system piping are black iron, galvanized steel or rubber. The dirty solvent storage tank is located below a concrete slab. There is no cathodic protection for this system. The exterior of the underground steel tank is reportedly protected from corrosion by a water proof coating.

Review of the chemical composition of the waste material shows it to be compatible with and not corrosive to the dumpster, piping, and tank materials. The system components are not provided with any specific internal corrosion protection measures.

It is concluded that the waste materials are compatible with the system materials of construction.

## 4. Age of the System

Construction documentation included in Appendix B shows that the system was installed in its current location in March of 1977. Based on this documentation, the system age at the time of issuance of this report is determined to be 11 years, 1 month.

## 5. Integrity Assessment

An inspection and integrity assessment were performed to:

1) verify correspondence between the system documentation, applicable standards, and the actual condition of the system, and

2) to detect leaks, cracks, corrosion, erosion, or other deterioration of the system.

Visual inspection of the above ground portions of the system and leak testing of the belowground tank and piping were the assessment methods used. Documentation of the inspection and testing performed is included in Appendix C.

There was no evidence of cracks or significant corrosion, erosion, or other deterioration of the visible portions of the system. The leak testing performed demonstrated that the underground tank (with the level alarm probe removed and the connection plugged) and the portions of the underground piping it was possible to test were tight. There was also no indications of leakage from the portions of the system piping which could not be tested.

## CONCLUSIONS OF ASSESSMENT

The dirty solvent waste system at the Safety-Kleen Corp. facility in Albuquerque, New Mexico was reviewed, inspected, and tested as described above and documented in this report. The system in its tested condition displayed no evidence of leaks or significant cracks, corrosion, erosion, or other defects. The testing performed demonstrated that the underground tank and the piping tested were leak free at the time of testing.

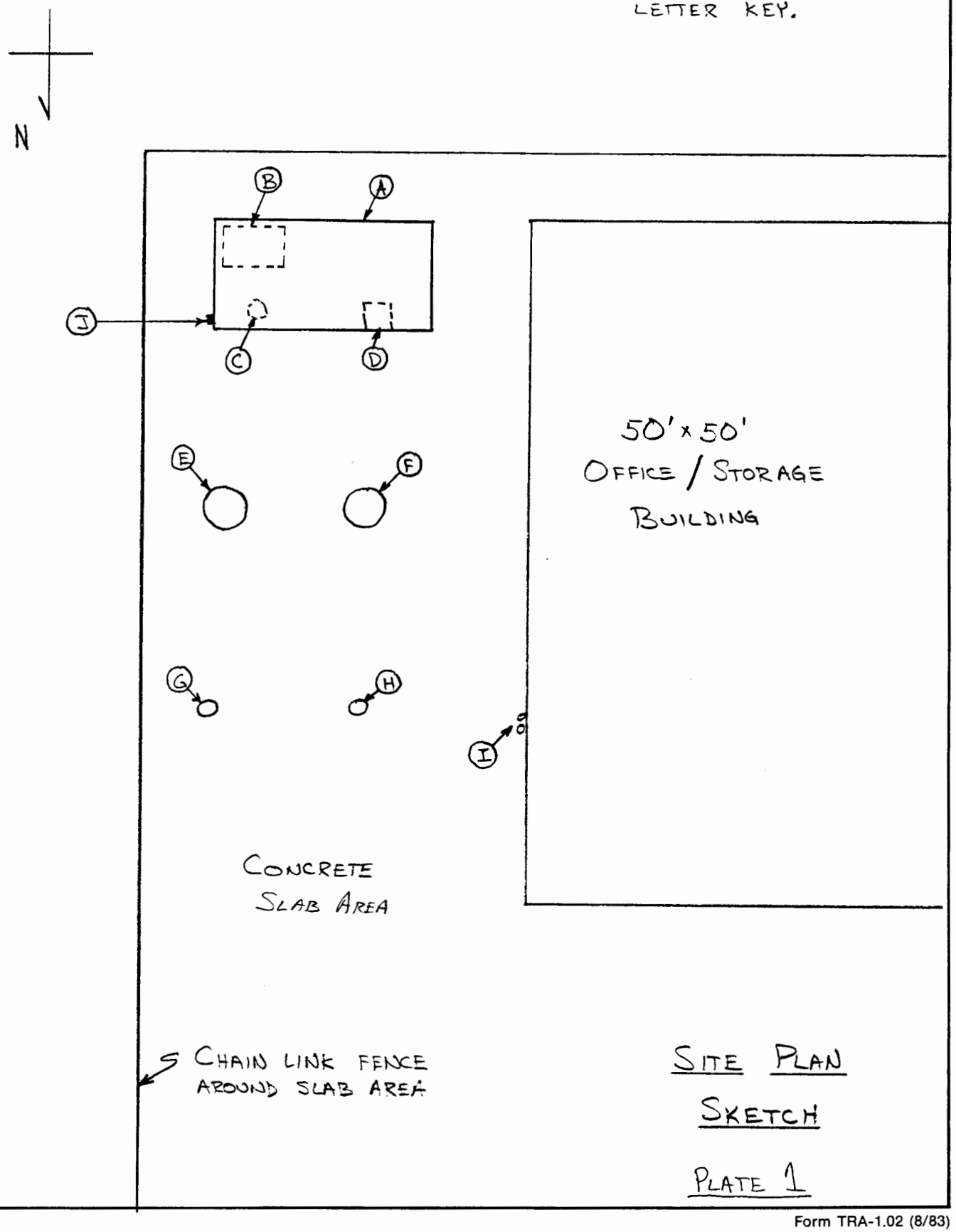
# ILLUSTRATIONS

SUBJECT: SAFETY-KLEEN
ALBUQUERQUE, NM
BY: THW DATE: 4/14/88

TERA, inc.

