

EXHIBITS

- A. [NOT USED]**
- B. FACILITY DESCRIPTION**
- C. WASTE CHARACTERIZATION**
- D. PROCESS INFORMATION**
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- F. PREPAREDNESS AND PREVENTION PLAN**
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- L. [NOT USED]**
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- N. SUBPART BB INFORMATION**
- O. SUBPART CC INSPECTION LOG**

EXHIBIT A

[NOT USED]

EXHIBIT B

FACILITY DESCRIPTION

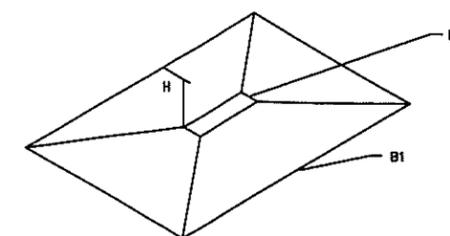
B-1	Site Topographic Map with 1,000 ft. Radius
B-2	Not Used
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B-5	Warehouse Pallet Layout
B-6	Site Layout and Utility Plan
B-7	Tank Farm Shelter Plan (Return and Fill Diagram)
B-8	Not Used
B-9	Site Storm Water Flow
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B-12	Not Used
B-13	DOT Hazmat Load and Segregation Chart

Exhibit B-1

Topographic Map – 1,000 Foot Radius

Exhibit B-5

Office/Warehouse Floor Plan



CONTAINMENT FORMULA USED:
 $(1/3)(H)(B1+B2+\sqrt{B1 \times B2})$

B1 = (78'-8" x 48'-8") 3828.4 S.F.
B2 = (12'-0" x 2'-0") 24 S.F.
H = 2"

$\sqrt{B1 \times B2}$ (91872) = 303
3828 + 24 + 303 = 4155 S.F.
4155 S.F. x 2" (H) = 692.5 C.F.
1/3 x 692.5 = 230.8 C.F.
230.8 C.F. x 7.48 = **1726.3 GALLONS**

VOLUME OF TRENCH (L X W X D X 7.48 GAL/CF)
11.66' X 1.72' X 3.0' X 7.48 GAL/CF = **450 GAL**

1726.3 TOTAL GALLONS

10 DAY TRANSFER WASTE STORAGE

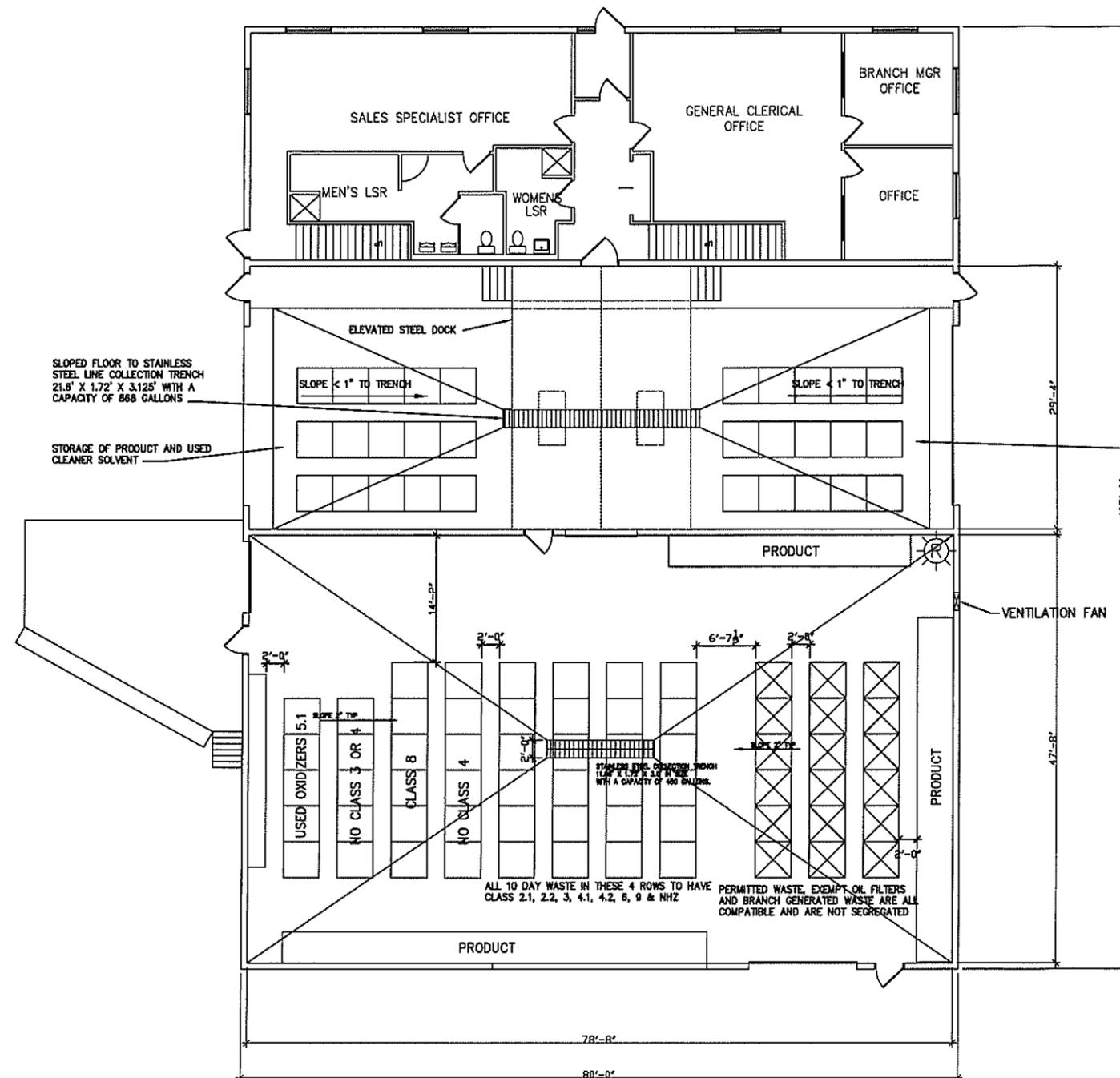
PERMITTED WASTE STORAGE

STORAGE ARRANGEMENT

4 CONTAINERS/PALLET X 55 GAL/CONTAINER X 2 PALLETS/STACK X 39 STACKS = 17,160 GALLONS

CONTAINMENT SPECIFICATIONS

FLOOR AREA CONTAINMENT AVAILABLE = 1,726 GALLONS
TRENCH CAPACITY = 450 GALLONS
TOTAL CONTAINMENT AVAILABLE = 2,176 GALLONS
CONTAINMENT REQUIRED = 10% OF 17,160 = 1,716 GALLONS
EXCESS CONTAINMENT = 460 GALLONS



SLOPED FLOOR TO STAINLESS STEEL LINE COLLECTION TRENCH 21.8' X 1.72' X 3.125' WITH A CAPACITY OF 868 GALLONS

STORAGE OF PRODUCT AND USED CLEANER SOLVENT

SLOPE < 1" TO TRENCH

SLOPE < 1" TO TRENCH

STORAGE OF PRODUCT AND USED AQUEOUS PARTS CLEANER DRUMS

PRODUCT

VENTILATION FAN

USED OXIDIZERS 5.1

NO CLASS 3 OR 4

CLASS 8

NO CLASS 4

STAINLESS STEEL COLLECTION TRENCH 21.8' X 1.72' X 3.125' WITH A CAPACITY OF 868 GALLONS

PERMITTED WASTE, EXEMPT OIL FILTERS AND BRANCH GENERATED WASTE ARE ALL COMPATIBLE AND ARE NOT SEGREGATED

ALL 10 DAY WASTE IN THESE 4 ROWS TO HAVE CLASS 2.1, 2.2, 3, 4.1, 4.2, 6, 9 & NHZ

PRODUCT

PRODUCT

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REVISIONS						TITLE					
						WAREHOUSE PALLET LAYOUT					
2	REVISE PALLET LAYOUT	JEK	GAS	GAS	051216	SAFETY-KLEEN SYSTEMS, INC. 2640 N. CENT. EXPRESSWAY STE 400 RICHMOND, TX, 75008 PHONE 800-669-5740					
1	REVISE TO SHOW CURRENT STORAGE CONDITIONS	JEK	-	-	041406						
1	UPDATE FOR PART B	JEK	-	-	042804						
NO.	DESCRIPTION	BY	CHK	APPR	DATE	SCALE	BY	CHKD	P.E. APPR	DR. APPR	DATE
						1/8"=1'	VEY	VEY	-	-	12-10-93
						SERVICE CENTER BRANCH AT			STD-DWG-REV NO.		
						CHANDLER, AZ			7134-WB00-003-2		

Exhibit B-6

Site Layout and Utility Plan



NET LAND AREA: 91,250 S.F., 2.095 AC.
 BUILDING AREA: 8,400 S.F. FIRST FLOOR
 2,080 S.F. SECOND FLOOR
 10,480 S.F. TOTAL

COVERAGE : 9.2%
 ZONE: I-2
 OCCUPANCY : OFFICE - B
 WAREHOUSE - H-7
 CONSTRUCTION : III_N
 HEIGHT: ONE AND TWO STORIES

PARKING:
 OFFICE: 4160/200 = 20.80
 WAREHOUSE: 6420/500 = 12.64
 TOTAL REQUIRED = 34
 TOTAL PROVIDED = 60

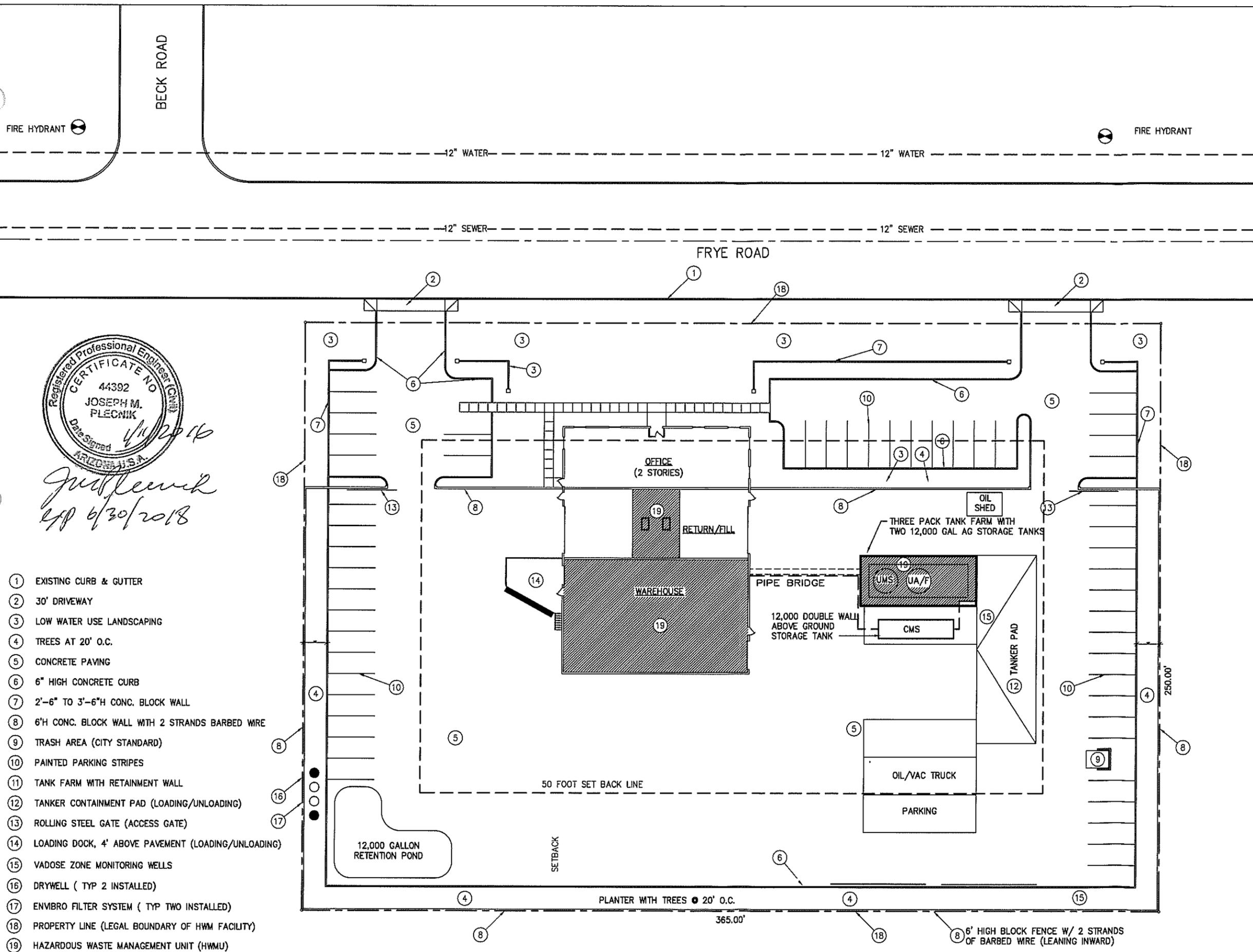
NO.	DESCRIPTION	BY	CHK	APPR	DATE
09	ADD CONTAINERS LEGEND	GAS	-	-	03/17/14
08	UPDATE STORAGE TANKS	GAS	-	-	02/20/14
07	UPDATE STORAGE TANKS	GAS	-	-	07/13/09
06	SHOW 12K AGT FOR PART B	JEX	-	-	05/18/04
05	SHOW 12K DBL WALL 150 AGT	WEY	-	-	06/09/05
04	ADJUST FOR AS-BUILT	WEY	WEY	-	12/13/03
03	ADDED RETENTION POND	MJP	WO	-	04/07/02
02	ADDED SITE DEVEL IMPROVEMENT #S	MJP	-	-	02/13/02

STORAGE CONTAINERS LEGEND			
CONTAINER	CAPACITY	NUMBER PRESENT	CONTENTS
CONTAINER STORAGE AREA	55-360	UP TO 140	MISC.* OIL
RETURN/FILL STATION	162	2	MISC.* OIL
OIL-VAC TRUCKS	3,500	12	USED OIL
TANK FARM AST'S	12,000	3	NEW/USED SOLVENT
FRAC TANKS (FT1, FT2, FT3)	UP TO 21,000	3	USED OIL

* MISC. OIL CAN INCLUDE SOLVENT, CLEANERS PAINT PRODUCT AND WASTE.

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TITLE					
SITE LAYOUT AND UTILITY PLAN					
SAFETY-KLEEN SYSTEMS, INC.					
2600 N CENT EXPRESSWAY STE 400 RICHARDSON, TX 75080 PHONE 800-669-3748					
SCALE	BY	CHKD	P.E. APPR	OP. APPR	DATE
1" = 20'-0"	WEY	-	-	-	04-23-90
SERVICE CENTER LOCATION	SC-DWG NUMBER				REV. NO.
CHANDLER, ARIZONA	7134-SPOO-001				09



Joseph M. Plechnik
 6/30/2018

- ① EXISTING CURB & GUTTER
- ② 30' DRIVEWAY
- ③ LOW WATER USE LANDSCAPING
- ④ TREES AT 20' O.C.
- ⑤ CONCRETE PAVING
- ⑥ 6" HIGH CONCRETE CURB
- ⑦ 2'-6" TO 3'-6" H CONC. BLOCK WALL
- ⑧ 6" H CONC. BLOCK WALL WITH 2 STRANDS BARBED WIRE
- ⑨ TRASH AREA (CITY STANDARD)
- ⑩ PAINTED PARKING STRIPES
- ⑪ TANK FARM WITH RETAINMENT WALL
- ⑫ TANKER CONTAINMENT PAD (LOADING/UNLOADING)
- ⑬ ROLLING STEEL GATE (ACCESS GATE)
- ⑭ LOADING DOCK, 4' ABOVE PAVEMENT (LOADING/UNLOADING)
- ⑮ VADOSE ZONE MONITORING WELLS
- ⑯ DRYWELL (TYP 2 INSTALLED)
- ⑰ ENVBRO FILTER SYSTEM (TYP TWO INSTALLED)
- ⑱ PROPERTY LINE (LEGAL BOUNDARY OF HWM FACILITY)
- ⑲ HAZARDOUS WASTE MANAGEMENT UNIT (HWMU)

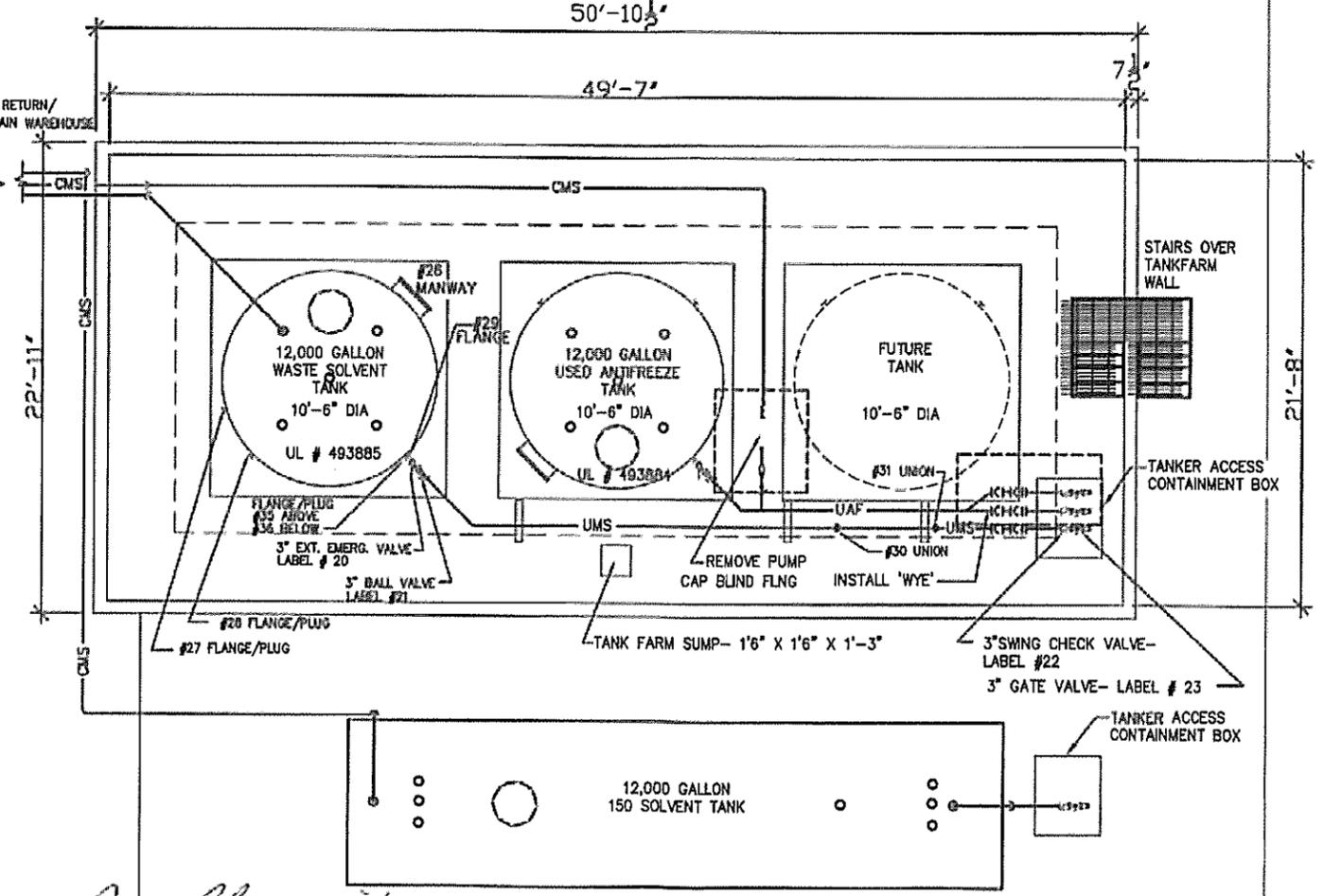
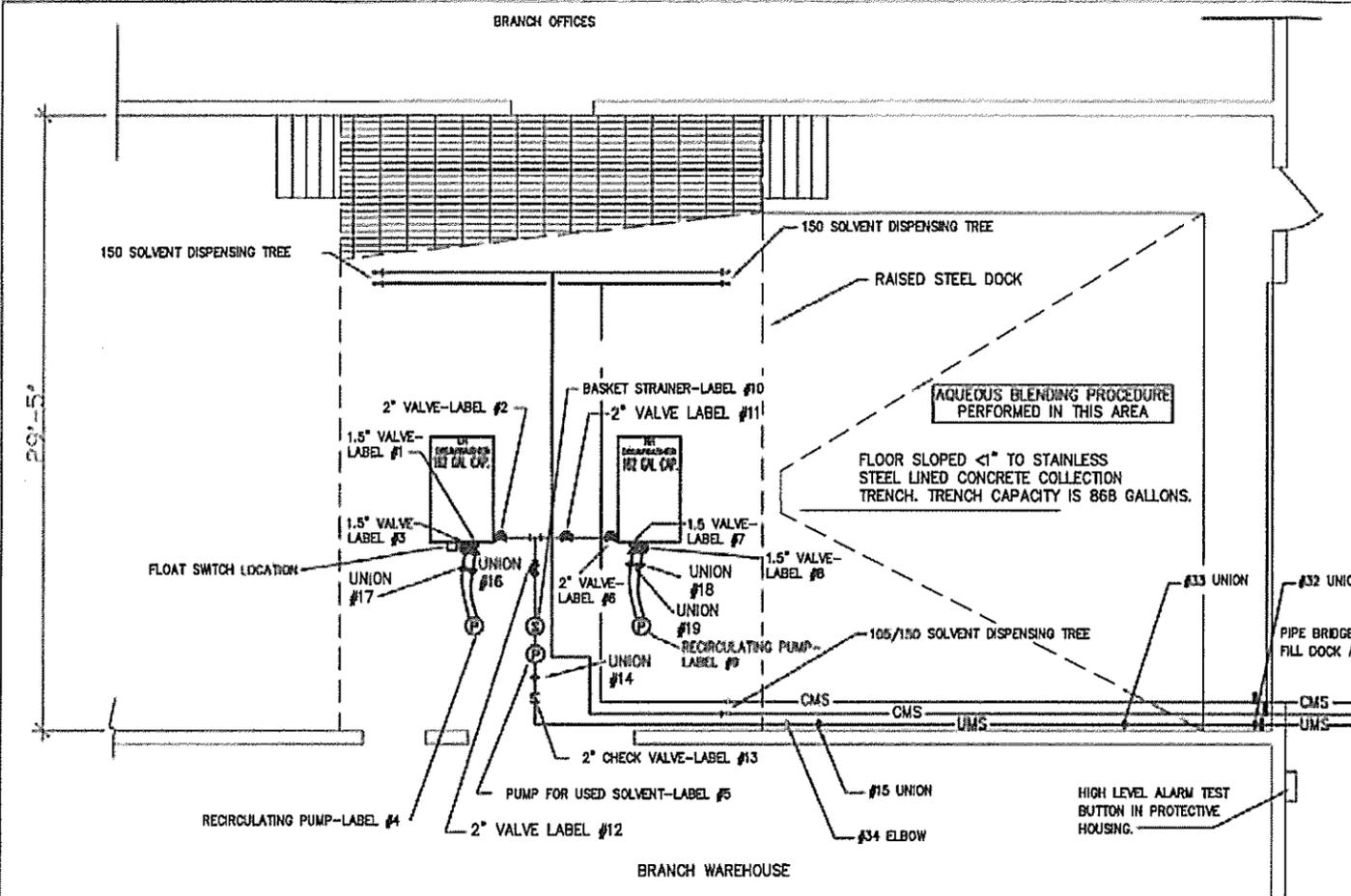
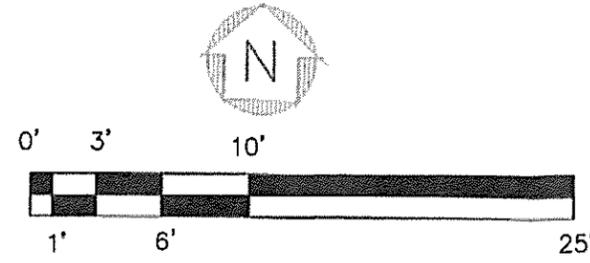
EXHIBIT B-6

Exhibit B-7

Return and Fill Diagram

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DIKE VOLUME CALCULATION - 12,000 GAL. STORAGE TANK (DISH BOTTOM) DIKE HEIGHT 3'-0" CALC4

FORMULAS USED:
 $(\pi/3) T^2 h^2 (3r-h) \times 7.48 \text{ GAL./CU. FT.} = \text{TANK HEAD DISPLACEMENT VOLUME (GAL.'S)}$
 $\pi R^2 (H_1 - H_2) \times 7.48 \text{ GAL./CF} = \text{TANK SHELL DISPLACEMENT VOLUME (GAL.'S)}$
 $(L \times W \times H) \times 7.48 \text{ GAL./CU. FT.} = \text{DIKE VOLUME (GAL.'S)}$
 $(L_1 \times W_1 \times H_1) \times 7.48 \text{ GAL./CF} = \text{TANK PAD DISPLACEMENT VOLUME (GAL.'S)}$
 $\pi R^2 (H_2) \times 7.48 \text{ GAL./CF} = \text{TANK SHELL DISPLACEMENT VOLUME (GAL.'S)}$

R (TANK RADIUS) = 5.25 FT.
 R₂ (TANK RADIUS) = 5.29 FT.
 L (DIKE LENGTH) = 49.55 FT.
 W (DIKE WIDTH) = 21.65 FT.
 H (DIKE HEIGHT) = 3.54 FT.
 r (DISH RADIUS) = 10.50 FT.
 h (DISH HEIGHT) = 1.61 FT.
 S (SKIRT HEIGHT) = 2.0 FT.
 L₁ (TANK PAD LENGTH) = 42.96 FT.
 W₁ (TANK PAD WIDTH) = 15.06 FT.
 H₁ (TANK PAD HEIGHT) = 0.167 FT.
 H₂ (TANK BAR HEIGHT) = 0.083 FT.
 H₃ (TANK HEIGHT) = 2.916 FT.

DIKE VOLUME:
 $(49.55 \times 21.65 \times 3.54) \times 7.48 = 28,405 \text{ GAL. (←)}$

SUMP VOLUME:
 $(11 \times 7.5 \times 1.25 \times 7.48) = 16 \text{ GAL. (←)}$

VOLUME OF LARGEST TANK WITHIN DIKED AREA:
 $(\pi/3) \pi \times 1.61^2 (3 \times 10.5 - 1.61) \times 7.48 + (\pi \times 5.25^2 (3.54 - 2.0 - 0.167) \times 7.48) = 607 + 887.0 = 1,494 \text{ GAL. (←)}$

TANK PAD DISPLACEMENT VOLUME:
 $42.96 \times 15.06 \times 0.167 \times 7.48 = 808 \text{ GAL. (←)}$

EX MISC. DISPLACEMENT FOR PUMPS, PIPING, FITTINGS, SUPPORTS:
 = 284 GAL. (←)

RAINFALL ALLOWANCE: 25 YR/24 HR. = 0.417'
 $49.55 \times 21.65 \times 0.417 \times 7.48 = 3,346 \text{ GAL. (←)}$

TOTAL (EXCESS) = 10,489 GAL. (←)

SYMBOL LIST	
	CAMLOC COUPLING
	ELBOW
	GATE VALVE
	INTERNAL EMERGENCY VALVE
	BALL VALVE
	SCREWED COUPLING
	CHECK VALVE
	PUMP
	BASKET STRAINER
	SCREWED UNION
	FLEXIBLE HOSE
	SOLVENT DISPENSING TREE
	ELBOW DOWN
	CLEAN MINERAL SPIRITS
	USED MINERAL SPIRITS

Joseph M. Plecnik
 Registered Professional Engineer
 CERTIFICATE NO. 44392
 JOSEPH M. PLECNIK
 Date Signed 11/21/2018
 ARIZONA U.S.A.
 6/30/2018

NO.	DESCRIPTION	BY	CHK	APPR	DATE	REV. NO.
07	REVISED FOR PERMIT	JEK	MC	MC	080315	
06	105 PIPING CONVERSION	GAS	GAS	GD	030411	
05	REVISED PER SITE INSPECTION	JEK	MC	MC	100807	
03	REVISED PER SITE INSPECTION	JEK	MC	MC	071007	
04	SHOW 12K 150 SOLVENT TANK	VEY	-	-	120994	
03	MODIFY TO AS BUILT	VEY	-	-	121493	
02	ADDED HIGHLIGHTED PUMP/PIPING NOTES	HLP	-	-	083122	

TANK FARM/SHELTER PLAN

SAFETY-KLEEN SYSTEMS, INC.
 800 N. 12TH, EXPRESSWAY STE 400 BIRD-ROCK, TX, 75008
 PHONE 800-429-5718

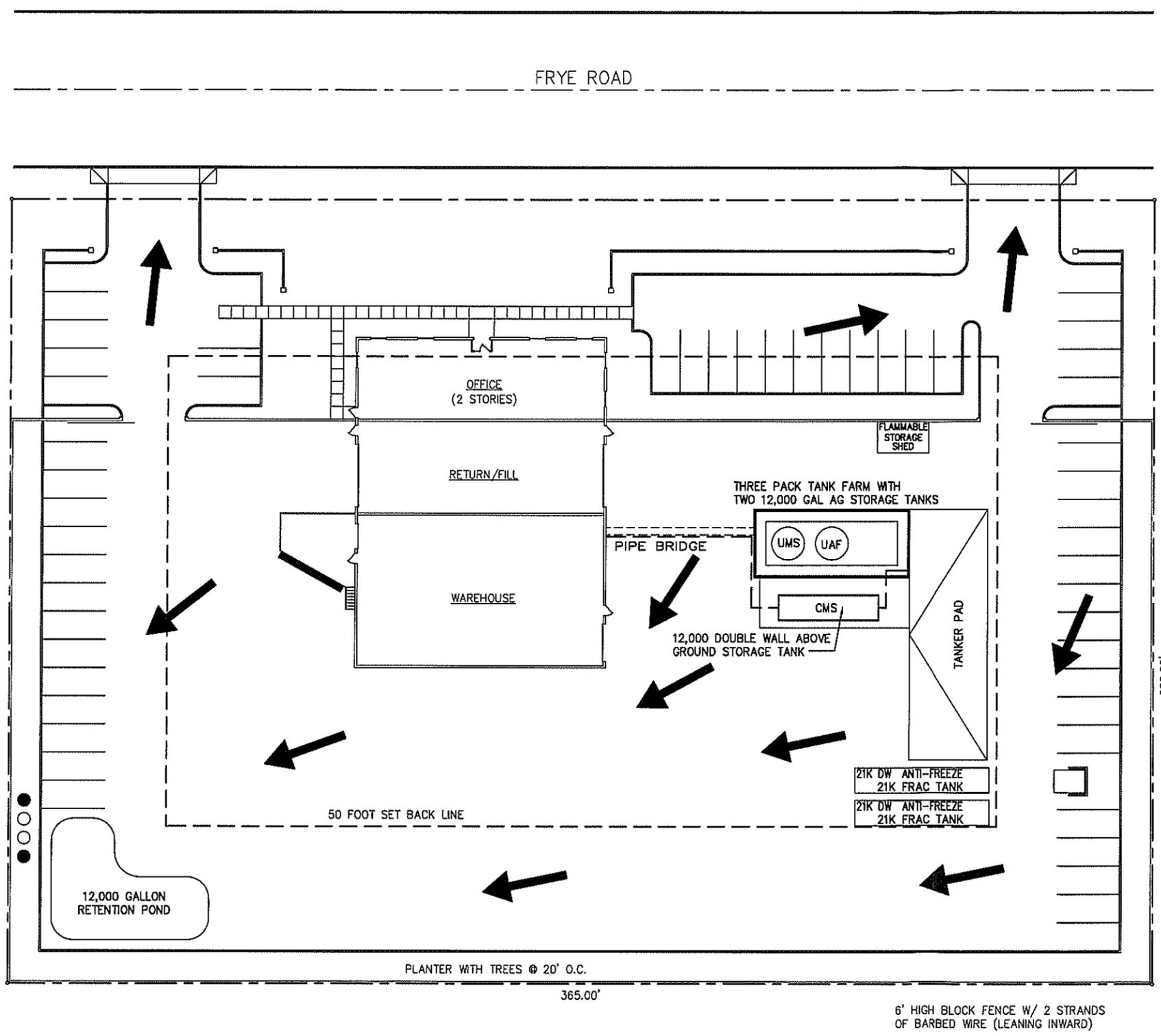
SCALE	1/4" = 1'-0"	BY	ALL	DATE	04-04-20
SERVICE CENTER LOCATION	CHANDLER, ARIZONA	SC-DWG NUMBER	7134-4100-150	OP. APPR	
REV. NO.	07				

Exhibit B-9

Site Grading and Drainage Plan



Exhibit B-9



← - FLOW ARROW

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TITLE
SITE STORM WATER FLOW

SAFETY-KLEEN SYSTEMS, INC.
2600 N. CENT. EXPRESSWAY STE 400 RICHARDSON, TX 75080
PHONE 800-669-5748

NO.	DESCRIPTION	BY	CHK	APPR	DATE	SCALE	BY	CHKD	P.E. APPR	OP. APPR	DATE
0	NEW ISSUE FOR REVIEW	JEX	GO	GO	120309	1" = 20'-0"	JEX	GO	GO	GO	12/03/09
REVISIONS						SERVICE CENTER LOCATION	SC-DWG NUMBER		REV. NO.		
						CHANDLER, ARIZONA	7134-SPOO-006		0		

Exhibit B-13

DOT Hazmat Load and Segregation Chart

HAZARDOUS MATERIALS LOAD AND SEGREGATION CHART

COMPATIBILITY TABLE FOR CLASS 1 (EXPLOSIVE) MATERIALS														CLASS 1 EXPLOSIVE PLACARDS	
COMPATIBILITY GROUP	A	B	C	D	E	F	G	H	J	K	L	N	S	DIVISIONS 1.1, 1.2 & 1.3	DIVISION 1.4
A		X	X	X	X	X	X	X	X	X	X	X	X		
B	X		X	X ⁽⁴⁾	X	X	X	X	X	X	X	X	X	4/5	
C	X	X		2	2	X	6	X	X	X	X	X	3	4/5	
D	X	X ⁽⁴⁾	2		2	X	6	X	X	X	X	X	3	4/5	
E	X	X	2	2		X	6	X	X	X	X	X	3	4/5	
F	X	X	X	X	X		X	X	X	X	X	X	X	4/5	
G	X	X	6	6	6	X		X	X	X	X	X	X	4/5	
H	X	X	X	X	X	X	X		X	X	X	X	X	4/5	
J	X	X	X	X	X	X	X	X		X	X	X	X	4/5	
K	X	X	X	X	X	X	X	X	X		X	X	X	4/5	
L	X	X	X	X	X	X	X	X	X	X	1	X	X	4/5	
N	X	X	3	3	3	X	X	X	X	X	X	X	X	4/5	
S	X	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	X	4/5	4/5		

§177.848
 (g) Instructions for using the compatibility table for Class 1 (explosive) materials are as follows:
 (1) A blank space in the Table indicates that no restrictions apply.
 (2) The letter "X" in the Table indicates that explosives of different compatibility groups may not be carried on the same transport vehicle.
 (3) The numbers in the Table mean the following:
 (i) "1" means an explosive from compatibility group L shall only be carried on the same transport vehicle with an identical explosive.
 (ii) "2" means any combination of explosives from compatibility groups C, D, or E is assigned to compatibility group E.
 (iii) "3" means any combination of explosives from compatibility groups C, D, or E with those in compatibility group N is assigned to compatibility group D.
 (iv) "4" means 'see §177.835(g)' when transporting detonators.
 (v) "5" means Division 1.4S fireworks may not be loaded on the same transport vehicle with Division 1.1 or 1.2 (explosive) materials.
 (vi) "6" means explosive articles in compatibility group G, other than fireworks and those requiring special handling, may be loaded, transported and stored with other explosive articles of compatibility groups C, D and E, provided that explosive substances (such as those not contained in articles) are not carried in the same vehicle.
 (h) Except as provided in paragraph (i) of this section, explosives of the same compatibility group but of different divisions may be transported together provided that the whole shipment is transported as though its entire contents were of the lower numerical division (i.e., Division 1.1 being lower than Division 1.2). For example, a mixed shipment of Division 1.2 (explosive) materials and Division 1.4 (explosive) materials, both of compatibility group D, must be transported as Division 1.2 (explosive) materials.
 (i) When Division 1.5 materials, compatibility group D, are transported in the same freight container as Division 1.2 (explosive) materials, compatibility group D, the shipment must be transported as Division 1.1 (explosive) materials, compatibility group D.

The Division number and compatibility group are printed in black ink where the * is shown. Placard any quantity of Division 1.1, 1.2 or 1.3 material.
 * Division Numbers and Compatibility Group

1.1A	1.2B	1.2L
1.1B	1.2C	1.3C
1.1C	1.2D	1.3F
1.1D	1.2E	1.3G
1.1E	1.2F	1.3H
1.1F	1.2G	1.3J
1.1G	1.2H	1.3K
1.1J	1.2J	1.3L
1.1L	1.2K	

The compatibility group is printed in black ink, where the * is shown. Placard 454 kg. (1,001 lbs.) or more of 1.4 Explosives.
 * Compatibility Group

B
C
D
E
F
G
S

DIVISION 1.5

 The compatibility group is D. Placard 454 kg, (1,001 lbs.) or more of 1.5 Blasting Agents.

DIVISION 1.6

 The compatibility group is N. Placard 454 kg, (1,001 lbs.) or more of 1.6 Explosives.

- PLACARDS NOT REQUIRED FOR:**
- Infectious substances (Division 6.2).
 - Combustible liquids in non-bulk packagings.
 - ORM-D materials.
 - Limited quantities when identified on papers.
 - Radioactive (Class 7) I or II labels.
 - Small quantities per §173.4.
 - Excepted quantities per §173.4a.
 - Class 9 materials in domestic transport.
 - Materials prepared per §173.13.

DANGEROUS PLACARD FOR MIXED LOADS
 Placard 454 kg (1,001 lbs.) gross weight of two or more categories of hazardous materials listed in Table 2. A freight container, unit load device, transport vehicle, or rail car which contains nonbulk packages with two or more categories of hazardous materials that require different placards, as specified in Table 2, may be placarded with a DANGEROUS placard instead of the separate placarding specified for each of the materials in Table 2. However, when 1,000 kg (2,205 pounds) aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, transport vehicle, or rail car, the placard specified in Table 2 for that category must be applied.

Division 1.4 Division 1.5 Division 1.6 Division 2.1 Division 2.2 Class 3 Combustible liquid Division 4.1		Division 4.2 Division 5.1 Division 5.2, other than Type B, liquid or solid, temperature controlled Division 6.1, other than material poisonous by inhalation Class 8 Class 9
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§172.504(g) COMPATIBILITY GROUP LETTER
 For shipments of Class 1 (explosive materials) by aircraft or vessel, the applicable compatibility group letter must be displayed on the placards, or labels when applicable, required by this section. When more than one compatibility group placard is required for Class 1 materials, only one placard is required to be displayed, as provided in paragraphs (g)(1) through (g)(4) of this section. For the purposes of paragraphs (g)(1) through (g)(4), there is a distinction between the phrases *explosive articles* and *explosive substances*. *Explosive article* means an article containing an explosive substance; examples include a detonator, flare, primer or fuse. *Explosive substance* means a substance contained in a packaging that is not contained in an article; examples include black powder and smokeless powder.

- Explosive articles of compatibility groups C, D or E may be placarded displaying compatibility group E.
- Explosive articles of compatibility groups C, D, or E, when transported with those in compatibility group N, may be placarded displaying compatibility group D.
- Explosive substances of compatibility groups C and D may be placarded displaying compatibility group D.
- Explosive articles of compatibility groups C, D, E or G, except for fireworks, may be placarded displaying compatibility group E.

§172.505 PLACARDING FOR SUBSIDIARY HAZARDS

(a) Each transport vehicle, freight container, portable tank, unit load device, or rail car that contains a poisonous material subject to the "Poison Inhalation Hazard" shipping description of §172.203(m) must be placarded with a POISON INHALATION HAZARD or POISON GAS placard, as appropriate, on each side and each end, in addition to any other placard required for that material in §172.504. Duplication of the POISON INHALATION HAZARD or POISON GAS placard is not required.

(b) In addition to the RADIOACTIVE placard which may be required by §172.504(e) of this subpart, each transport vehicle, portable tank or freight container that contains 454 kg (1,001 pounds) or more gross weight of fissile or low specific activity uranium hexafluoride shall be placarded with a CORROSIVE placard on each side and each end.

(c) Each transport vehicle, portable tank, freight container or unit load device that contains a material which has a subsidiary hazard of being dangerous when wet, as defined in §173.124 of this subchapter, shall be placarded with DANGEROUS WHEN WET placards, on each side and each end, in addition to the placards required by §172.504.

(d) Hazardous materials that possess secondary hazards may exhibit subsidiary placards that correspond to the placards described in this part, even when not required by this part (see also §172.519(b)(4) of this subpart).

EXHIBIT C

WASTE CHARACTERIZATION

C-1	Safety-Kleen Annual Recharacterization Sampling Locations
C-2	Statistical Analysis of Annual Waste Characterization Data
C-3	Not Used
C-4	Not Used
C-4.1	Underlying Hazardous Constituents (UHCs)
C-5	Example Waste Material Profile Sheet
C-6	Example Solvent Generator Notification & Certification Form
C-7	AR Sample Testing Protocol
C-8	Annual Recharacterization Sampling Instruction
C-9	AR Waste Code Assignment – National 2016
C-10	Sample Shipping Package 68740R
C-11	Sample Shipping Package 66491
C-12	Example Sample Chain of Custody Form
C-13	Non-parametric Upper Confidence Interval Approach Uth Values
C-14	Example Statistical Approach Applied to Premium Solvent
C-15	AR Data Key of Terms
C-16	AR Waste Name - Data Cross Reference
C-17	Not Used
C-18	Machine Placement Document Waste Agreement
C-19	Sales/Service Document Agreement
C-20	ODEQ Used Antifreeze Policy

Exhibit C-1

Map of Sampling Locations

Exhibit C-2

Statistical Analysis of Annual Waste
Characterization Data

Statistical Analysis of Annual Waste Characterization Data

Prepared by
Robert D. Gibbons Ph.D.

for

Safety Kleen
July 23, 1998

1 Introduction

Since 1990, Safety-Kleen has undertaken a major analytical study each year to document the contaminants in some of its most common waste streams to determine which TCLP waste codes should appear on the manifest for that waste. This Annual Waste Recharacterization Program is both expensive and extensive. Upon review, it appeared that regulatory agency instructions for how to interpret the data might not have been in line with current policy, as reflected in SW846. The general approach is based on development of an upper 90% confidence limit¹ for the true concentration of each constituent, which can in turn be directly compared to regulatory standards to determine if the waste code should or should not be added to a particular waste stream (e.g., Premium Gold Parts Washer Solvent 150). The regulatory basis for this type of comparison stems from U.S. EPA SW846 Chapter 9 (September 1986) guidance on determining if a waste stream is hazardous.² The primary complicating feature is the presence of large numbers of nondetects which raises serious question regarding the use of the parametric approach. In light of this concern, nonparametric methods are used throughout.³ Specifically, following U.S. EPA SW846, we construct a nonparametric 90% upper confidence limit (UCL) for the 50th percentile of the distribution (i.e., median), which is equivalent to the 90% UCL for the mean in the case of a symmetric distribution such as the normal distribution.