JOB NO.: 87-168
FILE:
SHEET: 1 OF: 2

SEE SHEET 2 FOR LETTER KEY.




SITE PLAN SKETCH

PLATE 1

Form TRA-1.02 (8/83)

SUBJECT: SAFETY-KLEEN
ALBUQUERQUE, NM
BY: THW DATE: 4/14/88

TERA, inc.

JOB NO.: 87-168
FILE:
SHEET: 2 OF: 2

## SITE PLAN LETTER KEY

(A) 8'x16' FILL/DUMP SHELTER. SHELTER HAS SLOPED ROOF AND IS ENCLOSED ON THREE SIDES (NORTH SIDE IS OPEN). FLOOR OF SHELTER CONSISTS OF FOUR 6" HIGH STEEL DRIP PANS BOLTED TOGETHER. SHELTER IS SURROUNDED BY A 6" HIGH CONCRETE CURB.

(B) 3'x5'x4' HIGH STEEL WET DUMPSTER WITH HINGED LID. 3" DIAMEDER DUMPSTER DRAIN PIPE PENETRATES DRIP PAN FLOOR INSIDE A CURBED AREA.

(C) 16" DIAMETER OPENING IN DRIP PAN FLOOR OVER SUMP.

(D) 20" SQUARE COVER PLATE OVER BELOW GRADE CLEAN SOLVENT PUMP. CLEAN SOLVENT SYSTEM NOT PART OF WASTE SYSTEM.

(E) 30" DIAMETER COVER PLATE OVER ACCESS TO DIRTY SOLVENT TANK MANWAY. MANWAY COVER 3'-2" BELOW EDGE OF SLAB. MANWAY DIAMETER 20". LEVEL ALARM CONDUIT PENETRATES COVER.

(F) 30" DIAMETER COVER PLATE OVER CLEAN SOLVENT TANK MANWAY. CLEAN SOLVENT TANK NOT PART OF WASTE SYSTEM.

(G) 13" DIAMETER COVER PLATE OVER 4" DIAMETER DIRTY SOLVENT TANK PUMPOUT CONNECTION. ADJACENT CONCRETE STENCILED "DIRTY".

(H) 13" DIAMETER COVER PLATE OVER 4" DIAMETER CLEAN SOLVENT TANK FILL CONNECTION. NOT PART OF WASTE SYSTEM. ADJACENT CONCRETE STENCILED "CLEAN".

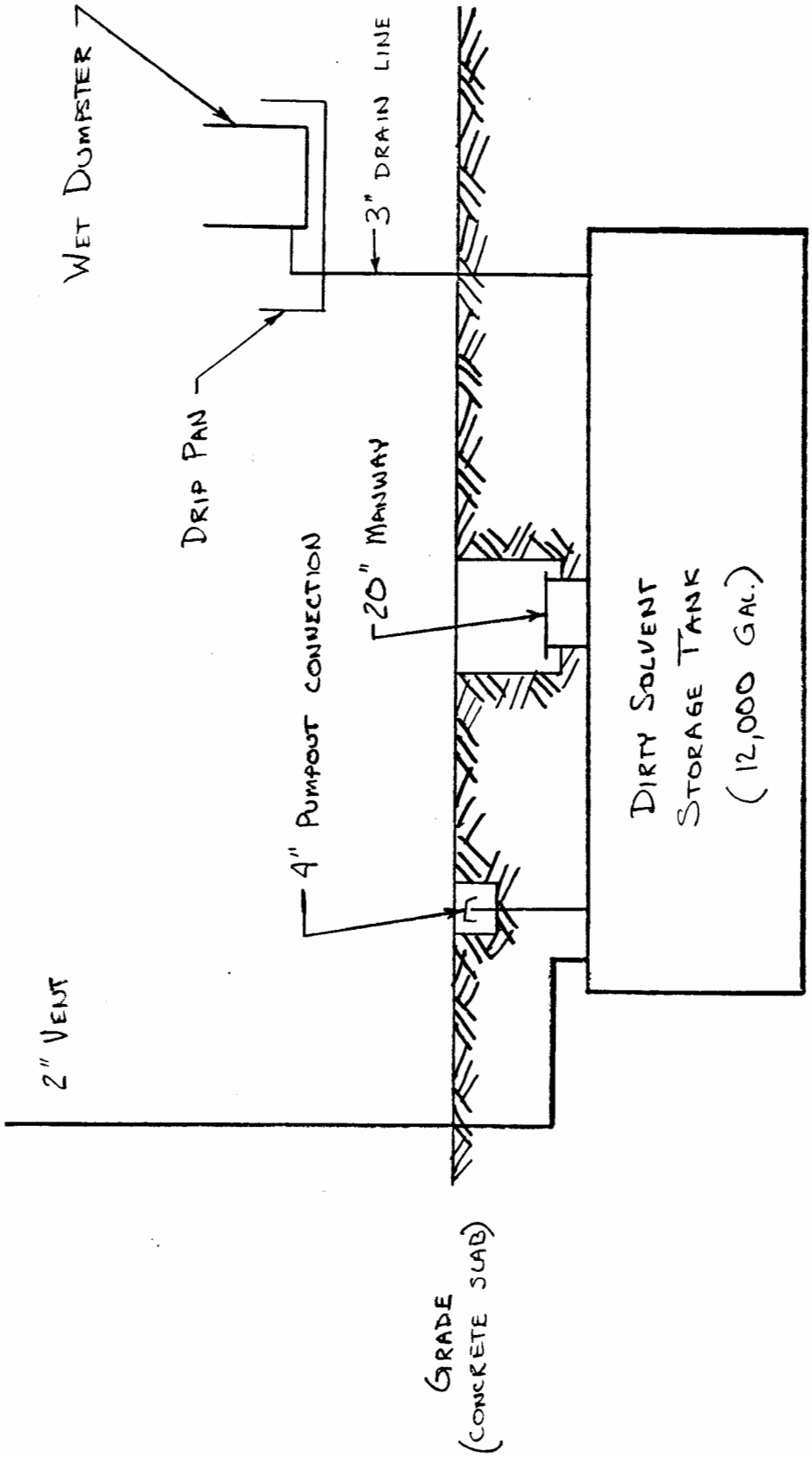
(I) TWO 2" DIAMETER GALVANIZED STEEL VENT PIPES APROX 20' HIGH.