¹"Consequently, the CI employed to evaluate solid wastes is, for all practical purposes, a 90% interval." U.S. EPA SW846 (1986) chapter 9 page 6.

²"The upper limit of the CI for μ is compared with the applicable regulatory threshold (RT) to determine if a solid waste contains the variable (chemical contaminant) of concern at a hazardous level. The contaminant of concern is not considered to be present in the waste at a hazardous level if the upper limit of the CI is less than the applicable RT. Otherwise the opposite conclusion is reached." U.S. EPA SW846 (1986) chapter 9 page 3

³"If the data do not adequately follow the normal distribution even after logarithm transformation, a nonparametric confidence interval can be constructed. This interval is for the median concentration (which equals the mean if the distribution is symmetric)." U.S. EPA Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, April 1989, page 6-8

2 Method

Following Chapter 9 of SW846, the 90% UCL for the mean concentration obtained from a series of n representative samples is to be compared to the appropriate regulatory standard to determine if the waste stream is hazardous. If the UCL exceeds the standard, the waste stream is considered hazardous. The applicant must compute the UCL that is appropriate for the specific distributional form of the data. Given the large number of nondetects for many of the constituents, it is difficult if not impossible to clearly identify the underlying distributional form of the data. In this case, the U.S. EPA guidance indicates that a nonparametric alternative should be used.⁴

Nonparametric confidence limits are derived as follows. Given an unknown $P \times 100$ th percentile of interest (e.g. the 50th percentile or median),⁵ where P is between 0 and 1, and n concentration measurements, the probability that any randomly selected concentration measurements being less than the $P \times 100$ th percentile is simply P and the probability of exceeding the $P \times 100$ th percentile is $1 - P$. In light of this, the number of sample values falling below the $P \times 100$ th percentile out of a set of n measurements follows a Binomial distribution with parameters n and P .

The connection with the Binomial distribution can be used to determine an interval formed by a given pair of order statistics (i.e. ranked values) that will contain the percentile of interest, in this case the 50th percentile. Similarly, the Binomial distribution can also be used in constructing an upper limit (i.e. one-sided) for the percentile (e.g. a 90% upper confidence limit for the 50th percentile of the distribution). The computational formula for the cumulative binomial distribution $B(x;n,p)$, representing the probability of getting x or fewer successes in n trials with success probability p is given by

$$Bin(x;n,p) \equiv \sum_{i=0}^x \binom{n}{i} p^i (1-p)^{n-i}$$

To draw inference regarding the $P = 50$ th percentile, we set $p = .5$ in the previous equation. For a one-sided UCL we compute

$$1 - \alpha = 1 - Bin(U - 1; n, .5)$$

beginning from the sample median. We then increase U by one until in this case $1 - \alpha$ is equal to at least .90. The smallest value of U that provides $1 - \alpha \geq .9$ is then the order statistic (i.e., ranked value) that is the nonparametric 90% UCL for the 50th percentile of the distribution.

⁴“If the data do not adequately follow the normal distribution even after logarithm transformation, a nonparametric confidence interval can be constructed.” U.S. EPA, 1989

⁵“This interval is for the median concentration (which equals the mean if the distribution is symmetric).” U.S. EPA (1989), page 6-8

3 Illustration

Consider the following most recent 50 data values for PCE (D039) obtained from Premium Gold Parts Washer Solvent-150.

Table 1
Premium Gold Parts Washer Solvent - 150
50 most recent samples in order of increasing concentration
in ppm

<50.000	<1.000	<0.100	<0.100	<0.100
<0.100	<0.100	<0.100	<0.100	<0.100
<0.100	0.110	0.200	0.200	0.220
0.230	0.260	0.510	0.870	0.880
1.000	1.300	1.500	1.800	2.000
2.700	2.700	3.300	5.400	7.000
7.100	12.000	12.300	17.200	19.700
20.000	20.000	21.200	23.600	32.300
51.100	52.500	136.000	211.000	286.000
508.000	635.000	771.000	940.000	2810.000

For $n=50$, $p=.5$ and $1 - \alpha = .9$, we find that $U = 31$ is the smallest order statistic that provides 90% confidence or more ($1 - \alpha = .941$). As such, we select the 31st largest value in Table 1 which is 7.1 ppm as our UCL. Since 7.1 ppm is larger than the standard of 0.7 ppm, then the D039 waste code is required for this waste stream.

4 Conclusion

The data in the following package have been interpreted using the methodology described. The waste codes for each stream were determined as those parameters for which the 90% UCL for the median concentration was above the regulatory limit, based on review of the last two years of samples or the most recent 50 samples, whichever yielded the larger number of samples to consider.

Exhibit C-4.1

Underlying Hazardous Constituents (UHCs)

NATIONAL UNDERLYING HAZARDOUS CONSTITUENTS

Branch Contaminated Debris	Immersion Cleaner (IC 699)	Parts Washer Solvent 105 (Virgin)	Parts Washer Solvents (Bulked) Combination of 105 and 150	Parts Washer Solvent Sludge/Dumpster Mud	Parts Washer Solvent Tank Bottoms (bulk)	
1,1-Dichloroethylene	122	100	Benzene	67	Benzene	67
1,2-Dichloroethane	121	101	Cadmium	250	Cadmium	250
1,4-Dichlorobenzene	118	102	Chromium	251	Lead	255
2,4,5-Trichlorophenol	239	118	1,4-Dichlorobenzene	255	Tetrachloroethylene	229
2,4,6-Trichlorophenol	240	184	Methyl ethyl ketone	229	Trichloroethylene	237
2,4-Dinitrotoluene	137	211	Pentachlorophenol	229	Trichloroethylene	237
Acetone	51	229	Tetrachloroethylene			
Arsenic	247	237	Trichloroethylene			
Barium	248	250	Cadmium			
Benzene	67	251	Chromium			
Cadmium	250	255	Lead			
Carbon tetrachloride	81					
Chlorobenzene	84					
Chloroform	91					
Chromium	251					
Hexachlorobenzene	164					
Hexachlorobutadiene	165					
Hexachloroethane	169					
Lead	255					
m-Cresol	101					
Mercury	257					
Methyl ethyl ketone	184					
Methyl isobutyl ketone	185					
Nitrobenzene	193					
o-Cresol	100					
p-Cresol	102					
Pentachlorophenol	211					
Pyridine	220					
Selenium	259					
Silver	260					
Tetrachloroethylene	229					
Toluene	231					
Trichloroethylene	237					
Vinyl chloride	244					
Xylenes	245					

Exhibit C-5

Example
Waste Material Profile Sheet



WASTE MATERIAL PROFILE SHEET

Exhibit C-5

Clean Harbors Profile No. 755166

A. GENERAL INFORMATION

GENERATOR EPA ID #/REGISTRATION #	NONREQUIRED	GENERATOR NAME:	Safety-Kleen Systems Inc
GENERATOR CODE (Assigned by Clean Harbors)	SA31528	CITY	Elgin
ADDRESS 1502 Villa St Attn Gregg Lanio		STATE/PROVINCE	IL
		ZIP/POSTAL CODE	60120
CUSTOMER CODE (Assigned by Clean Harbors)	SA31528	PHONE:	(847) 468-6760
ADDRESS 1502 Villa St Attn Gregg Lanio		CUSTOMER NAME:	Safety-Kleen Systems Inc
		CITY	Elgin
		STATE/PROVINCE	IL
		ZIP/POSTAL CODE	60120

B. WASTE DESCRIPTION

WASTE DESCRIPTION:

PROCESS GENERATING WASTE:

IS THIS WASTE CONTAINED IN SMALL PACKAGING CONTAINED WITHIN A LARGER SHIPPING CONTAINER ?

C. PHYSICAL PROPERTIES (at 25C or 77F)

PHYSICAL STATE SOLID WITHOUT FREE LIQUID POWDER MONOLITHIC SOLID LIQUID WITH NO SOLIDS LIQUID/SOLID MIXTURE % FREE LIQUID % SETTLED SOLID % TOTAL SUSPENDED SOLID SLUDGE GAS/AEROSOL	NUMBER OF PHASES/LAYERS				VISCOSITY (If liquid present)		COLOR
	1	2	3	TOP	1 - 100 (e.g. Water)		
	% BY VOLUME (Approx.)				MIDDLE	101 - 500 (e.g. Motor Oil)	
					BOTTOM	501 - 10,000 (e.g. Molasses)	
	ODOR			BOILING POINT °F (°C)		MELTING POINT °F (°C)	TOTAL ORGANIC CARBON
	NONE			<= 95 (<=35)			
	MILD			95 - 100 (35-38)		< 140 (<60)	<= 1%
	STRONG			101 - 129 (38-54)		140-200 (60-93)	1-9%
	Describe:			>= 130 (>54)		> 200 (>93)	>= 10%

FLASH POINT °F (°C)	pH	SPECIFIC GRAVITY	ASH	BTU/LB (MJ/kg)
< 73 (<23)	<= 2	< 0.8 (e.g. Gasoline)	< 0.1	< 2,000 (<4.6)
73 - 100 (23-38)	2.1 - 6.9	0.8-1.0 (e.g. Ethanol)	0.1 - 1.0	2,000-5,000 (4.6-11.6)
101 -140 (38-60)	7 (Neutral)	1.0 (e.g. Water)	1.1 - 5.0	5,000-10,000 (11.6-23.2)
141 -200 (60-93)	7.1 - 12.4	1.0-1.2 (e.g. Antifreeze)	5.1 - 20.0	> 10,000 (>23.2)
> 200 (>93)	>= 12.5	> 1.2 (e.g. Methylene Chloride)		Actual:

COMPOSITION (List the complete composition of the waste, include any inert components and/or debris. Ranges for individual components are acceptable. If a trade name is used, please supply an MSDS. Please do not use abbreviations.)

CHEMICAL

	MIN	--	MAX	UOM
DOES THIS WASTE CONTAIN ANY HEAVY GAUGE METAL DEBRIS OR OTHER LARGE OBJECTS (EX., METAL PLATE OR PIPING >1/4" THICK OR >12" LONG, METAL REINFORCED HOSE >12" LONG, METAL WIRE >12" LONG, METAL VALVES, PIPE FITTINGS, CONCRETE REINFORCING BAR OR PIECES OF CONCRETE >3")?			YES	NO
If yes, describe, including dimensions:				
DOES THIS WASTE CONTAIN ANY METALS IN POWDERED OR OTHER FINELY DIVIDED FORM?			YES	NO
DOES THIS WASTE CONTAIN OR HAS IT CONTACTED ANY OF THE FOLLOWING; ANIMAL WASTES, HUMAN BLOOD, BLOOD PRODUCTS, BODY FLUIDS, MICROBIOLOGICAL WASTE, PATHOLOGICAL WASTE, HUMAN OR ANIMAL DERIVED SERUMS OR PROTEINS OR ANY OTHER POTENTIALLY INFECTIOUS MATERIAL?			YES	NO
I acknowledge that this waste material is neither infectious nor does it contain any organism known to be a threat to human health. This certification is based on my knowledge of the material. Select the answer below that applies:				
The waste was never exposed to potentially infectious material.			YES	NO
Chemical disinfection or some other form of sterilization has been applied to the waste.			YES	NO
I ACKNOWLEDGE THAT THIS PROFILE MEETS THE CLEAN HARBORS BATTERY PACKAGING REQUIREMENTS.			YES	NO
I ACKNOWLEDGE THAT MY FRIABLE ASBESTOS WASTE IS DOUBLE BAGGED AND WETTED.			YES	NO
SPECIFY THE SOURCE CODE ASSOCIATED WITH THE WASTE.		SPECIFY THE FORM CODE ASSOCIATED WITH THE WASTE.		



E. CONSTITUENTS

Are these values based on testing or knowledge? Knowledge Testing

If constituent concentrations are based on analytical testing, analysis must be provided. Please attach document(s) using the link on the Submit tab.

Please indicate which constituents below apply. Concentrations must be entered when applicable to assist in accurate review and expedited approval of your waste profile. Please note that the total regulated metals and other constituents sections require answers.

Table with columns: RCRA, REGULATED METALS, REGULATORY LEVEL (mg/l), TCLP mg/l, TOTAL, UOM, NOT APPLICABLE. Rows include ARSENIC, BARIUM, CADMIUM, CHROMIUM, LEAD, MERCURY, SELENIUM, SILVER, VOLATILE COMPOUNDS (BENZENE, CARBON TETRACHLORIDE, etc.), SEMI-VOLATILE COMPOUNDS (o-CRESOL, m-CRESOL, etc.), and PESTICIDES AND HERBICIDES (ENDRIN, LINDANE, etc.).

Table with columns: HOCs, PCBs. HOCs options: NONE, < 1000 PPM, >= 1000 PPM. PCBs options: NONE, < 50 PPM, >= 50 PPM. Question: IF PCBs ARE PRESENT, IS THE WASTE REGULATED BY TSCA 40 CFR 761? YES NO

ADDITIONAL HAZARDS

DOES THIS WASTE HAVE ANY UNDISCLOSED HAZARDS OR PRIOR INCIDENTS ASSOCIATED WITH IT, WHICH COULD AFFECT THE WAY IT SHOULD BE HANDLED?

YES NO (If yes, explain)

CHOOSE ALL THAT APPLY

- DEA REGULATED SUBSTANCE EXPLOSIVE FUMING OSHA REGULATED CARCINOGENS
POLYMERIZABLE RADIOACTIVE REACTIVE MATERIAL NONE OF THE ABOVE



F. REGULATORY STATUS

YES NO USEPA HAZARDOUS WASTE?
 YES NO DO ANY STATE WASTE CODES APPLY?
 Texas Waste Code _____
 YES NO DO ANY CANADIAN PROVINCIAL WASTE CODES APPLY?
 YES NO IS THIS WASTE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT PER 40 CFR PART 268?
 LDR CATEGORY: _____
 VARIANCE INFO: _____
 YES NO IS THIS A UNIVERSAL WASTE?
 YES NO IS THE GENERATOR OF THE WASTE CLASSIFIED AS CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)?
 YES NO IS THIS MATERIAL GOING TO BE MANAGED AS A RCRA EXEMPT COMMERCIAL PRODUCT, WHICH IS FUEL (40 CFR 261.2 (C)(2)(II))?
 YES NO DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE?
 YES NO IS THIS WASTE STREAM SUBJECT TO THE INORGANIC METAL BEARING WASTE PROHIBITION FOUND AT 40 CFR 268.3(C)?
 YES NO DOES THIS WASTE CONTAIN VOC'S IN CONCENTRATIONS >=500 PPM?
 YES NO DOES THE WASTE CONTAIN GREATER THAN 20% OF ORGANIC CONSTITUENTS WITH A VAPOR PRESSURE >= .3KPA (.044 PSIA)?
 YES NO DOES THIS WASTE CONTAIN AN ORGANIC CONSTITUENT WHICH IN ITS PURE FORM HAS A VAPOR PRESSURE > 77 KPA (11.2 PSIA)?
 YES NO IS THIS CERCLA REGULATED (SUPERFUND) WASTE ?
 YES NO IS THE WASTE SUBJECT TO ONE OF THE FOLLOWING NESHAP RULES?
 Hazardous Organic NESHAP (HON) rule (subpart G) Pharmaceuticals production (subpart GGG)
 YES NO IF THIS IS A US EPA HAZARDOUS WASTE, DOES THIS WASTE STREAM CONTAIN BENZENE?
 YES NO Does the waste stream come from a facility with one of the SIC codes listed under benzene NESHAP or is this waste regulated under the benzene NESHAP rules because the original source of the waste is from a chemical manufacturing, coke by-product recovery, or petroleum refinery process?
 YES NO Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) >10 Mg/year?
 What is the TAB quantity for your facility? _____ Megagram/year (1 Mg = 2,200 lbs)
 The basis for this determination is: Knowledge of the Waste Or Test Data Knowledge Testing
 Describe the knowledge : _____

G. DOT/TDG INFORMATION

DOT/TDG PROPER SHIPPING NAME:

H. TRANSPORTATION REQUIREMENTS

ESTIMATED SHIPMENT FREQUENCY ONE TIME WEEKLY MONTHLY QUARTERLY YEARLY OTHER

<input checked="" type="checkbox"/> CONTAINERIZED		BULK LIQUID		BULK SOLID		
0-0 CONTAINERS/SHIPMENT		GALLONS/SHIPMENT: 0 Min -0 Max		GAL.	SHIPMENT UOM:	TON YARD
STORAGE CAPACITY:				TONS/YARDS/SHIPMENT: 0 Min - 0 Max		
CONTAINER TYPE:						
CUBIC YARD BOX	PALLET					
TOTE TANK	DRUM					
OTHER:	DRUM SIZE:					

I. SPECIAL REQUEST

COMMENTS OR REQUESTS:

GENERATOR'S CERTIFICATION

I certify that I am authorized to execute this document as an authorized agent. I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If Clean Harbors discovers a discrepancy during the approval process, Generator grants Clean Harbors the authority to amend the profile, as Clean Harbors deems necessary, to reflect the discrepancy.

AUTHORIZED SIGNATURE

NAME (PRINT)

TITLE

DATE

Exhibit C-6

Example Solvent Notification & Certification
Form



Example

Solvent Generator Notification & Certification U.S. Version

Customer (Shop) Name: _____ Customer #: _____

Customer Address: _____

Please check the parts washer solvent(s) used at this location.

MPC & 4 in 1 (Brake Cleaning Applications Only) Combo Cleaner Premium Solvent (150)
 MIL-PRF-680 Type II MIL-PD-680 Type II Q-Sol 300

Please complete a brief description of the application and location(s) of the Safety-Kleen parts washing unit(s) covered by this certification form. If there are multiple applications complete a separate form for each application. ►

All generators of the spent parts washer waste checked above must declare and certify to Safety-Kleen whether their parts washer waste is either non-hazardous or an EPA or state regulated hazardous waste by checking the appropriate box(s) below and by signing and dating this form. This form will be kept on file at Safety-Kleen and will be available to local, state, and federal regulatory agencies who may elect to confirm the certification made by the customer by sampling solvent from the customer's parts washer to determine if toxic constituents (such as aerosol solvents containing perchloroethylene or trichloroethylene) have been added.

NOTE: CHECK ONLY ONE BOX BELOW:

▼ Non-Hazardous Waste* ▼

I certify that no other cleaning solvents (e.g., perchloroethylene) have been added into the parts washer solvent generated at this location either directly or by pre-treating parts with any other solvent degreasers (including aerosol sprays) prior to cleaning the parts in the parts washer. I am using "Generator Knowledge" to certify that this waste is non-hazardous under the federal waste classification regulations contained in 40 CFR Sections 261.20-35. I understand that if any other organic solvents are used to help clean or pre-clean parts that are then washed in the parts washer the solvent can become contaminated and would likely become an EPA regulated hazardous waste.

* Note to Customer: even though you have declared this waste to be non-hazardous it must still be managed in a manner that meets all local, state and federal laws and regulations.

▼ Hazardous Waste ▼ Generator EPA ID No.

EPA RCRA Hazardous Waste - D039 I certify that the spent solvent generated at this location is an EPA regulated hazardous waste because perchloroethylene solvent from aerosol spray cans of brake or carburetor cleaner is used to pre-clean parts prior to final cleaning in the parts washer. I declare this waste to be regulated as EPA Waste Code: D039.

Other EPA RCRA Hazardous Waste I certify that the spent solvent generated this location is an EPA regulated hazardous waste that has been characterized by either sampling and laboratory analysis or through generator knowledge to have these EPA Waste Codes:

Non-RCRA State-Regulated Hazardous Waste I certify that the spent solvent generated at this location is only a state regulated hazardous waste because it meets one or more state-specific hazardous waste classification criteria. I further declare that no other cleaning solvents (e.g., perchloroethylene) have been added to the solvent generated at this location either directly or by pre-cleaning parts with any other solvent degreasers (including aerosol sprays) prior to cleaning the parts in the parts washer. I am using "Generator Knowledge" to certify that this waste is not hazardous under the federal waste classification regulations contained in 40 CFR Sections 261.20-35. I understand that if any other organic solvents are used to help clean or pre-clean parts that are then washed in the parts washer the solvent can become contaminated and would likely become an EPA regulated hazardous waste.

I hereby certify that the above information is both a true and accurate description of the spent solution/solvent generated at this location by this company. I also certify that I am an authorized representative of this company and am authorized to make this certification.

Print Name/Title: Signature:

Date:

Exhibit C-7

Annual Recharacterization
Sample Testing Protocol

Annual Re-Characterization Sample Testing Protocol

Spent Material	Test Parameters	Test Methods
Parts Washer Solvent	Flash Point	EPA SW846 1010, 1020
	Closed Cup Tester	
	pH	EPA SW846 9045
	Apparent Specific Gravity and Bulk Density of Waste	ASTM D5057
	TCLP Metals	EPA SW846 1311, 6010, 7470, 7471
	TCLP Semi-Volatiles	EPA SW846 1311, 8270
	TCLP Volatiles	EPA SW846 1311, 8260
Bottom Sediment from the Spent Parts Washer Solvent Tank and Return & Fill	Same As Above	
Immersion Cleaner	Same As Above	
Paint and Paint Gun Cleaner Waste	Same As Above	
Dry Cleaner Waste	Same As Above	

Based on the process generating the waste streams outlined in the above table, 40 CFR 261.24 regulated herbicides and pesticides are not expected to be present; and are therefore, not included in the parameters tested under the Annual Re-Characterization Program.

Analysis is performed on a representative grab sample obtained from a single customer's waste container using a COLIWASA (Composite Liquid Waste Sampler) or a scoop when needed for materials such as Dry Cleaner Waste and Tank Bottom Sediments.

Exhibit C-8

Annual Recharacterization Sampling Instruction

Annual Re-characterization Sampling Instructions

Exhibit C-8

Good sampling practices are critical to the success of the Annual Re-characterization program. Please take your time when pulling samples, ensuring that all of the following requirements are fulfilled.

Training Requirements and Supporting Documentation

✓ **SAFETYFIRST!**

- ✓ Personal Protective Equipment (PPE) – Follow requirements in attached PPE Matrix
- ✓ Prior to shipping samples by FedEx Air, you must complete the following:
 - IATA Dangerous Goods Regulations Training.
 - Sample shipping requirements are outlined in [BOG O310-005 \(US\)](#) and [OC310-005/OC310-005 FC \(Canada\)](#) and Clean Harbors [TC 8.0 Handling, Packaging, and Transporting Samples](#) policy

Supply Checklist

NOTE: To minimize opportunity for contamination, all AR sampling supplies are to be stored in facility office building until needed for actual sampling.

- ✓ Disposable COLIWASA (SK P/N 8941)
- ✓ Disposable plastic scoop
- ✓ Disposable plastic bucket if composite required (e.g., 6 gallon SK P/N 706)
- ✓ Sample Kits
 - SK P/N 3419 – Required for all dry cleaning related materials
 - SK P/N 82260 – Required for all other samples
- ✓ Housekeeping Supplies
 - PIG® Universal Heavy-Weight Mat
 - PIG® Heavy-Duty Maintenance Wipes
 - Plastic garbage bags
- ✓ Non sparking tools
- ✓ Grounding and bonding equipment
- ✓ Paperwork and Packaging Supplies
 - Chain of Custody form
 - Pen and Sharpie Marker
 - Packaging Tape

Pre-sampling Preparation

- ✓ Time – allow 15 minutes per sample
- ✓ **IMPORTANT** - Make arrangements with warehouse workers/material handlers to set aside containers from different customers. Each container sampled must be from a different customer.
- ✓ Place sample kit freezer packs in the freezer 24 hrs prior to sampling event.
- ✓ Purchase bags of ice to supplement the freezer packs if shipping samples in warmer weather
- ✓ Fill out Chain of Custody (COC) forms completely

How to fill out the Chain of Custody (COC) Form

1. Complete all fields in the COLLECTION INFORMATION section
2. **IMPORTANT** - Both the Customer Name(s) and Customer Number(s) associated with the container(s) being sampled must be documented on the COC.

In the event the analytical report shows atypical waste codes, we'll be able to track the sample back to the generator to discuss their specific process and possible source for contamination. Decision will need to be made regarding whether or not the generator's waste should remain as CORE, or is better handled through CWS.

3. A unique identification number must be assigned to each sample using the format **AR2014_Plant #_sample type** (e.g., AR2014_7113_DC Perc Bottoms, AR2014_7113_Premium Solvent, etc.).
4. The same number must be written on the associated sample jar custody label so that the lab can match-up paperwork with samples upon receipt.
5. The sample collector must sign the RELINQUISHED BY section and enter the date and time of shipment.
6. Enter the air bill number on the COC form and make a copy of the form for your records.

Sampling

The majority of facilities' WAPs require "grab samples". A select few, however, require composite samples. See section below on how to obtain a composite sample.

The following table summarizes how samples are typically taken. Keep in mind, the waste streams required for sampling are permit specific (i.e., not every facility will be required to sample every stream outlined in the below table).

- Sampling Methods/Practices to be used
 - ASTM D5495 - *Standard Practice for Sampling with a Composite Liquid Waste Sampler (COLIWASA)*
 - ASTM D5633 - *Standard Practice for Sampling with a Scoop*

Sample Type	Sampling Location	Sample Size/Kit	Homogenization Technique	Sampling Device
Aqueous Brake Cleaner	5 gallon poly carboy	1 quart TCLP kit	Grab sample using multiple COLIWASA pulls or pour contents into a new bucket Stir/mix contents before sampling.	COLIWASA
Dry Cleaner Naphtha/PERC Bottoms/Filters	Drum	1 quart DOT SP-9168 Exemption Packaging	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA or Scoop
Immersion Cleaner	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
Paint Gun Cleaner Paint Waste	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
Parts Washer Solvent Bulk Tank	Tank	1 quart TCLP kit	Grab sample	Tank valve or from tanker using a COLIWASA during annual draw down
APW and PWS Dumpster Sludge	Return and Fill	1 quart TCLP kit	Grab sample Stir/mix up Return and Fill bottoms with scoop before sampling	Scoop

Sample Type	Sampling Location	Sample Size/Kit	Homogenization Technique	Sampling Device
APW and PWS Tank Bottoms	Tank	1 quart TCLP kit	Grab sample during tank clean out Stir/mix up tank bottoms with scoop before sampling	Scoop
PWS 105	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
PWS Premium	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
APW	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
Antifreeze	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA
Used Oil	Drum	1 quart TCLP kit	Grab sample Stir/mix content of drum with COLIWASA before sampling	COLIWASA

1. Bring all items in the *Equipment Checklist*, including frozen sample kit freezer packs/ice, with you to the sampling location.
2. Wear required PPE
3. Obtain a representative sample using a disposable plastic scoop or disposable COLIWASA

IMPORTANT – a new scoop or COLIWASA must be used for each sample pulled

4. Place all sampling debris in plastic garbage bag(s) and dispose of as Branch Generated Debris
5. Ensure the sample jar lid is tight. Seal the lid to the jar by wrapping with packaging tape.
6. Attach *Custody Seal* across the lid of the jar in such a way that the seal must be broken to open the jar. The *Custody Seal* must be signed by the sampler and contain the date, time the sample was pulled, and unique sample ID (ID must follow required format and match the ID written on the accompanying COC).
7. Place the sample jar(s) into a "Samples Only" refrigerator until ready to ship.
8. When ready to ship, place the quart sample jar into the TCLP kit with **frozen freezer packs**. Use additional bagged ice if shipping during warm temperatures. Close up the Styrofoam cooler and place the COC paperwork on top before sealing up the cardboard shipping box using shipping tape.

IMPORTANT - Ship samples Monday thru Wednesday via *FedEx Priority Overnight* to ensure they arrive Thursday or Friday when lab personnel are available to unpack and place in a refrigerator.

TestAmerica Laboratory
Attention: Debra Bowen (412.963.2445)
301 Alpha Drive, RIDC Park
Pittsburgh, PA 15238

CRITICAL – SAMPLE(S) MUST ARRIVE COLD AND LAB MUST ANALYZE WITHIN 14 CALENDAR DAYS FROM THE DATE YOU PULLED THE SAMPLE(S). IF SAMPLES ARRIVE WARM OR EXCEED 14 DAYS, YOU WILL NEED TO RESAMPLE.

Sampling using a COLIWASA

- Ensure the COLIWASA is functioning properly before use. Confirm that the stopper is securely attached to the plastic rod and provides a good seal when in the closed position.
- **OPEN** the COLIWASA and **SLOWLY** lower into the container until it touches the bottom. The COLIWASA must not be lowered with the stopper in the closed position. Opening the stopper after the tube is submerged will cause material to flow in from the bottom layer only, resulting in gross over-representation of that layer. If lowered too fast, a non-representative sample will result.
- When the COLIWASA touches the bottom of the container, pull up on the stopper mechanism to close the COLIWASA.
- Slowly withdraw the COLIWASA from the container while wiping the outside of the COLIWASA with a disposable wipe.
- Place the end of the COLIWASA into the 32-oz sample jar and discharge contents by slowly opening the stopper mechanism.

Obtaining a Composite Sample (Only those branches that require a composite per permit)

- Use a new disposable plastic bucket
- Use a new COLIWASA for each customer container sampled
- For each customer container sampled, you'll actually need to pull the following two samples
 - Place one COLIWASA volume into the compositing bucket
 - Using the same COLIWASA, fill a new quart glass jar (SK P/N 8895). This sample jar needs to be labeled with the customer name and number associated with the container that is being sampled. This sample will serve as a retain in the event analytical on the composite shows atypical results and we need to analyze all associated customer samples. These retains need to be stored until analytical on the composite sample is reported.
- After sampling all customer containers, mix the contents of the bucket.
- Use a COLIWASA to pull a sample of the mixture from the bucket and submit this sample to TestAmerica following instructions above.

Rick Haskins Director Research and Development | Safety-Kleen | A Clean Harbors Company | Elgin, IL | rick.haskins@safety-kleen.com

847.468.6766 (o) | 630.347.1093 (c) | 847.468.6770 (f) | safety-kleen.com

safety-kleen PROTECTION CHOICES PEOPLE
MAKE GREEN WORK

Exhibit C-9

AR Waste Code Assignment –
National 2016

2016 Final Annual Recharacterization Waste Code Assignments - National

Waste Stream	Description Subcategory	Changes from 2015 to 2016	2016 National Waste Codes	2016 NATIONAL Profile
Aqueous Brake Cleaner	N/A	No Change	None	150100
Branch Contaminated Debris	N/A	No Change	F002, F003, F005, D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043	Refer to CH Outbound
Immersion Cleaner	N/A	Remove D006, D008	D027, D039, D040	150133
Parts Washer Solvent 105 Virgin	under 100 lbs	No Change	D001, D018, D039, D040	150045
	over 100 lbs (RQ)			150085
	Non-RQ DF container (no DOT SP)			157045
Bulk MS Solvent	N/A	No Change	D001, D018, D039, D040	Refer to CH Outbound
Parts Washer Solvent Sludge/Dumpster Mud	N/A	No Change	D001, D018, D039, D040	Refer to CH Outbound
Parts Washer Solvent Tank Bottoms (bulk)**	N/A	No Change	D001, D018, D039, D040	Refer to CH Outbound
Premium (150) / PRF / PDF Mil Spec Solvent	N/A	No Change	D039	150055
Paint Gun Cleaner (SK)	DF container (no DOT SP)	No Change	D039	157055
	under 100 lbs			150370
	over 100 lbs (RQ)			152002
Clear Choice Paint Gun Cleaner	under 100 lbs	Add D022	F003, F005, D001, D018, D022, D035, D039, D040	156370
	over 100 lbs (RQ)	Add D022	F003, D001, D018, D022, D035, D039, D040	156371
Paint Waste Other ***	Any size container	Add D022	F003, F005, D001, D018, D022, D035, D039, D040	157372
Universal Paint Gun Cleaner	N/A	Add D022	F003, D001, D018, D022, D035, D039, D040	157375
Dry Cleaner (Perc) Bottoms	N/A	Add D030, D033	F002, D007, D030, D033, D039, D040	154000
Dry Cleaner (Perc) Filters	N/A	Add D030, D033	F002, D007, D030, D033, D039, D040	154001
Dry Cleaner (Perc) Separator Water	N/A	Add D030, D033	F002, D030, D033, D039, D040	154002
Dry Cleaning Naphtha Bottoms	N/A	No Change	D001, D007, D039, D040	150422
Dry Cleaning Naphtha Filters	N/A	No Change	D001, D007, D039, D040	150424
Dry Cleaning Naphtha Separator Water	N/A	No Change	D001, D039, D040	150423
Aqueous Parts Washer Tank Bottoms	N/A	No Change	NONE	Refer to CH Outbound
Aqueous Parts Washer Dumpster Sludge	N/A	No Change	NONE	Refer to CH Outbound
Parts washer solvent tank bottoms are SK-generated wastes from the cleanout of solvent storage tanks. Safety-Kleen does not accept this waste stream from non-SK generators.				

Exhibit C-10

Sample Shipping Package 68740R



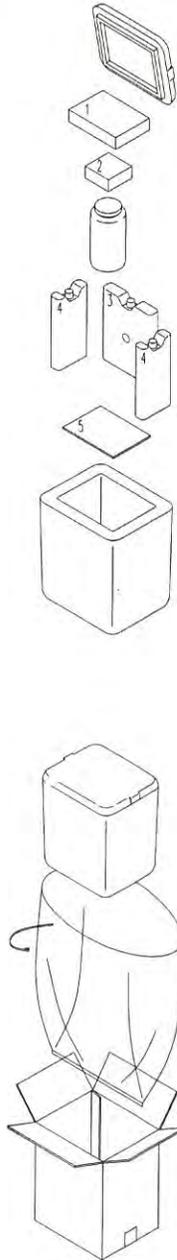
DANGEROUS
GOODS A DIVISION OF
BERLIN PACKAGING

Catalog #
HMS-68740R



4G Package

**HMS One 32 oz. Flint Glass W/M Bottle with EPS
Mini TCLP 2 Pack Master - Rebuild**



Package Contents

Item #	Item Descriptions
COR-H21987402	Carton: 11" x 9" x 13 1/2" 200# Single Wall Corrugated 4G/Y 5.5/S/Yr USA/+AA4224
COR-HC1968742	Corrugated Top Pad: 7 1/2" x 5 1/2" 125# Single Wall Corrugated
COR-J21968742	Master Carton: 19 1/4" x 11 1/2" x 14 1/4" 200# Single Wall Corrugated
GLC-RW028XAGT2G	32 oz. Flint Glass Plastic Coated Standard Wide Mouth Bottle with 70-400 Urea Green Plain Round Lined with F217 & Teflon.
HMS-8687AR	(1) Large KOOLIT Capsule
HMS-86875R	(2) Small KOOLIT Capsule
HMS-8113A	12" x 9" x 29" 2 Mil Bag
HMS-86911R	EPS Foam Cooler + Lid
HMS-81874R	(1) Polyam Insert: 1 1/2" x 3 1/2" x 3 1/2"
HMS-8187AR	(1) Polyam Insert: 1/1/2" x 5" x 7"
HMS-9605K*	2" x 18" Pressure Sensitive Closing Tape
HMS-8133C	Bag Tie
BAG-1A271*	10" X 12" Ziploc Bag for Components
HMS-93875* HMS-9387D*, HMS-9387F*	Label, Custody Record, Waste Declaration Form

*not shown

Transportation Mode: Contact All-Pak, Inc. when Shipment is other than Ground Transportation.

Note: This package is acceptable for Medium Danger Hazardous Materials (gross mass not exceeding 5.5 kg), Packing Group II

Warning: It is the responsibility of each person offering a hazardous material for transportation to ensure that such packaging is compatible with their lading. Failure to heed this warning could result in a serious incident.

Pallet Quantity: 40 @ 2 (80)

Exhibit C-11

Sample Shipping Package 66491



DANGEROUS
GOODS A DIVISION OF
BERLIN PACKAGING

Catalog #
HMS-66491

DOT-SP 9168 Exemption Package
4GV Package

**One 32 oz. W/M Flint Glass Plastic coated Bottle 70-400,
Slip Cover Can & Polypropylene Pouch**
1 Pack Master

Package Contents

Item #	Item Descriptions
COR-8196W002	Carton: 11 3/16" x 11 3/16" x 14 3/4" 275# Double Wall Corrugated 4GV/X 4.0/S/Yr USA/AA4056
COR-H81960102	Insert: 275# Double Wall Corrugated
GLA-RW028XA1	32 oz. Flint Glass Plastic coated W/M 70-400
CAP- AXXAA11PRFTGR9	70-400 Green Urea Closure Lined with F-217 & Teflon
COR-JF1964911*	Master Carton: 20" x 12" x 12" 1 Pack Master 32ECT
HMS-10801	6 5/8" x 10 1/4" Slip Cover Can
HMS-1080L	Slip Cover
HMS-81186	4mil Open End Pouch with Polypropylene Absorbent
HMS-8133E*	Bag Tie for Pouch
HMS-96040	(4) 1" x 10" Pressure Sensitive Tape for Can & Bottle
HMS-9605K*	2" x 18" Pressure Sensitive Tape for Carton
HMS-9605C	2" 3M # 375 Carton Tape
HMS-81100	13" x 30" 4mil PE Open End Bag for Can
HMS-81330*	Bag Tie
HMS-93110* & HMS-93120*	Instruction and DOT Exemption Sheet
HMS-96510	Fiber Core for Bottle
HMS-93100*	1-1/2" x 2" White LithoLabel for Bottle
HMS-93101*	1" x 3" Warning Label on can

*not shown

Transportation Mode: Contact Berlin Packaging when Shipment is other than Ground Transportation

SEE www.BerlinPackaging.com/torque FOR APPLICATION TORQUE

Warning: It is the responsibility of each person offering a hazardous material for transportation to ensure that such packaging is compatible with their lading. Failure to heed this warning could result in a serious incident.

Pallet Quantity: 35

HAZARDOUS MATERIALS SHIPPER

DOT-SP-9168

ASSEMBLY INSTRUCTIONS



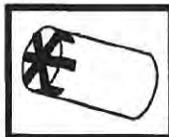
1. Do not overfill bottle



2. Close bottle tightly proper closure would be 50% of cap size. I.E. 33mm would require 17 inch pounce. Use tape around cap and neck to prevent closure backoff.



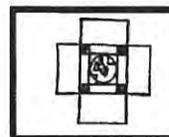
3. Place bottle into absorbent pouch. When using narrow mouth bottle place fiber core over neck of bottle and close pouch with bag tie



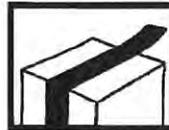
4. Place into can, apply can lid and secure with tape



5. Put can in plastic bag, twist end and tie within itself or close with bag tie.



6. Place bagged can into corrugated insert. Push die-cut corners in to secure can.



7. Seal box with tape



8. Put proper shipping name and UN Identification Number on box.

SHIPPER PROVIDES PRIMARY CONTAINER

Follow general assembly instructions but when using your own container, place container(s) within can and secure with compatible cushioning material surrounding and separating containers in a sufficient quantity to prevent movement side by side and up and down. Primary container supplied via the user of this Special Permit must be capable of passing certain drop and internal pressure tests described within Special Permit DOT-SP 9168.

NOTE: Special Permit requires a 4 Mil bag on inside and outside of can.

POLYPROPYLENE POUCH, VERMICULITE WRAP & PILLOW AND POLYPROPYLENE WRAP & PILLOW

When using alternative method of packing, the shipper must totally surround the primary container (top, bottom and sides) with a cushioning and absorbent material that is compatible with the material being shipped and in sufficient quantity to prevent movement and breakage in transit and capable of absorbing the total contents of material being shipped. When using the vermiculite wrap and pillows be sure to have a pillow on top and bottom of the wrap.

- WARNING -

FAILURE TO FOLLOW INSTRUCTIONS CAN RESULT IN SERIOUS ACCIDENT OR INJURY! IF ANY COMPONENT FROM TOTAL PACKAGE IS MISSING OR DAMAGED. **DO NOT USE.** RETURN PACKAGE TO ALL-PAK FOR REPLACEMENT. THIS PACKAGE IS NOT SOLD AS A STORAGE CONTAINER NOR FOR CONTAINMENT OF A PRODUCT IN WASTE DISPOSAL SITES. NO PART OF THIS PACKAGE IS TO BE RE-USED. **DO NOT OVERFILL BOTTLE.**

- * THE SHIPPER MUST DETERMINE THE SUITABILITY OF THE STURDEESEAL SHIPPER FOR USE WITH THIS PRODUCT.
- * This Special Permit by the Department of Transportation allows the shipper the determination to eliminate the hazard warning label for those items covered under the Special Permit when packaged as described.
- * DOT-SP-9168 is an approved package for shipping via ground transportation including UPS, rail, passenger aircraft or cargo-only aircraft.
- * This package is acceptable for shipping PCB's via UPS but all markings on the outside of the carton that refer to the Special Permit must be covered over or removed. In addition the shipper must attach the EPA Warning Label to the outside of the carton and follow other instructions required by UPS.

TOXIC BY INHALATION AND PYROPHORIC MATERIALS - these materials must be packed inside a can that is capable of maintaining 100 KPA pressure.

This can is a paint style can with plastic ring. DO NOT USE SLIP COVER CAN FOR TOXIC BY INHALATION MATERIALS OR PYROPHORIC MATERIALS.

Read Complete Brochure For Important Information, Instructions and Warnings Concerning Special Permit DOT-SP-9168.

Shipper must determine suitability of SturdeeSeal Shipper for use with their product.

The name United Parcel Service, the initials UPS and the trademark are registered trade identification of United Parcel Service of America, Inc. and used with permission.

All-Pak

All-Pak, Inc., Corporate One West
1195 Washington Pike
Bridgeville, Pennsylvania 15017-2854
Phone: (412) 257-3000

Hms-93110

REV 11/07

SturdeeSeal™

IMPORTANT INFORMATION CONCERNING SHIPMENT WITHOUT DIAMOND LABELS PURSUANT TO DOT-SP-9168

1. Shipper must place specific chemical name or generic commodity description, as appropriate, and U.N. Number on each package prior to shipping.
2. This Special Permit authorizes package transportation only by motor vehicle, rail freight, passenger aircraft or cargo-only aircraft.
3. Any incident involving loss of contents of the package must be reported to the Office of Hazardous Materials Regulation (or OHMR).
4. THE BOTTLE MUST NOT CONTAIN MORE THAN 32 OUNCES OF LIQUID PACKED AT A MINIMUM FILL TEMPERATURE OF AT LEAST 50° F. THE START OF THE BOTTLE SHOULDER PER PACKING INSTRUCTION ILLUSTRATION NO. 2 IS THE MAXIMUM FILL LINE. OVERFILLING BOTTLE CAN RESULT IN SERIOUS ACCIDENT.
5. DOT-SP-9168 **DOES NOT** ELIMINATE THE SHIPPER'S RESPONSIBILITY TO PLACE A PROPER EXTERNAL PRODUCT IDENTIFICATION CODE ON THE PACKAGE AND **DOES NOT** ELIMINATE THE SHIPPER'S RESPONSIBILITY TO PROVIDE APPROPRIATE INSTRUCTIONS AND WARNINGS INSIDE THE HAZARDOUS MATERIALS SHIPPER SO THAT THE CONTAINER AND PRODUCT MAY BE PACKED, USED, UNPACKED AND DISCARDED SAFELY.
6. **USE OF PACKAGING AUTHORIZED UNDER SPECIAL PERMITS CFR 49 TRANSPORTATION SECTION 173.22A.**
 - (a) Except as provided in paragraph (b) of this section, no person may offer a hazardous material for transportation in a packaging the use of which is dependent upon an exemption or special permit issued under subpart B of part 107 of this title, unless that person is the holder of or a party to the exemption or special permit.
 - (b) If an exemption or special permit authorizes the use of a packaging for the transportation of a hazardous material by any person or class of persons other than or in addition to the holder of the exemption or special permit, that person or a member of that class of persons may use the packaging for the purposes authorized in the exemption or special permit subject to the terms specified therein. Copies of exemptions and special permits may be obtained by accessing the Hazardous Materials Safety Web site at <http://hazmat.dot.gov/specialpermits-index.htm> or by writing to the Associate Administrator for Hazardous Materials Safety, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590-0001, Attention: Records Center or from All-Pak, Inc., Corporate One West, 1195 Washington Pike, Bridgeville, Pennsylvania 15017-2854.

WARNING

ALL-PAK, INC. STRONGLY RECOMMENDS THAT THE USER TESTS HIS PRODUCT WITH THE PACKAGE AND THAT IT IS COMPATIBLE WITH THE COMPONENTS IN QUESTION. FAILURE TO DO THIS COULD RESULT IN AN ACCIDENT WHICH COULD CAUSE SERIOUS DAMAGE OR INJURY.

HYDROFLUORIC ACID IN GLASS BOTTLES ARE STRONGLY **NOT** RECOMMENDED FOR SHIPMENT IN THIS PACKAGE AND SHOULD **NOT** BE SHIPPED IN THIS PACKAGE. FAILURE TO FOLLOW THIS WARNING COULD CAUSE A VIOLENT OR SERIOUS ACCIDENT RESULTING IN DAMAGE OR SERIOUS INJURY.

TOXIC BY INHALATION AND PYROPHORIC MATERIALS - these materials must be packed inside a can that is capable of maintaining 100 KPA pressure.

This type of can is a paint style can with plastic ring.

DO NOT USE SLIP COVER CAN FOR TOXIC BY INHALATION MATERIALS OR PYROPHORIC MATERIALS

ALL-PAK, INC. STRONGLY RECOMMENDS THAT NARROW MOUTH BOTTLES BE USED FOR THE SHIPMENT OF LIQUID MATERIAL AND WIDE MOUTH BOTTLES BE USED FOR VISCOUS AND SOLID MATERIALS. FAILURE TO FOLLOW THIS WARNING COULD RESULT IN A SERIOUS ACCIDENT.

All-Pak

All-Pak, Inc., Corporate One West
1195 Washington Pike
Bridgeville, Pennsylvania 15017-2854
Phone: (412) 257-3000
Fax: (412) 257-3001

Exhibit C-12

Example Sample Chain of Custody Form



ANNUAL RECHARACTERIZATION 2014 SAMPLES FOR 2015 WASTE CODES
 Ship Samples to: TestAmerica Laboratory, 301 Alpha Drive, RIDC Park, Pittsburgh PA 15238
 TELEPHONE: 412.963.2445 (Debra Bowen - AR Project Manager)

Exhibit C-12
 Example Sample
 Chain of Custody

COLLECTION INFORMATION

SAMPLE ID #	GENERATING FACILITY NUMBER/CITY/STATE:	DATE	TIME	DESCRIPTION OF SAMPLE (circle one)	NO. OF CONTAINERS	SAMPLING FACILITY NUMBER/CITY/STATE (if different from generating facility - for example if an AC collects the sample for a Branch):
	Customer Name(s) and #(s)			Premium Solvent PWS Bulk Tank PWS Dumpster Sludge PWS Tank Bottoms Immersion Cleaner (Petroleum) Immersion Cleaner (Aqueous) Dry Cleaning PERC Bottoms DC PERC Filters Dry Cleaning NAPHTHA Bottoms Aqueous Brake Cleaner Paint Gun Cleaner Related Waste Paint Related Waste (Paint Waste Only) APW APW Bulk Tank APW Dumpster Sludge APW Tank Bottoms Used Oil Antifreeze	1	
COLLECTOR NAME/PHONE NUMBER:						

ANALYSIS REQUEST

TCLP Metals, TCLP Volatiles, TCLP Semivolatiles, Flash Point, pH, and Specific Gravity

FINAL RESULTS REQUEST

Results to:	Rick Haskins	AND:	
Address:	Safety-Kleen Systems, Inc., 1502 East Villa St., Elgin, IL 60120		
E-mail address:	rick.haskins@safety-kleen.com Phone : 847.468.6766		

SAMPLE TRANSFER RECORD

SIGNATURE OF COLLECTOR:	DATE	TIME	RECEIVED BY	DATE	TIME

Was sample kept chilled until relinquished for shipment to lab? Yes ___ No ___
 Airbill Number: _____

LAB USE ONLY

TEMPERATURE WHEN RECEIVED _____ °C
 SAMPLE KIT OPENED AND CHECKED IN BY _____ TIME _____ DATE _____
 C.O.C. SEALS SIGNED, DATED, AND INTACT ON ALL SAMPLE JARS? YES ___ NO ___
 SHIPPING NOTES/LAB COMMENTS: _____
 IF NO, EXPLAIN _____

Exhibit C-13

Non-Parametric Upper Confidence Interval Approach U^{th} Values

Comparison of Critical Values for 90% UCL of Median for Sign Test and Gibbons Model

Number of Data Points (N)	90% UCL for Sign Test*	90% UCL for Gibbons Model**	Number of Data Points (N)	90% UCL for Sign Test*	90% UCL for Gibbons Model**	Number of Data Points (N)	90% UCL for Sign Test*	90% UCL for Gibbons Model**
21	15	14.8	61	38	37.4	101	59	59.3
22	16	15.4	62	38	38.0	102	60	59.8
23	16	15.9	63	39	38.5	103	60	60.3
24	17	16.5	64	40	39.1	104	61	60.9
25	18	17.1	65	40	39.6	105	61	61.4
26	18	17.7	66	41	40.2	106	62	62.0
27	19	18.3	67	41	40.7	107	63	62.5
28	19	18.9	68	42	41.3	108	63	63.1
29	20	19.4	69	42	41.8	109	64	63.6
30	20	20.0	70	43	42.4	110	64	64.1
31	21	20.6	71	43	42.9	111	65	64.7
32	22	21.2	72	44	43.5	112	65	65.2
33	22	21.7	73	45	44.0	113	66	65.7
34	23	22.3	74	45	44.6	114	66	66.3
35	23	22.9	75	46	45.1	115	67	66.8
36	24	23.4	76	46	45.7	116	67	67.4
37	24	24.0	77	47	46.2	117	68	67.9
38	25	24.6	78	47	46.8	118	68	68.4
39	26	25.1	79	48	47.3	119	69	69.0
40	26	25.7	80	48	47.9	120	70	69.1
41	27	26.3	81	49	48.4	121	70	70.1
42	27	26.8	82	49	48.9	122	71	70.6
43	28	27.4	83	50	49.5	123	71	71.1
44	28	28.0	84	51	50.0	124	72	71.7
45	29	28.5	85	51	50.6	125	72	72.2
46	30	29.1	86	51	51.1	126	73	72.7
47	30	29.6	87	52	51.7	127	73	73.3
48	31	30.2	88	52	52.2	128	74	73.8
49	31	30.8	89	53	52.8	129	74	74.3
50	32	31.3	90	53	53.3	130	75	74.9
51	32	31.9	91	54	53.8			
52	33	32.4	92	54	54.4			
53	33	33.0	93	55	54.9			
54	34	33.5	94	55	55.5			
55	35	34.1	95	56	56.0			
56	35	34.7	96	57	56.6			
57	36	35.2	97	57	57.1			
58	36	35.8	98	58	57.6			
59	37	36.3	99	58	58.2			
60	37	36.9	100	59	58.7			

Calculator for Gibbons Model:	
N	21
Z (0.975)	1.645
UCL	14.8

Numbers listed for the Sign Test and Gibbons Model are the nth ranked data points corresponding to the 90% UCL for the median. For example, in a data set consisting of 44 data points, the 28th highest value will equal the 90% UCL for the median.

* Sign Test critical values for N = 21 through N = 84 were obtained from published tables at the following web site:
<http://www.math.unb.ca/~knight/utility/sgntbl.htm>

Sign Test critical values for N = 85 through N = 130 were calculated using a program available on the Washington State Department of Health web site (see Section 4.5 for binomial proportions):
<http://www.doh.wa.gov/data/guidelines/ConfIntguide.htm>

** Critical values for the Gibbons Model were calculated using equation 13.22 in R.O. Gilbert (Statistical Methods for Environmental Pollution Monitoring) for estimating the upper confidence limit for the median

Conclusion: The Sign Test and Gibbons Model produce equivalent results. The ranking of the 90% UCL never differs by more than +/- 1 for the two methods.

Exhibit C-14

Example Statistical Approach Applied to Premium Solvent

Exhibit C-14 Example Statistical Approach Applied to Premium Solvent

MATRIX	PARAMETER	LAB ID	RESULT	RANKED DATA	UNITS	QUALIFIER	REPORTING LIMIT	Uth VALUE	COUNT	FACILITY	BRANCH	YEAR
Premium Solvent	1,1-Dichloroethene	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	1,1-Dichloroethene	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	1,1-Dichloroethene	180-20832-1	0.25	0.125	mg/L	U	0.25			Archdale	306401	2013
Premium Solvent	1,1-Dichloroethene	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	1,1-Dichloroethane	180-20512-1	0.25	0.125	mg/L	U	0.25			Barre	210501	2013
Premium Solvent	1,1-Dichloroethene	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	1,1-Dichloroethene	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	1,1-Dichloroethene	180-25564-1	0.25	0.125	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	1,1-Dichloroethene	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	1,1-Dichloroethene	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	1,1-Dichloroethene	180-24468-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	1,1-Dichloroethene	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	1,1-Dichloroethene	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	1,1-Dichloroethene	180-24283-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2013
Premium Solvent	1,1-Dichloroethene	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	1,1-Dichloroethene	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	1,1-Dichloroethene	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	1,1-Dichloroethene	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	1,1-Dichloroethene	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	1,1-Dichloroethene	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	1,1-Dichloroethene	180-22177-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2013
Premium Solvent	1,1-Dichloroethene	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	1,1-Dichloroethene	180-2668-1	0.25	0.125	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	1,1-Dichloroethene	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011
Premium Solvent	1,1-Dichloroethene	180-2367-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	612401	2011
Premium Solvent	1,1-Dichloroethene	180-2221-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2011
Premium Solvent	1,1-Dichloroethene	180-2186-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2011
Premium Solvent	1,1-Dichloroethene	180-1865-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2011
Premium Solvent	1,1-Dichloroethene	180-1899-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2011
Premium Solvent	1,1-Dichloroethene	180-1685-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2011
Premium Solvent	1,1-Dichloroethene	180-1535-1	0.25	0.125	mg/L	U	0.25			Wichita	619501	2011
Premium Solvent	1,1-Dichloroethene	180-1536-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2011
Premium Solvent	1,1-Dichloroethene	180-1346-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2011
Premium Solvent	1,1-Dichloroethene	180-1150-1	0.25	0.125	mg/L	U	0.25			Sacramento	715701	2011
Premium Solvent	1,1-Dichloroethene	180-1124-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2011
Premium Solvent	1,1-Dichloroethene	C1D290517001	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2011
Premium Solvent	1,1-Dichloroethene	C1E030546001	0.25	0.125	mg/L	U	0.25			Archdale	306401	2011
Premium Solvent	1,1-Dichloroethene	C1D200409001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	1,1-Dichloroethene	C1D140573001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	1,1-Dichloroethene	C1C100616001	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2011
Premium Solvent	1,1-Dichloroethene	180-9899-1	0.25	0.125	mg/L	U	0.25			Barre	7015	2012
Premium Solvent	1,1-Dichloroethene	180-9967-1	0.25	0.125	mg/L	U	0.25			Cohoes	7046	2012
Premium Solvent	1,1-Dichloroethene	180-10339-1	0.25	0.125	mg/L	U	0.25			Avon	7048	2012
Premium Solvent	1,1-Dichloroethene	180-11568-1	0.25	0.125	mg/L	U	0.25			Charlotte	7055	2012
Premium Solvent	1,1-Dichloroethene	180-10888-1	0.25	0.125	mg/L	U	0.25	45	73	St. Pauls	7087	2012
Premium Solvent	1,1-Dichloroethene	180-10018-1	0.25	0.125	mg/L	U	0.25			Archdale	7088	2012
Premium Solvent	1,1-Dichloroethene	180-12866-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	1,1-Dichloroethene	180-4888-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	1,1-Dichloroethene	180-13029-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	1,1-Dichloroethene	180-4889-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	1,1-Dichloroethene	180-4902-1	0.25	0.125	mg/L	U	0.25			Vinton	7091	2012
Premium Solvent	1,1-Dichloroethene	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	1,1-Dichloroethene	180-13439-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	7104	2012
Premium Solvent	1,1-Dichloroethene	180-12590-1	0.25	0.125	mg/L	U	0.25			Tulsa	7105	2012
Premium Solvent	1,1-Dichloroethene	180-11642-1	0.25	0.125	mg/L	U	0.25			Grand Island	7107	2012
Premium Solvent	1,1-Dichloroethene	180-14162-1	0.25	0.125	mg/L	U	0.25			Wichita	7112	2012
Premium Solvent	1,1-Dichloroethene	180-10007-1	0.25	0.125	mg/L	U	0.25			Boise	7114	2012
Premium Solvent	1,1-Dichloroethene	180-11338-1	0.25	0.125	mg/L	U	0.25			Santa Ana	7117	2012
Premium Solvent	1,1-Dichloroethene	180-11559-1	0.25	0.125	mg/L	U	0.25			Albuquerque	7133	2012
Premium Solvent	1,1-Dichloroethene	180-12755-1	0.25	0.125	mg/L	U	0.25			Chandler	7134	2012
Premium Solvent	1,1-Dichloroethene	180-14306-1	0.25	0.125	mg/L	U	0.25			Sacramento	7138	2012
Premium Solvent	1,1-Dichloroethene	180-12189-1	0.25	0.125	mg/L	U	0.25			Farmington	7179	2012
Premium Solvent	1,1-Dichloroethene	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	1,1-Dichloroethene	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	1,1-Dichloroethene	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	1,1-Dichloroethene	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	1,1-Dichloroethene	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	1,1-Dichloroethene	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	1,1-Dichloroethene	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	1,1-Dichloroethene	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	1,1-Dichloroethene	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	1,1-Dichloroethene	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	1,1-Dichloroethene	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	1,2-Dichloroethane	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	1,2-Dichloroethane	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	1,2-Dichloroethane	180-20632-1	0.25	0.125	mg/L	U	0.25			Archdale	306401	2013
Premium Solvent	1,2-Dichloroethane	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	1,2-Dichloroethane	180-20512-1	0.25	0.125	mg/L	U	0.25			Barre	210501	2013
Premium Solvent	1,2-Dichloroethane	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	1,2-Dichloroethane	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	1,2-Dichloroethane	180-25564-1	0.25	0.125	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	1,2-Dichloroethane	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	1,2-Dichloroethane	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	1,2-Dichloroethane	180-24468-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	1,2-Dichloroethane	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	1,2-Dichloroethane	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	1,2-Dichloroethane	180-24283-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2013
Premium Solvent	1,2-Dichloroethane	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	1,2-Dichloroethane	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	1,2-Dichloroethane	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	1,2-Dichloroethane	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	1,2-Dichloroethane	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	1,2-Dichloroethane	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	1,2-Dichloroethane	180-22177-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2013
Premium Solvent	1,2-Dichloroethane	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	1,2-Dichloroethane	180-2668-1	0.25	0.125	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	1,2-Dichloroethane	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011

Premium Solvent	1,2-Dichloroethane	180-2367-1	0.25	0.125	mg/L	U	0.25	Oklahoma City	612401	2011
Premium Solvent	1,2-Dichloroethane	180-2221-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2011
Premium Solvent	1,2-Dichloroethane	180-2186-1	0.25	0.125	mg/L	U	0.25	Tampa	316301	2011
Premium Solvent	1,2-Dichloroethane	180-1865-1	0.25	0.125	mg/L	U	0.25	Farmington	700804	2011
Premium Solvent	1,2-Dichloroethane	180-1899-1	0.25	0.125	mg/L	U	0.25	Syracuse	218701	2011
Premium Solvent	1,2-Dichloroethane	180-1685-1	0.25	0.125	mg/L	U	0.25	Omaha	512701	2011
Premium Solvent	1,2-Dichloroethane	180-1535-1	0.25	0.125	mg/L	U	0.25	Wichita	619501	2011
Premium Solvent	1,2-Dichloroethane	180-1536-1	0.25	0.125	mg/L	U	0.25	Grand Island	506501	2011
Premium Solvent	1,2-Dichloroethane	180-1346-1	0.25	0.125	mg/L	U	0.25	St. Pauls	303102	2011
Premium Solvent	1,2-Dichloroethane	180-1150-1	0.25	0.125	mg/L	U	0.25	Sacramento	715701	2011
Premium Solvent	1,2-Dichloroethane	180-1124-1	0.25	0.125	mg/L	U	0.25	Albuquerque	700801	2011
Premium Solvent	1,2-Dichloroethane	C1D290517001	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2011
Premium Solvent	1,2-Dichloroethane	C1E030546001	0.25	0.125	mg/L	U	0.25	Archdale	306401	2011
Premium Solvent	1,2-Dichloroethane	C1D200409001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	1,2-Dichloroethane	C1D140573001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	1,2-Dichloroethane	C1C100616001	0.25	0.125	mg/L	U	0.25	Cohoes	200401	2011
Premium Solvent	1,2-Dichloroethane	180-9899-1	0.25	0.125	mg/L	U	0.25	Barre	7015	2012
Premium Solvent	1,2-Dichloroethane	180-9967-1	0.25	0.125	mg/L	U	0.25	Cohoes	7046	2012
Premium Solvent	1,2-Dichloroethane	180-10339-1	0.25	0.125	mg/L	U	0.25	Avon	7048	2012
Premium Solvent	1,2-Dichloroethane	180-11568-1	0.25	0.125	mg/L	U	0.25	Charlotte	7055	2012
Premium Solvent	1,2-Dichloroethane	180-10888-1	0.25	0.125	mg/L	U	0.25	St. Pauls	7087	2012
Premium Solvent	1,2-Dichloroethane	180-10018-1	0.25	0.125	mg/L	U	0.25	Archdale	7088	2012
Premium Solvent	1,2-Dichloroethane	180-12866-1	0.25	0.125	mg/L	U	0.25	Chesapeake	7089	2012
Premium Solvent	1,2-Dichloroethane	180-4888-1	0.25	0.125	mg/L	U	0.25	Chesapeake	7089	2012
Premium Solvent	1,2-Dichloroethane	180-13029-1	0.25	0.125	mg/L	U	0.25	Chester	7090	2012
Premium Solvent	1,2-Dichloroethane	180-4889-1	0.25	0.125	mg/L	U	0.25	Chester	7090	2012
Premium Solvent	1,2-Dichloroethane	180-4902-1	0.25	0.125	mg/L	U	0.25	Vinton	7091	2012
Premium Solvent	1,2-Dichloroethane	180-9962-1	0.25	0.125	mg/L	U	0.25	Raleigh	7092	2012
Premium Solvent	1,2-Dichloroethane	180-13439-1	0.25	0.125	mg/L	U	0.25	Oklahoma City	7104	2012
Premium Solvent	1,2-Dichloroethane	180-12590-1	0.25	0.125	mg/L	U	0.25	Tulsa	7105	2012
Premium Solvent	1,2-Dichloroethane	180-11642-1	0.25	0.125	mg/L	U	0.25	Grand Island	7107	2012
Premium Solvent	1,2-Dichloroethane	180-14162-1	0.25	0.125	mg/L	U	0.25	Wichita	7112	2012
Premium Solvent	1,2-Dichloroethane	180-10007-1	0.25	0.125	mg/L	U	0.25	Boise	7114	2012
Premium Solvent	1,2-Dichloroethane	180-11338-1	0.25	0.125	mg/L	U	0.25	Santa Ana	7117	2012
Premium Solvent	1,2-Dichloroethane	180-11559-1	0.25	0.125	mg/L	U	0.25	Albuquerque	7133	2012
Premium Solvent	1,2-Dichloroethane	180-12755-1	0.25	0.125	mg/L	U	0.25	Chandler	7134	2012
Premium Solvent	1,2-Dichloroethane	180-14306-1	0.25	0.125	mg/L	U	0.25	Sacramento	7138	2012
Premium Solvent	1,2-Dichloroethane	180-12189-1	0.25	0.125	mg/L	U	0.25	Farmington	7179	2012
Premium Solvent	1,2-Dichloroethane	180-21252-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2013
Premium Solvent	1,2-Dichloroethane	180-25504-1	0.5	0.25	mg/L	U	0.5	Sacramento	715701	2013
Premium Solvent	1,2-Dichloroethane	180-24151-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2013
Premium Solvent	1,2-Dichloroethane	180-2356-1	0.5	0.25	mg/L	U	0.5	Boise	118308	2011
Premium Solvent	1,2-Dichloroethane	180-591-1	0.5	0.25	mg/L	U	0.5	Charlotte	303101	2011
Premium Solvent	1,2-Dichloroethane	C1D280567001	0.5	0.25	mg/L	U	0.5	Avon	202802	2011
Premium Solvent	1,2-Dichloroethane	180-13289-1	0.5	0.25	mg/L	U	0.5	Vinton	7091	2012
Premium Solvent	1,2-Dichloroethane	180-14205-1	0.5	0.25	mg/L	U	0.5	Tallahassee	7094	2012
Premium Solvent	1,2-Dichloroethane	180-14023-1	0.5	0.25	mg/L	U	0.5	Omaha	7157	2012
Premium Solvent	1,2-Dichloroethane	180-14585-1	0.5	0.25	mg/L	U	0.5	Dodge City	7178	2012
Premium Solvent	1,2-Dichloroethane	480-20539-1	9.9	4.95	mg/L	U	0.25	Lackawanna	202801	2012
Premium Solvent	1,4-Dichlorobenzene	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	1,4-Dichlorobenzene	180-22446-1	0.25	0.125	mg/L	U	0.25	Albuquerque	700801	2013
Premium Solvent	1,4-Dichlorobenzene	180-20632-1	0.25	0.125	mg/L	U	0.25	Archdale	306401	2013
Premium Solvent	1,4-Dichlorobenzene	180-20891-1	0.25	0.125	mg/L	U	0.25	Avon	202802	2013
Premium Solvent	1,4-Dichlorobenzene	180-20512-1	0.25	0.125	mg/L	U	0.25	Barre	210501	2013
Premium Solvent	1,4-Dichlorobenzene	180-20858-1	0.25	0.125	mg/L	U	0.25	Charlotte	303101	2013
Premium Solvent	1,4-Dichlorobenzene	180-24136-1	0.25	0.125	mg/L	U	0.25	Chesapeake	312101	2013
Premium Solvent	1,4-Dichlorobenzene	180-25564-1	0.25	0.125	mg/L	U	0.25	Chester	315401	2013
Premium Solvent	1,4-Dichlorobenzene	180-24429-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2013
Premium Solvent	1,4-Dichlorobenzene	180-20316-1	0.25	0.125	mg/L	U	0.25	Cohoes	200401	2013
Premium Solvent	1,4-Dichlorobenzene	180-24468-1	0.25	0.125	mg/L	U	0.25	Dodge City	619503	2013
Premium Solvent	1,4-Dichlorobenzene	180-23579-1	0.25	0.125	mg/L	U	0.25	Farmington	700804	2013
Premium Solvent	1,4-Dichlorobenzene	180-20765-1	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2013
Premium Solvent	1,4-Dichlorobenzene	180-20920-1	0.25	0.125	mg/L	U	0.25	St. Pauls	303102	2013
Premium Solvent	1,4-Dichlorobenzene	180-20719-1	0.25	0.125	mg/L	U	0.25	Syracuse	218701	2013
Premium Solvent	1,4-Dichlorobenzene	180-21349-1	0.25	0.125	mg/L	U	0.25	Tampa	316301	2013
Premium Solvent	1,4-Dichlorobenzene	180-21898-1	0.25	0.125	mg/L	U	0.25	Tulsa	619301	2013
Premium Solvent	1,4-Dichlorobenzene	180-24593-1	0.25	0.125	mg/L	U	0.25	Vinton	315501	2013
Premium Solvent	1,4-Dichlorobenzene	180-25917-1	0.25	0.125	mg/L	U	0.25	Raleigh	317101	2013
Premium Solvent	1,4-Dichlorobenzene	180-2878-1	0.25	0.125	mg/L	U	0.25	Dodge City	619503	2011
Premium Solvent	1,4-Dichlorobenzene	180-2668-1	0.25	0.125	mg/L	U	0.25	Chandler	714201	2011
Premium Solvent	1,4-Dichlorobenzene	180-2454-1	0.25	0.125	mg/L	U	0.25	Tulsa	619301	2011
Premium Solvent	1,4-Dichlorobenzene	180-2367-1	0.25	0.125	mg/L	U	0.25	Oklahoma City	612401	2011
Premium Solvent	1,4-Dichlorobenzene	180-2221-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2011
Premium Solvent	1,4-Dichlorobenzene	180-2186-1	0.25	0.125	mg/L	U	0.25	Tampa	316301	2011
Premium Solvent	1,4-Dichlorobenzene	180-1865-1	0.25	0.125	mg/L	U	0.25	Farmington	700804	2011
Premium Solvent	1,4-Dichlorobenzene	180-1899-1	0.25	0.125	mg/L	U	0.25	Syracuse	218701	2011
Premium Solvent	1,4-Dichlorobenzene	180-1535-1	0.25	0.125	mg/L	U	0.25	Wichita	619501	2011
Premium Solvent	1,4-Dichlorobenzene	180-1346-1	0.25	0.125	mg/L	U	0.25	St. Pauls	303102	2011
Premium Solvent	1,4-Dichlorobenzene	180-1150-1	0.25	0.125	mg/L	U	0.25	Sacramento	715701	2011
Premium Solvent	1,4-Dichlorobenzene	180-1124-1	0.25	0.125	mg/L	U	0.25	Albuquerque	700801	2011
Premium Solvent	1,4-Dichlorobenzene	C1D290517001	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2011
Premium Solvent	1,4-Dichlorobenzene	C1E030546001	0.25	0.125	mg/L	U	0.25	Archdale	306401	2011
Premium Solvent	1,4-Dichlorobenzene	C1D200409001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	1,4-Dichlorobenzene	C1D140573001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	1,4-Dichlorobenzene	C1C100616001	0.25	0.125	mg/L	U	0.25	Cohoes	200401	2011
Premium Solvent	1,4-Dichlorobenzene	180-9899-1	0.25	0.125	mg/L	U	0.25	Barre	7015	2012
Premium Solvent	1,4-Dichlorobenzene	180-9967-1	0.25	0.125	mg/L	U	0.25	Cohoes	7046	2012
Premium Solvent	1,4-Dichlorobenzene	180-10339-1	0.25	0.125	mg/L	U	0.25	Avon	7048	2012
Premium Solvent	1,4-Dichlorobenzene	180-11568-1	0.25	0.125	mg/L	U	0.25	Charlotte	7055	2012
Premium Solvent	1,4-Dichlorobenzene	180-10888-1	0.25	0.125	mg/L	U	0.25	St. Pauls	7087	2012
Premium Solvent	1,4-Dichlorobenzene	180-10018-1	0.25	0.125	mg/L	U	0.25	Archdale	7088	2012
Premium Solvent	1,4-Dichlorobenzene	180-12866-1	0.25	0.125	mg/L	U	0.25	Chesapeake	7089	2012
Premium Solvent	1,4-Dichlorobenzene	180-4888-1	0.25	0.125	mg/L	U	0.25	Chesapeake	7089	2012
Premium Solvent	1,4-Dichlorobenzene	180-13029-1	0.25	0.125	mg/L	U	0.25	Chester	7090	2012
Premium Solvent	1,4-Dichlorobenzene	180-4889-1	0.25	0.125	mg/L	U	0.25	Chester	7090	2012
Premium Solvent	1,4-Dichlorobenzene	180-4902-1	0.25	0.125	mg/L	U	0.25	Vinton	7091	2012
Premium Solvent	1,4-Dichlorobenzene	180-9962-1	0.25	0.125	mg/L	U	0.25	Raleigh	7092	2012
Premium Solvent	1,4-Dichlorobenzene	180-13439-1	0.25	0.125	mg/L	U	0.25	Oklahoma City	7104	2012

Premium Solvent	1,4-Dichlorobenzene	180-12590-1	0.25	0.125	mg/L	U	0.25	Tulsa	7105	2012
Premium Solvent	1,4-Dichlorobenzene	180-14162-1	0.25	0.125	mg/L	U	0.25	Wichita	7112	2012
Premium Solvent	1,4-Dichlorobenzene	180-10007-1	0.25	0.125	mg/L	U	0.25	Boise	7114	2012
Premium Solvent	1,4-Dichlorobenzene	180-11338-1	0.25	0.125	mg/L	U	0.25	Santa Ana	7117	2012
Premium Solvent	1,4-Dichlorobenzene	180-11559-1	0.25	0.125	mg/L	U	0.25	Albuquerque	7133	2012
Premium Solvent	1,4-Dichlorobenzene	180-12755-1	0.25	0.125	mg/L	U	0.25	Chandler	7134	2012
Premium Solvent	1,4-Dichlorobenzene	180-14306-1	0.25	0.125	mg/L	U	0.25	Sacramento	7138	2012
Premium Solvent	1,4-Dichlorobenzene	180-12189-1	0.25	0.125	mg/L	U	0.25	Farmington	7179	2012
Premium Solvent	1,4-Dichlorobenzene	180-24283-1	0.17	0.17	mg/L	J	0.25	Omaha	512701	2013
Premium Solvent	1,4-Dichlorobenzene	180-1685-1	0.21	0.21	mg/L	J	0.25	Omaha	512701	2011
Premium Solvent	1,4-Dichlorobenzene	180-1536-1	0.21	0.21	mg/L	J	0.25	Grand Island	506501	2011
Premium Solvent	1,4-Dichlorobenzene	180-21252-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2013
Premium Solvent	1,4-Dichlorobenzene	180-25504-1	0.5	0.25	mg/L	U	0.5	Sacramento	715701	2013
Premium Solvent	1,4-Dichlorobenzene	180-24151-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2013
Premium Solvent	1,4-Dichlorobenzene	180-2356-1	0.5	0.25	mg/L	U	0.5	Boise	118308	2011
Premium Solvent	1,4-Dichlorobenzene	180-591-1	0.5	0.25	mg/L	U	0.5	Charlotte	303101	2011
Premium Solvent	1,4-Dichlorobenzene	C1D280567001	0.5	0.25	mg/L	U	0.5	Avon	202802	2011
Premium Solvent	1,4-Dichlorobenzene	180-13289-1	0.5	0.25	mg/L	U	0.5	Vinton	7091	2012
Premium Solvent	1,4-Dichlorobenzene	180-14205-1	0.5	0.25	mg/L	U	0.5	Tallahassee	7094	2012
Premium Solvent	1,4-Dichlorobenzene	180-14585-1	0.5	0.25	mg/L	U	0.5	Dodge City	7178	2012
Premium Solvent	1,4-Dichlorobenzene	180-22177-1	0.36	0.36	mg/L	U	0.25	Grand Island	506501	2013
Premium Solvent	1,4-Dichlorobenzene	180-14023-1	0.65	0.65	mg/L	U	0.5	Omaha	7157	2012
Premium Solvent	1,4-Dichlorobenzene	180-11642-1	1.9	1.9	mg/L	U	0.25	Grand Island	7107	2012
Premium Solvent	1,4-Dichlorobenzene	480-20539-1	24	12	mg/L	U	0.25	Lackawanna	202801	2012
Premium Solvent	2,4,5-Trichlorophenol	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	2,4,5-Trichlorophenol	180-22446-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2013
Premium Solvent	2,4,5-Trichlorophenol	180-20632-1	0.1	0.05	mg/L	U	0.1	Archdale	306401	2013
Premium Solvent	2,4,5-Trichlorophenol	180-20858-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24136-1	0.1	0.05	mg/L	U	0.1	Chesapeake	312101	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24429-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24468-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2013
Premium Solvent	2,4,5-Trichlorophenol	180-23579-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24283-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2013
Premium Solvent	2,4,5-Trichlorophenol	180-20920-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2013
Premium Solvent	2,4,5-Trichlorophenol	180-21349-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2013
Premium Solvent	2,4,5-Trichlorophenol	180-21898-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24593-1	0.1	0.05	mg/L	U	0.1	Vinton	315501	2013
Premium Solvent	2,4,5-Trichlorophenol	180-24151-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2013
Premium Solvent	2,4,5-Trichlorophenol	180-22177-1	0.1	0.05	mg/L	U	0.1	Grand Island	506501	2013
Premium Solvent	2,4,5-Trichlorophenol	180-2878-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2668-1	0.1	0.05	mg/L	U	0.1	Chandler	714201	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2454-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2356-1	0.1	0.05	mg/L	U	0.1	Boise	118308	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2367-1	0.1	0.05	mg/L	U	0.1	Oklahoma City	612401	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2221-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2011
Premium Solvent	2,4,5-Trichlorophenol	180-2186-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2011
Premium Solvent	2,4,5-Trichlorophenol	180-1865-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2011
Premium Solvent	2,4,5-Trichlorophenol	180-1899-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2011
Premium Solvent	2,4,5-Trichlorophenol	180-1685-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2011
Premium Solvent	2,4,5-Trichlorophenol	180-1124-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2011
Premium Solvent	2,4,5-Trichlorophenol	180-591-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2011
Premium Solvent	2,4,5-Trichlorophenol	180-10888-1	0.1	0.05	mg/L	U	0.1	St. Pauls	7087	2012
Premium Solvent	2,4,5-Trichlorophenol	180-13029-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012
Premium Solvent	2,4,5-Trichlorophenol	180-4889-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012
Premium Solvent	2,4,5-Trichlorophenol	180-12590-1	0.1	0.05	mg/L	U	0.1	Tulsa	7105	2012
Premium Solvent	2,4,5-Trichlorophenol	180-11642-1	0.1	0.05	mg/L	U	0.1	Grand Island	7107	2012
Premium Solvent	2,4,5-Trichlorophenol	180-14162-1	0.1	0.05	mg/L	U	0.1	Wichita	7112	2012
Premium Solvent	2,4,5-Trichlorophenol	180-11559-1	0.1	0.05	mg/L	U	0.1	Albuquerque	7133	2012
Premium Solvent	2,4,5-Trichlorophenol	180-14023-1	0.1	0.05	mg/L	U	0.1	Omaha	7157	2012
Premium Solvent	2,4,5-Trichlorophenol	180-14585-1	0.1	0.05	mg/L	U	0.1	Dodge City	7178	2012
Premium Solvent	2,4,5-Trichlorophenol	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012
Premium Solvent	2,4,5-Trichlorophenol	180-25564-1	0.13	0.065	mg/L	U	0.13	Chester	315401	2013
Premium Solvent	2,4,5-Trichlorophenol	180-25917-1	0.13	0.065	mg/L	U	0.13	Raleigh	317101	2013
Premium Solvent	2,4,5-Trichlorophenol	180-12866-1	0.12	0.12	mg/L	p	0.1	Chesapeake	7089	2012
Premium Solvent	2,4,5-Trichlorophenol	180-10007-1	0.13	0.13	mg/L	p*	0.1	Boise	7114	2012
Premium Solvent	2,4,5-Trichlorophenol	180-10018-1	0.14	0.14	mg/L	p*	0.1	Archdale	7088	2012
Premium Solvent	2,4,5-Trichlorophenol	180-4888-1	0.17	0.17	mg/L	U	0.1	Chesapeake	7089	2012
Premium Solvent	2,4,5-Trichlorophenol	180-13289-1	0.17	0.17	mg/L	p	0.1	Vinton	7091	2012
Premium Solvent	2,4,5-Trichlorophenol	180-20719-1	0.19	0.19	mg/L	p	0.1	Syracuse	218701	2013
Premium Solvent	2,4,5-Trichlorophenol	180-9962-1	0.19	0.19	mg/L	p*	0.1	Raleigh	7092	2012
Premium Solvent	2,4,5-Trichlorophenol	180-20316-1	0.2	0.2	mg/L	p	0.1	Cohoes	200401	2013
Premium Solvent	2,4,5-Trichlorophenol	180-1536-1	0.20	0.2	mg/L	p	0.1	Grand Island	506501	2011
Premium Solvent	2,4,5-Trichlorophenol	180-20512-1	0.21	0.21	mg/L	p	0.1	Barre	210501	2011
Premium Solvent	2,4,5-Trichlorophenol	180-20765-1	0.21	0.21	mg/L	p	0.1	Lackawanna	202801	2013
Premium Solvent	2,4,5-Trichlorophenol	180-20891-1	0.26	0.26	mg/L	p	0.1	Avon	202802	2013
Premium Solvent	2,4,5-Trichlorophenol	180-1346-1	0.3	0.3	mg/L	p	0.1	St. Pauls	303102	2011
Premium Solvent	2,4,5-Trichlorophenol	180-9967-1	0.33	0.33	mg/L	p*	0.1	Cohoes	7046	2012
Premium Solvent	2,4,5-Trichlorophenol	180-9899-1	0.38	0.38	mg/L	p*	0.1	Barre	7015	2012
Premium Solvent	2,4,5-Trichlorophenol	180-10339-1	0.4	0.4	mg/L	p	0.1	Avon	7048	2012
Premium Solvent	2,4,5-Trichlorophenol	180-1535-1	0.57	0.57	mg/L	p	0.1	Wichita	619501	2011
Premium Solvent	2,4,5-Trichlorophenol	180-4902-1	0.67	0.67	mg/L	U	0.1	Vinton	7091	2012
Premium Solvent	2,4,5-Trichlorophenol	480-20539-1	12	6	mg/L	U	0.1	Lackawanna	202801	2012
Premium Solvent	2,4,5-Trichlorophenol	180-21252-1	20	10	mg/L	U	20	Oklahoma City	612401	2013
Premium Solvent	2,4,5-Trichlorophenol	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012
Premium Solvent	2,4,5-Trichlorophenol	180-14205-1	20	10	mg/L	U	20	Tallahassee	7094	2012
Premium Solvent	2,4,5-Trichlorophenol	180-13439-1	20	10	mg/L	U	20	Oklahoma City	7104	2012
Premium Solvent	2,4,5-Trichlorophenol	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012
Premium Solvent	2,4,5-Trichlorophenol	C1D290517001	400	200	mg/L	U	400	Lackawanna	202801	2011
Premium Solvent	2,4,5-Trichlorophenol	C1D280567001	400	200	mg/L	U	400	Avon	202802	2011
Premium Solvent	2,4,5-Trichlorophenol	C1E030546001	400	200	mg/L	U	400	Archdale	306401	2011
Premium Solvent	2,4,5-Trichlorophenol	C1D200409001	400	200	mg/L	U	400	Barre	210501	2011
Premium Solvent	2,4,5-Trichlorophenol	C1D140573001	400	200	mg/L	U	400	Barre	210501	2011
Premium Solvent	2,4,5-Trichlorophenol	C1C100616001	400	200	mg/L	U	400	Cohoes	200401	2011
Premium Solvent	2,4,6-Trichlorophenol	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	2,4,6-Trichlorophenol	180-22446-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20632-1	0.1	0.05	mg/L	U	0.1	Archdale	306401	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20891-1	0.1	0.05	mg/L	U	0.1	Avon	202802	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20512-1	0.1	0.05	mg/L	U	0.1	Barre	210501	2013