(J) TANK HIGH LEVEL ALARM PANEL.

SUBJECT: SAFETY-KLEEN
ALBUQUERQUE, NM
BY: THW DATE: 4/14/88

TERA, inc.

JOB NO.: 87-168
FILE:
SHEET: 1 OF: 1




WASTE SYSTEM SCHEMATIC

PLATE 2

Form TRA-1.02 (8/83)

# APPENDIX A
## Characteristics of the Waste

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|---|---|
| Description of Waste Characteristics ..... (Note portions of the documentation not applicable to this report have been crossed out.) | A-1 |
| Compositions of Clean and Used Mineral Spirits Solvent ..... | A-6 |
| Typical Chemical and Physical Analyses ..... for Used and Fresh Mineral Spirits | A-7 |
| Material Safety Data Sheet ..... Safety-Kleen 105 Solvent | A-8 |

## SECTION C-WASTE CHARACTERISTICS

### C.1.a TYPES AND CHARACTERISTICS OF WASTE

In Accordance with U.S. EPA Hazardous Waste Regulations, four types of hazardous waste have been identified at the Service Center:

1. The used mineral spirits solvent, returned from customers in separate drums transferred and stored in the underground tank awaiting shipment to the Recycle Center, is considered to be an Ignitable Waste (D001);
2. ~~The used chlorinated solvent, returned from customers in separate drums and remaining in the same drum for shipment to the Recycle Center, is considered to be a Toxic Waste (F002 and F004);~~
3. Mineral spirits dumpster mud, and tank bottom sludge accumulated in the solvent return receptacles (wet dumpsters) and in the sludge tank, is considered to be an Ignitable Waste (D001) and possibly an EP Toxic Waste (D006 and/or D008); and
4. ~~The dry cleaning wastes, collected from dry cleaning facilities in separate drums and remaining in the same drum for shipment to the Recycle Center, is considered to be a Toxic Waste (F002).~~

A typical composition, and chemical and physical analysis for each of the waste streams listed above is shown in ~~Exhibits C-1 through C-8,~~ based on existing data on these wastes generated from similar processes within Safety-Kleen's current and/or potential customers.

Material Safety Data Sheets for the Mineral Spirits, ~~Immersion Cleaner, and Dry Cleaning Solvent (Perchloroethylene)~~ are presented in ~~Exhibis C-9 through C-11, respectively.~~

## C.1.b USED MINERAL SPIRITS

The clean mineral spirits solvent is labeled under the trade-name of "Safety-Kleen 105 Solvent", so-named because of the flash point of the solvent being 105°F (minimum). Chemically, the solvent primarily consists of petroleum hydrocarbon fraction (the mineral spirits) with boiling points between 310°F and 400°F. Impurities such as light aromatic hydro-carbons (LAHC) and chlorinated hydrocarbons usually constitutes less than one percent of the total volume. A typical chemical composition of the clean solvent is shown on Exhibit C-1, which represents an analysis of sixteen samples of clean mineral spirits solvent in 1982. The mineral spirits constituted an average of 99.407% of the total volume of the solvent, with minimum and maximum concentrations ranging from 99.229% to 99.896%. The average flash point of the sixteen samples of the clean solvent was 112.8°F, with minimum and maximum flash points ranging from 108°F to 117°F. A Department of Labor Material Safety Data Sheet for this solvent is attached as Exhibit C-9 to further illustrate other characteristics of the clean solvent.

The used mineral spirits solvent consists primarily of mineral spirits solvent plus water, solid, oil and grease picked up in the various degreasing operations. An analysis of 21 samples of the used mineral spirit solvent in 1982 showed an average of 87.5% solvent, 6.5% water, and 6.0% oily bottoms, by volume (Exhibit C-1). In most instances, no water is associated with the used solvent; however, at times the water content may range from a few percentage to as much as around 50%. The oily bottoms may range from 2% to 10%, by volume, in the used solvent.

Chemically, based on 21 samples of the used solvent tested, the composition of the solvent fraction in the used mineral spirits solvent is essentially the same as the clean solvent, as shown in Exhibit C-1. Average flash point of the used solvent, however, is 108.3°F, which is slightly lower than that of the clean solvent. In addition, the range of flash point determined for the 21 samples tested is from 95°F to 115°F.