Premium Solvent	2,4,6-Trichlorophenol	180-20858-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24136-1	0.1	0.05	mg/L	U	0.1			Chesapeake	312101	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24429-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20316-1	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24468-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2013
Premium Solvent	2,4,6-Trichlorophenol	180-23579-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20765-1	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24283-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20920-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2013
Premium Solvent	2,4,6-Trichlorophenol	180-20719-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2013
Premium Solvent	2,4,6-Trichlorophenol	180-21349-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2013
Premium Solvent	2,4,6-Trichlorophenol	180-21898-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24593-1	0.1	0.05	mg/L	U	0.1			Vinton	315501	2013
Premium Solvent	2,4,6-Trichlorophenol	180-24151-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2013
Premium Solvent	2,4,6-Trichlorophenol	180-22177-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2013
Premium Solvent	2,4,6-Trichlorophenol	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	2,4,6-Trichlorophenol	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	2,4,6-Trichlorophenol	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	2,4,6-Trichlorophenol	180-591-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2011
Premium Solvent	2,4,6-Trichlorophenol	180-9899-1	0.1	0.05	mg/L	U *	0.1			Barre	7015	2012
Premium Solvent	2,4,6-Trichlorophenol	180-9967-1	0.1	0.05	mg/L	U *	0.1			Cohoes	7046	2012
Premium Solvent	2,4,6-Trichlorophenol	180-10339-1	0.1	0.05	mg/L	U	0.1			Avon	7048	2012
Premium Solvent	2,4,6-Trichlorophenol	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	2,4,6-Trichlorophenol	180-10018-1	0.1	0.05	mg/L	U *	0.1			Archdale	7088	2012
Premium Solvent	2,4,6-Trichlorophenol	180-12866-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	2,4,6-Trichlorophenol	180-4888-1	0.1	0.05	mg/L	U	0.1	42	69	Chesapeake	7089	2012
Premium Solvent	2,4,6-Trichlorophenol	180-13029-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	2,4,6-Trichlorophenol	180-4889-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	2,4,6-Trichlorophenol	180-13289-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	2,4,6-Trichlorophenol	180-4902-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	2,4,6-Trichlorophenol	180-9962-1	0.1	0.05	mg/L	U *	0.1			Raleigh	7092	2012
Premium Solvent	2,4,6-Trichlorophenol	180-12590-1	0.1	0.05	mg/L	U	0.1			Tulsa	7105	2012
Premium Solvent	2,4,6-Trichlorophenol	180-11642-1	0.1	0.05	mg/L	U	0.1			Grand Island	7107	2012
Premium Solvent	2,4,6-Trichlorophenol	180-14162-1	0.1	0.05	mg/L	U	0.1			Wichita	7112	2012
Premium Solvent	2,4,6-Trichlorophenol	180-10007-1	0.1	0.05	mg/L	U *	0.1			Boise	7114	2012
Premium Solvent	2,4,6-Trichlorophenol	180-11559-1	0.1	0.05	mg/L	U	0.1			Albuquerque	7133	2012
Premium Solvent	2,4,6-Trichlorophenol	180-14023-1	0.1	0.05	mg/L	U	0.1			Omaha	7157	2012
Premium Solvent	2,4,6-Trichlorophenol	180-14585-1	0.1	0.05	mg/L	U	0.1			Dodge City	7178	2012
Premium Solvent	2,4,6-Trichlorophenol	180-12189-1	0.1	0.05	mg/L	U	0.1			Farmington	7179	2012
Premium Solvent	2,4,6-Trichlorophenol	180-25564-1	0.13	0.065	mg/L	U	0.13			Chester	315401	2013
Premium Solvent	2,4,6-Trichlorophenol	180-25917-1	0.13	0.065	mg/L	U *	0.13			Raleigh	317101	2013
Premium Solvent	2,4,6-Trichlorophenol	C1D290517001	2	1	mg/L	U	2			Lackawanna	202801	2011
Premium Solvent	2,4,6-Trichlorophenol	C1D280567001	2	1	mg/L	U	2			Avon	202802	2011
Premium Solvent	2,4,6-Trichlorophenol	C1E030546001	2	1	mg/L	U	2			Archdale	306401	2011
Premium Solvent	2,4,6-Trichlorophenol	C1D200409001	2	1	mg/L	U	2			Barre	210501	2011
Premium Solvent	2,4,6-Trichlorophenol	C1D140573001	2	1	mg/L	U	2			Barre	210501	2011
Premium Solvent	2,4,6-Trichlorophenol	C1C100616001	2	1	mg/L	U	2			Cohoes	200401	2011
Premium Solvent	2,4,6-Trichlorophenol	480-20539-1	12	6	mg/L	U	0.1			Lackawanna	202801	2012
Premium Solvent	2,4,6-Trichlorophenol	180-21252-1	20	10	mg/L	U	20			Oklahoma City	612401	2013
Premium Solvent	2,4,6-Trichlorophenol	180-11568-1	20	10	mg/L	U	20			Charlotte	7055	2012
Premium Solvent	2,4,6-Trichlorophenol	180-14205-1	20	10	mg/L	U	20			Tallahassee	7094	2012
Premium Solvent	2,4,6-Trichlorophenol	180-13439-1	20	10	mg/L	U	20			Oklahoma City	7104	2012
Premium Solvent	2,4,6-Trichlorophenol	180-12755-1	20	10	mg/L	U	20			Chandler	7134	2012
Premium Solvent	2,4-Dinitrotoluene	180-20856-1	0.05	0.025	mg/L	U	0.05			Boise	118308	2013
Premium Solvent	2,4-Dinitrotoluene	180-22446-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2013
Premium Solvent	2,4-Dinitrotoluene	180-20632-1	0.1	0.05	mg/L	U	0.1			Archdale	306401	2013
Premium Solvent	2,4-Dinitrotoluene	180-20891-1	0.1	0.05	mg/L	U	0.1			Avon	202802	2013
Premium Solvent	2,4-Dinitrotoluene	180-20512-1	0.1	0.05	mg/L	U	0.1			Barre	210501	2013
Premium Solvent	2,4-Dinitrotoluene	180-20858-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2013
Premium Solvent	2,4-Dinitrotoluene	180-24136-1	0.1	0.05	mg/L	U	0.1			Chesapeake	312101	2013
Premium Solvent	2,4-Dinitrotoluene	180-24429-1	0.1	0.05	mg/L	U *	0.1			Clackamas	714801	2013
Premium Solvent	2,4-Dinitrotoluene	180-20316-1	0.1	0.05	mg/L	U *	0.1			Cohoes	200401	2013
Premium Solvent	2,4-Dinitrotoluene	180-24468-1	0.1	0.05	mg/L	U *	0.1			Dodge City	619503	2013
Premium Solvent	2,4-Dinitrotoluene	180-23579-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2013
Premium Solvent	2,4-Dinitrotoluene	180-20765-1	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2013
Premium Solvent	2,4-Dinitrotoluene	180-24283-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2013
Premium Solvent	2,4-Dinitrotoluene	180-20920-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2013
Premium Solvent	2,4-Dinitrotoluene	180-20719-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2013
Premium Solvent	2,4-Dinitrotoluene	180-21349-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2013
Premium Solvent	2,4-Dinitrotoluene	180-21898-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2013
Premium Solvent	2,4-Dinitrotoluene	180-24593-1	0.1	0.05	mg/L	U	0.1			Vinton	315501	2013
Premium Solvent	2,4-Dinitrotoluene	180-24151-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2013
Premium Solvent	2,4-Dinitrotoluene	180-22177-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2013
Premium Solvent	2,4-Dinitrotoluene	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	2,4-Dinitrotoluene	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	2,4-Dinitrotoluene	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	2,4-Dinitrotoluene	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	2,4-Dinitrotoluene	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	2,4-Dinitrotoluene	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	2,4-Dinitrotoluene	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	2,4-Dinitrotoluene	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	2,4-Dinitrotoluene	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	2,4-Dinitrotoluene	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	2,4-Dinitrotoluene	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	2,4-Dinitrotoluene	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	2,4-Dinitrotoluene	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	2,4-Dinitrotoluene	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011

Premium Solvent	2,4-Dinitrotoluene	180-591-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2011
Premium Solvent	2,4-Dinitrotoluene	180-10339-1	0.1	0.05	mg/L	U	0.1			Avon	7048	2012
Premium Solvent	2,4-Dinitrotoluene	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	2,4-Dinitrotoluene	180-10018-1	0.1	0.05	mg/L	U*	0.1			Archdale	7088	2012
Premium Solvent	2,4-Dinitrotoluene	180-12866-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	2,4-Dinitrotoluene	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	2,4-Dinitrotoluene	180-13029-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	2,4-Dinitrotoluene	180-4889-1	0.1	0.05	mg/L	U	0.1	42	69	Chester	7090	2012
Premium Solvent	2,4-Dinitrotoluene	180-13289-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	2,4-Dinitrotoluene	180-12590-1	0.1	0.05	mg/L	U	0.1			Tulsa	7105	2012
Premium Solvent	2,4-Dinitrotoluene	180-11642-1	0.1	0.05	mg/L	U	0.1			Grand Island	7107	2012
Premium Solvent	2,4-Dinitrotoluene	180-14162-1	0.1	0.05	mg/L	U	0.1			Wichita	7112	2012
Premium Solvent	2,4-Dinitrotoluene	180-10007-1	0.1	0.05	mg/L	U*	0.1			Boise	7114	2012
Premium Solvent	2,4-Dinitrotoluene	180-11559-1	0.1	0.05	mg/L	U	0.1			Albuquerque	7133	2012
Premium Solvent	2,4-Dinitrotoluene	180-14023-1	0.1	0.05	mg/L	U	0.1			Omaha	7157	2012
Premium Solvent	2,4-Dinitrotoluene	180-14585-1	0.1	0.05	mg/L	U	0.1			Dodge City	7178	2012
Premium Solvent	2,4-Dinitrotoluene	180-12189-1	0.1	0.05	mg/L	U	0.1			Farmington	7179	2012
Premium Solvent	2,4-Dinitrotoluene	180-25564-1	0.13	0.065	mg/L	U*	0.13			Chester	315401	2013
Premium Solvent	2,4-Dinitrotoluene	180-25917-1	0.13	0.065	mg/L	U	0.13			Raleigh	317101	2013
Premium Solvent	2,4-Dinitrotoluene	C1D290517001	0.13	0.065	mg/L	U	0.13			Lackawanna	202801	2011
Premium Solvent	2,4-Dinitrotoluene	C1D280567001	0.13	0.065	mg/L	U	0.13			Avon	202802	2011
Premium Solvent	2,4-Dinitrotoluene	C1E030546001	0.13	0.065	mg/L	U	0.13			Archdale	306401	2011
Premium Solvent	2,4-Dinitrotoluene	C1D200409001	0.13	0.065	mg/L	U	0.13			Barre	210501	2011
Premium Solvent	2,4-Dinitrotoluene	C1D140573001	0.13	0.065	mg/L	U	0.13			Barre	210501	2011
Premium Solvent	2,4-Dinitrotoluene	C1C100616001	0.13	0.065	mg/L	U	0.13			Cohoes	200401	2011
Premium Solvent	2,4-Dinitrotoluene	180-9962-1	0.14	0.14	mg/L	p*	0.1			Raleigh	7092	2012
Premium Solvent	2,4-Dinitrotoluene	180-9967-1	0.16	0.16	mg/L	p*	0.1			Cohoes	7046	2012
Premium Solvent	2,4-Dinitrotoluene	180-9899-1	0.17	0.17	mg/L	p*	0.1			Barre	7015	2012
Premium Solvent	2,4-Dinitrotoluene	180-4902-1	0.17	0.17	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	2,4-Dinitrotoluene	480-20539-1	12	6	mg/L	U	0.1			Lackawanna	202801	2012
Premium Solvent	2,4-Dinitrotoluene	180-21252-1	20	10	mg/L	U	20			Oklahoma City	612401	2013
Premium Solvent	2,4-Dinitrotoluene	180-11568-1	20	10	mg/L	U	20			Charlotte	7055	2012
Premium Solvent	2,4-Dinitrotoluene	180-14205-1	20	10	mg/L	U	20			Tallahassee	7094	2012
Premium Solvent	2,4-Dinitrotoluene	180-13439-1	20	10	mg/L	U	20			Oklahoma City	7104	2012
Premium Solvent	2,4-Dinitrotoluene	180-12755-1	20	10	mg/L	U	20			Chandler	7134	2012
Premium Solvent	2-Methylphenol	180-20856-1	0.05	0.025	mg/L	U	0.05			Boise	118308	2013
Premium Solvent	2-Methylphenol	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	2-Methylphenol	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	2-Methylphenol	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	2-Methylphenol	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	2-Methylphenol	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	2-Methylphenol	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	2-Methylphenol	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	2-Methylphenol	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	2-Methylphenol	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	2-Methylphenol	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	2-Methylphenol	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	2-Methylphenol	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	2-Methylphenol	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	2-Methylphenol	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	2-Methylphenol	C1D290517001	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2011
Premium Solvent	2-Methylphenol	C1D280567001	0.1	0.05	mg/L	U	0.1			Avon	202802	2011
Premium Solvent	2-Methylphenol	C1E030546001	0.1	0.05	mg/L	U	0.1			Archdale	306401	2011
Premium Solvent	2-Methylphenol	C1D200409001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	2-Methylphenol	C1D140573001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	2-Methylphenol	C1C100616001	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2011
Premium Solvent	2-Methylphenol	180-9899-1	0.1	0.05	mg/L	U	0.1			Barre	7015	2012
Premium Solvent	2-Methylphenol	180-9987-1	0.1	0.05	mg/L	U	0.1			Cohoes	7046	2012
Premium Solvent	2-Methylphenol	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	2-Methylphenol	180-10018-1	0.1	0.05	mg/L	U	0.1			Archdale	7088	2012
Premium Solvent	2-Methylphenol	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	2-Methylphenol	180-4889-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	2-Methylphenol	180-4902-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	2-Methylphenol	180-9962-1	0.1	0.05	mg/L	U	0.1			Raleigh	7092	2012
Premium Solvent	2-Methylphenol	180-10007-1	0.1	0.05	mg/L	U	0.1			Boise	7114	2012
Premium Solvent	2-Methylphenol	180-22446-1	1	0.5	mg/L	U	1			Albuquerque	700801	2013
Premium Solvent	2-Methylphenol	180-20632-1	1	0.5	mg/L	U	1			Archdale	306401	2013
Premium Solvent	2-Methylphenol	180-20891-1	1	0.5	mg/L	U	1			Avon	202802	2013
Premium Solvent	2-Methylphenol	180-20512-1	1	0.5	mg/L	U	1			Barre	210501	2013
Premium Solvent	2-Methylphenol	180-20858-1	1	0.5	mg/L	U	1			Charlotte	303101	2013
Premium Solvent	2-Methylphenol	180-24136-1	1	0.5	mg/L	U	1			Chesapeake	312101	2013
Premium Solvent	2-Methylphenol	180-25564-1	1	0.5	mg/L	U	1			Chester	315401	2013
Premium Solvent	2-Methylphenol	180-24429-1	1	0.5	mg/L	U	1			Clackamas	714801	2013
Premium Solvent	2-Methylphenol	180-20316-1	1	0.5	mg/L	U	1			Cohoes	200401	2013
Premium Solvent	2-Methylphenol	180-24468-1	1	0.5	mg/L	U	1			Dodge City	619503	2013
Premium Solvent	2-Methylphenol	180-23579-1	1	0.5	mg/L	U	1			Farmington	700804	2013
Premium Solvent	2-Methylphenol	180-20765-1	1	0.5	mg/L	U	1	42	69	Lackawanna	202801	2013
Premium Solvent	2-Methylphenol	180-24283-1	1	0.5	mg/L	U	1			Omaha	512701	2013
Premium Solvent	2-Methylphenol	180-20920-1	1	0.5	mg/L	U	1			St. Pauls	303102	2013
Premium Solvent	2-Methylphenol	180-20719-1	1	0.5	mg/L	U	1			Syracuse	218701	2013
Premium Solvent	2-Methylphenol	180-21349-1	1	0.5	mg/L	U	1			Tampa	316301	2013
Premium Solvent	2-Methylphenol	180-21898-1	1	0.5	mg/L	U	1			Tulsa	619301	2013
Premium Solvent	2-Methylphenol	180-24593-1	1	0.5	mg/L	U	1			Vinton	315501	2013
Premium Solvent	2-Methylphenol	180-24151-1	1	0.5	mg/L	U	1			Wichita	619501	2013
Premium Solvent	2-Methylphenol	180-25917-1	1	0.5	mg/L	U	1			Raleigh	317101	2013
Premium Solvent	2-Methylphenol	180-22177-1	1	0.5	mg/L	U	1			Grand Island	506501	2013
Premium Solvent	2-Methylphenol	180-10339-1	1	0.5	mg/L	U	1			Avon	7048	2012
Premium Solvent	2-Methylphenol	180-12866-1	1	0.5	mg/L	U	1			Chesapeake	7089	2012
Premium Solvent	2-Methylphenol	180-13029-1	1	0.5	mg/L	U	1			Chester	7090	2012
Premium Solvent	2-Methylphenol	180-13289-1	1	0.5	mg/L	U	1			Vinton	7091	2012
Premium Solvent	2-Methylphenol	180-12590-1	1	0.5	mg/L	U	1			Tulsa	7105	2012
Premium Solvent	2-Methylphenol	180-11642-1	1	0.5	mg/L	U	1			Grand Island	7107	2012
Premium Solvent	2-Methylphenol	180-14162-1	1	0.5	mg/L	U	1			Wichita	7112	2012
Premium Solvent	2-Methylphenol	180-11559-1	1	0.5	mg/L	U	1			Albuquerque	7133	2012
Premium Solvent	2-Methylphenol	180-14023-1	1	0.5	mg/L	U	1			Omaha	7157	2012
Premium Solvent	2-Methylphenol	180-14585-1	1	0.5	mg/L	U	1			Dodge City	7178	2012
Premium Solvent	2-Methylphenol	180-12189-1	1	0.5	mg/L	U	1			Farmington	7179	2012
Premium Solvent	2-Methylphenol	480-20539-1	12	6	mg/L	U	1			Lackawanna	202801	2012

Premium Solvent	2-Methylphenol	180-21252-1	20	10	mg/L	U	20	Oklahoma City	612401	2013
Premium Solvent	2-Methylphenol	180-591-1	20	10	mg/L	U	20	Charlotte	303101	2011
Premium Solvent	2-Methylphenol	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012
Premium Solvent	2-Methylphenol	180-14205-1	20	10	mg/L	U	20	Tallahassee	7094	2012
Premium Solvent	2-Methylphenol	180-13439-1	20	10	mg/L	U	20	Oklahoma City	7104	2012
Premium Solvent	2-Methylphenol	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012
Premium Solvent	Arsenic	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	Arsenic	180-1536-1	0.22		mg/L	J	1	Grand Island	506501	2011
Premium Solvent	Arsenic	180-22446-1	1	0.5	mg/L	U	1	Albuquerque	700801	2013
Premium Solvent	Arsenic	180-20632-1	1	0.5	mg/L	U	1	Archdale	306401	2013
Premium Solvent	Arsenic	180-20891-1	1	0.5	mg/L	U	1	Avon	202802	2013
Premium Solvent	Arsenic	180-20512-1	1	0.5	mg/L	U	1	Barre	210501	2013
Premium Solvent	Arsenic	180-20858-1	1	0.5	mg/L	U	1	Charlotte	303101	2013
Premium Solvent	Arsenic	180-24136-1	1	0.5	mg/L	U	1	Chesapeake	312101	2013
Premium Solvent	Arsenic	180-25564-1	1	0.5	mg/L	U	1	Chester	315401	2013
Premium Solvent	Arsenic	180-24429-1	1	0.5	mg/L	U	1	Clackamas	714801	2013
Premium Solvent	Arsenic	180-20316-1	1	0.5	mg/L	U	1	Cohoes	200401	2013
Premium Solvent	Arsenic	180-24468-1	1	0.5	mg/L	U	1	Dodge City	619503	2013
Premium Solvent	Arsenic	180-23579-1	1	0.5	mg/L	U	1	Farmington	700804	2013
Premium Solvent	Arsenic	180-20765-1	1	0.5	mg/L	U	1	Lackawanna	202801	2013
Premium Solvent	Arsenic	180-21252-1	1	0.5	mg/L	U	1	Oklahoma City	612401	2013
Premium Solvent	Arsenic	180-24283-1	1	0.5	mg/L	U	1	Omaha	512701	2013
Premium Solvent	Arsenic	180-25504-1	1	0.5	mg/L	U	1	Sacramento	715701	2013
Premium Solvent	Arsenic	180-20920-1	1	0.5	mg/L	U	1	St. Pauls	303102	2013
Premium Solvent	Arsenic	180-20719-1	1	0.5	mg/L	U	1	Syracuse	218701	2013
Premium Solvent	Arsenic	180-21349-1	1	0.5	mg/L	U	1	Tampa	316301	2013
Premium Solvent	Arsenic	180-21898-1	1	0.5	mg/L	U	1	Tulsa	619301	2013
Premium Solvent	Arsenic	180-24593-1	1	0.5	mg/L	U	1	Vinton	315501	2013
Premium Solvent	Arsenic	180-24151-1	1	0.5	mg/L	U	1	Wichita	619501	2013
Premium Solvent	Arsenic	180-25917-1	1	0.5	mg/L	U	1	Raleigh	317101	2013
Premium Solvent	Arsenic	180-22177-1	1	0.5	mg/L	U	1	Grand Island	506501	2013
Premium Solvent	Arsenic	180-2878-1	1	0.5	mg/L	U	1	Dodge City	619503	2011
Premium Solvent	Arsenic	180-2668-1	1	0.5	mg/L	U	1	Chandler	714201	2011
Premium Solvent	Arsenic	180-2454-1	1	0.5	mg/L	U	1	Tulsa	619301	2011
Premium Solvent	Arsenic	180-2356-1	1	0.5	mg/L	U	1	Boise	118308	2011
Premium Solvent	Arsenic	180-2367-1	1	0.5	mg/L	U	1	Oklahoma City	612401	2011
Premium Solvent	Arsenic	180-2221-1	1	0.5	mg/L	U	1	Clackamas	714801	2011
Premium Solvent	Arsenic	180-2186-1	1	0.5	mg/L	U	1	Tampa	316301	2011
Premium Solvent	Arsenic	180-1865-1	1	0.5	mg/L	U	1	Farmington	700804	2011
Premium Solvent	Arsenic	180-1899-1	1	0.5	mg/L	U	1	Syracuse	218701	2011
Premium Solvent	Arsenic	180-1685-1	1	0.5	mg/L	U	1	Omaha	512701	2011
Premium Solvent	Arsenic	180-1535-1	1	0.5	mg/L	U	1	Wichita	619501	2011
Premium Solvent	Arsenic	180-1346-1	1	0.5	mg/L	U	1	St. Pauls	303102	2011
Premium Solvent	Arsenic	180-1150-1	1	0.5	mg/L	U	1	Sacramento	715701	2011
Premium Solvent	Arsenic	180-1124-1	1	0.5	mg/L	U	1	Albuquerque	700801	2011
Premium Solvent	Arsenic	180-591-1	1	0.5	mg/L	U	1	Charlotte	303101	2011
Premium Solvent	Arsenic	C1D290517001	1	0.5	mg/L	U	1	Lackawanna	202801	2011
Premium Solvent	Arsenic	C1D280567001	1	0.5	mg/L	U	1	Avon	202802	2011
Premium Solvent	Arsenic	C1E030546001	1	0.5	mg/L	U	1	Archdale	306401	2011
Premium Solvent	Arsenic	C1D200409001	1	0.5	mg/L	U	1	Barre	210501	2011
Premium Solvent	Arsenic	C1D140573001	1	0.5	mg/L	U	1	Barre	210501	2011
Premium Solvent	Arsenic	C1C100616001	1	0.5	mg/L	U	1	Cohoes	200401	2011
Premium Solvent	Arsenic	180-9899-1	1	0.5	mg/L	U	1	Barre	7015	2012
Premium Solvent	Arsenic	180-9967-1	1	0.5	mg/L	U	1	Cohoes	7046	2012
Premium Solvent	Arsenic	180-10339-1	1	0.5	mg/L	U	1	Avon	7048	2012
Premium Solvent	Arsenic	180-11568-1	1	0.5	mg/L	U	1	Charlotte	7055	2012
Premium Solvent	Arsenic	180-10888-1	1	0.5	mg/L	U	1	St. Pauls	7087	2012
Premium Solvent	Arsenic	180-10018-1	1	0.5	mg/L	U	1	Archdale	7088	2012
Premium Solvent	Arsenic	180-12886-1	1	0.5	mg/L	U	1	Chesapeake	7089	2012
Premium Solvent	Arsenic	180-4888-1	1	0.5	mg/L	U	1	Chesapeake	7089	2012
Premium Solvent	Arsenic	180-13029-1	1	0.5	mg/L	U	1	Chester	7090	2012
Premium Solvent	Arsenic	180-4889-1	1	0.5	mg/L	U	1	Chester	7090	2012
Premium Solvent	Arsenic	180-13289-1	1	0.5	mg/L	U	1	Vinton	7091	2012
Premium Solvent	Arsenic	180-4902-1	1	0.5	mg/L	U	1	Vinton	7091	2012
Premium Solvent	Arsenic	180-9962-1	1	0.5	mg/L	U	1	Raleigh	7092	2012
Premium Solvent	Arsenic	180-14205-1	1	0.5	mg/L	U	1	Tallahassee	7094	2012
Premium Solvent	Arsenic	180-13439-1	1	0.5	mg/L	U	1	Oklahoma City	7104	2012
Premium Solvent	Arsenic	180-12590-1	1	0.5	mg/L	U	1	Tulsa	7105	2012
Premium Solvent	Arsenic	180-11642-1	1	0.5	mg/L	U	1	Grand Island	7107	2012
Premium Solvent	Arsenic	180-14162-1	1	0.5	mg/L	U	1	Wichita	7112	2012
Premium Solvent	Arsenic	180-10007-1	1	0.5	mg/L	U	1	Boise	7114	2012
Premium Solvent	Arsenic	180-11338-1	1	0.5	mg/L	U	1	Santa Ana	7117	2012
Premium Solvent	Arsenic	180-11559-1	1	0.5	mg/L	U	1	Albuquerque	7133	2012
Premium Solvent	Arsenic	180-12755-1	1	0.5	mg/L	U	1	Chandler	7134	2012
Premium Solvent	Arsenic	180-14306-1	1	0.5	mg/L	U	1	Sacramento	7138	2012
Premium Solvent	Arsenic	180-14023-1	1	0.5	mg/L	U	1	Omaha	7157	2012
Premium Solvent	Arsenic	180-14585-1	1	0.5	mg/L	U	1	Dodge City	7178	2012
Premium Solvent	Arsenic	180-12189-1	1	0.5	mg/L	U	1	Farmington	7179	2012
Premium Solvent	Arsenic	480-20539-1	2	1	mg/L	U	1	Lackawanna	202801	2012
Premium Solvent	Barium	180-1124-1	0.053	0.053	mg/L	J	20	Albuquerque	700801	2011
Premium Solvent	Barium	180-11559-1	0.054	0.054	mg/L	J B	20	Albuquerque	7133	2012
Premium Solvent	Barium	180-14023-1	0.057	0.057	mg/L	J	20	Omaha	7157	2012
Premium Solvent	Barium	180-1685-1	0.067	0.067	mg/L	J	20	Omaha	512701	2011
Premium Solvent	Barium	180-2221-1	0.073	0.073	mg/L	J	20	Clackamas	714801	2011
Premium Solvent	Barium	180-2454-1	0.085	0.085	mg/L	J B	20	Tulsa	619301	2011
Premium Solvent	Barium	180-2186-1	0.086	0.086	mg/L	J	20	Tampa	316301	2011
Premium Solvent	Barium	180-2668-1	0.096	0.096	mg/L	J B	20	Chandler	714201	2011
Premium Solvent	Barium	180-20632-1	0.1	0.1	mg/L	J B	20	Archdale	306401	2013
Premium Solvent	Barium	180-1899-1	0.11	0.11	mg/L	J	20	Syracuse	218701	2011
Premium Solvent	Barium	180-21252-1	0.12	0.12	mg/L	J B	20	Oklahoma City	612401	2013
Premium Solvent	Barium	180-21898-1	0.12	0.12	mg/L	J B	20	Tulsa	619301	2013
Premium Solvent	Barium	180-20719-1	0.13	0.13	mg/L	J B	20	Syracuse	218701	2013
Premium Solvent	Barium	180-20858-1	0.15	0.15	mg/L	J B	20	Charlotte	303101	2013
Premium Solvent	Barium	180-4888-1	0.15	0.15	mg/L	J B	20	Chesapeake	7089	2012
Premium Solvent	Barium	180-12590-1	0.15	0.15	mg/L	J B	20	Tulsa	7105	2012
Premium Solvent	Barium	180-23579-1	0.16	0.16	mg/L	J B	20	Farmington	700804	2013
Premium Solvent	Barium	180-20920-1	0.18	0.18	mg/L	J B	20	St. Pauls	303102	2013
Premium Solvent	Barium	180-24593-1	0.19	0.19	mg/L	J B	20	Vinton	315501	2013

Premium Solvent	Barium	180-1535-1	0.19	0.19	mg/L	J	20	Wichita	619501	2011
Premium Solvent	Barium	180-21349-1	0.2	0.2	mg/L	J B	20	Tampa	316301	2013
Premium Solvent	Barium	180-25917-1	0.2	0.2	mg/L	J B	20	Raleigh	317101	2013
Premium Solvent	Barium	180-9967-1	0.2	0.2	mg/L	J	20	Cohoes	7046	2012
Premium Solvent	Barium	180-1865-1	0.21	0.21	mg/L	J	20	Farmington	700804	2011
Premium Solvent	Barium	180-13029-1	0.22	0.22	mg/L	J	20	Chester	7090	2012
Premium Solvent	Barium	180-22446-1	0.23	0.23	mg/L	J B	20	Albuquerque	700801	2013
Premium Solvent	Barium	180-10888-1	0.23	0.23	mg/L	J B	20	St. Pauls	7087	2012
Premium Solvent	Barium	180-25564-1	0.26	0.26	mg/L	J B	20	Chester	315401	2013
Premium Solvent	Barium	180-24429-1	0.26	0.26	mg/L	J B	20	Clackamas	714801	2013
Premium Solvent	Barium	480-20539-1	0.31	0.31	mg/L	J	20	Lackawanna	202801	2012
Premium Solvent	Barium	180-24468-1	0.32	0.32	mg/L	J B	20	Dodge City	619503	2013
Premium Solvent	Barium	180-9962-1	0.34	0.34	mg/L	J	20	Raleigh	7092	2012
Premium Solvent	Barium	180-20512-1	0.36	0.36	mg/L	J	20	Barre	210501	2013
Premium Solvent	Barium	180-22177-1	0.37	0.37	mg/L	J B	20	Grand Island	506501	2013
Premium Solvent	Barium	180-1536-1	0.40	0.4	mg/L	J	20	Grand Island	506501	2011
Premium Solvent	Barium	180-20891-1	0.41	0.41	mg/L	J B	20	Avon	202802	2013
Premium Solvent	Barium	180-25504-1	0.42	0.42	mg/L	J B	20	Sacramento	715701	2013
Premium Solvent	Barium	180-20856-1	0.43	0.43	mg/L	B	0.2	Boise	118308	2013
Premium Solvent	Barium	180-11338-1	0.51	0.51	mg/L	J B	20	Santa Ana	7117	2012
Premium Solvent	Barium	180-2356-1	0.54	0.54	mg/L	J	20	Boise	118308	2011
Premium Solvent	Barium	180-9899-1	0.7	0.7	mg/L	J B	20	Barre	7015	2012
Premium Solvent	Barium	180-2878-1	0.8	0.8	mg/L	J B	20	Dodge City	619503	2011
Premium Solvent	Barium	180-13439-1	0.88	0.88	mg/L	J B	20	Oklahoma City	7104	2012
Premium Solvent	Barium	180-11642-1	1	1	mg/L	J B	20	Grand Island	7107	2012
Premium Solvent	Barium	180-4902-1	1.1	1.1	mg/L	J B	20	Vinton	7091	2012
Premium Solvent	Barium	180-10007-1	1.1	1.1	mg/L	J	20	Boise	7114	2012
Premium Solvent	Barium	180-14205-1	1.5	1.5	mg/L	J B	20	Tallahassee	7094	2012
Premium Solvent	Barium	180-4889-1	2.3	2.3	mg/L	J B	20	Chester	7090	2012
Premium Solvent	Barium	180-24151-1	2.8	2.8	mg/L	J	20	Wichita	619501	2013
Premium Solvent	Barium	180-24283-1	3.6	3.6	mg/L	J B	20	Omaha	512701	2013
Premium Solvent	Barium	180-591-1	3.6	3.6	mg/L	J	20	Charlotte	303101	2011
Premium Solvent	Barium	180-14306-1	4.9	4.9	mg/L	J B	20	Sacramento	7138	2012
Premium Solvent	Barium	180-20316-1	6.7	6.7	mg/L	J	20	Cohoes	200401	2013
Premium Solvent	Barium	180-20765-1	8	8	mg/L	J B	20	Lackawanna	202801	2013
Premium Solvent	Barium	180-24136-1	20	10	mg/L	U	20	Chesapeake	312101	2013
Premium Solvent	Barium	180-2367-1	20	10	mg/L	U	20	Oklahoma City	612401	2011
Premium Solvent	Barium	180-1346-1	20	10	mg/L	U	20	St. Pauls	303102	2011
Premium Solvent	Barium	180-1150-1	20	10	mg/L	U	20	Sacramento	715701	2011
Premium Solvent	Barium	C1D290517001	20	10	mg/L	U	20	Lackawanna	202801	2011
Premium Solvent	Barium	C1D280567001	20	10	mg/L	U	20	Avon	202802	2011
Premium Solvent	Barium	C1E030546001	20	10	mg/L	U	20	Archdale	306401	2011
Premium Solvent	Barium	C1D200409001	20	10	mg/L	U	20	Barre	210501	2011
Premium Solvent	Barium	C1D140573001	20	10	mg/L	U	20	Barre	210501	2011
Premium Solvent	Barium	C1C100616001	20	10	mg/L	U	20	Cohoes	200401	2011
Premium Solvent	Barium	180-10339-1	20	10	mg/L	U	20	Avon	7048	2012
Premium Solvent	Barium	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012
Premium Solvent	Barium	180-10018-1	20	10	mg/L	U	20	Archdale	7088	2012
Premium Solvent	Barium	180-12866-1	20	10	mg/L	U	20	Chesapeake	7089	2012
Premium Solvent	Barium	180-13289-1	20	10	mg/L	U	20	Vinton	7091	2012
Premium Solvent	Barium	180-14162-1	20	10	mg/L	U	20	Wichita	7112	2012
Premium Solvent	Barium	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012
Premium Solvent	Barium	180-14585-1	20	10	mg/L	U	20	Dodge City	7178	2012
Premium Solvent	Barium	180-12189-1	20	10	mg/L	U	20	Farmington	7179	2012
Premium Solvent	Benzene	180-20856-1	0.2	0.1	mg/L	U	0.2	Boise	118308	2013
Premium Solvent	Benzene	180-13029-1	0.11	0.11	mg/L	J	0.25	Chester	7090	2012
Premium Solvent	Benzene	180-22446-1	0.25	0.125	mg/L	U	0.25	Albuquerque	700801	2013
Premium Solvent	Benzene	180-20632-1	0.25	0.125	mg/L	U	0.25	Archdale	306401	2013
Premium Solvent	Benzene	180-20891-1	0.25	0.125	mg/L	U	0.25	Avon	202802	2013
Premium Solvent	Benzene	180-20858-1	0.25	0.125	mg/L	U	0.25	Charlotte	303101	2013
Premium Solvent	Benzene	180-24429-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2013
Premium Solvent	Benzene	180-20316-1	0.25	0.125	mg/L	U	0.25	Cohoes	200401	2013
Premium Solvent	Benzene	180-24468-1	0.25	0.125	mg/L	U	0.25	Dodge City	619503	2013
Premium Solvent	Benzene	180-20765-1	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2013
Premium Solvent	Benzene	180-20920-1	0.25	0.125	mg/L	U	0.25	St. Pauls	303102	2013
Premium Solvent	Benzene	180-21349-1	0.25	0.125	mg/L	U	0.25	Tampa	316301	2013
Premium Solvent	Benzene	180-21898-1	0.25	0.125	mg/L	U	0.25	Tulsa	619301	2013
Premium Solvent	Benzene	180-24593-1	0.25	0.125	mg/L	U	0.25	Vinton	315501	2013
Premium Solvent	Benzene	180-22177-1	0.25	0.125	mg/L	U	0.25	Grand Island	506501	2013
Premium Solvent	Benzene	180-2878-1	0.25	0.125	mg/L	U	0.25	Dodge City	619503	2011
Premium Solvent	Benzene	180-2668-1	0.25	0.125	mg/L	U	0.25	Chandler	714201	2011
Premium Solvent	Benzene	180-2454-1	0.25	0.125	mg/L	U	0.25	Tulsa	619301	2011
Premium Solvent	Benzene	180-2367-1	0.25	0.125	mg/L	U	0.25	Oklahoma City	612401	2011
Premium Solvent	Benzene	180-2221-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2011
Premium Solvent	Benzene	180-2186-1	0.25	0.125	mg/L	U	0.25	Tampa	316301	2011
Premium Solvent	Benzene	180-1685-1	0.25	0.125	mg/L	U	0.25	Omaha	512701	2011
Premium Solvent	Benzene	180-1535-1	0.25	0.125	mg/L	U	0.25	Wichita	619501	2011
Premium Solvent	Benzene	180-1346-1	0.25	0.125	mg/L	U	0.25	St. Pauls	303102	2011
Premium Solvent	Benzene	180-1150-1	0.25	0.125	mg/L	U	0.25	Sacramento	715701	2011
Premium Solvent	Benzene	180-1124-1	0.25	0.125	mg/L	U	0.25	Albuquerque	700801	2011
Premium Solvent	Benzene	C1D290517001	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2011
Premium Solvent	Benzene	C1E030546001	0.25	0.125	mg/L	U	0.25	Archdale	306401	2011
Premium Solvent	Benzene	C1D200409001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	Benzene	C1C100616001	0.25	0.125	mg/L	U	0.25	Cohoes	200401	2011
Premium Solvent	Benzene	180-9967-1	0.25	0.125	mg/L	U	0.25	Cohoes	7046	2012
Premium Solvent	Benzene	180-10339-1	0.25	0.125	mg/L	U	0.25	Avon	7048	2012
Premium Solvent	Benzene	180-10888-1	0.25	0.125	mg/L	U	0.25	St. Pauls	7087	2012
Premium Solvent	Benzene	180-12866-1	0.25	0.125	mg/L	U	0.25	Chesapeake	7089	2012
Premium Solvent	Benzene	180-4889-1	0.25	0.125	mg/L	U	0.25	Chester	7090	2012
Premium Solvent	Benzene	180-9962-1	0.25	0.125	mg/L	U	0.25	Raleigh	7092	2012
Premium Solvent	Benzene	180-12590-1	0.25	0.125	mg/L	U	0.25	Tulsa	7105	2012
Premium Solvent	Benzene	180-14162-1	0.25	0.125	mg/L	U	0.25	Wichita	7112	2012
Premium Solvent	Benzene	180-10007-1	0.25	0.125	mg/L	U	0.25	Boise	7114	2012
Premium Solvent	Benzene	180-11338-1	0.25	0.125	mg/L	U	0.25	Santa Ana	7117	2012
Premium Solvent	Benzene	180-11559-1	0.25	0.125	mg/L	U	0.25	Albuquerque	7133	2012
Premium Solvent	Benzene	180-12755-1	0.25	0.125	mg/L	U	0.25	Chandler	7134	2012
Premium Solvent	Benzene	180-4888-1	0.13	0.13	mg/L	J	0.25	Chesapeake	7089	2012
Premium Solvent	Benzene	180-4902-1	0.15	0.15	mg/L	J	0.25	Vinton	7091	2012

Premium Solvent	Benzene	180-20719-1	0.16	0.16	mg/L	J	0.25	45	73	Syracuse	218701	2013
Premium Solvent	Benzene	180-11642-1	0.17	0.17	mg/L	J	0.25			Grand Island	7107	2012
Premium Solvent	Benzene	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Benzene	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Benzene	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Benzene	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Benzene	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Benzene	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Benzene	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Benzene	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Benzene	180-25564-1	0.27	0.27	mg/L		0.25			Chester	315401	2013
Premium Solvent	Benzene	C1D140573001	0.29	0.29	mg/L		0.25			Barre	210501	2011
Premium Solvent	Benzene	180-9899-1	0.38	0.38	mg/L		0.25			Barre	7015	2012
Premium Solvent	Benzene	180-1865-1	0.39	0.39	mg/L		0.25			Farmington	700804	2011
Premium Solvent	Benzene	180-21252-1	0.47	0.47	mg/L	J	0.5			Oklahoma City	612401	2013
Premium Solvent	Benzene	180-11568-1	0.5	0.5	mg/L		0.25			Charlotte	7055	2012
Premium Solvent	Benzene	180-1899-1	0.52	0.52	mg/L		0.25			Syracuse	218701	2011
Premium Solvent	Benzene	180-24283-1	0.53	0.53	mg/L		0.25			Omaha	512701	2013
Premium Solvent	Benzene	180-12189-1	0.54	0.54	mg/L		0.25			Farmington	7179	2012
Premium Solvent	Benzene	180-14306-1	0.91	0.91	mg/L		0.25			Sacramento	7138	2012
Premium Solvent	Benzene	180-24136-1	1.7	1.7	mg/L		0.25			Chesapeake	312101	2013
Premium Solvent	Benzene	180-23579-1	2.2	2.2	mg/L		0.25			Farmington	700804	2013
Premium Solvent	Benzene	180-25917-1	3.8	3.8	mg/L		0.25			Raleigh	317101	2013
Premium Solvent	Benzene	180-10018-1	4.5	4.5	mg/L		0.25			Archdale	7088	2012
Premium Solvent	Benzene	180-13439-1	4.5	4.5	mg/L		0.25			Oklahoma City	7104	2012
Premium Solvent	Benzene	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Benzene	180-25504-1	6.2	6.2	mg/L		0.5			Sacramento	715701	2013
Premium Solvent	Benzene	180-20512-1	7	7	mg/L		0.25			Barre	210501	2013
Premium Solvent	Benzene	180-1536-1	8.8	8.8	mg/L		0.25			Grand Island	506501	2011
Premium Solvent	Cadmium	180-20856-1	0.00024	0.00024	mg/L	J	0.05			Boise	118308	2013
Premium Solvent	Cadmium	180-20512-1	0.024	0.024	mg/L	J	0.5			Barre	210501	2013
Premium Solvent	Cadmium	180-10018-1	0.027	0.027	mg/L	J	0.5			Archdale	7088	2012
Premium Solvent	Cadmium	180-12590-1	0.027	0.027	mg/L	J	0.5			Tulsa	7105	2012
Premium Solvent	Cadmium	180-20719-1	0.029	0.029	mg/L	J	0.5			Syracuse	218701	2013
Premium Solvent	Cadmium	180-1535-1	0.031	0.031	mg/L	J	0.5			Wichita	619501	2011
Premium Solvent	Cadmium	180-12866-1	0.031	0.031	mg/L	J	0.5			Chesapeake	7089	2012
Premium Solvent	Cadmium	180-13029-1	0.031	0.031	mg/L	J	0.5			Chester	7090	2012
Premium Solvent	Cadmium	180-9967-1	0.033	0.033	mg/L	J	0.5			Cohoes	7046	2012
Premium Solvent	Cadmium	180-4902-1	0.053	0.053	mg/L	J	0.5			Vinton	7091	2012
Premium Solvent	Cadmium	180-21252-1	0.055	0.055	mg/L	J	0.5			Oklahoma City	612401	2013
Premium Solvent	Cadmium	180-1124-1	0.059	0.059	mg/L	J	0.5			Albuquerque	700801	2011
Premium Solvent	Cadmium	180-2878-1	0.06	0.06	mg/L	J	0.5			Dodge City	619503	2011
Premium Solvent	Cadmium	180-21349-1	0.077	0.077	mg/L	J	0.5			Tampa	316301	2013
Premium Solvent	Cadmium	480-20539-1	0.079	0.079	mg/L	J	0.5			Lackawanna	202801	2012
Premium Solvent	Cadmium	180-4889-1	0.08	0.08	mg/L	J	0.5			Chester	7090	2012
Premium Solvent	Cadmium	180-9962-1	0.087	0.087	mg/L	J	0.5			Raleigh	7092	2012
Premium Solvent	Cadmium	180-24151-1	0.1	0.1	mg/L	J	0.5			Wichita	619501	2013
Premium Solvent	Cadmium	180-9899-1	0.11	0.11	mg/L	J	0.5			Barre	7015	2012
Premium Solvent	Cadmium	180-10007-1	0.11	0.11	mg/L	J	0.5			Boise	7114	2012
Premium Solvent	Cadmium	180-25564-1	0.12	0.12	mg/L	J	0.5			Chester	315401	2013
Premium Solvent	Cadmium	180-2367-1	0.13	0.13	mg/L	J	0.5			Oklahoma City	612401	2011
Premium Solvent	Cadmium	180-24283-1	0.14	0.14	mg/L	J	0.5			Omaha	512701	2013
Premium Solvent	Cadmium	180-13439-1	0.14	0.14	mg/L	J	0.5			Oklahoma City	7104	2012
Premium Solvent	Cadmium	180-25917-1	0.15	0.15	mg/L	J B	0.5			Raleigh	317101	2013
Premium Solvent	Cadmium	180-2668-1	0.21	0.21	mg/L	J	0.5			Chandler	714201	2011
Premium Solvent	Cadmium	180-1685-1	0.23	0.23	mg/L	J	0.5			Omaha	512701	2011
Premium Solvent	Cadmium	180-22446-1	0.5	0.25	mg/L	U	0.5			Albuquerque	700801	2013
Premium Solvent	Cadmium	180-20632-1	0.5	0.25	mg/L	U	0.5			Archdale	306401	2013
Premium Solvent	Cadmium	180-20891-1	0.5	0.25	mg/L	U	0.5			Avon	202802	2013
Premium Solvent	Cadmium	180-20858-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2013
Premium Solvent	Cadmium	180-24136-1	0.5	0.25	mg/L	U	0.5			Chesapeake	312101	2013
Premium Solvent	Cadmium	180-24429-1	0.5	0.25	mg/L	U	0.5			Clackamas	714801	2013
Premium Solvent	Cadmium	180-20316-1	0.5	0.25	mg/L	U	0.5			Cohoes	200401	2013
Premium Solvent	Cadmium	180-23579-1	0.5	0.25	mg/L	U	0.5			Farmington	700804	2013
Premium Solvent	Cadmium	180-20920-1	0.5	0.25	mg/L	U	0.5			St. Pauls	303102	2013
Premium Solvent	Cadmium	180-21898-1	0.5	0.25	mg/L	U	0.5			Tulsa	619301	2013
Premium Solvent	Cadmium	180-24593-1	0.5	0.25	mg/L	U	0.5			Vinton	315501	2013
Premium Solvent	Cadmium	180-22177-1	0.5	0.25	mg/L	U	0.5			Grand Island	506501	2013
Premium Solvent	Cadmium	180-2454-1	0.5	0.25	mg/L	U	0.5			Tulsa	619301	2011
Premium Solvent	Cadmium	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Cadmium	180-2221-1	0.5	0.25	mg/L	U	0.5			Clackamas	714801	2011
Premium Solvent	Cadmium	180-2186-1	0.5	0.25	mg/L	U	0.5			Tampa	316301	2011
Premium Solvent	Cadmium	180-1865-1	0.5	0.25	mg/L	U	0.5			Farmington	700804	2011
Premium Solvent	Cadmium	180-1346-1	0.5	0.25	mg/L	U	0.5	45	73	St. Pauls	303102	2011
Premium Solvent	Cadmium	180-1150-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2011
Premium Solvent	Cadmium	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Cadmium	C1D290517001	0.5	0.25	mg/L	U	0.5			Lackawanna	202801	2011
Premium Solvent	Cadmium	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Cadmium	C1E030546001	0.5	0.25	mg/L	U	0.5			Archdale	306401	2011
Premium Solvent	Cadmium	C1D200409001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Cadmium	C1D140573001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Cadmium	C1C100616001	0.5	0.25	mg/L	U	0.5			Cohoes	200401	2011
Premium Solvent	Cadmium	180-10339-1	0.5	0.25	mg/L	U	0.5			Avon	7048	2012
Premium Solvent	Cadmium	180-10888-1	0.5	0.25	mg/L	U	0.5			St. Pauls	7087	2012
Premium Solvent	Cadmium	180-4888-1	0.5	0.25	mg/L	U	0.5			Chesapeake	7089	2012
Premium Solvent	Cadmium	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Cadmium	180-11642-1	0.5	0.25	mg/L	U	0.5			Grand Island	7107	2012
Premium Solvent	Cadmium	180-14162-1	0.5	0.25	mg/L	U	0.5			Wichita	7112	2012
Premium Solvent	Cadmium	180-11559-1	0.5	0.25	mg/L	U	0.5			Albuquerque	7133	2012
Premium Solvent	Cadmium	180-12755-1	0.5	0.25	mg/L	U	0.5			Chandler	7134	2012
Premium Solvent	Cadmium	180-14306-1	0.5	0.25	mg/L	U	0.5			Sacramento	7138	2012
Premium Solvent	Cadmium	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Cadmium	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Cadmium	180-12189-1	0.5	0.25	mg/L	U	0.5			Farmington	7179	2012
Premium Solvent	Cadmium	180-20765-1	0.36	0.36	mg/L	J	0.5			Lackawanna	202801	2013
Premium Solvent	Cadmium	180-11338-1	0.39	0.39	mg/L	J	0.5			Santa Ana	7117	2012
Premium Solvent	Cadmium	180-25504-1	0.42	0.42	mg/L	J	0.5			Sacramento	715701	2013
Premium Solvent	Cadmium	180-1536-1	0.42	0.42	mg/L	J	0.5			Grand Island	506501	2011

Premium Solvent	Cadmium	180-11568-1	0.52	0.52	mg/L	U	0.5			Charlotte	7055	2012
Premium Solvent	Cadmium	180-24468-1	0.87	0.87	mg/L	U	0.5			Dodge City	619503	2013
Premium Solvent	Cadmium	180-14205-1	0.88	0.88	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Cadmium	180-1899-1	1.1	1.1	mg/L	U	0.5			Syracuse	218701	2011
Premium Solvent	Carbon Tetrachloride	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	Carbon Tetrachloride	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	Carbon Tetrachloride	180-20632-1	0.25	0.125	mg/L	U	0.25			Archdale	306401	2013
Premium Solvent	Carbon Tetrachloride	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	Carbon Tetrachloride	180-20512-1	0.25	0.125	mg/L	U	0.25			Barre	210501	2013
Premium Solvent	Carbon Tetrachloride	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	Carbon Tetrachloride	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	Carbon Tetrachloride	180-25564-1	0.25	0.125	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	Carbon Tetrachloride	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	Carbon Tetrachloride	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	Carbon Tetrachloride	180-24468-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	Carbon Tetrachloride	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	Carbon Tetrachloride	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	Carbon Tetrachloride	180-24283-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2013
Premium Solvent	Carbon Tetrachloride	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	Carbon Tetrachloride	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	Carbon Tetrachloride	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	Carbon Tetrachloride	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	Carbon Tetrachloride	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	Carbon Tetrachloride	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	Carbon Tetrachloride	180-22177-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2013
Premium Solvent	Carbon Tetrachloride	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	Carbon Tetrachloride	180-2668-1	0.25	0.125	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	Carbon Tetrachloride	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011
Premium Solvent	Carbon Tetrachloride	180-2367-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	612401	2011
Premium Solvent	Carbon Tetrachloride	180-2221-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2011
Premium Solvent	Carbon Tetrachloride	180-2186-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2011
Premium Solvent	Carbon Tetrachloride	180-1865-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2011
Premium Solvent	Carbon Tetrachloride	180-1899-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2011
Premium Solvent	Carbon Tetrachloride	180-1685-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2011
Premium Solvent	Carbon Tetrachloride	180-1535-1	0.25	0.125	mg/L	U	0.25			Wichita	619501	2011
Premium Solvent	Carbon Tetrachloride	180-1536-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2011
Premium Solvent	Carbon Tetrachloride	180-1346-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2011
Premium Solvent	Carbon Tetrachloride	180-1150-1	0.25	0.125	mg/L	U	0.25			Sacramento	715701	2011
Premium Solvent	Carbon Tetrachloride	180-1124-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2011
Premium Solvent	Carbon Tetrachloride	C1D290517001	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2011
Premium Solvent	Carbon Tetrachloride	C1E030546001	0.25	0.125	mg/L	U	0.25			Archdale	306401	2011
Premium Solvent	Carbon Tetrachloride	C1D200409001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Carbon Tetrachloride	C1D140573001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Carbon Tetrachloride	C1C100616001	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2011
Premium Solvent	Carbon Tetrachloride	180-9899-1	0.25	0.125	mg/L	U	0.25			Barre	7015	2012
Premium Solvent	Carbon Tetrachloride	180-9967-1	0.25	0.125	mg/L	U	0.25			Cohoes	7046	2012
Premium Solvent	Carbon Tetrachloride	180-10339-1	0.25	0.125	mg/L	U	0.25			Avon	7048	2012
Premium Solvent	Carbon Tetrachloride	180-11568-1	0.25	0.125	mg/L	U	0.25			Charlotte	7055	2012
Premium Solvent	Carbon Tetrachloride	180-10888-1	0.25	0.125	mg/L	U	0.25	45	73	St. Pauls	7087	2012
Premium Solvent	Carbon Tetrachloride	180-10018-1	0.25	0.125	mg/L	U	0.25			Archdale	7088	2012
Premium Solvent	Carbon Tetrachloride	180-12866-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Carbon Tetrachloride	180-4888-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Carbon Tetrachloride	180-13029-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Carbon Tetrachloride	180-4889-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Carbon Tetrachloride	180-4902-1	0.25	0.125	mg/L	U	0.25			Vinton	7091	2012
Premium Solvent	Carbon Tetrachloride	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	Carbon Tetrachloride	180-13439-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	7104	2012
Premium Solvent	Carbon Tetrachloride	180-12590-1	0.25	0.125	mg/L	U	0.25			Tulsa	7105	2012
Premium Solvent	Carbon Tetrachloride	180-11642-1	0.25	0.125	mg/L	U	0.25			Grand Island	7107	2012
Premium Solvent	Carbon Tetrachloride	180-14162-1	0.25	0.125	mg/L	U	0.25			Wichita	7112	2012
Premium Solvent	Carbon Tetrachloride	180-10007-1	0.25	0.125	mg/L	U	0.25			Boise	7114	2012
Premium Solvent	Carbon Tetrachloride	180-11338-1	0.25	0.125	mg/L	U	0.25			Santa Ana	7117	2012
Premium Solvent	Carbon Tetrachloride	180-11559-1	0.25	0.125	mg/L	U	0.25			Albuquerque	7133	2012
Premium Solvent	Carbon Tetrachloride	180-12755-1	0.25	0.125	mg/L	U	0.25			Chandler	7134	2012
Premium Solvent	Carbon Tetrachloride	180-14306-1	0.25	0.125	mg/L	U	0.25			Sacramento	7138	2012
Premium Solvent	Carbon Tetrachloride	180-12189-1	0.25	0.125	mg/L	U*	0.25			Farmington	7179	2012
Premium Solvent	Carbon Tetrachloride	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	Carbon Tetrachloride	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Carbon Tetrachloride	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Carbon Tetrachloride	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Carbon Tetrachloride	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Carbon Tetrachloride	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Carbon Tetrachloride	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Carbon Tetrachloride	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Carbon Tetrachloride	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Carbon Tetrachloride	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Carbon Tetrachloride	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Chlorobenzene	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	Chlorobenzene	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	Chlorobenzene	180-20632-1	0.25	0.125	mg/L	U	0.25			Archdale	306401	2013
Premium Solvent	Chlorobenzene	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	Chlorobenzene	180-20512-1	0.25	0.125	mg/L	U	0.25			Barre	210501	2013
Premium Solvent	Chlorobenzene	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	Chlorobenzene	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	Chlorobenzene	180-25564-1	0.25	0.125	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	Chlorobenzene	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	Chlorobenzene	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	Chlorobenzene	180-24468-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	Chlorobenzene	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	Chlorobenzene	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	Chlorobenzene	180-24283-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2013
Premium Solvent	Chlorobenzene	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	Chlorobenzene	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	Chlorobenzene	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	Chlorobenzene	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	Chlorobenzene	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	Chlorobenzene	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	Chlorobenzene	180-22177-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2013

Premium Solvent	Chlorobenzene	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	Chlorobenzene	180-2668-1	0.25	0.125	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	Chlorobenzene	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011
Premium Solvent	Chlorobenzene	180-2367-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	612401	2011
Premium Solvent	Chlorobenzene	180-2221-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2011
Premium Solvent	Chlorobenzene	180-2186-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2011
Premium Solvent	Chlorobenzene	180-1865-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2011
Premium Solvent	Chlorobenzene	180-1899-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2011
Premium Solvent	Chlorobenzene	180-1685-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2011
Premium Solvent	Chlorobenzene	180-1535-1	0.25	0.125	mg/L	U	0.25			Wichita	619501	2011
Premium Solvent	Chlorobenzene	180-1536-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2011
Premium Solvent	Chlorobenzene	180-1346-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2011
Premium Solvent	Chlorobenzene	180-1150-1	0.25	0.125	mg/L	U	0.25			Sacramento	715701	2011
Premium Solvent	Chlorobenzene	180-1124-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2011
Premium Solvent	Chlorobenzene	C1D290517001	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2011
Premium Solvent	Chlorobenzene	C1E030546001	0.25	0.125	mg/L	U	0.25			Archdale	306401	2011
Premium Solvent	Chlorobenzene	C1D200409001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Chlorobenzene	C1D140573001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Chlorobenzene	C1C100616001	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2011
Premium Solvent	Chlorobenzene	180-9899-1	0.25	0.125	mg/L	U	0.25			Barre	7015	2012
Premium Solvent	Chlorobenzene	180-9967-1	0.25	0.125	mg/L	U	0.25			Cohoes	7046	2012
Premium Solvent	Chlorobenzene	180-10339-1	0.25	0.125	mg/L	U	0.25			Avon	7048	2012
Premium Solvent	Chlorobenzene	180-11568-1	0.25	0.125	mg/L	U	0.25			Charlotte	7055	2012
Premium Solvent	Chlorobenzene	180-10888-1	0.25	0.125	mg/L	U	0.25	45	73	St. Pauls	7087	2012
Premium Solvent	Chlorobenzene	180-10018-1	0.25	0.125	mg/L	U	0.25			Archdale	7088	2012
Premium Solvent	Chlorobenzene	180-12866-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Chlorobenzene	180-4888-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Chlorobenzene	180-13029-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Chlorobenzene	180-4889-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Chlorobenzene	180-4902-1	0.25	0.125	mg/L	U	0.25			Vinton	7091	2012
Premium Solvent	Chlorobenzene	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	Chlorobenzene	180-13439-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	7104	2012
Premium Solvent	Chlorobenzene	180-12590-1	0.25	0.125	mg/L	U	0.25			Tulsa	7105	2012
Premium Solvent	Chlorobenzene	180-11642-1	0.25	0.125	mg/L	U	0.25			Grand Island	7107	2012
Premium Solvent	Chlorobenzene	180-14162-1	0.25	0.125	mg/L	U	0.25			Wichita	7112	2012
Premium Solvent	Chlorobenzene	180-10007-1	0.25	0.125	mg/L	U	0.25			Boise	7114	2012
Premium Solvent	Chlorobenzene	180-11338-1	0.25	0.125	mg/L	U	0.25			Santa Ana	7117	2012
Premium Solvent	Chlorobenzene	180-11559-1	0.25	0.125	mg/L	U	0.25			Albuquerque	7133	2012
Premium Solvent	Chlorobenzene	180-12755-1	0.25	0.125	mg/L	U	0.25			Chandler	7134	2012
Premium Solvent	Chlorobenzene	180-14306-1	0.25	0.125	mg/L	U	0.25			Sacramento	7138	2012
Premium Solvent	Chlorobenzene	180-12189-1	0.25	0.125	mg/L	U	0.25			Farmington	7179	2012
Premium Solvent	Chlorobenzene	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	Chlorobenzene	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Chlorobenzene	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Chlorobenzene	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Chlorobenzene	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Chlorobenzene	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Chlorobenzene	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Chlorobenzene	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Chlorobenzene	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Chlorobenzene	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Chlorobenzene	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Chloroform	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	Chloroform	180-22446-1	1	0.5	mg/L	U	1			Albuquerque	700801	2013
Premium Solvent	Chloroform	180-20632-1	1	0.5	mg/L	U	1			Archdale	306401	2013
Premium Solvent	Chloroform	180-20891-1	1	0.5	mg/L	U	1			Avon	202802	2013
Premium Solvent	Chloroform	180-20512-1	1	0.5	mg/L	U	1			Barre	210501	2013
Premium Solvent	Chloroform	180-20858-1	1	0.5	mg/L	U	1			Charlotte	303101	2013
Premium Solvent	Chloroform	180-24136-1	1	0.5	mg/L	U	1			Chesapeake	312101	2013
Premium Solvent	Chloroform	180-25564-1	1	0.5	mg/L	U	1			Chester	315401	2013
Premium Solvent	Chloroform	180-24429-1	1	0.5	mg/L	U	1			Clackamas	714801	2013
Premium Solvent	Chloroform	180-20316-1	1	0.5	mg/L	U	1			Cohoes	200401	2013
Premium Solvent	Chloroform	180-24468-1	1	0.5	mg/L	U	1			Dodge City	619503	2013
Premium Solvent	Chloroform	180-23579-1	1	0.5	mg/L	U	1			Farmington	700804	2013
Premium Solvent	Chloroform	180-20765-1	1	0.5	mg/L	U	1			Lackawanna	202801	2013
Premium Solvent	Chloroform	180-24283-1	1	0.5	mg/L	U	1			Omaha	512701	2013
Premium Solvent	Chloroform	180-20920-1	1	0.5	mg/L	U	1			St. Pauls	303102	2013
Premium Solvent	Chloroform	180-20719-1	1	0.5	mg/L	U	1			Syracuse	218701	2013
Premium Solvent	Chloroform	180-21349-1	1	0.5	mg/L	U	1			Tampa	316301	2013
Premium Solvent	Chloroform	180-21898-1	1	0.5	mg/L	U	1			Tulsa	619301	2013
Premium Solvent	Chloroform	180-24593-1	1	0.5	mg/L	U	1			Vinton	315501	2013
Premium Solvent	Chloroform	180-25917-1	1	0.5	mg/L	U	1			Raleigh	317101	2013
Premium Solvent	Chloroform	180-22177-1	1	0.5	mg/L	U	1			Grand Island	506501	2013
Premium Solvent	Chloroform	180-2878-1	1	0.5	mg/L	U	1			Dodge City	619503	2011
Premium Solvent	Chloroform	180-2668-1	1	0.5	mg/L	U	1			Chandler	714201	2011
Premium Solvent	Chloroform	180-2454-1	1	0.5	mg/L	U	1			Tulsa	619301	2011
Premium Solvent	Chloroform	180-2367-1	1	0.5	mg/L	U	1			Oklahoma City	612401	2011
Premium Solvent	Chloroform	180-2221-1	1	0.5	mg/L	U	1			Clackamas	714801	2011
Premium Solvent	Chloroform	180-2186-1	1	0.5	mg/L	U	1			Tampa	316301	2011
Premium Solvent	Chloroform	180-1865-1	1	0.5	mg/L	U	1			Farmington	700804	2011
Premium Solvent	Chloroform	180-1899-1	1	0.5	mg/L	U	1			Syracuse	218701	2011
Premium Solvent	Chloroform	180-1685-1	1	0.5	mg/L	U	1			Omaha	512701	2011
Premium Solvent	Chloroform	180-1535-1	1	0.5	mg/L	U	1			Wichita	619501	2011
Premium Solvent	Chloroform	180-1536-1	1	0.5	mg/L	U	1			Grand Island	506501	2011
Premium Solvent	Chloroform	180-1346-1	1	0.5	mg/L	U	1			St. Pauls	303102	2011
Premium Solvent	Chloroform	180-1150-1	1	0.5	mg/L	U	1			Sacramento	715701	2011
Premium Solvent	Chloroform	180-1124-1	1	0.5	mg/L	U	1			Albuquerque	700801	2011
Premium Solvent	Chloroform	C1D290517001	1	0.5	mg/L	U	1			Lackawanna	202801	2011
Premium Solvent	Chloroform	C1E030546001	1	0.5	mg/L	U	1			Archdale	306401	2011
Premium Solvent	Chloroform	C1D200409001	1	0.5	mg/L	U	1			Barre	210501	2011
Premium Solvent	Chloroform	C1D140573001	1	0.5	mg/L	U	1			Barre	210501	2011
Premium Solvent	Chloroform	C1C100616001	1	0.5	mg/L	U	1			Cohoes	200401	2011
Premium Solvent	Chloroform	180-9899-1	1	0.5	mg/L	U	1			Barre	7015	2012
Premium Solvent	Chloroform	180-9967-1	1	0.5	mg/L	U	1			Cohoes	7046	2012
Premium Solvent	Chloroform	180-10339-1	1	0.5	mg/L	U	1			Avon	7048	2012
Premium Solvent	Chloroform	180-11568-1	1	0.5	mg/L	U	1			Charlotte	7055	2012
Premium Solvent	Chloroform	180-10888-1	1	0.5	mg/L	U	1	45	73	St. Pauls	7087	2012
Premium Solvent	Chloroform	180-10018-1	1	0.5	mg/L	U	1			Archdale	7088	2012

Premium Solvent	Chloroform	180-12866-1	1	0.5	mg/L	U	1	Chesapeake	7089	2012
Premium Solvent	Chloroform	180-4888-1	1	0.5	mg/L	U	1	Chesapeake	7089	2012
Premium Solvent	Chloroform	180-13029-1	1	0.5	mg/L	U	1	Chester	7090	2012
Premium Solvent	Chloroform	180-4889-1	1	0.5	mg/L	U	1	Chester	7090	2012
Premium Solvent	Chloroform	180-4902-1	1	0.5	mg/L	U	1	Vinton	7091	2012
Premium Solvent	Chloroform	180-9962-1	1	0.5	mg/L	U	1	Raleigh	7092	2012
Premium Solvent	Chloroform	180-13439-1	1	0.5	mg/L	U	1	Oklahoma City	7104	2012
Premium Solvent	Chloroform	180-12590-1	1	0.5	mg/L	U	1	Tulsa	7105	2012
Premium Solvent	Chloroform	180-11642-1	1	0.5	mg/L	U	1	Grand Island	7107	2012
Premium Solvent	Chloroform	180-14162-1	1	0.5	mg/L	U	1	Wichita	7112	2012
Premium Solvent	Chloroform	180-10007-1	1	0.5	mg/L	U	1	Boise	7114	2012
Premium Solvent	Chloroform	180-11338-1	1	0.5	mg/L	U	1	Santa Ana	7117	2012
Premium Solvent	Chloroform	180-11559-1	1	0.5	mg/L	U	1	Albuquerque	7133	2012
Premium Solvent	Chloroform	180-12755-1	1	0.5	mg/L	U	1	Chandler	7134	2012
Premium Solvent	Chloroform	180-14306-1	1	0.5	mg/L	U	1	Sacramento	7138	2012
Premium Solvent	Chloroform	180-12189-1	1	0.5	mg/L	U	1	Farmington	7179	2012
Premium Solvent	Chloroform	180-21252-1	2	1	mg/L	U	2	Oklahoma City	612401	2013
Premium Solvent	Chloroform	180-25504-1	2	1	mg/L	U	2	Sacramento	715701	2013
Premium Solvent	Chloroform	180-24151-1	2	1	mg/L	U	2	Wichita	619501	2013
Premium Solvent	Chloroform	180-2356-1	2	1	mg/L	U	2	Boise	118308	2011
Premium Solvent	Chloroform	180-591-1	2	1	mg/L	U	2	Charlotte	303101	2011
Premium Solvent	Chloroform	C1D280567001	2	1	mg/L	U	2	Avon	202802	2011
Premium Solvent	Chloroform	180-13289-1	2	1	mg/L	U	2	Vinton	7091	2012
Premium Solvent	Chloroform	180-14205-1	2	1	mg/L	U	2	Tallahassee	7094	2012
Premium Solvent	Chloroform	180-14023-1	2	1	mg/L	U	2	Omaha	7157	2012
Premium Solvent	Chloroform	180-14585-1	2	1	mg/L	U	2	Dodge City	7178	2012
Premium Solvent	Chloroform	480-20539-1	9.9	4.95	mg/L	U	1	Lackawanna	202801	2012
Premium Solvent	Chromium	180-20858-1	0.0025	0.0025	mg/L	J B	0.05	Boise	118308	2013
Premium Solvent	Chromium	180-2454-1	0.086	0.086	mg/L	J B	0.5	Tulsa	619301	2011
Premium Solvent	Chromium	180-1536-1	0.087	0.087	mg/L	J	0.5	Grand Island	506501	2011
Premium Solvent	Chromium	180-10007-1	0.093	0.093	mg/L	J	0.5	Boise	7114	2012
Premium Solvent	Chromium	180-25504-1	0.094	0.094	mg/L	J	0.5	Sacramento	715701	2013
Premium Solvent	Chromium	180-20891-1	0.095	0.095	mg/L	J	0.5	Avon	202802	2013
Premium Solvent	Chromium	180-20719-1	0.095	0.095	mg/L	J	0.5	Syracuse	218701	2013
Premium Solvent	Chromium	180-21252-1	0.099	0.099	mg/L	J	0.5	Oklahoma City	612401	2013
Premium Solvent	Chromium	180-9899-1	0.099	0.099	mg/L	J	0.5	Barre	7015	2012
Premium Solvent	Chromium	180-9967-1	0.1	0.1	mg/L	J	0.5	Cohoes	7046	2012
Premium Solvent	Chromium	180-12590-1	0.1	0.1	mg/L	J	0.5	Tulsa	7105	2012
Premium Solvent	Chromium	180-12755-1	0.11	0.11	mg/L	J B	0.5	Chandler	7134	2012
Premium Solvent	Chromium	180-591-1	0.12	0.12	mg/L	J	0.5	Charlotte	303101	2011
Premium Solvent	Chromium	180-4902-1	0.12	0.12	mg/L	J	0.5	Vinton	7091	2012
Premium Solvent	Chromium	180-14306-1	0.12	0.12	mg/L	J	0.5	Sacramento	7138	2012
Premium Solvent	Chromium	180-20512-1	0.13	0.13	mg/L	J	0.5	Barre	210501	2013
Premium Solvent	Chromium	180-11338-1	0.13	0.13	mg/L	J	0.5	Santa Ana	7117	2012
Premium Solvent	Chromium	180-20858-1	0.14	0.14	mg/L	J	0.5	Charlotte	303101	2013
Premium Solvent	Chromium	180-4888-1	0.14	0.14	mg/L	J	0.5	Chesapeake	7089	2012
Premium Solvent	Chromium	180-23579-1	0.16	0.16	mg/L	J	0.5	Farmington	700804	2013
Premium Solvent	Chromium	180-25564-1	0.18	0.18	mg/L	J	0.5	Chester	315401	2013
Premium Solvent	Chromium	180-14023-1	0.19	0.19	mg/L	J B	0.5	Omaha	7157	2012
Premium Solvent	Chromium	180-20765-1	0.2	0.2	mg/L	J	0.5	Lackawanna	202801	2013
Premium Solvent	Chromium	180-4889-1	0.2	0.2	mg/L	J	0.5	Chester	7090	2012
Premium Solvent	Chromium	180-13439-1	0.21	0.21	mg/L	J	0.5	Oklahoma City	7104	2012
Premium Solvent	Chromium	180-22446-1	0.5	0.25	mg/L	U	0.5	Albuquerque	700801	2013
Premium Solvent	Chromium	180-20632-1	0.5	0.25	mg/L	U	0.5	Archdale	306401	2013
Premium Solvent	Chromium	180-24136-1	0.5	0.25	mg/L	U	0.5	Chesapeake	312101	2013
Premium Solvent	Chromium	180-24429-1	0.5	0.25	mg/L	U	0.5	Clackamas	714801	2013
Premium Solvent	Chromium	180-24468-1	0.5	0.25	mg/L	U	0.5	Dodge City	619503	2013
Premium Solvent	Chromium	180-21349-1	0.5	0.25	mg/L	U	0.5	Tampa	316301	2013
Premium Solvent	Chromium	180-21898-1	0.5	0.25	mg/L	U	0.5	Tulsa	619301	2013
Premium Solvent	Chromium	180-24593-1	0.5	0.25	mg/L	U	0.5	Vinton	315501	2013
Premium Solvent	Chromium	180-22177-1	0.5	0.25	mg/L	U	0.5	Grand Island	506501	2013
Premium Solvent	Chromium	180-2668-1	0.5	0.25	mg/L	U	0.5	Chandler	714201	2011
Premium Solvent	Chromium	180-2356-1	0.5	0.25	mg/L	U	0.5	Boise	118308	2011
Premium Solvent	Chromium	180-2387-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2011
Premium Solvent	Chromium	180-2221-1	0.5	0.25	mg/L	U	0.5	Clackamas	714801	2011
Premium Solvent	Chromium	180-2188-1	0.5	0.25	mg/L	U	0.5	Tampa	316301	2011
Premium Solvent	Chromium	180-1865-1	0.5	0.25	mg/L	U	0.5	Farmington	700804	2011
Premium Solvent	Chromium	180-1685-1	0.5	0.25	mg/L	U	0.5	Omaha	512701	2011
Premium Solvent	Chromium	180-1535-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2011
Premium Solvent	Chromium	180-1346-1	0.5	0.25	mg/L	U	0.5	St. Pauls	303102	2011
Premium Solvent	Chromium	180-1150-1	0.5	0.25	mg/L	U	0.5	Sacramento	715701	2011
Premium Solvent	Chromium	180-1124-1	0.5	0.25	mg/L	U	0.5	Albuquerque	700801	2011
Premium Solvent	Chromium	C1D290517001	0.5	0.25	mg/L	U	0.5	Lackawanna	202801	2011
Premium Solvent	Chromium	C1D280567001	0.5	0.25	mg/L	U	0.5	Avon	202802	2011
Premium Solvent	Chromium	C1E030546001	0.5	0.25	mg/L	U	0.5	Archdale	306401	2011
Premium Solvent	Chromium	C1D200409001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Chromium	C1D140573001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Chromium	C1C100616001	0.5	0.25	mg/L	U	0.5	Cohoes	200401	2011
Premium Solvent	Chromium	180-10339-1	0.5	0.25	mg/L	U	0.5	Avon	7048	2012
Premium Solvent	Chromium	180-11568-1	0.5	0.25	mg/L	U	0.5	Charlotte	7055	2012
Premium Solvent	Chromium	180-10888-1	0.5	0.25	mg/L	U	0.5	St. Pauls	7087	2012
Premium Solvent	Chromium	180-10018-1	0.5	0.25	mg/L	U	0.5	Archdale	7088	2012
Premium Solvent	Chromium	180-12866-1	0.5	0.25	mg/L	U	0.5	Chesapeake	7089	2012
Premium Solvent	Chromium	180-13029-1	0.5	0.25	mg/L	U	0.5	Chester	7090	2012
Premium Solvent	Chromium	180-13289-1	0.5	0.25	mg/L	U	0.5	Vinton	7091	2012
Premium Solvent	Chromium	180-11642-1	0.5	0.25	mg/L	U	0.5	Grand Island	7107	2012
Premium Solvent	Chromium	180-14162-1	0.5	0.25	mg/L	U	0.5	Wichita	7112	2012
Premium Solvent	Chromium	180-11559-1	0.5	0.25	mg/L	U	0.5	Albuquerque	7133	2012
Premium Solvent	Chromium	180-14585-1	0.5	0.25	mg/L	U	0.5	Dodge City	7178	2012
Premium Solvent	Chromium	180-12189-1	0.5	0.25	mg/L	U	0.5	Farmington	7179	2012
Premium Solvent	Chromium	480-20539-1	0.51	0.255	mg/L	U	0.5	Lackawanna	202801	2012
Premium Solvent	Chromium	180-24283-1	0.28	0.28	mg/L	J	0.5	Omaha	512701	2013
Premium Solvent	Chromium	180-1899-1	0.31	0.31	mg/L	J	0.5	Syracuse	218701	2011
Premium Solvent	Chromium	180-9962-1	0.41	0.41	mg/L	J	0.5	Raleigh	7092	2012
Premium Solvent	Chromium	180-20316-1	0.46	0.46	mg/L	J	0.5	Cohoes	200401	2013
Premium Solvent	Chromium	180-14205-1	0.68	0.68	mg/L	J	0.5	Tallahassee	7094	2012
Premium Solvent	Chromium	180-25917-1	1.1	1.1	mg/L	J	0.5	Raleigh	317101	2013
Premium Solvent	Chromium	180-24151-1	2.4	2.4	mg/L	J	0.5	Wichita	619501	2013

Premium Solvent	Chromium	180-20920-1	4.3	4.3	mg/L		0.5	St. Pauls	303102	2013
Premium Solvent	Chromium	180-2878-1	11	11	mg/L	B	0.5	Dodge City	619503	2011
Premium Solvent	Flash Point	180-25564-1	75	75	Degrees F			Chester	315401	2013
Premium Solvent	Flash Point	180-11568-1	99	99	Degrees F			Charlotte	7055	2012
Premium Solvent	Flash Point	480-20539-1	105	105	Degrees F			Lackawanna	202801	2012
Premium Solvent	Flash Point	C1E030546001	114	114	Degrees F			Archdale	306401	2011
Premium Solvent	Flash Point	180-10888-1	119	119	Degrees F			St. Pauls	7087	2012
Premium Solvent	Flash Point	180-24283-1	137	137	Degrees F			Omaha	512701	2013
Premium Solvent	Flash Point	180-1346-1	139	139	Degrees F			St. Pauls	303102	2011
Premium Solvent	Flash Point	180-20856-1	>140	>140	Degrees F			Boise	118308	2013
Premium Solvent	Flash Point	180-4889-1	143	143	Degrees F			Chester	7090	2012
Premium Solvent	Flash Point	180-14306-1	143	143	Degrees F			Sacramento	7138	2012
Premium Solvent	Flash Point	180-9967-1	145	145	Degrees F			Cohoes	7046	2012
Premium Solvent	Flash Point	180-11642-1	145	145	Degrees F			Grand Island	7107	2012
Premium Solvent	Flash Point	180-25504-1	145	145	Degrees F			Sacramento	715701	2013
Premium Solvent	Flash Point	C1D140573001	146	146	Degrees F			Barre	210501	2011
Premium Solvent	Flash Point	180-20512-1	146	146	Degrees F			Barre	210501	2013
Premium Solvent	Flash Point	180-2367-1	147	147	Degrees F			Oklahoma City	612401	2011
Premium Solvent	Flash Point	180-24136-1	147	147	Degrees F			Chesapeake	312101	2013
Premium Solvent	Flash Point	180-25917-1	148	148	Degrees F			Raleigh	317101	2013
Premium Solvent	Flash Point	180-2356-1	149	149	Degrees F			Boise	118308	2011
Premium Solvent	Flash Point	180-9962-1	149	149	Degrees F			Raleigh	7092	2012
Premium Solvent	Flash Point	180-10007-1	149	149	Degrees F			Boise	7114	2012
Premium Solvent	Flash Point	180-22177-1	149	149	Degrees F			Grand Island	506501	2013
Premium Solvent	Flash Point	180-591-1	150	150	Degrees F			Charlotte	303101	2011
Premium Solvent	Flash Point	180-2668-1	151	151	Degrees F			Chandler	714201	2011
Premium Solvent	Flash Point	180-1536-1	151	151	Degrees F			Grand Island	506501	2011
Premium Solvent	Flash Point	180-9899-1	151	151	Degrees F			Barre	7015	2012
Premium Solvent	Flash Point	180-12189-1	151	151	Degrees F			Farmington	7179	2012
Premium Solvent	Flash Point	180-22446-1	151	151	Degrees F			Albuquerque	700801	2013
Premium Solvent	Flash Point	180-24429-1	151	151	Degrees F	45	73	Clackamas	714801	2013
Premium Solvent	Flash Point	180-21252-1	151	151	Degrees F			Oklahoma City	612401	2013
Premium Solvent	Flash Point	180-20719-1	152	152	Degrees F			Syracuse	218701	2013
Premium Solvent	Flash Point	180-1685-1	153	153	Degrees F			Omaha	512701	2011
Premium Solvent	Flash Point	180-10018-1	153	153	Degrees F			Archdale	7088	2012
Premium Solvent	Flash Point	180-11338-1	153	153	Degrees F			Santa Ana	7117	2012
Premium Solvent	Flash Point	180-12755-1	153	153	Degrees F			Chandler	7134	2012
Premium Solvent	Flash Point	180-20858-1	153	153	Degrees F			Charlotte	303101	2013
Premium Solvent	Flash Point	180-23579-1	153	153	Degrees F			Farmington	700804	2013
Premium Solvent	Flash Point	180-20765-1	153	153	Degrees F			Lackawanna	202801	2013
Premium Solvent	Flash Point	180-21898-1	153	153	Degrees F			Tulsa	619301	2013
Premium Solvent	Flash Point	180-24593-1	153	153	Degrees F			Vinton	315501	2013
Premium Solvent	Flash Point	C1D290517001	154	154	Degrees F			Lackawanna	202801	2011
Premium Solvent	Flash Point	C1C100616001	154	154	Degrees F			Cohoes	200401	2011
Premium Solvent	Flash Point	180-1899-1	155	155	Degrees F			Syracuse	218701	2011
Premium Solvent	Flash Point	180-13029-1	155	155	Degrees F			Chester	7090	2012
Premium Solvent	Flash Point	180-13289-1	155	155	Degrees F			Vinton	7091	2012
Premium Solvent	Flash Point	180-4902-1	155	155	Degrees F			Vinton	7091	2012
Premium Solvent	Flash Point	180-12590-1	155	155	Degrees F			Tulsa	7105	2012
Premium Solvent	Flash Point	180-14023-1	155	155	Degrees F			Omaha	7157	2012
Premium Solvent	Flash Point	180-20632-1	155	155	Degrees F			Archdale	306401	2013
Premium Solvent	Flash Point	180-20316-1	155	155	Degrees F			Cohoes	200401	2013
Premium Solvent	Flash Point	180-20920-1	155	155	Degrees F			St. Pauls	303102	2013
Premium Solvent	Flash Point	180-21349-1	155	155	Degrees F			Tampa	316301	2013
Premium Solvent	Flash Point	C1D280567001	156	156	Degrees F			Avon	202802	2011
Premium Solvent	Flash Point	180-1535-1	157	157	Degrees F			Wichita	619501	2011
Premium Solvent	Flash Point	180-12866-1	157	157	Degrees F			Chesapeake	7089	2012
Premium Solvent	Flash Point	180-4888-1	157	157	Degrees F			Chesapeake	7089	2012
Premium Solvent	Flash Point	180-14162-1	157	157	Degrees F			Wichita	7112	2012
Premium Solvent	Flash Point	180-14585-1	157	157	Degrees F			Dodge City	7178	2012
Premium Solvent	Flash Point	180-20891-1	157	157	Degrees F			Avon	202802	2013
Premium Solvent	Flash Point	C1D200409001	158	158	Degrees F			Barre	210501	2011
Premium Solvent	Flash Point	180-10339-1	158	158	Degrees F			Avon	7048	2012
Premium Solvent	Flash Point	180-2878-1	159	159	Degrees F			Dodge City	619503	2011
Premium Solvent	Flash Point	180-1865-1	159	159	Degrees F			Farmington	700804	2011
Premium Solvent	Flash Point	180-13439-1	159	159	Degrees F			Oklahoma City	7104	2012
Premium Solvent	Flash Point	180-24468-1	159	159	Degrees F			Dodge City	619503	2013
Premium Solvent	Flash Point	180-24151-1	159	159	Degrees F			Wichita	619501	2013
Premium Solvent	Flash Point	180-1150-1	160	160	Degrees F			Sacramento	715701	2011
Premium Solvent	Flash Point	180-1124-1	160	160	Degrees F			Albuquerque	700801	2011
Premium Solvent	Flash Point	180-2221-1	161	161	Degrees F			Clackamas	714801	2011
Premium Solvent	Flash Point	180-2186-1	161	161	Degrees F			Tampa	316301	2011
Premium Solvent	Flash Point	180-14205-1	161	161	Degrees F			Tallahassee	7094	2012
Premium Solvent	Flash Point	180-2454-1	166	166	Degrees F			Tulsa	619301	2011
Premium Solvent	Flash Point	180-11559-1	>200	>200	Degrees F			Albuquerque	7133	2012
Premium Solvent	Hexachlorobenzene	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	Hexachlorobenzene	180-22446-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2013
Premium Solvent	Hexachlorobenzene	180-20632-1	0.1	0.05	mg/L	U	0.1	Archdale	306401	2013
Premium Solvent	Hexachlorobenzene	180-20891-1	0.1	0.05	mg/L	U	0.1	Avon	202802	2013
Premium Solvent	Hexachlorobenzene	180-20512-1	0.1	0.05	mg/L	U	0.1	Barre	210501	2013
Premium Solvent	Hexachlorobenzene	180-20858-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2013
Premium Solvent	Hexachlorobenzene	180-24136-1	0.1	0.05	mg/L	U	0.1	Chesapeake	312101	2013
Premium Solvent	Hexachlorobenzene	180-24429-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2013
Premium Solvent	Hexachlorobenzene	180-20316-1	0.1	0.05	mg/L	U	0.1	Cohoes	200401	2013
Premium Solvent	Hexachlorobenzene	180-24468-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2013
Premium Solvent	Hexachlorobenzene	180-23579-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2013
Premium Solvent	Hexachlorobenzene	180-20765-1	0.1	0.05	mg/L	U	0.1	Lackawanna	202801	2013
Premium Solvent	Hexachlorobenzene	180-24283-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2013
Premium Solvent	Hexachlorobenzene	180-20920-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2013
Premium Solvent	Hexachlorobenzene	180-20719-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2013
Premium Solvent	Hexachlorobenzene	180-21349-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2013
Premium Solvent	Hexachlorobenzene	180-21898-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2013
Premium Solvent	Hexachlorobenzene	180-24593-1	0.1	0.05	mg/L	U	0.1	Vinton	315501	2013
Premium Solvent	Hexachlorobenzene	180-24151-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2013
Premium Solvent	Hexachlorobenzene	180-22177-1	0.1	0.05	mg/L	U	0.1	Grand Island	506501	2013
Premium Solvent	Hexachlorobenzene	180-2878-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2011
Premium Solvent	Hexachlorobenzene	180-2668-1	0.1	0.05	mg/L	U	0.1	Chandler	714201	2011
Premium Solvent	Hexachlorobenzene	180-2454-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2011