~~During 1985, 80,780 gallons of used mineral spirits were shipped to the Recycle Center for reclamation.~~

~~C.1.c USED CHLORINATED SOLVENT~~

~~The clean chlorinated solvent 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 (water) layer and lower non-aqueous (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 immersion cleaner is shown on Exhibit C-2. Exhibit C-10 presents the Department of Labor Material Safety Data Sheet.~~

~~The used immersion cleaner is basically unchanged from its clean state, except oil, grease and other solids may be picked up during the various degreasing operations. The spent solvent is non-flammable. It is regarded as toxic because of the contents of halogenated solvents.~~

~~During 1985, 533 drums of used immersion cleaner were returned to the Service Center from the customers, and were subsequently shipped to the Recycle Center for reclamation. Less than five gallons of solvent plus seal water is expected to be in each drum. Hence, in 1985 approximately 2,450 gallons of used immersion cleaner was processed through this service center. Of these quantities, approximately 70% (by volume) was chlorinated solvents and cresylic acid.~~

C.1.d USED MINERAL SPIRITS BOTTOM SLUDGE

This is material settled from used mineral spirits in the underground tanks. It contains basically soils, oil and grease, and some water picked up in the degreasing operations, together with a small amount of mineral spirits. Analyses have shown that the sludge is an ignitable waste and often is also considered toxic due to its lead and/or cadmium contents.

The sludge is removed from the underground tank about once a year and shipped to Denton, Texas for reclamation.

C.1.e USED MINERAL SPIRITS DUMPSTER MUD

The waste material is accumulated in the wet dumpsters when emptying the used mineral spirits from the drums into the underground storage tanks via the underground sludge tank. The nature of this waste is similar to the used mineral spirits bottom sludge, except with some small metal parts and less mineral spirits. It is regarded as an ignitable waste and often is also considered as a toxic waste because of its lead and/or cadmium contents.

The sludge in the dumpsters is cleaned out frequently. The waste is drummed and shipped to Safety-Kleen's facility for recycling. ~~During 1985, 43 drums or approximately 344 gallons of dumpster mud was removed from this service center.~~

~~C.1.f DRY CLEANING WASTES~~

~~Solvent used in dry cleaning of clothing is commonly tetrachloroethylene (or perchloroethylene). Hence, wastes generated from dry cleaning operations contain various concentrations of the solvent. Basically, wastes generated by dry cleaning facilities appear to be limited to 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 powered 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 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 20 to 30 percent of solvent.~~

## EXHIBIT C-1
## COMPOSITIONS OF CLEAN AND USED MINERAL SPIRITS SOLVENT

| | Clean Solvent[a] | | | Used Solvent[b] | | |
|---|---|---|---|---|---|---|
| | Average | Min. | Max. | Average | Min. | Max. |
| Solvent, % By Vol. | 1.00 | - | - | 87.5 | 40 | 98 |
| Water, % By Vol. | 0 | - | - | 6.5 | 0 | 52 |
| Oily Bottoms, % Vol. | 0 | - | - | 6.0 | 2 | 10 |
| Chemical Composition of Solvent Fraction, % By Vol. | | | | | | |
| Mineral Spirit | 99.407 | 98.229 | 99.896 | 99.378 | 99.010 | 99.607 |
| Light Aromatic Hydrocarbons | 0.417 | 0.200 | 0.626 | 0.422 | 0.260 | 0.681 |
| Methylene Chloride | 0.012 | 0 | 0.027 | 0.011 | 0 | 0.046 |
| 1,1,1 Trichloroethane | 0.040 | 0.010 | 0.107 | 0.043 | 0 | 0.089 |
| Toluene | 0.110 | 0.012 | 0.159 | 0.090 | 0.010 | 0.175 |
| Perchloroethylene | 0.050[c] | 0 | 0.701 | 0.028[d] | 0 | 0.587 |
| Trichloroethylene | 0.039 | 0 | 0.093 | 0.031 | 0 | 0.087 |
| Flash Point, °F | 112.8 | 108 | 117 | 108.3 | 95 | 115 |

[a] On the basis of 16 samples taken in 1982
[b] On the basis of 21 samples taken in 1982
[c] Only one sample showing the presence of perchloroethylene
[d] Only one sample showing the presence of perchloroethylene

EXHIBIT C-3

TYPICAL CHEMICAL AND PHYSICAL ANALYSES FOR USED AND FRESH MINERAL SPIRITS

**USED MINERAL SPIRITS**

1994

| Period Date | ER & RC Sample Nos. | Gallon | Sol. | Water | Bot | F. FP | % Volume LAIC | HC | 1,1,1 | Tol | Perc | Trl | MS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-26 | 1718 1318 | 3259 | 90 | 0 | 10 | 112 | .159 | 0 | .052 | .178 | 0 | .052 | 99.560 |
| 5-10 | 1751 1351 | 6680 | 90 | 0 | 10 | 103 | .297 | 0 | .098 | .359 | 0 | .064 | 99.181 |
| 5-16 | 1767 1367 | 6513 | 90 | 0 | 10 | 104 | .261 | 0 | .073 | .274 | 0 | .054 | 99.338 |
| 5-31 | 1896 1496 | 7041 | 90 | 0 | 10 | 105 | .149 | 0 | .069 | .501 | 0 | 0 | 99.281 |
| 6-14 | 1954 1554 | 6710 | 90 | 0 | 10 | 103 | .248 | 0 | .050 | .419 | 0 | .041 | 99.245 |
| 7-3 | 1911 1514 | 7206 | 90 | 0 | 10 | 105 | .165 | 0 | .058 | .258 | 0 | 0 | 99.491 |
| 7-10 | 1916 1519 | 6534 | 90 | 0 | 10 | 108 | .196 | 0 | .094 | .182 | 0 | .036 | 99.291 |
| 7-24 | 1967 1567 | 7254 | 79 | 7 | 14 | 102 | .107 | 0 | .114 | .269 | 0 | 0 | 99.509 |

**FRESH MINERAL SPIRITS**

| Period Date | ER & RC Sample Nos. | Gallon | F. FP | % Volume LAIC | HC | 1,1,1 | Tol | Perc | Trl | MS |
|---|---|---|---|---|---|---|---|---|---|---|
| 4-26 | 2162 | 5700 | 110 | .573 | 0 | 0 | 0 | 0 | 0 | 99.427 |
| 5-10 | 2137 | 6700 | 115 | .515 | 0 | .098 | 0 | 0 | .071 | 99.236 |
| 5-16 | 2155 | 6700 | 109 | .235 | 0 | .052 | .183 | 0 | .047 | 99.483 |
| 5-30 | 2183 | 6700 | 110 | .490 | 0 | .115 | 0 | 0 | .070 | 99.322 |
| 6-14 | 2235 | 6700 | 107 | .657 | 0 | 0 | 0 | 0 | 0 | 99.343 |
| 7-3 | 2286 | 6700 | 111 | .489 | 0 | 0 | 0 | 0 | 0 | 99.511 |
| 7-10 | 2332 | 6700 | 112 | .588 | 0 | .111 | 0 | 0 | 0 | 99.301 |
| 7-24 | 2334 | 6700 | 114 | .433 | 0 | 0 | 0 | 0 | 0 | 99.567 |

# MATERIAL SAFETY DATA SHEET
SAFETY-KLEEN CORP.
777 Big Timber Rd.
Elgin, IL 60123

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<br>Safety-Kleen Corp. | Emergency Telephone Number<br>312/697-8460 |
| Address *(Number, Street, City, State, and ZIP Code)*<br>777 Big Timber Road | Telephone Number for Information<br>312/697-8460 |
| Elgin, Illinois 60123 | Date Prepared<br>9/12/86, Revised 5/26/87 |
| | 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 | N/A | 99.9+ |
| Dye | Unknown | Unknown | unk. | 0.003 |
| Anti-Static Agent | Unknown | Unknown | 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)<br>105°F TCC | Flammable Limits | LEL<br>0.7 | UEL<br>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 | Unstable | | Conditions to Avoid |
|---|---|---|---|
| | 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 | May Occur | | Conditions to Avoid |
|---|---|---|---|
| | | | N/A |
| | 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? |
|---|---|---|---|
| | Not listed | Not listed | No |

Not a known or suspected 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- DO NOT SMOKE. Remove the solvent saturated clothes immediately to avoid skin rash. 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 | Special |
|---|---|---|
| | Normal room ventilation. | None. |
| | Mechanical *(General)* | Other |
| | None. | 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/Hygeienic Practices
Do not smoke while using this solvent.

# APPENDIX B
## Waste System Documentation

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|---|---|
| Integrity Assessment Form Tank # 1 | B-1 |
| Real Estate Index Card | B-2 |
| Property Record Rental | B-3 |
| Lease Abstract | B-4 |
| Tank Installation Bid | B-5 |
| Tank Installation Invoice | B-6 |

BRANCH # 7-008-01
LOCATION Albuquerque, NM

HAZARDOUS WASTE TANK SYSTEM
INTEGRITY ASSESSMENT

Tank # 1

Tank 1 - 12,000 gallon
Tank 2 - _____ gallon

I. Description of Tank and Piping

| Tank | Piping |
|---|---|
| ___ Bare steel | ___ Aboveground |
| ✓ Coated steel | ✓ Underground |
| ___ Cathodic protection | ___ Galvanized |
| ✓ Manway (describe) 20" | ✓ Black |
| Tank dimensions: | ✓ Threaded |
| Diameter: 8' | ___ Welded |
| Length: 31' | ___ Cathodic protection |
| Thickness: 1/4" | ___ Underground pressurized lines (dirty tank only) |

Attach available documentation (invoice, drawings, etc.)

II. Documentation of Tank Age (must attach copy)

Tank age: 10 years Installation date: 3/77

Type of documentation attached:
✓ Invoice for tank system installation
✓ Property lease record
✓ Real estate index card
___ Lease agreement (lessor-owned tanks)
___ Other _____

III. Waste Material and Hazardous Characteristics

✓ Waste mineral spirits (D001/D008)
___ Waste mineral spirits sludge (D001/D008)
___ Other _____

IV. Independent Professional Engineer _____

Scheduled test/inspection date _____
Test method _____
Results _____
Report due _____

7-008-01 Albuquerque *

2720 Girard, N.E. Expir. 2-28-87
Albuquerque, New Mexico 87107 Effec. 3-1-77
~~$809 eff. 3-1-80~~ $988-3-1-83
Rent ~~$600~~ Last mos. rent $600
COL review every 3 yrs. (~~Jan.~~ Mar. of ~~1980~~, ~~1983~~ & 1986)

Two 12,000 gallon tanks ($3,395 & $3,310) in March, 1977.
One 1,500 gallon tank $897 Pump $458 Installation
underground $13,750 Removed & filled with sand Feb. 1983

Option to renew

* See Farmington Stge. area - a satellite for this branch

SAFETY-KLEEN CORP.

PROPERTY RECORD RENTAL

Route
7-008-01 Albuquerque

ADDRESS 2720 Girard, N.E.

CITY Albuquerque STATE New Mexico 87107

LESSOR

AGENT

BROKER

COMPANY Building Corporation of America (Benny Saiz, President

ADDRESS 3200 Richmond Drive, N.E.

CITY Albuquerque, STATE New Mexico 87110

LESSEE

COMPANY Safety-Kleen Corp.