Premium Solvent	Hexachlorobenzene	180-2356-1	0.1	0.05	mg/L	U	0.1	Boise	118308	2011		
Premium Solvent	Hexachlorobenzene	180-2367-1	0.1	0.05	mg/L	U	0.1	Oklahoma City	612401	2011		
Premium Solvent	Hexachlorobenzene	180-2221-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2011		
Premium Solvent	Hexachlorobenzene	180-2186-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2011		
Premium Solvent	Hexachlorobenzene	180-1865-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2011		
Premium Solvent	Hexachlorobenzene	180-1899-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2011		
Premium Solvent	Hexachlorobenzene	180-1685-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2011		
Premium Solvent	Hexachlorobenzene	180-1346-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2011		
Premium Solvent	Hexachlorobenzene	180-1124-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2011		
Premium Solvent	Hexachlorobenzene	180-591-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2011		
Premium Solvent	Hexachlorobenzene	180-9899-1	0.1	0.05	mg/L	U*	0.1	Barre	7015	2012		
Premium Solvent	Hexachlorobenzene	180-9967-1	0.1	0.05	mg/L	U*	0.1	Cohoes	7046	2012		
Premium Solvent	Hexachlorobenzene	180-10339-1	0.1	0.05	mg/L	U	0.1	Avon	7048	2012		
Premium Solvent	Hexachlorobenzene	180-10888-1	0.1	0.05	mg/L	U	0.1	St. Pauls	7087	2012		
Premium Solvent	Hexachlorobenzene	180-10018-1	0.1	0.05	mg/L	U*	0.1	Archdale	7088	2012		
Premium Solvent	Hexachlorobenzene	180-12866-1	0.1	0.05	mg/L	U	0.1	Chesapeake	7089	2012		
Premium Solvent	Hexachlorobenzene	180-4888-1	0.1	0.05	mg/L	U	0.1	Chesapeake	7089	2012		
Premium Solvent	Hexachlorobenzene	180-13029-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012		
Premium Solvent	Hexachlorobenzene	180-4889-1	0.1	0.05	mg/L	U	0.1	42	69	Chester	7090	2012
Premium Solvent	Hexachlorobenzene	180-4902-1	0.1	0.05	mg/L	U	0.1	Vinton	7091	2012		
Premium Solvent	Hexachlorobenzene	180-9962-1	0.1	0.05	mg/L	U*	0.1	Raleigh	7092	2012		
Premium Solvent	Hexachlorobenzene	180-12590-1	0.1	0.05	mg/L	U	0.1	Tulsa	7105	2012		
Premium Solvent	Hexachlorobenzene	180-11642-1	0.1	0.05	mg/L	U	0.1	Grand Island	7107	2012		
Premium Solvent	Hexachlorobenzene	180-14162-1	0.1	0.05	mg/L	U	0.1	Wichita	7112	2012		
Premium Solvent	Hexachlorobenzene	180-10007-1	0.1	0.05	mg/L	U*	0.1	Boise	7114	2012		
Premium Solvent	Hexachlorobenzene	180-11559-1	0.1	0.05	mg/L	U	0.1	Albuquerque	7133	2012		
Premium Solvent	Hexachlorobenzene	180-14023-1	0.1	0.05	mg/L	U	0.1	Omaha	7157	2012		
Premium Solvent	Hexachlorobenzene	180-14585-1	0.1	0.05	mg/L	U	0.1	Dodge City	7178	2012		
Premium Solvent	Hexachlorobenzene	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012		
Premium Solvent	Hexachlorobenzene	180-25564-1	0.13	0.065	mg/L	U	0.13	Chester	315401	2013		
Premium Solvent	Hexachlorobenzene	180-25917-1	0.13	0.065	mg/L	U	0.13	Raleigh	317101	2013		
Premium Solvent	Hexachlorobenzene	C1D290517001	0.13	0.065	mg/L	U	0.13	Lackawanna	202801	2011		
Premium Solvent	Hexachlorobenzene	C1D280567001	0.13	0.065	mg/L	U	0.13	Avon	202802	2011		
Premium Solvent	Hexachlorobenzene	C1E030546001	0.13	0.065	mg/L	U	0.13	Archdale	306401	2011		
Premium Solvent	Hexachlorobenzene	C1D200409001	0.13	0.065	mg/L	U	0.13	Barre	210501	2011		
Premium Solvent	Hexachlorobenzene	C1D140573001	0.13	0.065	mg/L	U	0.13	Barre	210501	2011		
Premium Solvent	Hexachlorobenzene	C1C100616001	0.13	0.065	mg/L	U	0.13	Cohoes	200401	2011		
Premium Solvent	Hexachlorobenzene	180-1536-1	0.16	0.16	mg/L	U	0.1	Grand Island	506501	2011		
Premium Solvent	Hexachlorobenzene	180-13289-1	0.16	0.16	mg/L	p	0.1	Vinton	7091	2012		
Premium Solvent	Hexachlorobenzene	180-1535-1	0.18	0.18	mg/L	U	0.1	Wichita	619501	2011		
Premium Solvent	Hexachlorobenzene	480-20539-1	12	6	mg/L	U	0.1	Lackawanna	202801	2012		
Premium Solvent	Hexachlorobenzene	180-21252-1	20	10	mg/L	U	20	Oklahoma City	612401	2013		
Premium Solvent	Hexachlorobenzene	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012		
Premium Solvent	Hexachlorobenzene	180-14205-1	20	10	mg/L	U	20	Tallahassee	7094	2012		
Premium Solvent	Hexachlorobenzene	180-13439-1	20	10	mg/L	U	20	Oklahoma City	7104	2012		
Premium Solvent	Hexachlorobenzene	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012		
Premium Solvent	Hexachlorobutadiene	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013		
Premium Solvent	Hexachlorobutadiene	180-22446-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2013		
Premium Solvent	Hexachlorobutadiene	180-20632-1	0.1	0.05	mg/L	U	0.1	Archdale	306401	2013		
Premium Solvent	Hexachlorobutadiene	180-20891-1	0.1	0.05	mg/L	U	0.1	Avon	202802	2013		
Premium Solvent	Hexachlorobutadiene	180-20512-1	0.1	0.05	mg/L	U	0.1	Barre	210501	2013		
Premium Solvent	Hexachlorobutadiene	180-20858-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2013		
Premium Solvent	Hexachlorobutadiene	180-24136-1	0.1	0.05	mg/L	U	0.1	Chesapeake	312101	2013		
Premium Solvent	Hexachlorobutadiene	180-24429-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2013		
Premium Solvent	Hexachlorobutadiene	180-20316-1	0.1	0.05	mg/L	U	0.1	Cohoes	200401	2013		
Premium Solvent	Hexachlorobutadiene	180-24468-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2013		
Premium Solvent	Hexachlorobutadiene	180-23579-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2013		
Premium Solvent	Hexachlorobutadiene	180-20765-1	0.1	0.05	mg/L	U	0.1	Lackawanna	202801	2013		
Premium Solvent	Hexachlorobutadiene	180-24283-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2013		
Premium Solvent	Hexachlorobutadiene	180-20920-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2013		
Premium Solvent	Hexachlorobutadiene	180-20719-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2013		
Premium Solvent	Hexachlorobutadiene	180-21349-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2013		
Premium Solvent	Hexachlorobutadiene	180-21898-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2013		
Premium Solvent	Hexachlorobutadiene	180-24593-1	0.1	0.05	mg/L	U	0.1	Vinton	315501	2013		
Premium Solvent	Hexachlorobutadiene	180-24151-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2013		
Premium Solvent	Hexachlorobutadiene	180-22177-1	0.1	0.05	mg/L	U	0.1	Grand Island	506501	2013		
Premium Solvent	Hexachlorobutadiene	180-2878-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2011		
Premium Solvent	Hexachlorobutadiene	180-2688-1	0.1	0.05	mg/L	U	0.1	Chandler	714201	2011		
Premium Solvent	Hexachlorobutadiene	180-2454-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2011		
Premium Solvent	Hexachlorobutadiene	180-2356-1	0.1	0.05	mg/L	U	0.1	Boise	118308	2011		
Premium Solvent	Hexachlorobutadiene	180-2367-1	0.1	0.05	mg/L	U	0.1	Oklahoma City	612401	2011		
Premium Solvent	Hexachlorobutadiene	180-2221-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2011		
Premium Solvent	Hexachlorobutadiene	180-2186-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2011		
Premium Solvent	Hexachlorobutadiene	180-1865-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2011		
Premium Solvent	Hexachlorobutadiene	180-1899-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2011		
Premium Solvent	Hexachlorobutadiene	180-1685-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2011		
Premium Solvent	Hexachlorobutadiene	180-1535-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2011		
Premium Solvent	Hexachlorobutadiene	180-1536-1	0.1	0.05	mg/L	U	0.1	Grand Island	506501	2011		
Premium Solvent	Hexachlorobutadiene	180-1346-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2011		
Premium Solvent	Hexachlorobutadiene	180-1124-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2011		
Premium Solvent	Hexachlorobutadiene	180-591-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2011		
Premium Solvent	Hexachlorobutadiene	180-9899-1	0.1	0.05	mg/L	U*	0.1	Barre	7015	2012		
Premium Solvent	Hexachlorobutadiene	180-9967-1	0.1	0.05	mg/L	U*	0.1	Cohoes	7046	2012		
Premium Solvent	Hexachlorobutadiene	180-10339-1	0.1	0.05	mg/L	U	0.1	Avon	7048	2012		
Premium Solvent	Hexachlorobutadiene	180-10888-1	0.1	0.05	mg/L	U	0.1	St. Pauls	7087	2012		
Premium Solvent	Hexachlorobutadiene	180-10018-1	0.1	0.05	mg/L	U*	0.1	Archdale	7088	2012		
Premium Solvent	Hexachlorobutadiene	180-12866-1	0.1	0.05	mg/L	U	0.1	Chesapeake	7089	2012		
Premium Solvent	Hexachlorobutadiene	180-4888-1	0.1	0.05	mg/L	U	0.1	42	69	Chesapeake	7089	2012
Premium Solvent	Hexachlorobutadiene	180-13029-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012		
Premium Solvent	Hexachlorobutadiene	180-4889-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012		
Premium Solvent	Hexachlorobutadiene	180-13289-1	0.1	0.05	mg/L	U	0.1	Vinton	7091	2012		
Premium Solvent	Hexachlorobutadiene	180-4902-1	0.1	0.05	mg/L	U	0.1	Vinton	7091	2012		
Premium Solvent	Hexachlorobutadiene	180-9962-1	0.1	0.05	mg/L	U*	0.1	Raleigh	7092	2012		
Premium Solvent	Hexachlorobutadiene	180-12590-1	0.1	0.05	mg/L	U	0.1	Tulsa	7105	2012		
Premium Solvent	Hexachlorobutadiene	180-11642-1	0.1	0.05	mg/L	U	0.1	Grand Island	7107	2012		
Premium Solvent	Hexachlorobutadiene	180-14162-1	0.1	0.05	mg/L	U	0.1	Wichita	7112	2012		
Premium Solvent	Hexachlorobutadiene	180-10007-1	0.1	0.05	mg/L	U*	0.1	Boise	7114	2012		
Premium Solvent	Hexachlorobutadiene	180-11559-1	0.1	0.05	mg/L	U	0.1	Albuquerque	7133	2012		

Premium Solvent	Hexachlorobutadiene	180-14023-1	0.1	0.05	mg/L	U	0.1	Omaha	7157	2012
Premium Solvent	Hexachlorobutadiene	180-14585-1	0.1	0.05	mg/L	U	0.1	Dodge City	7178	2012
Premium Solvent	Hexachlorobutadiene	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012
Premium Solvent	Hexachlorobutadiene	180-25564-1	0.13	0.065	mg/L	U	0.13	Chester	315401	2013
Premium Solvent	Hexachlorobutadiene	180-25917-1	0.13	0.065	mg/L	U	0.13	Raleigh	317101	2013
Premium Solvent	Hexachlorobutadiene	C1D290517001	0.5	0.25	mg/L	U	0.5	Lackawanna	202801	2011
Premium Solvent	Hexachlorobutadiene	C1D280567001	0.5	0.25	mg/L	U	0.5	Avon	202802	2011
Premium Solvent	Hexachlorobutadiene	C1E030546001	0.5	0.25	mg/L	U	0.5	Archdale	306401	2011
Premium Solvent	Hexachlorobutadiene	C1D200409001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Hexachlorobutadiene	C1D140573001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Hexachlorobutadiene	C1C100616001	0.5	0.25	mg/L	U	0.5	Cohoes	200401	2011
Premium Solvent	Hexachlorobutadiene	480-20539-1	12	6	mg/L	U	0.1	Lackawanna	202801	2012
Premium Solvent	Hexachlorobutadiene	180-21252-1	20	10	mg/L	U	20	Oklahoma City	612401	2013
Premium Solvent	Hexachlorobutadiene	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012
Premium Solvent	Hexachlorobutadiene	180-14205-1	20	10	mg/L	U	20	Tallahassee	7094	2012
Premium Solvent	Hexachlorobutadiene	180-13439-1	20	10	mg/L	U	20	Oklahoma City	7104	2012
Premium Solvent	Hexachlorobutadiene	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012
Premium Solvent	Hexachloroethane	180-20856-1	0.05	0.025	mg/L	U	0.05	Boise	118308	2013
Premium Solvent	Hexachloroethane	180-22446-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2013
Premium Solvent	Hexachloroethane	180-20632-1	0.1	0.05	mg/L	U	0.1	Archdale	306401	2013
Premium Solvent	Hexachloroethane	180-20891-1	0.1	0.05	mg/L	U	0.1	Avon	202802	2013
Premium Solvent	Hexachloroethane	180-20512-1	0.1	0.05	mg/L	U	0.1	Barre	210501	2013
Premium Solvent	Hexachloroethane	180-20858-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2013
Premium Solvent	Hexachloroethane	180-24136-1	0.1	0.05	mg/L	U	0.1	Chesapeake	312101	2013
Premium Solvent	Hexachloroethane	180-24429-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2013
Premium Solvent	Hexachloroethane	180-20316-1	0.1	0.05	mg/L	U	0.1	Cohoes	200401	2013
Premium Solvent	Hexachloroethane	180-24468-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2013
Premium Solvent	Hexachloroethane	180-23579-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2013
Premium Solvent	Hexachloroethane	180-20765-1	0.1	0.05	mg/L	U	0.1	Lackawanna	202801	2013
Premium Solvent	Hexachloroethane	180-24283-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2013
Premium Solvent	Hexachloroethane	180-20920-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2013
Premium Solvent	Hexachloroethane	180-20719-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2013
Premium Solvent	Hexachloroethane	180-21349-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2013
Premium Solvent	Hexachloroethane	180-21898-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2013
Premium Solvent	Hexachloroethane	180-24593-1	0.1	0.05	mg/L	U	0.1	Vinton	315501	2013
Premium Solvent	Hexachloroethane	180-24151-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2013
Premium Solvent	Hexachloroethane	180-22177-1	0.1	0.05	mg/L	U	0.1	Grand Island	508501	2013
Premium Solvent	Hexachloroethane	180-2878-1	0.1	0.05	mg/L	U	0.1	Dodge City	619503	2011
Premium Solvent	Hexachloroethane	180-2668-1	0.1	0.05	mg/L	U	0.1	Chandler	714201	2011
Premium Solvent	Hexachloroethane	180-2454-1	0.1	0.05	mg/L	U	0.1	Tulsa	619301	2011
Premium Solvent	Hexachloroethane	180-2356-1	0.1	0.05	mg/L	U	0.1	Boise	118308	2011
Premium Solvent	Hexachloroethane	180-2367-1	0.1	0.05	mg/L	U	0.1	Oklahoma City	612401	2011
Premium Solvent	Hexachloroethane	180-2221-1	0.1	0.05	mg/L	U	0.1	Clackamas	714801	2011
Premium Solvent	Hexachloroethane	180-2186-1	0.1	0.05	mg/L	U	0.1	Tampa	316301	2011
Premium Solvent	Hexachloroethane	180-1865-1	0.1	0.05	mg/L	U	0.1	Farmington	700804	2011
Premium Solvent	Hexachloroethane	180-1899-1	0.1	0.05	mg/L	U	0.1	Syracuse	218701	2011
Premium Solvent	Hexachloroethane	180-1685-1	0.1	0.05	mg/L	U	0.1	Omaha	512701	2011
Premium Solvent	Hexachloroethane	180-1535-1	0.1	0.05	mg/L	U	0.1	Wichita	619501	2011
Premium Solvent	Hexachloroethane	180-1536-1	0.1	0.05	mg/L	U	0.1	Grand Island	508501	2011
Premium Solvent	Hexachloroethane	180-1346-1	0.1	0.05	mg/L	U	0.1	St. Pauls	303102	2011
Premium Solvent	Hexachloroethane	180-1124-1	0.1	0.05	mg/L	U	0.1	Albuquerque	700801	2011
Premium Solvent	Hexachloroethane	180-591-1	0.1	0.05	mg/L	U	0.1	Charlotte	303101	2011
Premium Solvent	Hexachloroethane	180-9967-1	0.1	0.05	mg/L	U *	0.1	Cohoes	7046	2012
Premium Solvent	Hexachloroethane	180-10339-1	0.1	0.05	mg/L	U	0.1	Avon	7048	2012
Premium Solvent	Hexachloroethane	180-10888-1	0.1	0.05	mg/L	U	0.1	St. Pauls	7087	2012
Premium Solvent	Hexachloroethane	180-10018-1	0.1	0.05	mg/L	U *	0.1	Archdale	7088	2012
Premium Solvent	Hexachloroethane	180-12866-1	0.1	0.05	mg/L	U	0.1	Chesapeake	7089	2012
Premium Solvent	Hexachloroethane	180-4888-1	0.1	0.05	mg/L	U	0.1	Chesapeake	7089	2012
Premium Solvent	Hexachloroethane	180-13029-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012
Premium Solvent	Hexachloroethane	180-4689-1	0.1	0.05	mg/L	U	0.1	Chester	7090	2012
Premium Solvent	Hexachloroethane	180-13289-1	0.1	0.05	mg/L	U	0.1	Vinton	7091	2012
Premium Solvent	Hexachloroethane	180-4902-1	0.1	0.05	mg/L	U	0.1	Vinton	7091	2012
Premium Solvent	Hexachloroethane	180-9962-1	0.1	0.05	mg/L	U *	0.1	Raleigh	7092	2012
Premium Solvent	Hexachloroethane	180-12590-1	0.1	0.05	mg/L	U	0.1	Tulsa	7105	2012
Premium Solvent	Hexachloroethane	180-11642-1	0.1	0.05	mg/L	U	0.1	Grand Island	7107	2012
Premium Solvent	Hexachloroethane	180-14162-1	0.1	0.05	mg/L	U	0.1	Wichita	7112	2012
Premium Solvent	Hexachloroethane	180-10007-1	0.1	0.05	mg/L	U *	0.1	Boise	7114	2012
Premium Solvent	Hexachloroethane	180-11559-1	0.1	0.05	mg/L	U	0.1	Albuquerque	7133	2012
Premium Solvent	Hexachloroethane	180-14023-1	0.1	0.05	mg/L	U	0.1	Omaha	7157	2012
Premium Solvent	Hexachloroethane	180-14585-1	0.1	0.05	mg/L	U	0.1	Dodge City	7178	2012
Premium Solvent	Hexachloroethane	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012
Premium Solvent	Hexachloroethane	180-25564-1	0.13	0.065	mg/L	U	0.13	Chester	315401	2013
Premium Solvent	Hexachloroethane	180-25917-1	0.13	0.065	mg/L	U	0.13	Raleigh	317101	2013
Premium Solvent	Hexachloroethane	180-9899-1	0.18	0.18	mg/L	*	0.1	Barre	7015	2012
Premium Solvent	Hexachloroethane	C1D290517001	3	1.5	mg/L	U	3	Lackawanna	202801	2011
Premium Solvent	Hexachloroethane	C1D280567001	3	1.5	mg/L	U	3	Avon	202802	2011
Premium Solvent	Hexachloroethane	C1E030546001	3	1.5	mg/L	U	3	Archdale	306401	2011
Premium Solvent	Hexachloroethane	C1D200409001	3	1.5	mg/L	U	3	Barre	210501	2011
Premium Solvent	Hexachloroethane	C1D140573001	3	1.5	mg/L	U	3	Barre	210501	2011
Premium Solvent	Hexachloroethane	C1C100616001	3	1.5	mg/L	U	3	Cohoes	200401	2011
Premium Solvent	Hexachloroethane	480-20539-1	12	6	mg/L	U	0.1	Lackawanna	202801	2012
Premium Solvent	Hexachloroethane	180-21252-1	20	10	mg/L	U	20	Oklahoma City	612401	2013
Premium Solvent	Hexachloroethane	180-11568-1	20	10	mg/L	U	20	Charlotte	7055	2012
Premium Solvent	Hexachloroethane	180-14205-1	20	10	mg/L	U	20	Tallahassee	7094	2012
Premium Solvent	Hexachloroethane	180-13439-1	20	10	mg/L	U	20	Oklahoma City	7104	2012
Premium Solvent	Hexachloroethane	180-12755-1	20	10	mg/L	U	20	Chandler	7134	2012
Premium Solvent	Lead	180-20856-1	0.0014	0.0014	mg/L	J	0.05	Boise	118308	2013
Premium Solvent	Lead	180-22446-1	0.3	0.15	mg/L	U	0.3	Albuquerque	700801	2013
Premium Solvent	Lead	180-24429-1	0.3	0.15	mg/L	U	0.3	Clackamas	714801	2013
Premium Solvent	Lead	180-21898-1	0.3	0.15	mg/L	U	0.3	Tulsa	619301	2013
Premium Solvent	Lead	180-2454-1	0.3	0.15	mg/L	U	0.3	Tulsa	619301	2011
Premium Solvent	Lead	180-2221-1	0.3	0.15	mg/L	U	0.3	Clackamas	714801	2011
Premium Solvent	Lead	180-2186-1	0.3	0.15	mg/L	U	0.3	Tampa	316301	2011
Premium Solvent	Lead	180-1346-1	0.3	0.15	mg/L	U	0.3	St. Pauls	303102	2011
Premium Solvent	Lead	180-1150-1	0.3	0.15	mg/L	U	0.3	Sacramento	715701	2011
Premium Solvent	Lead	180-1124-1	0.3	0.15	mg/L	U	0.3	Albuquerque	700801	2011
Premium Solvent	Lead	C1E030546001	0.3	0.15	mg/L	U	0.3	Archdale	306401	2011
Premium Solvent	Lead	C1D200409001	0.3	0.15	mg/L	U	0.3	Barre	210501	2011

Premium Solvent	Lead	C1C100616001	0.3	0.15	mg/L	U	0.3			Cohoes	200401	2011
Premium Solvent	Lead	180-13029-1	0.3	0.15	mg/L	U	0.3			Chester	7090	2012
Premium Solvent	Lead	180-12590-1	0.15	0.15	mg/L	J	0.3			Tulsa	7105	2012
Premium Solvent	Lead	180-14162-1	0.3	0.15	mg/L	U	0.3			Wichita	7112	2012
Premium Solvent	Lead	180-11559-1	0.3	0.15	mg/L	U	0.3			Albuquerque	7133	2012
Premium Solvent	Lead	180-12755-1	0.3	0.15	mg/L	U	0.3			Chandler	7134	2012
Premium Solvent	Lead	180-14585-1	0.3	0.15	mg/L	U	0.3			Dodge City	7178	2012
Premium Solvent	Lead	180-12189-1	0.3	0.15	mg/L	U	0.3			Farmington	7179	2012
Premium Solvent	Lead	180-20632-1	0.18	0.18	mg/L	J	0.3			Archdale	306401	2013
Premium Solvent	Lead	180-24136-1	0.19	0.19	mg/L	J	0.3			Chesapeake	312101	2013
Premium Solvent	Lead	180-12866-1	0.19	0.19	mg/L	J	0.3			Chesapeake	7089	2012
Premium Solvent	Lead	180-23579-1	0.21	0.21	mg/L	J	0.3			Farmington	700804	2013
Premium Solvent	Lead	180-20316-1	0.22	0.22	mg/L	J	0.3			Cohoes	200401	2013
Premium Solvent	Lead	180-11566-1	0.22	0.22	mg/L	J	0.3			Charlotte	7055	2012
Premium Solvent	Lead	180-2367-1	0.23	0.23	mg/L	J	0.3			Oklahoma City	612401	2011
Premium Solvent	Lead	180-13289-1	0.25	0.25	mg/L	J	0.3			Vinton	7091	2012
Premium Solvent	Lead	180-1865-1	0.26	0.26	mg/L	J	0.3			Farmington	700804	2011
Premium Solvent	Lead	180-10339-1	0.26	0.26	mg/L	J	0.3			Avon	7048	2012
Premium Solvent	Lead	180-591-1	0.28	0.28	mg/L	J	0.3			Charlotte	303101	2011
Premium Solvent	Lead	180-24593-1	0.31	0.31	mg/L	U	0.3			Vinton	315501	2013
Premium Solvent	Lead	180-20920-1	0.34	0.34	mg/L	U	0.3			St. Pauls	303102	2013
Premium Solvent	Lead	C1D290517001	0.37	0.37	mg/L	U	0.3			Lackawanna	202801	2011
Premium Solvent	Lead	180-1685-1	0.43	0.43	mg/L	U	0.3			Omaha	512701	2011
Premium Solvent	Lead	C1D280567001	0.45	0.45	mg/L	U	0.3			Avon	202802	2011
Premium Solvent	Lead	180-24151-1	0.51	0.51	mg/L	U	0.3			Wichita	619501	2013
Premium Solvent	Lead	180-10888-1	0.51	0.51	mg/L	U	0.3			St. Pauls	7087	2012
Premium Solvent	Lead	180-1535-1	0.54	0.54	mg/L	U	0.3			Wichita	619501	2011
Premium Solvent	Lead	180-2668-1	0.55	0.55	mg/L	U	0.3			Chandler	714201	2011
Premium Solvent	Lead	180-4888-1	0.61	0.61	mg/L	B	0.3			Chesapeake	7089	2012
Premium Solvent	Lead	180-14023-1	0.62	0.62	mg/L	U	0.3			Omaha	7157	2012
Premium Solvent	Lead	180-21349-1	0.64	0.64	mg/L	U	0.3			Tampa	316301	2013
Premium Solvent	Lead	180-22177-1	0.65	0.65	mg/L	B	0.3			Grand Island	506501	2013
Premium Solvent	Lead	180-1536-1	0.66	0.66	mg/L	U	0.3	45	73	Grand Island	506501	2011
Premium Solvent	Lead	180-24468-1	0.67	0.67	mg/L	U	0.3			Dodge City	619503	2013
Premium Solvent	Lead	180-9967-1	0.68	0.68	mg/L	U	0.3			Cohoes	7046	2012
Premium Solvent	Lead	180-1899-1	0.72	0.72	mg/L	U	0.3			Syracuse	218701	2011
Premium Solvent	Lead	180-10018-1	0.74	0.74	mg/L	U	0.3			Archdale	7088	2012
Premium Solvent	Lead	180-4889-1	0.74	0.74	mg/L	B	0.3			Chester	7090	2012
Premium Solvent	Lead	180-14306-1	0.75	0.75	mg/L	U	0.3			Sacramento	7138	2012
Premium Solvent	Lead	180-20512-1	0.77	0.77	mg/L	U	0.3			Barre	210501	2013
Premium Solvent	Lead	180-20891-1	0.79	0.79	mg/L	U	0.3			Avon	202802	2013
Premium Solvent	Lead	180-2356-1	0.86	0.86	mg/L	U	0.3			Boise	118308	2011
Premium Solvent	Lead	180-11338-1	1	1	mg/L	U	0.3			Santa Ana	7117	2012
Premium Solvent	Lead	180-25564-1	1.1	1.1	mg/L	U	0.3			Chester	315401	2013
Premium Solvent	Lead	180-13439-1	1.4	1.4	mg/L	U	0.3			Oklahoma City	7104	2012
Premium Solvent	Lead	180-11642-1	1.5	1.5	mg/L	U	0.3			Grand Island	7107	2012
Premium Solvent	Lead	180-10007-1	1.5	1.5	mg/L	U	0.3			Boise	7114	2012
Premium Solvent	Lead	180-25917-1	1.6	1.6	mg/L	U	1			Raleigh	317101	2013
Premium Solvent	Lead	180-2878-1	1.9	1.9	mg/L	U	0.3			Dodge City	619503	2011
Premium Solvent	Lead	180-9899-1	1.9	1.9	mg/L	U	0.3			Barre	7015	2012
Premium Solvent	Lead	C1D140573001	2.5	2.5	mg/L	U	0.3			Barre	210501	2011
Premium Solvent	Lead	180-20765-1	2.7	2.7	mg/L	U	0.3			Lackawanna	202801	2013
Premium Solvent	Lead	180-25504-1	3.1	3.1	mg/L	U	0.3			Sacramento	715701	2013
Premium Solvent	Lead	180-14205-1	3.5	3.5	mg/L	U	0.3			Tallahassee	7094	2012
Premium Solvent	Lead	180-21252-1	4	4	mg/L	U	0.3			Oklahoma City	612401	2013
Premium Solvent	Lead	180-20858-1	4.2	4.2	mg/L	U	0.3			Charlotte	303101	2013
Premium Solvent	Lead	180-4902-1	4.2	4.2	mg/L	B	0.3			Vinton	7091	2012
Premium Solvent	Lead	480-20539-1	5.2	5.2	mg/L	U	0.3			Lackawanna	202801	2012
Premium Solvent	Lead	180-24283-1	6.3	6.3	mg/L	U	0.3			Omaha	512701	2013
Premium Solvent	Lead	180-20719-1	11	11	mg/L	U	0.3			Syracuse	218701	2013
Premium Solvent	Lead	180-9962-1	14	14	mg/L	U	0.3			Raleigh	7092	2012
Premium Solvent	Mercury	180-20856-1	0.0002	0.0001	mg/L	U	0.0002			Boise	118308	2013
Premium Solvent	Mercury	180-9962-1	0.0065	0.0065	mg/L	J	0.033			Raleigh	7092	2012
Premium Solvent	Mercury	180-14205-1	0.0067	0.0067	mg/L	J	0.033			Tallahassee	7094	2012
Premium Solvent	Mercury	180-12866-1	0.0075	0.0075	mg/L	J	0.033			Chesapeake	7089	2012
Premium Solvent	Mercury	180-24468-1	0.0087	0.0087	mg/L	J	0.033			Dodge City	619503	2013
Premium Solvent	Mercury	480-20539-1	0.02	0.01	mg/L	U	0.033			Lackawanna	202801	2012
Premium Solvent	Mercury	180-22446-1	0.033	0.0165	mg/L	U	0.033			Albuquerque	700801	2013
Premium Solvent	Mercury	180-20632-1	0.033	0.0165	mg/L	U	0.033			Archdale	306401	2013
Premium Solvent	Mercury	180-20891-1	0.033	0.0165	mg/L	U	0.033			Avon	202802	2013
Premium Solvent	Mercury	180-20512-1	0.033	0.0165	mg/L	U	0.033			Barre	210501	2013
Premium Solvent	Mercury	180-20858-1	0.033	0.0165	mg/L	U	0.033			Charlotte	303101	2013
Premium Solvent	Mercury	180-24136-1	0.033	0.0165	mg/L	U	0.033			Chesapeake	312101	2013
Premium Solvent	Mercury	180-25564-1	0.033	0.0165	mg/L	U	0.033			Chester	315401	2013
Premium Solvent	Mercury	180-24429-1	0.033	0.0165	mg/L	U	0.033			Clackamas	714801	2013
Premium Solvent	Mercury	180-20316-1	0.033	0.0165	mg/L	U	0.033			Cohoes	200401	2013
Premium Solvent	Mercury	180-23579-1	0.033	0.0165	mg/L	U	0.033			Farmington	700804	2013
Premium Solvent	Mercury	180-20765-1	0.033	0.0165	mg/L	U	0.033			Lackawanna	202801	2013
Premium Solvent	Mercury	180-21252-1	0.033	0.0165	mg/L	U	0.033			Oklahoma City	612401	2013
Premium Solvent	Mercury	180-24283-1	0.033	0.0165	mg/L	U	0.033			Omaha	512701	2013
Premium Solvent	Mercury	180-25504-1	0.033	0.0165	mg/L	U	0.033			Sacramento	715701	2013
Premium Solvent	Mercury	180-20920-1	0.033	0.0165	mg/L	U	0.033			St. Pauls	303102	2013
Premium Solvent	Mercury	180-20719-1	0.033	0.0165	mg/L	U	0.033			Syracuse	218701	2013
Premium Solvent	Mercury	180-21349-1	0.033	0.0165	mg/L	U	0.033			Tampa	316301	2013
Premium Solvent	Mercury	180-21898-1	0.033	0.0165	mg/L	U	0.033			Tulsa	619301	2013
Premium Solvent	Mercury	180-24593-1	0.033	0.0165	mg/L	U	0.033			Vinton	315501	2013
Premium Solvent	Mercury	180-24151-1	0.033	0.0165	mg/L	U	0.033			Wichita	619501	2013
Premium Solvent	Mercury	180-25917-1	0.033	0.0165	mg/L	U	0.033			Raleigh	317101	2013
Premium Solvent	Mercury	180-22177-1	0.033	0.0165	mg/L	U	0.033			Grand Island	506501	2013
Premium Solvent	Mercury	180-2878-1	0.033	0.0165	mg/L	U	0.033			Dodge City	619503	2011
Premium Solvent	Mercury	180-2668-1	0.033	0.0165	mg/L	U	0.033			Chandler	714201	2011
Premium Solvent	Mercury	180-2454-1	0.033	0.0165	mg/L	U	0.033			Tulsa	619301	2011
Premium Solvent	Mercury	180-2356-1	0.033	0.0165	mg/L	U	0.033			Boise	118308	2011
Premium Solvent	Mercury	180-2367-1	0.033	0.0165	mg/L	U	0.033			Oklahoma City	612401	2011
Premium Solvent	Mercury	180-2221-1	0.033	0.0165	mg/L	U	0.033			Clackamas	714801	2011
Premium Solvent	Mercury	180-2186-1	0.033	0.0165	mg/L	U	0.033			Tampa	316301	2011
Premium Solvent	Mercury	180-1865-1	0.033	0.0165	mg/L	U	0.033			Farmington	700804	2011
Premium Solvent	Mercury	180-1899-1	0.033	0.0165	mg/L	U	0.033			Syracuse	218701	2011

Premium Solvent	Mercury	180-1685-1	0.033	0.0165	mg/L	U	0.033			Omaha	512701	2011
Premium Solvent	Mercury	180-1535-1	0.033	0.0165	mg/L	U	0.033			Wichita	619501	2011
Premium Solvent	Mercury	180-1536-1	0.033	0.0165	mg/L	U	0.033			Grand Island	506501	2011
Premium Solvent	Mercury	180-1346-1	0.033	0.0165	mg/L	U	0.033			St. Pauls	303102	2011
Premium Solvent	Mercury	180-1150-1	0.033	0.0165	mg/L	U	0.033			Sacramento	715701	2011
Premium Solvent	Mercury	180-1124-1	0.033	0.0165	mg/L	U	0.033			Albuquerque	700801	2011
Premium Solvent	Mercury	180-591-1	0.033	0.0165	mg/L	U	0.033			Charlotte	303101	2011
Premium Solvent	Mercury	C1D290517001	0.033	0.0165	mg/L	U	0.033	45	73	Lackawanna	202801	2011
Premium Solvent	Mercury	C1D280567001	0.033	0.0165	mg/L	U	0.033			Avon	202802	2011
Premium Solvent	Mercury	C1E030546001	0.033	0.0165	mg/L	U	0.033			Archdale	306401	2011
Premium Solvent	Mercury	C1D200409001	0.033	0.0165	mg/L	U	0.033			Barre	210501	2011
Premium Solvent	Mercury	C1D140573001	0.033	0.0165	mg/L	U	0.033			Barre	210501	2011
Premium Solvent	Mercury	C1C100616001	0.033	0.0165	mg/L	U	0.033			Cohoes	200401	2011
Premium Solvent	Mercury	180-9899-1	0.033	0.0165	mg/L	U	0.033			Barre	7015	2012
Premium Solvent	Mercury	180-9967-1	0.033	0.0165	mg/L	U	0.033			Cohoes	7046	2012
Premium Solvent	Mercury	180-10339-1	0.033	0.0165	mg/L	U	0.033			Avon	7048	2012
Premium Solvent	Mercury	180-11568-1	0.033	0.0165	mg/L	U	0.033			Charlotte	7055	2012
Premium Solvent	Mercury	180-10888-1	0.033	0.0165	mg/L	U	0.033			St. Pauls	7087	2012
Premium Solvent	Mercury	180-10018-1	0.033	0.0165	mg/L	U	0.033			Archdale	7088	2012
Premium Solvent	Mercury	180-4888-1	0.033	0.0165	mg/L	U	0.033			Chesapeake	7089	2012
Premium Solvent	Mercury	180-13029-1	0.033	0.0165	mg/L	U	0.033			Chester	7090	2012
Premium Solvent	Mercury	180-4889-1	0.033	0.0165	mg/L	U	0.033			Chester	7090	2012
Premium Solvent	Mercury	180-13289-1	0.033	0.0165	mg/L	U	0.033			Vinton	7091	2012
Premium Solvent	Mercury	180-4902-1	0.033	0.0165	mg/L	U	0.033			Vinton	7091	2012
Premium Solvent	Mercury	180-13439-1	0.033	0.0165	mg/L	U	0.033			Oklahoma City	7104	2012
Premium Solvent	Mercury	180-12590-1	0.033	0.0165	mg/L	U	0.033			Tulsa	7105	2012
Premium Solvent	Mercury	180-11642-1	0.033	0.0165	mg/L	U	0.033			Grand Island	7107	2012
Premium Solvent	Mercury	180-14162-1	0.033	0.0165	mg/L	U	0.033			Wichita	7112	2012
Premium Solvent	Mercury	180-10007-1	0.033	0.0165	mg/L	U	0.033			Boise	7114	2012
Premium Solvent	Mercury	180-11338-1	0.033	0.0165	mg/L	U	0.033			Santa Ana	7117	2012
Premium Solvent	Mercury	180-11559-1	0.033	0.0165	mg/L	U	0.033			Albuquerque	7133	2012
Premium Solvent	Mercury	180-12755-1	0.033	0.0165	mg/L	U	0.033			Chandler	7134	2012
Premium Solvent	Mercury	180-14306-1	0.033	0.0165	mg/L	U	0.033			Sacramento	7138	2012
Premium Solvent	Mercury	180-14023-1	0.033	0.0165	mg/L	U	0.033			Omaha	7157	2012
Premium Solvent	Mercury	180-14585-1	0.033	0.0165	mg/L	U	0.033			Dodge City	7178	2012
Premium Solvent	Mercury	180-12189-1	0.42	0.42	mg/L	U	0.033			Farmington	7179	2012
Premium Solvent	Methyl Ethyl Ketone	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	Methyl Ethyl Ketone	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	Methyl Ethyl Ketone	180-20632-1	0.25	0.125	mg/L	U	0.25			Archdale	306401	2013
Premium Solvent	Methyl Ethyl Ketone	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	Methyl Ethyl Ketone	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	Methyl Ethyl Ketone	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	Methyl Ethyl Ketone	180-25564-1	0.25	0.125	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	Methyl Ethyl Ketone	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	Methyl Ethyl Ketone	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	Methyl Ethyl Ketone	180-24468-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	Methyl Ethyl Ketone	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	Methyl Ethyl Ketone	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	Methyl Ethyl Ketone	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	Methyl Ethyl Ketone	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	Methyl Ethyl Ketone	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	Methyl Ethyl Ketone	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	Methyl Ethyl Ketone	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	Methyl Ethyl Ketone	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	Methyl Ethyl Ketone	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	Methyl Ethyl Ketone	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011
Premium Solvent	Methyl Ethyl Ketone	180-1865-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2011
Premium Solvent	Methyl Ethyl Ketone	180-1899-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2011
Premium Solvent	Methyl Ethyl Ketone	180-1346-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2011
Premium Solvent	Methyl Ethyl Ketone	180-1150-1	0.25	0.125	mg/L	U	0.25			Sacramento	715701	2011
Premium Solvent	Methyl Ethyl Ketone	180-1124-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2011
Premium Solvent	Methyl Ethyl Ketone	C1D290517001	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2011
Premium Solvent	Methyl Ethyl Ketone	C1E030546001	0.25	0.125	mg/L	U	0.25			Archdale	306401	2011
Premium Solvent	Methyl Ethyl Ketone	C1D200409001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Methyl Ethyl Ketone	C1D140573001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Methyl Ethyl Ketone	C1C100616001	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2011
Premium Solvent	Methyl Ethyl Ketone	180-9899-1	0.25	0.125	mg/L	U	0.25			Barre	7015	2012
Premium Solvent	Methyl Ethyl Ketone	180-9967-1	0.25	0.125	mg/L	U	0.25			Cohoes	7046	2012
Premium Solvent	Methyl Ethyl Ketone	180-10339-1	0.25	0.125	mg/L	U	0.25			Avon	7048	2012
Premium Solvent	Methyl Ethyl Ketone	180-10888-1	0.25	0.125	mg/L	U	0.25			St. Pauls	7087	2012
Premium Solvent	Methyl Ethyl Ketone	180-10018-1	0.25	0.125	mg/L	U	0.25			Archdale	7088	2012
Premium Solvent	Methyl Ethyl Ketone	180-12866-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Methyl Ethyl Ketone	180-4888-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Methyl Ethyl Ketone	180-13029-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Methyl Ethyl Ketone	180-4889-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Methyl Ethyl Ketone	180-4902-1	0.25	0.125	mg/L	U	0.25			Vinton	7091	2012
Premium Solvent	Methyl Ethyl Ketone	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	Methyl Ethyl Ketone	180-13439-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	7104	2012
Premium Solvent	Methyl Ethyl Ketone	180-14162-1	0.25	0.125	mg/L	U	0.25			Wichita	7112	2012
Premium Solvent	Methyl Ethyl Ketone	180-10007-1	0.25	0.125	mg/L	U	0.25			Boise	7114	2012
Premium Solvent	Methyl Ethyl Ketone	180-11338-1	0.25	0.125	mg/L	U	0.25	45	73	Santa Ana	7117	2012
Premium Solvent	Methyl Ethyl Ketone	180-11559-1	0.25	0.125	mg/L	U	0.25			Albuquerque	7133	2012
Premium Solvent	Methyl Ethyl Ketone	180-14306-1	0.25	0.125	mg/L	U	0.25			Sacramento	7138	2012
Premium Solvent	Methyl Ethyl Ketone	180-12189-1	0.25	0.125	mg/L	U	0.25			Farmington	7179	2012
Premium Solvent	Methyl Ethyl Ketone	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	Methyl Ethyl Ketone	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Methyl Ethyl Ketone	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Methyl Ethyl Ketone	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Methyl Ethyl Ketone	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Methyl Ethyl Ketone	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Methyl Ethyl Ketone	180-13289-1	0.5	0.25	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Methyl Ethyl Ketone	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Methyl Ethyl Ketone	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Methyl Ethyl Ketone	180-2186-1	0.63	0.63	mg/L	U	0.25			Tampa	316301	2011
Premium Solvent	Methyl Ethyl Ketone	180-1535-1	0.77	0.77	mg/L	U	0.25			Wichita	619501	2011
Premium Solvent	Methyl Ethyl Ketone	180-12755-1	0.93	0.93	mg/L	U	0.25			Chandler	7134	2012
Premium Solvent	Methyl Ethyl Ketone	180-2668-1	1	1	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	Methyl Ethyl Ketone	180-12590-1	1.6	1.6	mg/L	U	0.25			Tulsa	7105	2012