ADDRESS 655 Big Timber Road

CITY Elgin STATE Illinois 60120

LEASE TERM

FROM 3-1-77 TO 2-28-87 YEARS 10

RENTAL

ANNUAL $7,200

MONTHLY ~~$600~~ ~~804~~ 988 Last mos. rent $600

COL review every 3 yrs. (~~Jan.~~ Mar. 1980,83 & 86) See paragraph XIII of lease.

TERM $72,000

CHECK PAYABLE TO:

~~Building Corporation of America~~ Arthur Reeves
~~3200 Richmond Drive, N.E.~~ 4300 Arthur N.E.
Albuquerque, New Mexico 87110

CC: J. Weber
K. Kelly
K. Jennings
P. McMahon
R. Carr
Regional Manager

LESSEE'S RESPONSIBILITIES

LIGHT X HEAT X POWER X

PHONES X

OTHERS Garbage, Sewage or any other utility needed at this location.

PROPERTY USAGE

Service center, warehouse, office and solvent storage.

TANK INSTALLATION

Two 12,000 gallon tanks purchased in March, 1977 for $3,395 & $3,310. One 1,500 gallon tank for $897. Pump $458. Installation to put tanks underground $13,750.

PROPERTY DESCRIPTION

A 50' X 50' building constructed per Safety-Kleen drawings S-722, S-723 and S-724 dated 5-29-75. A fenced-in area (130' X 80') with a concrete pad. Building located at 2720 Girard, N.E. in Albuquerqu New Mexico.

HOLDOVER PENALTY

Any holding over shall be construed as a tenancy from month to month subject to terms of this lease.

REMARKS

Option to renew. Written consent from Lessor required for any alterations or subletting. Lessee may place sign on the property provided the type and design and location have been approved in writing by Lessor. Taxes to be paid by Lessor except personal property taxes which will be paid by Lessee.

# SAFETY-KLEEN CORP. LEASE ABSTRACT

BRANCH ALBUQUERQUE, NM ( )

ADDRESS 2720 GIRARD NE

CODE 7-008-01

RELATED LOCATION(S)

LESSOR ART REEVES and AL INOUE

4300 ALTURA NE

ALBUQUERQUE, NM 87110

B-4

## LEASE DOCUMENTS

Lease 10-13-76 )
Letter 2-24-77 ) Expired
Letter 11-6-80 )
Lease 12-6-86

## PROPERTY DESCRIPTION (Use, Size, Tanks)

2500 SF Service Center with two 12000 and one 1500 UG tank

## LEASE TERM

3-1-77 to 2-28-92

## PURCHASE OPTION

None

## RENTAL

$1337 from 3-1-87 to 2-28-90
$1447 from 3-1-90 to 2-28-92

## RENEWAL OPTIONS

5 years - Notice by 11-91 - Rent to be negotiated

Right to terminate on 6 months notice if permits denied

## MISCELLANEOUS PROVISIONS

Security Deposit $ 600

CPI Adjustment

Insurance

Taxes

Other

## FUTURE ACTION REQUIRED

Activate File For Planning Decision 1989

Renewal Option Exercise Date 11/91

c: D. Brinckman
W. Heyn
A. Pedersen

**KACHINA PETROLEUM EQUIPMENT COMPANY**

9614 Cochiti Road, S.E. Post Office Box 8186
Albuquerque, New Mexico 87108
Telephone 292-3090

February 9, 1977

SAFETY-KLEEN CORPORATION
3209 "C" Mathew N.E.
Albuquerque, N.M., 87107

ATTENTION: Mr. Brian Capo

Dear Sir:

Thank you for calling us. We are happy to submit, herein, our proposal as pertaining to the installation of underground storage tanks at your new facility and the removal of the two 10,000 gallon tanks at your old facility. Per your request, we will give you several alternative plans to accomplish your objective.

#1. Remove the two 10,000 gallon tanks from your existing facility, purchase a 1500 gallon tank and install all three at your new facility; backfill, pour concrete slab, and rebuild the fence at your old facility: ---------- $10,945.00.

#2. Furnish and install two 12,000 gallon and one 1500 gallon tanks w/submerged pump, etc as per your layout: $13,750.00.

#3. Remove the two 10,000 gallon underground tanks, backfill, pour slab only at old site: ---------- $ 2,800.00.

#4. If you install new tanks and allow us to remove the old tanks, we will attempt to help you dispose of the two 10,000 gallon tanks or we would allow you $1,000.00 total credit against either option #2 or #3 above.

If any of the above options are selected, and in the process of completing the work as outlined unforeseen objects are encountered, such as rock, water, etc., that will materially slow the progress of the work, such work will revert to time and material for the completion of the job and the contract price will be null and void.

As you noticed when we visited your new site, it is going to be a very tight fit to get a hole between the new building and the property line big enough for three tanks. We will use all caution in installation, but in the event the ground sloughs off, and shoring is necessary to keep the building or footers out of the excavation, these extra costs would be borne by your company.