Premium Solvent	Methyl Ethyl Ketone	180-2221-1	1.7	1.7	mg/L		0.25			Clackamas	714801	2011
Premium Solvent	Methyl Ethyl Ketone	180-22177-1	2.1	2.1	mg/L		0.25			Grand Island	506501	2013
Premium Solvent	Methyl Ethyl Ketone	180-2367-1	2.8	2.8	mg/L		0.25			Oklahoma City	612401	2011
Premium Solvent	Methyl Ethyl Ketone	180-1685-1	4	4	mg/L		0.25			Omaha	512701	2011
Premium Solvent	Methyl Ethyl Ketone	180-24283-1	4.4	4.4	mg/L		0.25			Omaha	512701	2013
Premium Solvent	Methyl Ethyl Ketone	180-1536-1	7.6	7.6	mg/L		0.25			Grand Island	506501	2011
Premium Solvent	Methyl Ethyl Ketone	180-20512-1	8.2	8.2	mg/L		0.25			Barre	210501	2013
Premium Solvent	Methyl Ethyl Ketone	180-11642-1	8.9	8.9	mg/L		0.25			Grand Island	7107	2012
Premium Solvent	Methyl Ethyl Ketone	180-14023-1	12	12	mg/L		0.5			Omaha	7157	2012
Premium Solvent	Methyl Ethyl Ketone	480-20539-1	50	25	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Methyl Ethyl Ketone	180-11568-1	3200	3200	mg/L		250			Charlotte	7055	2012
Premium Solvent	Methylphenol, 3 & 4	180-20856-1	0.05	0.025	mg/L	U	0.05			Boise	118308	2013
Premium Solvent	Methylphenol, 3 & 4	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	Methylphenol, 3 & 4	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	Methylphenol, 3 & 4	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	Methylphenol, 3 & 4	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	Methylphenol, 3 & 4	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	Methylphenol, 3 & 4	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	Methylphenol, 3 & 4	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	Methylphenol, 3 & 4	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	Methylphenol, 3 & 4	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	Methylphenol, 3 & 4	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	Methylphenol, 3 & 4	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	Methylphenol, 3 & 4	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	Methylphenol, 3 & 4	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	Methylphenol, 3 & 4	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	Methylphenol, 3 & 4	C1D280567001	0.1	0.05	mg/L	U	0.1			Avon	202802	2011
Premium Solvent	Methylphenol, 3 & 4	C1E030546001	0.1	0.05	mg/L	U	0.1			Archdale	306401	2011
Premium Solvent	Methylphenol, 3 & 4	C1D200409001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Methylphenol, 3 & 4	C1D140573001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Methylphenol, 3 & 4	C1C100616001	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2011
Premium Solvent	Methylphenol, 3 & 4	180-9899-1	0.1	0.05	mg/L	U	0.1			Barre	7015	2012
Premium Solvent	Methylphenol, 3 & 4	180-9967-1	0.1	0.05	mg/L	U	0.1			Cohoes	7046	2012
Premium Solvent	Methylphenol, 3 & 4	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	Methylphenol, 3 & 4	180-10018-1	0.1	0.05	mg/L	U	0.1			Archdale	7088	2012
Premium Solvent	Methylphenol, 3 & 4	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Methylphenol, 3 & 4	180-4889-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	Methylphenol, 3 & 4	180-4902-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	Methylphenol, 3 & 4	180-10007-1	0.1	0.05	mg/L	U	0.1			Boise	7114	2012
Premium Solvent	Methylphenol, 3 & 4	C1D290517001	0.13	0.13	mg/L		0.1			Lackawanna	202801	2011
Premium Solvent	Methylphenol, 3 & 4	180-22446-1	1	0.5	mg/L	U	1			Albuquerque	700801	2013
Premium Solvent	Methylphenol, 3 & 4	180-20632-1	1	0.5	mg/L	U	1			Archdale	306401	2013
Premium Solvent	Methylphenol, 3 & 4	180-20891-1	1	0.5	mg/L	U	1			Avon	202802	2013
Premium Solvent	Methylphenol, 3 & 4	180-20512-1	1	0.5	mg/L	U	1			Barre	210501	2013
Premium Solvent	Methylphenol, 3 & 4	180-20856-1	1	0.5	mg/L	U	1			Charlotte	303101	2013
Premium Solvent	Methylphenol, 3 & 4	180-24136-1	1	0.5	mg/L	U	1			Chesapeake	312101	2013
Premium Solvent	Methylphenol, 3 & 4	180-25564-1	1	0.5	mg/L	U	1			Chester	315401	2013
Premium Solvent	Methylphenol, 3 & 4	180-24429-1	1	0.5	mg/L	U	1			Clackamas	714801	2013
Premium Solvent	Methylphenol, 3 & 4	180-20316-1	1	0.5	mg/L	U	1			Cohoes	200401	2013
Premium Solvent	Methylphenol, 3 & 4	180-24468-1	1	0.5	mg/L	U	1			Dodge City	619503	2013
Premium Solvent	Methylphenol, 3 & 4	180-23579-1	1	0.5	mg/L	U	1			Farmington	700804	2013
Premium Solvent	Methylphenol, 3 & 4	180-20765-1	1	0.5	mg/L	U	1			Lackawanna	202801	2013
Premium Solvent	Methylphenol, 3 & 4	180-24283-1	1	0.5	mg/L	U	1	42	69	Omaha	512701	2013
Premium Solvent	Methylphenol, 3 & 4	180-20920-1	1	0.5	mg/L	U	1			St. Pauls	303102	2013
Premium Solvent	Methylphenol, 3 & 4	180-20719-1	1	0.5	mg/L	U	1			Syracuse	218701	2013
Premium Solvent	Methylphenol, 3 & 4	180-21349-1	1	0.5	mg/L	U	1			Tampa	316301	2013
Premium Solvent	Methylphenol, 3 & 4	180-21898-1	1	0.5	mg/L	U	1			Tulsa	619301	2013
Premium Solvent	Methylphenol, 3 & 4	180-24593-1	1	0.5	mg/L	U	1			Vinton	315501	2013
Premium Solvent	Methylphenol, 3 & 4	180-24151-1	1	0.5	mg/L	U	1			Wichita	619501	2013
Premium Solvent	Methylphenol, 3 & 4	180-25917-1	1	0.5	mg/L	U	1			Raleigh	317101	2013
Premium Solvent	Methylphenol, 3 & 4	180-22177-1	1	0.5	mg/L	U	1			Grand Island	506501	2013
Premium Solvent	Methylphenol, 3 & 4	180-10339-1	1	0.5	mg/L	U	1			Avon	7048	2012
Premium Solvent	Methylphenol, 3 & 4	180-12866-1	1	0.5	mg/L	U	1			Chesapeake	7089	2012
Premium Solvent	Methylphenol, 3 & 4	180-13029-1	1	0.5	mg/L	U	1			Chester	7090	2012
Premium Solvent	Methylphenol, 3 & 4	180-13289-1	1	0.5	mg/L	U	1			Vinton	7091	2012
Premium Solvent	Methylphenol, 3 & 4	180-12590-1	1	0.5	mg/L	U	1			Tulsa	7105	2012
Premium Solvent	Methylphenol, 3 & 4	180-11642-1	1	0.5	mg/L	U	1			Grand Island	7107	2012
Premium Solvent	Methylphenol, 3 & 4	180-14162-1	1	0.5	mg/L	U	1			Wichita	7112	2012
Premium Solvent	Methylphenol, 3 & 4	180-11559-1	1	0.5	mg/L	U	1			Albuquerque	7133	2012
Premium Solvent	Methylphenol, 3 & 4	180-14023-1	1	0.5	mg/L	U	1			Omaha	7157	2012
Premium Solvent	Methylphenol, 3 & 4	180-14585-1	1	0.5	mg/L	U	1			Dodge City	7178	2012
Premium Solvent	Methylphenol, 3 & 4	180-12189-1	1	0.5	mg/L	U	1			Farmington	7179	2012
Premium Solvent	Methylphenol, 3 & 4	180-9962-1	7.4	7.4	mg/L		0.1			Raleigh	7092	2012
Premium Solvent	Methylphenol, 3 & 4	180-21252-1	20	10	mg/L	U	20			Oklahoma City	612401	2013
Premium Solvent	Methylphenol, 3 & 4	180-591-1	20	10	mg/L	U	20			Charlotte	303101	2011
Premium Solvent	Methylphenol, 3 & 4	180-11568-1	20	10	mg/L	U	20			Charlotte	7055	2012
Premium Solvent	Methylphenol, 3 & 4	180-14205-1	20	10	mg/L	U	20			Tallahassee	7094	2012
Premium Solvent	Methylphenol, 3 & 4	180-13439-1	20	10	mg/L	U	20			Oklahoma City	7104	2012
Premium Solvent	Methylphenol, 3 & 4	180-12755-1	20	10	mg/L	U	20			Chandler	7134	2012
Premium Solvent	Methylphenol, 3 & 4	480-20539-1	24	12	mg/L	U	1			Lackawanna	202801	2012
Premium Solvent	Nitrobenzene	180-20856-1	0.05	0.025	mg/L	U	0.05			Boise	118308	2013
Premium Solvent	Nitrobenzene	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	Nitrobenzene	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	Nitrobenzene	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	Nitrobenzene	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	Nitrobenzene	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	Nitrobenzene	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	Nitrobenzene	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	Nitrobenzene	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	Nitrobenzene	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	Nitrobenzene	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	Nitrobenzene	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	Nitrobenzene	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	Nitrobenzene	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	Nitrobenzene	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	Nitrobenzene	C1D290517001	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2011
Premium Solvent	Nitrobenzene	C1D280567001	0.1	0.05	mg/L	U	0.1			Avon	202802	2011
Premium Solvent	Nitrobenzene	C1E030546001	0.1	0.05	mg/L	U	0.1			Archdale	306401	2011

Premium Solvent	Nitrobenzene	C1D200409001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Nitrobenzene	C1D140573001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Nitrobenzene	C1C100618001	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2011
Premium Solvent	Nitrobenzene	180-9999-1	0.1	0.05	mg/L	U	0.1			Barre	7015	2012
Premium Solvent	Nitrobenzene	180-9967-1	0.1	0.05	mg/L	U	0.1			Cohoes	7046	2012
Premium Solvent	Nitrobenzene	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	Nitrobenzene	180-10018-1	0.1	0.05	mg/L	U	0.1			Archdale	7088	2012
Premium Solvent	Nitrobenzene	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Nitrobenzene	180-4889-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	Nitrobenzene	180-4902-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	Nitrobenzene	180-9962-1	0.1	0.05	mg/L	U	0.1			Raleigh	7092	2012
Premium Solvent	Nitrobenzene	180-10007-1	0.1	0.05	mg/L	U	0.1			Boise	7114	2012
Premium Solvent	Nitrobenzene	180-22446-1	1	0.5	mg/L	U	1			Albuquerque	700801	2013
Premium Solvent	Nitrobenzene	180-20632-1	1	0.5	mg/L	U	1			Archdale	306401	2013
Premium Solvent	Nitrobenzene	180-20891-1	1	0.5	mg/L	U	1			Avon	202802	2013
Premium Solvent	Nitrobenzene	180-20512-1	1	0.5	mg/L	U	1			Barre	210501	2013
Premium Solvent	Nitrobenzene	180-20858-1	1	0.5	mg/L	U	1			Charlotte	303101	2013
Premium Solvent	Nitrobenzene	180-24136-1	1	0.5	mg/L	U *	1			Chesapeake	312101	2013
Premium Solvent	Nitrobenzene	180-25564-1	1	0.5	mg/L	U	1			Chester	315401	2013
Premium Solvent	Nitrobenzene	180-24429-1	1	0.5	mg/L	U *	1			Clackamas	714801	2013
Premium Solvent	Nitrobenzene	180-20316-1	1	0.5	mg/L	U	1			Cohoes	200401	2013
Premium Solvent	Nitrobenzene	180-24468-1	1	0.5	mg/L	U *	1			Dodge City	619503	2013
Premium Solvent	Nitrobenzene	180-23579-1	1	0.5	mg/L	U	1			Farmington	700804	2013
Premium Solvent	Nitrobenzene	180-20765-1	1	0.5	mg/L	U	1	42	69	Lackawanna	202801	2013
Premium Solvent	Nitrobenzene	180-24283-1	1	0.5	mg/L	U *	1			Omaha	512701	2013
Premium Solvent	Nitrobenzene	180-20920-1	1	0.5	mg/L	U	1			St. Pauls	303102	2013
Premium Solvent	Nitrobenzene	180-20719-1	1	0.5	mg/L	U	1			Syracuse	218701	2013
Premium Solvent	Nitrobenzene	180-21349-1	1	0.5	mg/L	U	1			Tampa	316301	2013
Premium Solvent	Nitrobenzene	180-21898-1	1	0.5	mg/L	U	1			Tulsa	619301	2013
Premium Solvent	Nitrobenzene	180-24593-1	1	0.5	mg/L	U	1			Vinton	315501	2013
Premium Solvent	Nitrobenzene	180-24151-1	1	0.5	mg/L	U *	1			Wichita	619501	2013
Premium Solvent	Nitrobenzene	180-25917-1	1	0.5	mg/L	U	1			Raleigh	317101	2013
Premium Solvent	Nitrobenzene	180-22177-1	1	0.5	mg/L	U	1			Grand Island	506501	2013
Premium Solvent	Nitrobenzene	180-10339-1	1	0.5	mg/L	U	1			Avon	7048	2012
Premium Solvent	Nitrobenzene	180-12866-1	1	0.5	mg/L	U	1			Chesapeake	7089	2012
Premium Solvent	Nitrobenzene	180-13029-1	1	0.5	mg/L	U	1			Chester	7090	2012
Premium Solvent	Nitrobenzene	180-13289-1	1	0.5	mg/L	U	1			Vinton	7091	2012
Premium Solvent	Nitrobenzene	180-12590-1	1	0.5	mg/L	U	1			Tulsa	7105	2012
Premium Solvent	Nitrobenzene	180-11642-1	1	0.5	mg/L	U	1			Grand Island	7107	2012
Premium Solvent	Nitrobenzene	180-14162-1	1	0.5	mg/L	U	1			Wichita	7112	2012
Premium Solvent	Nitrobenzene	180-11559-1	1	0.5	mg/L	U	1			Albuquerque	7133	2012
Premium Solvent	Nitrobenzene	180-14023-1	1	0.5	mg/L	U	1			Omaha	7157	2012
Premium Solvent	Nitrobenzene	180-14585-1	1	0.5	mg/L	U	1			Dodge City	7178	2012
Premium Solvent	Nitrobenzene	180-12189-1	1	0.5	mg/L	U	1			Farmington	7179	2012
Premium Solvent	Nitrobenzene	480-20539-1	12	6	mg/L	U	1			Lackawanna	202801	2012
Premium Solvent	Nitrobenzene	180-21252-1	20	10	mg/L	U	20			Oklahoma City	612401	2013
Premium Solvent	Nitrobenzene	180-591-1	20	10	mg/L	U	20			Charlotte	303101	2011
Premium Solvent	Nitrobenzene	180-11568-1	20	10	mg/L	U	20			Charlotte	7055	2012
Premium Solvent	Nitrobenzene	180-14205-1	20	10	mg/L	U	20			Tallahassee	7094	2012
Premium Solvent	Nitrobenzene	180-13439-1	20	10	mg/L	U	20			Oklahoma City	7104	2012
Premium Solvent	Nitrobenzene	180-12755-1	20	10	mg/L	U	20			Chandler	7134	2012
Premium Solvent	Pentachlorophenol	180-22446-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2013
Premium Solvent	Pentachlorophenol	180-20632-1	0.1	0.05	mg/L	U	0.1			Archdale	306401	2013
Premium Solvent	Pentachlorophenol	180-20891-1	0.1	0.05	mg/L	U	0.1			Avon	202802	2013
Premium Solvent	Pentachlorophenol	180-20512-1	0.1	0.05	mg/L	U	0.1			Barre	210501	2013
Premium Solvent	Pentachlorophenol	180-20858-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2013
Premium Solvent	Pentachlorophenol	180-24136-1	0.1	0.05	mg/L	U	0.1			Chesapeake	312101	2013
Premium Solvent	Pentachlorophenol	180-24429-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2013
Premium Solvent	Pentachlorophenol	180-20316-1	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2013
Premium Solvent	Pentachlorophenol	180-24468-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2013
Premium Solvent	Pentachlorophenol	180-23579-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2013
Premium Solvent	Pentachlorophenol	180-20765-1	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2013
Premium Solvent	Pentachlorophenol	180-24283-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2013
Premium Solvent	Pentachlorophenol	180-20920-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2013
Premium Solvent	Pentachlorophenol	180-20719-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2013
Premium Solvent	Pentachlorophenol	180-21349-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2013
Premium Solvent	Pentachlorophenol	180-21898-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2013
Premium Solvent	Pentachlorophenol	180-24593-1	0.1	0.05	mg/L	U	0.1			Vinton	315501	2013
Premium Solvent	Pentachlorophenol	180-22177-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2013
Premium Solvent	Pentachlorophenol	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	Pentachlorophenol	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	Pentachlorophenol	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	Pentachlorophenol	180-2356-1	0.1	0.05	mg/L	U	0.1			Boise	118308	2011
Premium Solvent	Pentachlorophenol	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	Pentachlorophenol	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	Pentachlorophenol	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	Pentachlorophenol	180-1865-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	Pentachlorophenol	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	Pentachlorophenol	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	Pentachlorophenol	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	Pentachlorophenol	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	Pentachlorophenol	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	Pentachlorophenol	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	Pentachlorophenol	180-591-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2011
Premium Solvent	Pentachlorophenol	180-9899-1	0.1	0.05	mg/L	U *	0.1			Barre	7015	2012
Premium Solvent	Pentachlorophenol	180-9967-1	0.1	0.05	mg/L	U *	0.1			Cohoes	7046	2012
Premium Solvent	Pentachlorophenol	180-10339-1	0.1	0.05	mg/L	U	0.1			Avon	7048	2012
Premium Solvent	Pentachlorophenol	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	Pentachlorophenol	180-10018-1	0.1	0.05	mg/L	U *	0.1			Archdale	7088	2012
Premium Solvent	Pentachlorophenol	180-12866-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Pentachlorophenol	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Pentachlorophenol	180-13029-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	Pentachlorophenol	180-4889-1	0.1	0.05	mg/L	U	0.1	42	69	Chester	7090	2012
Premium Solvent	Pentachlorophenol	180-13289-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	Pentachlorophenol	180-9962-1	0.1	0.05	mg/L	U *	0.1			Raleigh	7092	2012
Premium Solvent	Pentachlorophenol	180-12590-1	0.1	0.05	mg/L	U	0.1			Tulsa	7105	2012
Premium Solvent	Pentachlorophenol	180-11642-1	0.1	0.05	mg/L	U	0.1			Grand Island	7107	2012
Premium Solvent	Pentachlorophenol	180-14162-1	0.1	0.05	mg/L	U	0.1			Wichita	7112	2012

Premium Solvent	Pentachlorophenol	180-10007-1	0.1	0.05	mg/L	U *	0.1	Boise	7114	2012
Premium Solvent	Pentachlorophenol	180-11559-1	0.1	0.05	mg/L	U	0.1	Albuquerque	7133	2012
Premium Solvent	Pentachlorophenol	180-14023-1	0.1	0.05	mg/L	U	0.1	Omaha	7157	2012
Premium Solvent	Pentachlorophenol	180-14585-1	0.1	0.05	mg/L	U	0.1	Dodge City	7178	2012
Premium Solvent	Pentachlorophenol	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012
Premium Solvent	Pentachlorophenol	180-25564-1	0.13	0.065	mg/L	U	0.13	Chester	315401	2013
Premium Solvent	Pentachlorophenol	180-25917-1	0.13	0.065	mg/L	U	0.13	Raleigh	317101	2013
Premium Solvent	Pentachlorophenol	180-20856-1	0.25	0.125	mg/L	U	0.25	Boise	118308	2013
Premium Solvent	Pentachlorophenol	180-4902-1	0.14	0.14	mg/L	p	0.1	Vinton	7091	2012
Premium Solvent	Pentachlorophenol	180-24151-1	0.18	0.18	mg/L	p	0.1	Wichita	619501	2013
Premium Solvent	Pentachlorophenol	480-20539-1	24	12	mg/L	U	0.1	Lackawanna	202801	2012
Premium Solvent	Pentachlorophenol	180-21252-1	100	50	mg/L	U	100	Oklahoma City	612401	2013
Premium Solvent	Pentachlorophenol	C1D290517001	100	50	mg/L	U	100	Lackawanna	202801	2011
Premium Solvent	Pentachlorophenol	C1D280567001	100	50	mg/L	U	100	Avon	202802	2011
Premium Solvent	Pentachlorophenol	C1E030546001	100	50	mg/L	U	100	Archdale	306401	2011
Premium Solvent	Pentachlorophenol	C1D200409001	100	50	mg/L	U	100	Barre	210501	2011
Premium Solvent	Pentachlorophenol	C1D140573001	100	50	mg/L	U	100	Barre	210501	2011
Premium Solvent	Pentachlorophenol	C1C100616001	100	50	mg/L	U	100	Cohoes	200401	2011
Premium Solvent	Pentachlorophenol	180-11568-1	100	50	mg/L	U	100	Charlotte	7055	2012
Premium Solvent	Pentachlorophenol	180-14205-1	100	50	mg/L	U	100	Tallahassee	7094	2012
Premium Solvent	Pentachlorophenol	180-13439-1	100	50	mg/L	U	100	Oklahoma City	7104	2012
Premium Solvent	Pentachlorophenol	180-12755-1	100	50	mg/L	U	100	Chandler	7134	2012
Premium Solvent	pH	180-12755-1	4.35	4.35	No Units	H	0.1	Chandler	7134	2012
Premium Solvent	pH	180-2356-1	4.7	4.7	No Units		0.1	Boise	118308	2011
Premium Solvent	pH	180-24151-1	4.82	4.82	No Units	H	0.1	Wichita	619501	2013
Premium Solvent	pH	180-591-1	4.9	4.9	No Units	HF	0.1	Charlotte	303101	2011
Premium Solvent	pH	180-25504-1	5.03	5.03	No Units		0.1	Sacramento	715701	2013
Premium Solvent	pH	180-25917-1	5.25	5.25	No Units		0.1	Raleigh	317101	2013
Premium Solvent	pH	180-9962-1	5.27	5.27	No Units	H	0.1	Raleigh	7092	2012
Premium Solvent	pH	180-2186-1	5.3	5.3	No Units		0.1	Tampa	316301	2011
Premium Solvent	pH	180-14205-1	5.59	5.59	No Units	H	0.1	Tallahassee	7094	2012
Premium Solvent	pH	180-12189-1	5.64	5.64	No Units	H	0.1	Farmington	7179	2012
Premium Solvent	pH	180-21898-1	5.89	5.89	No Units	H	0.1	Tulsa	619301	2013
Premium Solvent	pH	180-12590-1	5.89	5.89	No Units		0.1	Tulsa	7105	2012
Premium Solvent	pH	180-2221-1	5.9	5.9	No Units		0.1	Clackamas	714801	2011
Premium Solvent	pH	180-1899-1	6	6	No Units	H	0.1	Syracuse	218701	2011
Premium Solvent	pH	180-2367-1	6.1	6.1	No Units		0.1	Oklahoma City	612401	2011
Premium Solvent	pH	180-1865-1	6.1	6.1	No Units	H	0.1	Farmington	700804	2011
Premium Solvent	pH	180-1124-1	6.1	6.1	No Units	HF	0.1	Albuquerque	700801	2011
Premium Solvent	pH	180-4902-1	6.1	6.1	No Units	H	0.1	Vinton	7091	2012
Premium Solvent	pH	180-11642-1	6.19	6.19	No Units		0.1	Grand Island	7107	2012
Premium Solvent	pH	180-13029-1	6.25	6.25	No Units		0.1	Chester	7090	2012
Premium Solvent	pH	180-11568-1	6.39	6.39	No Units	H	0.1	Charlotte	7055	2012
Premium Solvent	pH	180-2878-1	6.4	6.4	No Units		0.1	Dodge City	619503	2011
Premium Solvent	pH	180-2688-1	6.4	6.4	No Units		0.1	Chandler	714201	2011
Premium Solvent	pH	180-1685-1	6.4	6.4	No Units	H	0.1	Omaha	512701	2011
Premium Solvent	pH	180-1346-1	6.4	6.4	No Units		0.1	St. Pauls	303102	2011
Premium Solvent	pH	C1D200409001	6.4	6.4	No Units		0.1	Barre	210501	2011
Premium Solvent	pH	180-20632-1	6.42	6.42	No Units		0.1	Archdale	306401	2013
Premium Solvent	pH	180-24136-1	6.42	6.42	No Units		0.1	Chesapeake	312101	2013
Premium Solvent	pH	180-24468-1	6.42	6.42	No Units	H	0.1	Dodge City	619503	2013
Premium Solvent	pH	180-9967-1	6.43	6.43	No Units	H	0.1	Cohoes	7046	2012
Premium Solvent	pH	180-9899-1	6.52	6.52	No Units		0.1	Barre	7015	2012
Premium Solvent	pH	180-10339-1	6.52	6.52	No Units	H	0.1	Avon	7048	2012
Premium Solvent	pH	180-10018-1	6.57	6.57	No Units		0.1	Archdale	7088	2012
Premium Solvent	pH	180-1535-1	6.6	6.6	No Units		0.1	Wichita	619501	2011
Premium Solvent	pH	C1D280567001	6.6	6.6	No Units		0.1	Avon	202802	2011
Premium Solvent	pH	180-25564-1	6.61	6.61	No Units		0.1	Chester	315401	2013
Premium Solvent	pH	180-14306-1	6.65	6.65	No Units		0.1	Sacramento	7138	2012
Premium Solvent	pH	C1D140573001	6.7	6.7	No Units		0.1	Barre	210501	2011
Premium Solvent	pH	180-13289-1	6.71	6.71	No Units	H	0.1	Vinton	7091	2012
Premium Solvent	pH	180-10007-1	6.71	6.71	No Units	H	0.1	Boise	7114	2012
Premium Solvent	pH	180-20920-1	6.72	6.72	No Units	H	0.1	St. Pauls	303102	2013
Premium Solvent	pH	180-11550-1	6.8	6.8	No Units	HF	0.1	Sacramento	715701	2011
Premium Solvent	pH	180-14023-1	6.88	6.88	No Units	H	0.1	Omaha	7157	2012
Premium Solvent	pH	180-4889-1	6.9	6.9	No Units	H	0.1	Chester	7090	2012
Premium Solvent	pH	180-20512-1	6.98	6.98	No Units		0.1	Barre	210501	2013
Premium Solvent	pH	180-20719-1	6.98	6.98	No Units		0.1	Syracuse	218701	2013
Premium Solvent	pH	180-1536-1	7.0	7	No Units		0.1	Grand Island	506501	2011
Premium Solvent	pH	C1D290517001	7	7	No Units		0.1	Lackawanna	202801	2011
Premium Solvent	pH	C1E030546001	7	7	No Units		0.1	Archdale	306401	2011
Premium Solvent	pH	180-14162-1	7.01	7.01	No Units	H	0.1	Wichita	7112	2012
Premium Solvent	pH	180-21252-1	7.05	7.05	No Units	H	0.1	Oklahoma City	612401	2013
Premium Solvent	pH	180-14585-1	7.06	7.06	No Units	H	0.1	Dodge City	7178	2012
Premium Solvent	pH	180-22446-1	7.14	7.14	No Units	H	0.1	Albuquerque	700801	2013
Premium Solvent	pH	180-11338-1	7.16	7.16	No Units	H	0.1	Santa Ana	7117	2012
Premium Solvent	pH	C1C100616001	7.2	7.2	No Units		0.1	Cohoes	200401	2011
Premium Solvent	pH	180-20891-1	7.29	7.29	No Units	H	0.1	Avon	202802	2013
Premium Solvent	pH	180-10888-1	7.3	7.3	No Units		0.1	St. Pauls	7087	2012
Premium Solvent	pH	180-20765-1	7.33	7.33	No Units		0.1	Lackawanna	202801	2013
Premium Solvent	pH	180-21349-1	7.39	7.39	No Units	H	0.1	Tampa	316301	2013
Premium Solvent	pH	180-4888-1	7.4	7.4	No Units		0.1	Chesapeake	7089	2012
Premium Solvent	pH	180-24593-1	7.43	7.43	No Units		0.1	Vinton	315501	2013
Premium Solvent	pH	180-12866-1	7.46	7.46	No Units		0.1	Chesapeake	7089	2012
Premium Solvent	pH	180-13439-1	7.52	7.52	No Units	H	0.1	Oklahoma City	7104	2012
Premium Solvent	pH	180-11559-1	7.54	7.54	No Units	H	0.1	Albuquerque	7133	2012
Premium Solvent	pH	180-20856-1	7.79	7.79	No Units		0.1	Boise	118308	2013
Premium Solvent	pH	180-24283-1	7.88	7.88	No Units	H	0.1	Omaha	512701	2013
Premium Solvent	pH	480-20539-1	7.94	7.94	No Units	H	0.1	Lackawanna	202801	2012
Premium Solvent	pH	180-24429-1	7.98	7.98	No Units		0.1	Clackamas	714801	2013
Premium Solvent	pH	180-2454-1	8	8	No Units		0.1	Tulsa	619301	2011
Premium Solvent	pH	180-23579-1	8.12	8.12	No Units		0.1	Farmington	700804	2013
Premium Solvent	pH	180-22177-1	8.3	8.3	No Units	H	0.1	Grand Island	506501	2013
Premium Solvent	pH	180-20858-1	9.19	9.19	No Units	H	0.1	Charlotte	303101	2013
Premium Solvent	pH	180-20316-1	9.83	9.83	No Units		0.1	Cohoes	200401	2013
Premium Solvent	Pyridine	180-20856-1	0.1	0.05	mg/L	U	0.1	Boise	118308	2013
Premium Solvent	Pyridine	180-2878-1	0.5	0.25	mg/L	U	0.5	Dodge City	619503	2011
Premium Solvent	Pyridine	180-2688-1	0.5	0.25	mg/L	U	0.5	Chandler	714201	2011

Premium Solvent	Pyridine	180-2454-1	0.5	0.25	mg/L	U	0.5	Tulsa	619301	2011
Premium Solvent	Pyridine	180-2356-1	0.5	0.25	mg/L	U	0.5	Boise	118308	2011
Premium Solvent	Pyridine	180-2367-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2011
Premium Solvent	Pyridine	180-2221-1	0.5	0.25	mg/L	U	0.5	Clackamas	714801	2011
Premium Solvent	Pyridine	180-2186-1	0.5	0.25	mg/L	U	0.5	Tampa	316301	2011
Premium Solvent	Pyridine	180-1865-1	0.5	0.25	mg/L	U	0.5	Farmington	700804	2011
Premium Solvent	Pyridine	180-1899-1	0.5	0.25	mg/L	U	0.5	Syracuse	218701	2011
Premium Solvent	Pyridine	180-1685-1	0.5	0.25	mg/L	U	0.5	Omaha	512701	2011
Premium Solvent	Pyridine	180-1535-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2011
Premium Solvent	Pyridine	180-1536-1	0.5	0.25	mg/L	U	0.5	Grand Island	506501	2011
Premium Solvent	Pyridine	180-1346-1	0.5	0.25	mg/L	U	0.5	St. Pauls	303102	2011
Premium Solvent	Pyridine	180-1124-1	0.5	0.25	mg/L	U	0.5	Albuquerque	700801	2011
Premium Solvent	Pyridine	C1D290517001	0.5	0.25	mg/L	U	0.5	Lackawanna	202801	2011
Premium Solvent	Pyridine	C1D280567001	0.5	0.25	mg/L	U	0.5	Avon	202802	2011
Premium Solvent	Pyridine	C1E030546001	0.5	0.25	mg/L	U	0.5	Archdale	306401	2011
Premium Solvent	Pyridine	C1D200409001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Pyridine	C1D140573001	0.5	0.25	mg/L	U	0.5	Barre	210501	2011
Premium Solvent	Pyridine	C1C100616001	0.5	0.25	mg/L	U	0.5	Cohoes	200401	2011
Premium Solvent	Pyridine	180-9899-1	0.5	0.25	mg/L	U	0.5	Barre	7015	2012
Premium Solvent	Pyridine	180-9967-1	0.5	0.25	mg/L	U	0.5	Cohoes	7046	2012
Premium Solvent	Pyridine	180-10888-1	0.5	0.25	mg/L	U	0.5	St. Pauls	7087	2012
Premium Solvent	Pyridine	180-10018-1	0.5	0.25	mg/L	U	0.5	Archdale	7088	2012
Premium Solvent	Pyridine	180-4898-1	0.5	0.25	mg/L	U *	0.5	Chesapeake	7089	2012
Premium Solvent	Pyridine	180-4899-1	0.5	0.25	mg/L	U *	0.5	Chester	7090	2012
Premium Solvent	Pyridine	180-4902-1	0.5	0.25	mg/L	U *	0.5	Vinton	7091	2012
Premium Solvent	Pyridine	180-9962-1	0.5	0.25	mg/L	U	0.5	Raleigh	7092	2012
Premium Solvent	Pyridine	180-10007-1	0.5	0.25	mg/L	U	0.5	Boise	7114	2012
Premium Solvent	Pyridine	180-22446-1	5	2.5	mg/L	U	5	Albuquerque	700801	2013
Premium Solvent	Pyridine	180-20632-1	5	2.5	mg/L	U	5	Archdale	306401	2013
Premium Solvent	Pyridine	180-20891-1	5	2.5	mg/L	U	5	Avon	202802	2013
Premium Solvent	Pyridine	180-20512-1	5	2.5	mg/L	U	5	Barre	210501	2013
Premium Solvent	Pyridine	180-20858-1	5	2.5	mg/L	U	5	Charlotte	303101	2013
Premium Solvent	Pyridine	180-24136-1	5	2.5	mg/L	U	5	Chesapeake	312101	2013
Premium Solvent	Pyridine	180-25564-1	5	2.5	mg/L	U	5	Chester	315401	2013
Premium Solvent	Pyridine	180-24429-1	5	2.5	mg/L	U	5	Clackamas	714801	2013
Premium Solvent	Pyridine	180-20316-1	5	2.5	mg/L	U	5	Cohoes	200401	2013
Premium Solvent	Pyridine	180-24468-1	5	2.5	mg/L	U	5	Dodge City	619503	2013
Premium Solvent	Pyridine	180-23579-1	5	2.5	mg/L	U	5	Farmington	700804	2013
Premium Solvent	Pyridine	180-20765-1	5	2.5	mg/L	U	5	Lackawanna	202801	2013
Premium Solvent	Pyridine	180-24283-1	5	2.5	mg/L	U	5	Omaha	512701	2013
Premium Solvent	Pyridine	180-20920-1	5	2.5	mg/L	U	5	St. Pauls	303102	2013
Premium Solvent	Pyridine	180-20719-1	5	2.5	mg/L	U	5	Syracuse	218701	2013
Premium Solvent	Pyridine	180-21349-1	5	2.5	mg/L	U	5	Tampa	316301	2013
Premium Solvent	Pyridine	180-21898-1	5	2.5	mg/L	U	5	Tulsa	619301	2013
Premium Solvent	Pyridine	180-24593-1	5	2.5	mg/L	U	5	Vinton	315501	2013
Premium Solvent	Pyridine	180-24151-1	5	2.5	mg/L	U	5	Wichita	619501	2013
Premium Solvent	Pyridine	180-25917-1	5	2.5	mg/L	U	5	Raleigh	317101	2013
Premium Solvent	Pyridine	180-22177-1	5	2.5	mg/L	U	5	Grand Island	506501	2013
Premium Solvent	Pyridine	180-10339-1	5	2.5	mg/L	U	5	Avon	7048	2012
Premium Solvent	Pyridine	180-12866-1	5	2.5	mg/L	U	5	Chesapeake	7089	2012
Premium Solvent	Pyridine	180-13029-1	5	2.5	mg/L	U	5	Chester	7090	2012
Premium Solvent	Pyridine	180-13289-1	5	2.5	mg/L	U	5	Vinton	7091	2012
Premium Solvent	Pyridine	180-12590-1	5	2.5	mg/L	U	5	Tulsa	7105	2012
Premium Solvent	Pyridine	180-11642-1	5	2.5	mg/L	U	5	Grand Island	7107	2012
Premium Solvent	Pyridine	180-14162-1	5	2.5	mg/L	U	5	Wichita	7112	2012
Premium Solvent	Pyridine	180-11559-1	5	2.5	mg/L	U	5	Albuquerque	7133	2012
Premium Solvent	Pyridine	180-14023-1	5	2.5	mg/L	U	5	Omaha	7157	2012
Premium Solvent	Pyridine	180-14585-1	5	2.5	mg/L	U	5	Dodge City	7178	2012
Premium Solvent	Pyridine	180-12189-1	5	2.5	mg/L	U	5	Farmington	7179	2012
Premium Solvent	Pyridine	480-20539-1	24	12	mg/L	U	5	Lackawanna	202801	2012
Premium Solvent	Pyridine	180-21252-1	100	50	mg/L	U	100	Oklahoma City	612401	2013
Premium Solvent	Pyridine	180-591-1	100	50	mg/L	U	100	Charlotte	303101	2011
Premium Solvent	Pyridine	180-11568-1	100	50	mg/L	U	100	Charlotte	7055	2012
Premium Solvent	Pyridine	180-14205-1	100	50	mg/L	U	100	Tallahassee	7094	2012
Premium Solvent	Pyridine	180-13439-1	100	50	mg/L	U	100	Oklahoma City	7104	2012
Premium Solvent	Pyridine	180-12755-1	100	50	mg/L	U	100	Chandler	7134	2012
Premium Solvent	Selenium	180-20856-1	0.005	0.005	mg/L	J B	0.05	Boise	118308	2013
Premium Solvent	Selenium	180-20316-1	0.22	0.22	mg/L	J	0.5	Cohoes	200401	2013
Premium Solvent	Selenium	180-9967-1	0.22	0.22	mg/L	J B	0.5	Cohoes	7046	2012
Premium Solvent	Selenium	180-22446-1	0.5	0.25	mg/L	U	0.5	Albuquerque	700801	2013
Premium Solvent	Selenium	180-20632-1	0.5	0.25	mg/L	U	0.5	Archdale	306401	2013
Premium Solvent	Selenium	180-20512-1	0.5	0.25	mg/L	U	0.5	Barre	210501	2013
Premium Solvent	Selenium	180-20858-1	0.5	0.25	mg/L	U	0.5	Charlotte	303101	2013
Premium Solvent	Selenium	180-24136-1	0.5	0.25	mg/L	U	0.5	Chesapeake	312101	2013
Premium Solvent	Selenium	180-24429-1	0.5	0.25	mg/L	U	0.5	Clackamas	714801	2013
Premium Solvent	Selenium	180-24468-1	0.5	0.25	mg/L	U	0.5	Dodge City	619503	2013
Premium Solvent	Selenium	180-23579-1	0.5	0.25	mg/L	U	0.5	Farmington	700804	2013
Premium Solvent	Selenium	180-20765-1	0.5	0.25	mg/L	U	0.5	Lackawanna	202801	2013
Premium Solvent	Selenium	180-21252-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2013
Premium Solvent	Selenium	180-24283-1	0.5	0.25	mg/L	U	0.5	Omaha	512701	2013
Premium Solvent	Selenium	180-25504-1	0.5	0.25	mg/L	U	0.5	Sacramento	715701	2013
Premium Solvent	Selenium	180-20920-1	0.5	0.25	mg/L	U	0.5	St. Pauls	303102	2013
Premium Solvent	Selenium	180-20719-1	0.5	0.25	mg/L	U	0.5	Syracuse	218701	2013
Premium Solvent	Selenium	180-21898-1	0.5	0.25	mg/L	U	0.5	Tulsa	619301	2013
Premium Solvent	Selenium	180-24593-1	0.5	0.25	mg/L	U	0.5	Vinton	315501	2013
Premium Solvent	Selenium	180-24151-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2013
Premium Solvent	Selenium	180-22177-1	0.5	0.25	mg/L	U	0.5	Grand Island	506501	2013
Premium Solvent	Selenium	180-2668-1	0.5	0.25	mg/L	U	0.5	Chandler	714201	2011
Premium Solvent	Selenium	180-2454-1	0.5	0.25	mg/L	U	0.5	Tulsa	619301	2011
Premium Solvent	Selenium	180-2356-1	0.25	0.25	mg/L	J	0.5	Boise	118308	2011
Premium Solvent	Selenium	180-2367-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	612401	2011
Premium Solvent	Selenium	180-2186-1	0.5	0.25	mg/L	U	0.5	Tampa	316301	2011
Premium Solvent	Selenium	180-1865-1	0.5	0.25	mg/L	U	0.5	Farmington	700804	2011
Premium Solvent	Selenium	180-1899-1	0.5	0.25	mg/L	U	0.5	Syracuse	218701	2011
Premium Solvent	Selenium	180-1685-1	0.5	0.25	mg/L	U	0.5	Omaha	512701	2011
Premium Solvent	Selenium	180-1535-1	0.5	0.25	mg/L	U	0.5	Wichita	619501	2011
Premium Solvent	Selenium	180-1536-1	0.5	0.25	mg/L	U	0.5	Grand Island	506501	2011
Premium Solvent	Selenium	180-1346-1	0.5	0.25	mg/L	U	0.5	St. Pauls	303102	2011