# KACHINA PETROLEUM EQUIPMENT COMPANY

9614 Cochiti Road, S.E.
Post Office Box 8186
Albuquerque, New Mexico 87108
Telephone 292-3090

SALES, SERVICE AND INSTALLATION OF PETROLEUM EQUIPMENT

SOLD TO:
•SAFETY KLEEN CORPORATION•
•2720 Girard N.E. •
•Albuquerque, N.M. •
• •
•ATTENTION: Mr. Brian Cabo

SHIP TO.
Same

DATE
4-29-77

INVOICE
№ 4105

NO DISCOUNT ALLOWED ON TRANSPORTATION CHARGES OR SALES TAX

| CUSTOMER ORDER NO. | DATE SHIPPED | TERMS | F O B. | SHIPPED VIA | SALESMAN | |
|---|---|---|---|---|---|---|
| | | | | | | |
| **WORK ORDER NO.** | **MAKE** | **MODEL** | **SERIAL NO.** | **DATE COMPLETED** | **CASH** | **CHARGE** |
| 4489 | | | | | | |

| ORDERED | B.O. | SHIPPED | DESCRIPTION | UNIT | EXTENSION |
|---|---|---|---|---|---|
| | | | To invoice you for tank installation, | | $13,750.00 |
| | | | tanks, and work completed as per quote | | |
| | AFE #383- | | | | |

IT IS AGREED THAT DELIVERY TO CARRIER BY SELLER CONSTITUTES DELIVERY AND A TRANSFER OF TITLE AND POSSESSION TO BUYER CLAIMS FOR LOSS OR DAMAGE SHOULD BE PRESENTED TO CARRIER PROMPTLY NO MERCHANDISE TO BE RETURNED WITHOUT OUR WRITTEN PERMISSION.

MAKE NO DEDUCTIONS FROM THIS INVOICE. IF INCORRECT RETURN AT ONCE.

# APPENDIX C
## Inspection and Testing Reports

# TABLE OF CONTENTS

| | Page No. |
|---|---|
| Underground Tank System Inspection Report ..... | C-1 |
| Testing Results Summary (Hunter) ..... | C-2 |
| Tank and Location Data (Hunter) ..... | C-3 |

# TERA, INC.

## UNDERGROUND TANK SYSTEM INSPECTION REPORT

Sheet: 1 of 1

CLIENT: Safety-Kleen Corp. Job No. 87-168-09

PLANT LOCATION: Albuquerque, New Mexico Date: 04/05/88

TANK TESTER: Hunter Environmental Services By: THW

Sal Ringer

WEATHER CONDITIONS: Clear, Windy 75° F

TANK FILLED SINCE: 04/04/88 (topped off for test 04/05/88)

FILL HEIGHT: 133 inches for system test (approx. 9" below grade)

PIPING INCL. IN TEST: To tank test level

PRELIMINARY RESULTS: System tight (0.025 gph calc. leak rate)

TANK VENT CONDITION: Good

MANHOLE CONDITION: Good, except level probe connection not liquid tight

SIGNS OF LEAKS OR DAMAGE: None

DUMPSTER LOCATION: Adjacent to tank (See Plate 1)

OVERALL CONDITION: Good

SIGNS OF LEAKAGE: None, indications of past spillage into pan

DRIP PAN CONDITION: Satisfactory

SIGNS OF LEAKAGE: None

SIGNS OF CORROSION: Minor surface corrosion

DRAIN LINE SIZE (S): 3 inch

CONDITION OF VISIBLE PORTION: Satisfactory

APPROX. DISTANCE TO TANK (ALONG PIPE): 15 feet

COMMENTS: No block valve in line from dumpster to storage tank. Test also performed at tank top level showed tank tight (0.015 gph calc. leak rate). Some dirty water standing in corners of drip pans and in curbed area around drip pans.

TFRA, Inc.

APR 18 1988

HUNTER ENVIRONMENTAL SERVICES, INC.
115 DEWALT AVENUE, N.W., SUITE 400
CANTON, OHIO 44702
216-453-1800 800-523-4370

FINAL TEST RESULTS
TEST DATE: 4/5/88

CUSTOMER: SAFETY KLEEN
ADDRESS: SUZANNE RYAN

LOCATION/IDENTIFICATION NO.: SAFETY KLEEN
2720 GIRARD STREET
ALBUQUERQUE, NM

TEST RESULTS SUMMARY

| NO. | SYSTEM PRODUCT | TANK SIZE GALLONS | TANK SIZE DIA/MATL | WATER INCHES | LEAK LOCATOR RESULTS LEVEL INCHES | LEAK LOCATOR RESULTS ALR GPH | LEAK LOCATOR RESULTS CONCLUSION | LEAK LOCATOR RESULTS RECOMMENDATIONS |
|---|---|---|---|---|---|---|---|---|
| 1 | MINERAL SPIRITS | 12,000 | 96 S | 0 | 104 | -.015 | PASS | |
| | | | | | 133 | -.025 | PASS | |

COMMENTS: TANK TOP TEST WAS CONDUCTED FIRST DUE TO THE LEVEL ALARM CONNECTED TO THE MANWAY WAS LEAKING. MAINTENANCE WAS NOTIFIED, REPAIR MADE AND TEST CONDUCTED AT FULL SYSTEM. SEE ABOVE RESULTS.

PRODUCT LINES - HYDROSTATIC PRESSURE TEST RESULTS

| NO. | SYSTEM PRODUCT | TYPE OF PUMP REMOTE | TYPE OF PUMP SUCTION | POUNDS APPLIED | POUNDS HELD | MINUTES HELD | PRODUCT LOSS CC's | PRODUCT LOSS GPH | CONCLUSION /RESULT |
|---|---|---|---|---|---|---|---|---|---|
| 1 | MINERAL SPIRITS | | | | | | | | NA |

NOTE: On suction systems, NEVER put more than 15 psi on any pump system.

DETAIL OF TEST RESULTS

| NO. | SYSTEM PRODUCT | TEST NO. | TEST LEVEL (IN.) | TIME CLOCK STATE | TIME DURATION (HR-MIN) | LEAK RATE CC/DIV | LEAK RATE CC/MIN | TEMPERATURE COMPENSATION DELTA °F | TEMPERATURE COMPENSATION CC/MIN | ABSOLUTE LEAK RATE CC/MIN | ABSOLUTE LEAK RATE GPH | CHECK TEST Y/N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MINERAL SPIRITS | 1 | 104 | 12:18 | 40 MIN | 1.131 | -8.945 | -.021 | -7.970 | -.975 | -.015 | N |
| | | 2 | 133 | 3:35 | 34 MIN | 1.662 | -9.903 | -.022 | -8.350 | -1.553 | -.025 | N |

*LEVEL - Inches from Tank Bottom to Test Level
ALR - Absolute Leak Rate (Measured Leak Rate - Temperature Compensation) in Gallons Per Hour
CONCLUSION - NFPA 329 criterion of +/- 0.05 GPA is used to certify tightness

CERTIFICATION

This is to certify that the above tank systems were tested, using the HUNTER ENVIRONMENTAL SERVICES, INC. LEAK LOCATOR according to all standard operating procedures. Those indicated as tight at full system meet the criterion established by the National Fire Protection Association Pamphlet 329 for Precision Testing.
Tests Conducted and Certified By: Test Van No. 40
Team Manager: SAL RINGER

# TANK AND LOCATION DATA

DATE: 4-5-88

CUSTOMER: Safety-Kleen

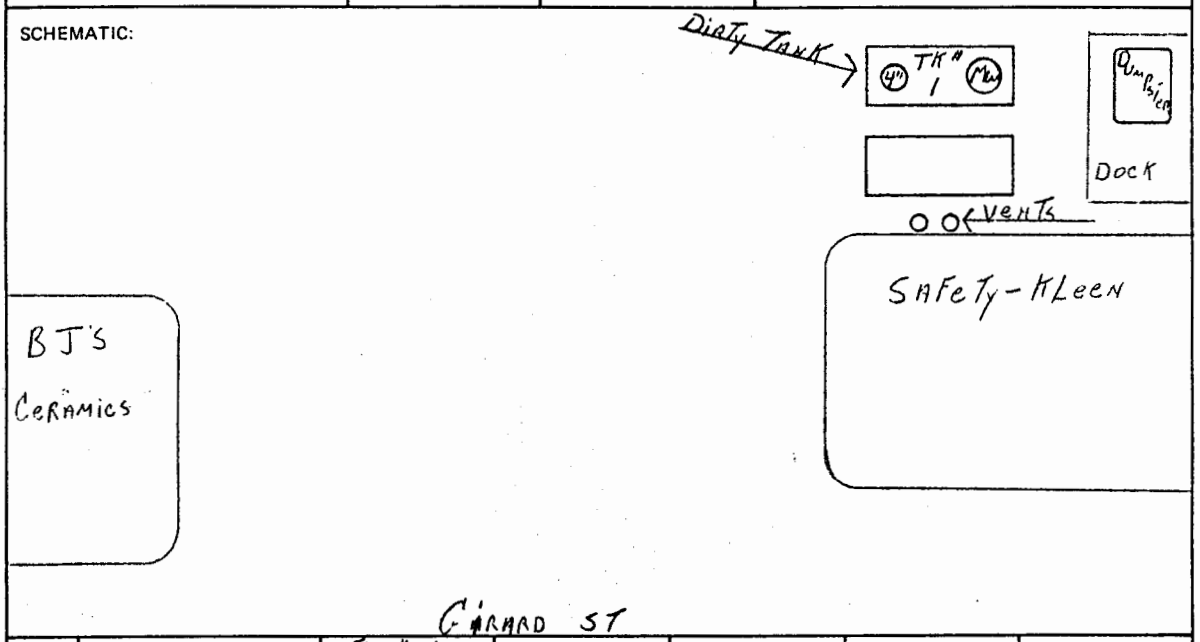
CITY: Albuquerque

I.D. #

STATE: NM

| WEATHER | TIME | TEMPERATURE | COMMENTS |
|---|---|---|---|
| BEFORE TEST – | | | |
| AFTER TEST – | | | |

SCHEMATIC:




| | PRODUCT/TANK NO. | TK # 1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fill | Gauge | Fill | Gauge | Fill | Gauge | Fill | Gauge | Fill | Gauge |
| BEFORE DELIVERY | LEVEL | 96" | | | | | | | | | |
| | GALLONS | 12,000 | | | | | | | | | |
| | WATER | 0 | | | | | | | | | |
| | TOP OF RISER | 135" | | | | | | | | | |
| | GRADE | 142" | | | | | | | | | |
| | DROP TUBE | ALUM | | | | | | | | | |
| | CAPACITY, GALLONS | 12,033 | | | | | | | | | |
| | DIAMETER, INCHES | 96 | | | | | | | | | |
| | MATERIAL | Steel | | | | | | | | | |
| | PUMP TYPE | None | | | | | | | | | |
| | TYPE OF COVER | Concrete | | | | | | | | | |
| | AGE OF TANK | UNK | | | | | | | | | |
| | SIPHON | NO | | | | | | | | | |
| | TANK OPENINGS | 1-4" | | | | | | | | | |
| | EXTRACTORS | None | | | | | | | | | |
| | | | | | | | | | | | |
| VAPOR RECOVERY | TYPE | None | | | | | | | | | |
| | VENT CONFIGURATION | Single | | | | | | | | | |
| | P-V VENT VALVE TYPE | None | | | | | | | | | |
| | | | | | | | | | | | |

REPLACEMENT PARTS:

| PART # | DESCRIPTION | QUANTITY | PRICE |
|---|---|---|---|
| 724 | Universal 4" T.S. Fill Adapter | 1 | $ 39.00 |

ADDITIONAL CHARGES: (pumpovers, overtime, etc.)

*Data obtained from ☐ Station ☐ LL Charts ☐ Other