Premium Solvent	Selenium	180-1150-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2011
Premium Solvent	Selenium	180-1124-1	0.5	0.25	mg/L	U	0.5			Albuquerque	700801	2011
Premium Solvent	Selenium	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Selenium	C1D290517001	0.5	0.25	mg/L	U	0.5			Lackawanna	202801	2011
Premium Solvent	Selenium	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Selenium	C1E030546001	0.5	0.25	mg/L	U	0.5			Archdale	306401	2011
Premium Solvent	Selenium	C1D200409001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Selenium	C1D140573001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Selenium	C1C100616001	0.5	0.25	mg/L	U	0.5			Cohoes	200401	2011
Premium Solvent	Selenium	180-9899-1	0.5	0.25	mg/L	U	0.5			Barre	7015	2012
Premium Solvent	Selenium	180-10339-1	0.5	0.25	mg/L	U	0.5			Avon	7048	2012
Premium Solvent	Selenium	180-11568-1	0.5	0.25	mg/L	U	0.5			Charlotte	7055	2012
Premium Solvent	Selenium	180-10888-1	0.5	0.25	mg/L	U	0.5	45	73	St. Pauls	7087	2012
Premium Solvent	Selenium	180-12866-1	0.5	0.25	mg/L	U	0.5			Chesapeake	7089	2012
Premium Solvent	Selenium	180-4888-1	0.5	0.25	mg/L	U	0.5			Chesapeake	7089	2012
Premium Solvent	Selenium	180-13029-1	0.5	0.25	mg/L	U	0.5			Chester	7090	2012
Premium Solvent	Selenium	180-4889-1	0.5	0.25	mg/L	U	0.5			Chester	7090	2012
Premium Solvent	Selenium	180-9962-1	0.5	0.25	mg/L	U	0.5			Raleigh	7092	2012
Premium Solvent	Selenium	180-14205-1	0.5	0.25	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Selenium	180-13439-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	7104	2012
Premium Solvent	Selenium	180-12590-1	0.5	0.25	mg/L	U	0.5			Tulsa	7105	2012
Premium Solvent	Selenium	180-11642-1	0.5	0.25	mg/L	U	0.5			Grand Island	7107	2012
Premium Solvent	Selenium	180-11338-1	0.5	0.25	mg/L	U	0.5			Santa Ana	7117	2012
Premium Solvent	Selenium	180-11559-1	0.5	0.25	mg/L	U	0.5			Albuquerque	7133	2012
Premium Solvent	Selenium	180-12755-1	0.5	0.25	mg/L	U	0.5			Chandler	7134	2012
Premium Solvent	Selenium	180-14306-1	0.5	0.25	mg/L	U	0.5			Sacramento	7138	2012
Premium Solvent	Selenium	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Selenium	180-14585-1	0.5	0.25	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Selenium	180-4902-1	0.26	0.26	mg/L	J	0.5			Vinton	7091	2012
Premium Solvent	Selenium	180-10007-1	0.26	0.26	mg/L	J B	0.5			Boise	7114	2012
Premium Solvent	Selenium	180-12189-1	0.26	0.26	mg/L	J	0.5			Farmington	7179	2012
Premium Solvent	Selenium	180-21349-1	0.27	0.27	mg/L	J	0.5			Tampa	316301	2013
Premium Solvent	Selenium	180-2221-1	0.28	0.28	mg/L	J	0.5			Clackamas	714801	2011
Premium Solvent	Selenium	180-10018-1	0.28	0.28	mg/L	J B	0.5			Archdale	7088	2012
Premium Solvent	Selenium	180-13289-1	0.29	0.29	mg/L	J	0.5			Vinton	7091	2012
Premium Solvent	Selenium	180-20891-1	0.31	0.31	mg/L	J	0.5			Avon	202802	2013
Premium Solvent	Selenium	180-25564-1	0.33	0.33	mg/L	J	0.5			Chester	315401	2013
Premium Solvent	Selenium	180-2878-1	0.36	0.36	mg/L	J	0.5			Dodge City	619503	2011
Premium Solvent	Selenium	180-14162-1	0.44	0.44	mg/L	J	0.5			Wichita	7112	2012
Premium Solvent	Selenium	180-25917-1	0.6	0.6	mg/L	J	1			Raleigh	317101	2013
Premium Solvent	Selenium	480-20539-1	0.81	0.81	mg/L	J	0.5			Lackawanna	202801	2012
Premium Solvent	Silver	180-20856-1	0.05	0.025	mg/L	J	0.05			Boise	118308	2013
Premium Solvent	Silver	180-11568-1	0.058	0.058	mg/L	J	0.5			Charlotte	7055	2012
Premium Solvent	Silver	180-24283-1	0.06	0.06	mg/L	J	0.5			Omaha	512701	2013
Premium Solvent	Silver	180-1685-1	0.061	0.061	mg/L	J	0.5			Omaha	512701	2011
Premium Solvent	Silver	180-12590-1	0.067	0.067	mg/L	J	0.5			Tulsa	7105	2012
Premium Solvent	Silver	180-23579-1	0.075	0.075	mg/L	J	0.5			Farmington	700804	2013
Premium Solvent	Silver	180-25564-1	0.081	0.081	mg/L	J	0.5			Chester	315401	2013
Premium Solvent	Silver	180-20719-1	0.095	0.095	mg/L	J	0.5			Syracuse	218701	2013
Premium Solvent	Silver	180-14205-1	0.1	0.1	mg/L	J	0.5			Tallahassee	7094	2012
Premium Solvent	Silver	180-2878-1	0.14	0.14	mg/L	J	0.5			Dodge City	619503	2011
Premium Solvent	Silver	180-14023-1	0.16	0.16	mg/L	J B	0.5			Omaha	7157	2012
Premium Solvent	Silver	180-22446-1	0.5	0.25	mg/L	U	0.5			Albuquerque	700801	2013
Premium Solvent	Silver	180-20632-1	0.5	0.25	mg/L	U	0.5			Archdale	306401	2013
Premium Solvent	Silver	180-20891-1	0.5	0.25	mg/L	U	0.5			Avon	202802	2013
Premium Solvent	Silver	180-20512-1	0.5	0.25	mg/L	U	0.5			Barre	210501	2013
Premium Solvent	Silver	180-20858-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2013
Premium Solvent	Silver	180-24136-1	0.5	0.25	mg/L	U	0.5			Chesapeake	312101	2013
Premium Solvent	Silver	180-24429-1	0.5	0.25	mg/L	U	0.5			Clackamas	714801	2013
Premium Solvent	Silver	180-20316-1	0.5	0.25	mg/L	U	0.5			Cohoes	200401	2013
Premium Solvent	Silver	180-24468-1	0.5	0.25	mg/L	U	0.5			Dodge City	619503	2013
Premium Solvent	Silver	180-20765-1	0.5	0.25	mg/L	U	0.5			Lackawanna	202801	2013
Premium Solvent	Silver	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	Silver	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Silver	180-20920-1	0.5	0.25	mg/L	U	0.5			St. Pauls	303102	2013
Premium Solvent	Silver	180-21349-1	0.5	0.25	mg/L	U	0.5			Tampa	316301	2013
Premium Solvent	Silver	180-21898-1	0.5	0.25	mg/L	U	0.5			Tulsa	619301	2013
Premium Solvent	Silver	180-24593-1	0.5	0.25	mg/L	U	0.5			Vinton	315501	2013
Premium Solvent	Silver	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Silver	180-25917-1	0.5	0.25	mg/L	U	0.5			Raleigh	317101	2013
Premium Solvent	Silver	180-22177-1	0.5	0.25	mg/L	U	0.5			Grand Island	506501	2013
Premium Solvent	Silver	180-2668-1	0.5	0.25	mg/L	U	0.5			Chandler	714201	2011
Premium Solvent	Silver	180-2454-1	0.5	0.25	mg/L	U	0.5			Tulsa	619301	2011
Premium Solvent	Silver	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Silver	180-2367-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2011
Premium Solvent	Silver	180-2221-1	0.5	0.25	mg/L	U	0.5			Clackamas	714801	2011
Premium Solvent	Silver	180-2186-1	0.5	0.25	mg/L	U	0.5			Tampa	316301	2011
Premium Solvent	Silver	180-1865-1	0.5	0.25	mg/L	U	0.5			Farmington	700804	2011
Premium Solvent	Silver	180-1899-1	0.5	0.25	mg/L	U	0.5			Syracuse	218701	2011
Premium Solvent	Silver	180-1535-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2011
Premium Solvent	Silver	180-1536-1	0.5	0.25	mg/L	U	0.5			Grand Island	506501	2011
Premium Solvent	Silver	180-1346-1	0.5	0.25	mg/L	U	0.5			St. Pauls	303102	2011
Premium Solvent	Silver	180-1150-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2011
Premium Solvent	Silver	180-1124-1	0.5	0.25	mg/L	U	0.5			Albuquerque	700801	2011
Premium Solvent	Silver	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Silver	C1D290517001	0.5	0.25	mg/L	U	0.5	45	73	Lackawanna	202801	2011
Premium Solvent	Silver	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Silver	C1E030546001	0.5	0.25	mg/L	U	0.5			Archdale	306401	2011
Premium Solvent	Silver	C1D200409001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Silver	C1D140573001	0.5	0.25	mg/L	U	0.5			Barre	210501	2011
Premium Solvent	Silver	C1C100616001	0.5	0.25	mg/L	U	0.5			Cohoes	200401	2011
Premium Solvent	Silver	180-9899-1	0.5	0.25	mg/L	U	0.5			Barre	7015	2012
Premium Solvent	Silver	180-9967-1	0.5	0.25	mg/L	U	0.5			Cohoes	7046	2012
Premium Solvent	Silver	180-10339-1	0.5	0.25	mg/L	U	0.5			Avon	7048	2012
Premium Solvent	Silver	180-10888-1	0.5	0.25	mg/L	U	0.5			St. Pauls	7087	2012
Premium Solvent	Silver	180-10018-1	0.5	0.25	mg/L	U	0.5			Archdale	7088	2012
Premium Solvent	Silver	180-12866-1	0.5	0.25	mg/L	U	0.5			Chesapeake	7089	2012
Premium Solvent	Silver	180-4888-1	0.5	0.25	mg/L	U	0.5			Chesapeake	7089	2012

Premium Solvent	Silver	180-13029-1	0.5	0.25	mg/L	U	0.5	Chester	7090	2012
Premium Solvent	Silver	180-4889-1	0.5	0.25	mg/L	U	0.5	Chester	7090	2012
Premium Solvent	Silver	180-13289-1	0.5	0.25	mg/L	U	0.5	Vinton	7091	2012
Premium Solvent	Silver	180-4902-1	0.5	0.25	mg/L	U	0.5	Vinton	7091	2012
Premium Solvent	Silver	180-9962-1	0.5	0.25	mg/L	U	0.5	Raleigh	7092	2012
Premium Solvent	Silver	180-13439-1	0.5	0.25	mg/L	U	0.5	Oklahoma City	7104	2012
Premium Solvent	Silver	180-11642-1	0.5	0.25	mg/L	U	0.5	Grand Island	7107	2012
Premium Solvent	Silver	180-14162-1	0.5	0.25	mg/L	U	0.5	Wichita	7112	2012
Premium Solvent	Silver	180-10007-1	0.5	0.25	mg/L	U	0.5	Boise	7114	2012
Premium Solvent	Silver	180-11338-1	0.5	0.25	mg/L	U	0.5	Santa Ana	7117	2012
Premium Solvent	Silver	180-11559-1	0.5	0.25	mg/L	U	0.5	Albuquerque	7133	2012
Premium Solvent	Silver	180-12755-1	0.5	0.25	mg/L	U	0.5	Chandler	7134	2012
Premium Solvent	Silver	180-14306-1	0.5	0.25	mg/L	U	0.5	Sacramento	7138	2012
Premium Solvent	Silver	180-14585-1	0.5	0.25	mg/L	U	0.5	Dodge City	7178	2012
Premium Solvent	Silver	180-12189-1	0.5	0.25	mg/L	U	0.5	Farmington	7179	2012
Premium Solvent	Silver	480-20539-1	0.51	0.255	mg/L	U	0.5	Lackawanna	202801	2012
Premium Solvent	Specific Gravity	180-12189-1	0.71	0.71	No Units		0.01	Farmington	7179	2012
Premium Solvent	Specific Gravity	180-1865-1	0.72	0.72	No Units		0.01	Farmington	700804	2011
Premium Solvent	Specific Gravity	180-14306-1	0.72	0.72	No Units		0.01	Sacramento	7138	2012
Premium Solvent	Specific Gravity	180-20891-1	0.73	0.73	No Units		0.01	Avon	202802	2013
Premium Solvent	Specific Gravity	180-24468-1	0.73	0.73	No Units		0.01	Dodge City	619503	2013
Premium Solvent	Specific Gravity	180-23579-1	0.73	0.73	No Units		0.01	Farmington	700804	2013
Premium Solvent	Specific Gravity	180-20719-1	0.73	0.73	No Units		0.01	Syracuse	218701	2013
Premium Solvent	Specific Gravity	180-2356-1	0.73	0.73	No Units		0.01	Boise	118308	2011
Premium Solvent	Specific Gravity	180-1899-1	0.73	0.73	No Units		0.01	Syracuse	218701	2011
Premium Solvent	Specific Gravity	180-4902-1	0.73	0.73	No Units		0.01	Vinton	7091	2012
Premium Solvent	Specific Gravity	180-14162-1	0.73	0.73	No Units		0.01	Wichita	7112	2012
Premium Solvent	Specific Gravity	180-20858-1	0.74	0.74	No Units		0.01	Charlotte	303101	2013
Premium Solvent	Specific Gravity	180-24136-1	0.74	0.74	No Units		0.01	Chesapeake	312101	2013
Premium Solvent	Specific Gravity	180-21252-1	0.74	0.74	No Units		0.01	Oklahoma City	612401	2013
Premium Solvent	Specific Gravity	180-21898-1	0.74	0.74	No Units		0.01	Tulsa	619301	2013
Premium Solvent	Specific Gravity	180-2878-1	0.74	0.74	No Units		0.01	Dodge City	619503	2011
Premium Solvent	Specific Gravity	180-2668-1	0.74	0.74	No Units		0.01	Chandler	714201	2011
Premium Solvent	Specific Gravity	180-2454-1	0.74	0.74	No Units		0.01	Tulsa	619301	2011
Premium Solvent	Specific Gravity	180-2367-1	0.74	0.74	No Units		0.01	Oklahoma City	612401	2011
Premium Solvent	Specific Gravity	180-1124-1	0.74	0.74	No Units		0.01	Albuquerque	700801	2011
Premium Solvent	Specific Gravity	C1E030546001	0.74	0.74	No Units		0.01	Archdale	306401	2011
Premium Solvent	Specific Gravity	180-10339-1	0.74	0.74	No Units		0.01	Avon	7048	2012
Premium Solvent	Specific Gravity	180-11568-1	0.74	0.74	No Units		0.01	Charlotte	7055	2012
Premium Solvent	Specific Gravity	180-4888-1	0.74	0.74	No Units		0.01	Chesapeake	7089	2012
Premium Solvent	Specific Gravity	180-13029-1	0.74	0.74	No Units		0.01	Chester	7090	2012
Premium Solvent	Specific Gravity	180-4889-1	0.74	0.74	No Units		0.01	Chester	7090	2012
Premium Solvent	Specific Gravity	180-12590-1	0.74	0.74	No Units		0.01	Tulsa	7105	2012
Premium Solvent	Specific Gravity	180-11642-1	0.74	0.74	No Units		0.01	Grand Island	7107	2012
Premium Solvent	Specific Gravity	180-11559-1	0.74	0.74	No Units		0.01	Albuquerque	7133	2012
Premium Solvent	Specific Gravity	180-12755-1	0.74	0.74	No Units		0.01	Chandler	7134	2012
Premium Solvent	Specific Gravity	180-20632-1	0.75	0.75	No Units		0.01	Archdale	306401	2013
Premium Solvent	Specific Gravity	180-20512-1	0.75	0.75	No Units		0.01	Barre	210501	2013
Premium Solvent	Specific Gravity	180-24429-1	0.75	0.75	No Units		0.01	Clackamas	714801	2013
Premium Solvent	Specific Gravity	180-20316-1	0.75	0.75	No Units		0.01	Cohoes	200401	2013
Premium Solvent	Specific Gravity	180-24593-1	0.75	0.75	No Units		0.01	Vinton	315501	2013
Premium Solvent	Specific Gravity	180-22177-1	0.75	0.75	No Units		0.01	Grand Island	506501	2013
Premium Solvent	Specific Gravity	180-1685-1	0.75	0.75	No Units		0.01	Omaha	512701	2011
Premium Solvent	Specific Gravity	180-1535-1	0.75	0.75	No Units		0.01	Wichita	619501	2011
Premium Solvent	Specific Gravity	180-1346-1	0.75	0.75	No Units		0.01	St. Pauls	303102	2011
Premium Solvent	Specific Gravity	180-1150-1	0.75	0.75	No Units		0.01	Sacramento	715701	2011
Premium Solvent	Specific Gravity	180-591-1	0.75	0.75	No Units		0.01	Charlotte	303101	2011
Premium Solvent	Specific Gravity	C1D290517001	0.75	0.75	No Units		0.01	Lackawanna	202801	2011
Premium Solvent	Specific Gravity	C1D280567001	0.75	0.75	No Units		0.01	Avon	202802	2011
Premium Solvent	Specific Gravity	C1D200409001	0.75	0.75	No Units		0.01	Barre	210501	2011
Premium Solvent	Specific Gravity	180-9899-1	0.75	0.75	No Units		0.01	Barre	7015	2012
Premium Solvent	Specific Gravity	180-14205-1	0.75	0.75	No Units		0.01	Tallahassee	7094	2012
Premium Solvent	Specific Gravity	180-22446-1	0.76	0.76	No Units		0.01	Albuquerque	700801	2013
Premium Solvent	Specific Gravity	180-25564-1	0.76	0.76	No Units		0.01	Chester	315401	2013
Premium Solvent	Specific Gravity	180-20920-1	0.76	0.76	No Units		0.01	St. Pauls	303102	2013
Premium Solvent	Specific Gravity	180-24151-1	0.76	0.76	No Units		0.01	Wichita	619501	2013
Premium Solvent	Specific Gravity	180-2186-1	0.76	0.76	No Units		0.01	Tampa	316301	2011
Premium Solvent	Specific Gravity	180-1536-1	0.76	0.76	No Units		0.01	Grand Island	506501	2011
Premium Solvent	Specific Gravity	C1C100616001	0.76	0.76	No Units		0.01	Cohoes	200401	2011
Premium Solvent	Specific Gravity	180-9967-1	0.76	0.76	No Units		0.01	Cohoes	7046	2012
Premium Solvent	Specific Gravity	180-10888-1	0.76	0.76	No Units		0.01	St. Pauls	7087	2012
Premium Solvent	Specific Gravity	180-10018-1	0.76	0.76	No Units		0.01	Archdale	7088	2012
Premium Solvent	Specific Gravity	180-12866-1	0.76	0.76	No Units		0.01	Chesapeake	7089	2012
Premium Solvent	Specific Gravity	180-9962-1	0.76	0.76	No Units		0.01	Raleigh	7092	2012
Premium Solvent	Specific Gravity	180-13439-1	0.76	0.76	No Units		0.01	Oklahoma City	7104	2012
Premium Solvent	Specific Gravity	180-10007-1	0.76	0.76	No Units		0.01	Boise	7114	2012
Premium Solvent	Specific Gravity	180-24283-1	0.77	0.77	No Units		0.01	Omaha	512701	2013
Premium Solvent	Specific Gravity	180-21349-1	0.77	0.77	No Units		0.01	Tampa	316301	2013
Premium Solvent	Specific Gravity	180-25917-1	0.77	0.77	No Units		0.01	Raleigh	317101	2013
Premium Solvent	Specific Gravity	180-2221-1	0.77	0.77	No Units		0.01	Clackamas	714801	2011
Premium Solvent	Specific Gravity	C1D140573001	0.77	0.77	No Units		0.01	Barre	210501	2011
Premium Solvent	Specific Gravity	180-14585-1	0.77	0.77	No Units		0.01	Dodge City	7178	2012
Premium Solvent	Specific Gravity	180-20765-1	0.78	0.78	No Units		0.01	Lackawanna	202801	2013
Premium Solvent	Specific Gravity	180-13289-1	0.78	0.78	No Units		0.01	Vinton	7091	2012
Premium Solvent	Specific Gravity	180-14023-1	0.78	0.78	No Units		0.01	Omaha	7157	2012
Premium Solvent	Specific Gravity	180-25504-1	0.79	0.79	No Units		0.01	Sacramento	715701	2013
Premium Solvent	Specific Gravity	480-20539-1	0.79	0.79	No Units		0.01	Lackawanna	202801	2012
Premium Solvent	Specific Gravity	180-11338-1	0.79	0.79	No Units		0.01	Santa Ana	7117	2012
Premium Solvent	Specific Gravity	180-20856-1	0.99	0.99	No Units		0.01	Boise	118308	2013
Premium Solvent	Tetrachloroethene	180-20856-1	0.2	0.1	mg/L	U	0.2	Boise	118308	2013
Premium Solvent	Tetrachloroethene	180-11568-1	0.12	0.12	mg/L	J	0.25	Charlotte	7055	2012
Premium Solvent	Tetrachloroethene	180-24429-1	0.25	0.125	mg/L	U	0.25	Clackamas	714801	2013
Premium Solvent	Tetrachloroethene	180-20765-1	0.25	0.125	mg/L	U	0.25	Lackawanna	202801	2013
Premium Solvent	Tetrachloroethene	180-20719-1	0.25	0.125	mg/L	U	0.25	Syracuse	218701	2013
Premium Solvent	Tetrachloroethene	180-2454-1	0.25	0.125	mg/L	U	0.25	Tulsa	619301	2011
Premium Solvent	Tetrachloroethene	180-1150-1	0.25	0.125	mg/L	U	0.25	Sacramento	715701	2011
Premium Solvent	Tetrachloroethene	C1D200409001	0.25	0.125	mg/L	U	0.25	Barre	210501	2011
Premium Solvent	Tetrachloroethene	180-10888-1	0.25	0.125	mg/L	U	0.25	St. Pauls	7087	2012

Premium Solvent	Tetrachloroethene	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	Tetrachloroethene	180-11338-1	0.25	0.125	mg/L	U	0.25			Santa Ana	7117	2012
Premium Solvent	Tetrachloroethene	180-12189-1	0.13	0.13	mg/L	J	0.25			Farmington	7179	2012
Premium Solvent	Tetrachloroethene	180-21349-1	0.14	0.14	mg/L	J	0.25			Tampa	316301	2013
Premium Solvent	Tetrachloroethene	180-9967-1	0.15	0.15	mg/L	J	0.25			Cohoes	7046	2012
Premium Solvent	Tetrachloroethene	180-14306-1	0.15	0.15	mg/L	J	0.25			Sacramento	7138	2012
Premium Solvent	Tetrachloroethene	180-2186-1	0.19	0.19	mg/L	J	0.25			Tampa	316301	2011
Premium Solvent	Tetrachloroethene	180-10018-1	0.2	0.2	mg/L	J	0.25			Archdale	7088	2012
Premium Solvent	Tetrachloroethene	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Tetrachloroethene	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Tetrachloroethene	C1D280567001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Tetrachloroethene	180-2668-1	0.26	0.26	mg/L		0.25			Chandler	714201	2011
Premium Solvent	Tetrachloroethene	180-1865-1	0.26	0.26	mg/L		0.25			Farmington	700804	2011
Premium Solvent	Tetrachloroethene	180-10339-1	0.28	0.28	mg/L		0.25			Avon	7048	2012
Premium Solvent	Tetrachloroethene	180-14585-1	0.28	0.28	mg/L	J	0.5			Dodge City	7178	2012
Premium Solvent	Tetrachloroethene	180-20316-1	0.31	0.31	mg/L		0.25			Cohoes	200401	2013
Premium Solvent	Tetrachloroethene	180-20858-1	0.38	0.38	mg/L		0.25			Charlotte	303101	2013
Premium Solvent	Tetrachloroethene	180-24136-1	0.39	0.39	mg/L		0.25			Chesapeake	312101	2013
Premium Solvent	Tetrachloroethene	180-21252-1	0.42	0.42	mg/L	J	0.5			Oklahoma City	612401	2013
Premium Solvent	Tetrachloroethene	180-12755-1	0.44	0.44	mg/L		0.25			Chandler	7134	2012
Premium Solvent	Tetrachloroethene	180-21898-1	0.45	0.45	mg/L		0.25			Tulsa	619301	2013
Premium Solvent	Tetrachloroethene	180-22446-1	0.53	0.53	mg/L		0.25			Albuquerque	700801	2013
Premium Solvent	Tetrachloroethene	180-11559-1	0.54	0.54	mg/L		0.25			Albuquerque	7133	2012
Premium Solvent	Tetrachloroethene	180-1124-1	0.57	0.57	mg/L		0.25			Albuquerque	700801	2011
Premium Solvent	Tetrachloroethene	180-23579-1	0.59	0.59	mg/L		0.25			Farmington	700804	2013
Premium Solvent	Tetrachloroethene	180-1535-1	0.89	0.89	mg/L		0.25			Wichita	619501	2011
Premium Solvent	Tetrachloroethene	C1E030546001	0.89	0.89	mg/L		0.25			Archdale	306401	2011
Premium Solvent	Tetrachloroethene	180-13439-1	0.91	0.91	mg/L		0.25			Oklahoma City	7104	2012
Premium Solvent	Tetrachloroethene	180-11642-1	0.98	0.98	mg/L		0.25			Grand Island	7107	2012
Premium Solvent	Tetrachloroethene	180-20891-1	1	1	mg/L		0.25			Avon	202802	2013
Premium Solvent	Tetrachloroethene	180-25564-1	1.2	1.2	mg/L		0.25			Chester	315401	2013
Premium Solvent	Tetrachloroethene	180-2878-1	1.3	1.3	mg/L		0.25			Dodge City	619503	2011
Premium Solvent	Tetrachloroethene	180-1899-1	1.3	1.3	mg/L		0.25			Syracuse	218701	2011
Premium Solvent	Tetrachloroethene	180-25917-1	1.8	1.8	mg/L		0.25			Raleigh	317101	2013
Premium Solvent	Tetrachloroethene	180-10007-1	2.1	2.1	mg/L		0.25			Boise	7114	2012
Premium Solvent	Tetrachloroethene	180-1346-1	2.4	2.4	mg/L		0.25	45	73	St. Pauls	303102	2011
Premium Solvent	Tetrachloroethene	180-14162-1	2.4	2.4	mg/L		0.25			Wichita	7112	2012
Premium Solvent	Tetrachloroethene	180-20632-1	2.6	2.6	mg/L		0.25			Archdale	306401	2013
Premium Solvent	Tetrachloroethene	180-12590-1	3.1	3.1	mg/L		0.25			Tulsa	7105	2012
Premium Solvent	Tetrachloroethene	180-4902-1	4.9	4.9	mg/L		0.25			Vinton	7091	2012
Premium Solvent	Tetrachloroethene	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Tetrachloroethene	180-4888-1	5.6	5.6	mg/L		0.25			Chesapeake	7089	2012
Premium Solvent	Tetrachloroethene	180-1685-1	6.1	6.1	mg/L		0.25			Omaha	512701	2011
Premium Solvent	Tetrachloroethene	180-24468-1	6.3	6.3	mg/L		0.25			Dodge City	619503	2013
Premium Solvent	Tetrachloroethene	180-1536-1	6.4	6.4	mg/L		0.25			Grand Island	506501	2011
Premium Solvent	Tetrachloroethene	180-22177-1	7.3	7.3	mg/L		0.25			Grand Island	506501	2013
Premium Solvent	Tetrachloroethene	180-24593-1	7.8	7.8	mg/L		0.25			Vinton	315501	2013
Premium Solvent	Tetrachloroethene	180-2221-1	13	13	mg/L		0.25			Clackamas	714801	2011
Premium Solvent	Tetrachloroethene	180-14023-1	13	13	mg/L		0.5			Omaha	7157	2012
Premium Solvent	Tetrachloroethene	180-2356-1	16	16	mg/L		0.5			Boise	118308	2011
Premium Solvent	Tetrachloroethene	180-12866-1	36	36	mg/L		0.25			Chesapeake	7089	2012
Premium Solvent	Tetrachloroethene	D1D290517001R2	52	52	mg/L		2.5			Lackawanna	202801	2011
Premium Solvent	Tetrachloroethene	180-24283-1	91	91	mg/L		5			Omaha	512701	2013
Premium Solvent	Tetrachloroethene	180-2367-1	150	150	mg/L		5			Oklahoma City	612401	2011
Premium Solvent	Tetrachloroethene	180-4889-1	170	170	mg/L	E	0.25			Chester	7090	2012
Premium Solvent	Tetrachloroethene	180-24151-1	210	210	mg/L		5			Wichita	619501	2013
Premium Solvent	Tetrachloroethene	180-9899-1	240	240	mg/L		50			Barre	7015	2012
Premium Solvent	Tetrachloroethene	D1D140573001R2	510	510	mg/L		25			Barre	210501	2011
Premium Solvent	Tetrachloroethene	180-13029-1	960	960	mg/L		50			Chester	7090	2012
Premium Solvent	Tetrachloroethene	180-20512-1	2300	2300	mg/L		100			Barre	210501	2013
Premium Solvent	Tetrachloroethene	180-14205-1	4600	4600	mg/L		100			Tallahassee	7094	2012
Premium Solvent	Tetrachloroethene	180-13289-1	6900	6900	mg/L		100			Vinton	7091	2012
Premium Solvent	Tetrachloroethene	180-20920-1	8800	8800	mg/L		250			St. Pauls	303102	2013
Premium Solvent	Tetrachloroethene	D1C100816001R2	14000	14000	mg/L		250			Cohoes	200401	2011
Premium Solvent	Trichloroethene	180-20856-1	0.2	0.1	mg/L	U	0.2			Boise	118308	2013
Premium Solvent	Trichloroethene	180-22446-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2013
Premium Solvent	Trichloroethene	180-20891-1	0.25	0.125	mg/L	U	0.25			Avon	202802	2013
Premium Solvent	Trichloroethene	180-20858-1	0.25	0.125	mg/L	U	0.25			Charlotte	303101	2013
Premium Solvent	Trichloroethene	180-24136-1	0.25	0.125	mg/L	U	0.25			Chesapeake	312101	2013
Premium Solvent	Trichloroethene	180-24429-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2013
Premium Solvent	Trichloroethene	180-20316-1	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2013
Premium Solvent	Trichloroethene	180-23579-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2013
Premium Solvent	Trichloroethene	180-20765-1	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2013
Premium Solvent	Trichloroethene	180-24283-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2013
Premium Solvent	Trichloroethene	180-20920-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2013
Premium Solvent	Trichloroethene	180-20719-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2013
Premium Solvent	Trichloroethene	180-21349-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2013
Premium Solvent	Trichloroethene	180-21898-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2013
Premium Solvent	Trichloroethene	180-24593-1	0.25	0.125	mg/L	U	0.25			Vinton	315501	2013
Premium Solvent	Trichloroethene	180-25917-1	0.25	0.125	mg/L	U	0.25			Raleigh	317101	2013
Premium Solvent	Trichloroethene	180-22177-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2013
Premium Solvent	Trichloroethene	180-2878-1	0.25	0.125	mg/L	U	0.25			Dodge City	619503	2011
Premium Solvent	Trichloroethene	180-2668-1	0.25	0.125	mg/L	U	0.25			Chandler	714201	2011
Premium Solvent	Trichloroethene	180-2454-1	0.25	0.125	mg/L	U	0.25			Tulsa	619301	2011
Premium Solvent	Trichloroethene	180-2367-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	612401	2011
Premium Solvent	Trichloroethene	180-2221-1	0.25	0.125	mg/L	U	0.25			Clackamas	714801	2011
Premium Solvent	Trichloroethene	180-2186-1	0.25	0.125	mg/L	U	0.25			Tampa	316301	2011
Premium Solvent	Trichloroethene	180-1865-1	0.25	0.125	mg/L	U	0.25			Farmington	700804	2011
Premium Solvent	Trichloroethene	180-1899-1	0.25	0.125	mg/L	U	0.25			Syracuse	218701	2011
Premium Solvent	Trichloroethene	180-1685-1	0.25	0.125	mg/L	U	0.25			Omaha	512701	2011
Premium Solvent	Trichloroethene	180-1535-1	0.25	0.125	mg/L	U	0.25			Wichita	619501	2011
Premium Solvent	Trichloroethene	180-1536-1	0.25	0.125	mg/L	U	0.25			Grand Island	506501	2011
Premium Solvent	Trichloroethene	180-1346-1	0.25	0.125	mg/L	U	0.25			St. Pauls	303102	2011
Premium Solvent	Trichloroethene	180-1150-1	0.25	0.125	mg/L	U	0.25			Sacramento	715701	2011
Premium Solvent	Trichloroethene	180-1124-1	0.25	0.125	mg/L	U	0.25			Albuquerque	700801	2011
Premium Solvent	Trichloroethene	C1D290517001	0.25	0.125	mg/L	U	0.25			Lackawanna	202801	2011
Premium Solvent	Trichloroethene	C1E030546001	0.25	0.125	mg/L	U	0.25			Archdale	306401	2011
Premium Solvent	Trichloroethene	C1D200409001	0.25	0.125	mg/L	U	0.25			Barre	210501	2011

Premium Solvent	Trichloroethene	C1C100616001	0.25	0.125	mg/L	U	0.25			Cohoes	200401	2011
Premium Solvent	Trichloroethene	180-9899-1	0.25	0.125	mg/L	U	0.25			Barre	7015	2012
Premium Solvent	Trichloroethene	180-9967-1	0.25	0.125	mg/L	U	0.25			Cohoes	7046	2012
Premium Solvent	Trichloroethene	180-10339-1	0.25	0.125	mg/L	U	0.25			Avon	7048	2012
Premium Solvent	Trichloroethene	180-11568-1	0.25	0.125	mg/L	U	0.25			Charlotte	7055	2012
Premium Solvent	Trichloroethene	180-10888-1	0.25	0.125	mg/L	U	0.25			St. Pauls	7087	2012
Premium Solvent	Trichloroethene	180-10018-1	0.25	0.125	mg/L	U	0.25			Archdale	7088	2012
Premium Solvent	Trichloroethene	180-12866-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Trichloroethene	180-4888-1	0.25	0.125	mg/L	U	0.25			Chesapeake	7089	2012
Premium Solvent	Trichloroethene	180-4889-1	0.25	0.125	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Trichloroethene	180-4902-1	0.25	0.125	mg/L	U	0.25	45	73	Vinton	7091	2012
Premium Solvent	Trichloroethene	180-9962-1	0.25	0.125	mg/L	U	0.25			Raleigh	7092	2012
Premium Solvent	Trichloroethene	180-13439-1	0.25	0.125	mg/L	U	0.25			Oklahoma City	7104	2012
Premium Solvent	Trichloroethene	180-12590-1	0.25	0.125	mg/L	U	0.25			Tulsa	7105	2012
Premium Solvent	Trichloroethene	180-11642-1	0.25	0.125	mg/L	U	0.25			Grand Island	7107	2012
Premium Solvent	Trichloroethene	180-14162-1	0.25	0.125	mg/L	U	0.25			Wichita	7112	2012
Premium Solvent	Trichloroethene	180-10007-1	0.25	0.125	mg/L	U	0.25			Boise	7114	2012
Premium Solvent	Trichloroethene	180-11338-1	0.25	0.125	mg/L	U	0.25			Santa Ana	7117	2012
Premium Solvent	Trichloroethene	180-11559-1	0.25	0.125	mg/L	U	0.25			Albuquerque	7133	2012
Premium Solvent	Trichloroethene	180-12755-1	0.25	0.125	mg/L	U	0.25			Chandler	7134	2012
Premium Solvent	Trichloroethene	180-14306-1	0.25	0.125	mg/L	U	0.25			Sacramento	7138	2012
Premium Solvent	Trichloroethene	180-12189-1	0.25	0.125	mg/L	U	0.25			Farmington	7179	2012
Premium Solvent	Trichloroethene	180-21252-1	0.5	0.25	mg/L	U	0.5			Oklahoma City	612401	2013
Premium Solvent	Trichloroethene	180-25504-1	0.5	0.25	mg/L	U	0.5			Sacramento	715701	2013
Premium Solvent	Trichloroethene	180-24151-1	0.5	0.25	mg/L	U	0.5			Wichita	619501	2013
Premium Solvent	Trichloroethene	180-2356-1	0.5	0.25	mg/L	U	0.5			Boise	118308	2011
Premium Solvent	Trichloroethene	180-591-1	0.5	0.25	mg/L	U	0.5			Charlotte	303101	2011
Premium Solvent	Trichloroethene	C1D280667001	0.5	0.25	mg/L	U	0.5			Avon	202802	2011
Premium Solvent	Trichloroethene	180-14023-1	0.5	0.25	mg/L	U	0.5			Omaha	7157	2012
Premium Solvent	Trichloroethene	180-13029-1	0.3	0.3	mg/L	U	0.25			Chester	7090	2012
Premium Solvent	Trichloroethene	C1D140573001	0.53	0.53	mg/L	U	0.25			Barre	210501	2011
Premium Solvent	Trichloroethene	180-14205-1	0.55	0.55	mg/L	U	0.5			Tallahassee	7094	2012
Premium Solvent	Trichloroethene	180-24468-1	1.4	1.4	mg/L	U	0.25			Dodge City	619503	2013
Premium Solvent	Trichloroethene	180-13289-1	1.4	1.4	mg/L	U	0.5			Vinton	7091	2012
Premium Solvent	Trichloroethene	480-20539-1	9.9	4.95	mg/L	U	0.25			Lackawanna	202801	2012
Premium Solvent	Trichloroethene	180-25564-1	5.1	5.1	mg/L	U	0.25			Chester	315401	2013
Premium Solvent	Trichloroethene	180-20512-1	7.8	7.8	mg/L	U	0.25			Barre	210501	2013
Premium Solvent	Trichloroethene	180-14585-1	10	10	mg/L	U	0.5			Dodge City	7178	2012
Premium Solvent	Trichloroethene	180-20632-1	770	770	mg/L	E	0.25			Archdale	306401	2013
Premium Solvent	Vinyl Chloride	180-22446-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2013
Premium Solvent	Vinyl Chloride	180-20632-1	0.1	0.05	mg/L	U	0.1			Archdale	306401	2013
Premium Solvent	Vinyl Chloride	180-20891-1	0.1	0.05	mg/L	U	0.1			Avon	202802	2013
Premium Solvent	Vinyl Chloride	180-20512-1	0.1	0.05	mg/L	U	0.1			Barre	210501	2013
Premium Solvent	Vinyl Chloride	180-20858-1	0.1	0.05	mg/L	U	0.1			Charlotte	303101	2013
Premium Solvent	Vinyl Chloride	180-24136-1	0.1	0.05	mg/L	U	0.1			Chesapeake	312101	2013
Premium Solvent	Vinyl Chloride	180-25564-1	0.1	0.05	mg/L	U	0.1			Chester	315401	2013
Premium Solvent	Vinyl Chloride	180-24429-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2013
Premium Solvent	Vinyl Chloride	180-20316-1	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2013
Premium Solvent	Vinyl Chloride	180-24468-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2013
Premium Solvent	Vinyl Chloride	180-23579-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2013
Premium Solvent	Vinyl Chloride	180-20765-1	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2013
Premium Solvent	Vinyl Chloride	180-24283-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2013
Premium Solvent	Vinyl Chloride	180-20920-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2013
Premium Solvent	Vinyl Chloride	180-20719-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2013
Premium Solvent	Vinyl Chloride	180-21349-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2013
Premium Solvent	Vinyl Chloride	180-21898-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2013
Premium Solvent	Vinyl Chloride	180-24593-1	0.1	0.05	mg/L	U *	0.1			Vinton	315501	2013
Premium Solvent	Vinyl Chloride	180-25917-1	0.1	0.05	mg/L	U	0.1			Raleigh	317101	2013
Premium Solvent	Vinyl Chloride	180-22177-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2013
Premium Solvent	Vinyl Chloride	180-2878-1	0.1	0.05	mg/L	U	0.1			Dodge City	619503	2011
Premium Solvent	Vinyl Chloride	180-2668-1	0.1	0.05	mg/L	U	0.1			Chandler	714201	2011
Premium Solvent	Vinyl Chloride	180-2454-1	0.1	0.05	mg/L	U	0.1			Tulsa	619301	2011
Premium Solvent	Vinyl Chloride	180-2367-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	612401	2011
Premium Solvent	Vinyl Chloride	180-2221-1	0.1	0.05	mg/L	U	0.1			Clackamas	714801	2011
Premium Solvent	Vinyl Chloride	180-2186-1	0.1	0.05	mg/L	U	0.1			Tampa	316301	2011
Premium Solvent	Vinyl Chloride	180-1866-1	0.1	0.05	mg/L	U	0.1			Farmington	700804	2011
Premium Solvent	Vinyl Chloride	180-1899-1	0.1	0.05	mg/L	U	0.1			Syracuse	218701	2011
Premium Solvent	Vinyl Chloride	180-1685-1	0.1	0.05	mg/L	U	0.1			Omaha	512701	2011
Premium Solvent	Vinyl Chloride	180-1535-1	0.1	0.05	mg/L	U	0.1			Wichita	619501	2011
Premium Solvent	Vinyl Chloride	180-1536-1	0.1	0.05	mg/L	U	0.1			Grand Island	506501	2011
Premium Solvent	Vinyl Chloride	180-1346-1	0.1	0.05	mg/L	U	0.1			St. Pauls	303102	2011
Premium Solvent	Vinyl Chloride	180-1150-1	0.1	0.05	mg/L	U	0.1			Sacramento	715701	2011
Premium Solvent	Vinyl Chloride	180-1124-1	0.1	0.05	mg/L	U	0.1			Albuquerque	700801	2011
Premium Solvent	Vinyl Chloride	C1D290517001	0.1	0.05	mg/L	U	0.1			Lackawanna	202801	2011
Premium Solvent	Vinyl Chloride	C1E030546001	0.1	0.05	mg/L	U	0.1			Archdale	306401	2011
Premium Solvent	Vinyl Chloride	C1D200409001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Vinyl Chloride	C1D140573001	0.1	0.05	mg/L	U	0.1			Barre	210501	2011
Premium Solvent	Vinyl Chloride	C1C100616001	0.1	0.05	mg/L	U	0.1			Cohoes	200401	2011
Premium Solvent	Vinyl Chloride	180-9899-1	0.1	0.05	mg/L	U	0.1			Barre	7015	2012
Premium Solvent	Vinyl Chloride	180-9967-1	0.1	0.05	mg/L	U	0.1			Cohoes	7046	2012
Premium Solvent	Vinyl Chloride	180-10339-1	0.1	0.05	mg/L	U	0.1			Avon	7048	2012
Premium Solvent	Vinyl Chloride	180-11568-1	0.1	0.05	mg/L	U	0.1			Charlotte	7055	2012
Premium Solvent	Vinyl Chloride	180-10888-1	0.1	0.05	mg/L	U	0.1			St. Pauls	7087	2012
Premium Solvent	Vinyl Chloride	180-10018-1	0.1	0.05	mg/L	U	0.1	45	73	Archdale	7088	2012
Premium Solvent	Vinyl Chloride	180-12866-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Vinyl Chloride	180-4888-1	0.1	0.05	mg/L	U	0.1			Chesapeake	7089	2012
Premium Solvent	Vinyl Chloride	180-13029-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	Vinyl Chloride	180-4889-1	0.1	0.05	mg/L	U	0.1			Chester	7090	2012
Premium Solvent	Vinyl Chloride	180-4902-1	0.1	0.05	mg/L	U	0.1			Vinton	7091	2012
Premium Solvent	Vinyl Chloride	180-9962-1	0.1	0.05	mg/L	U	0.1			Raleigh	7092	2012
Premium Solvent	Vinyl Chloride	180-13439-1	0.1	0.05	mg/L	U	0.1			Oklahoma City	7104	2012
Premium Solvent	Vinyl Chloride	180-12590-1	0.1	0.05	mg/L	U	0.1			Tulsa	7105	2012
Premium Solvent	Vinyl Chloride	180-11642-1	0.1	0.05	mg/L	U	0.1			Grand Island	7107	2012
Premium Solvent	Vinyl Chloride	180-14162-1	0.1	0.05	mg/L	U	0.1			Wichita	7112	2012
Premium Solvent	Vinyl Chloride	180-10007-1	0.1	0.05	mg/L	U	0.1			Boise	7114	2012
Premium Solvent	Vinyl Chloride	180-11338-1	0.1	0.05	mg/L	U	0.1			Santa Ana	7117	2012
Premium Solvent	Vinyl Chloride	180-11559-1	0.1	0.05	mg/L	U	0.1			Albuquerque	7133	2012
Premium Solvent	Vinyl Chloride	180-12755-1	0.1	0.05	mg/L	U	0.1			Chandler	7134	2012

Premium Solvent	Vinyl Chloride	180-14306-1	0.1	0.05	mg/L	U	0.1	Sacramento	7138	2012
Premium Solvent	Vinyl Chloride	180-12189-1	0.1	0.05	mg/L	U	0.1	Farmington	7179	2012
Premium Solvent	Vinyl Chloride	180-20856-1	0.2	0.1	mg/L	U	0.2	Boise	118308	2013
Premium Solvent	Vinyl Chloride	180-21252-1	0.2	0.1	mg/L	U	0.2	Oklahoma City	612401	2013
Premium Solvent	Vinyl Chloride	180-25504-1	0.2	0.1	mg/L	U	0.2	Sacramento	715701	2013
Premium Solvent	Vinyl Chloride	180-24151-1	0.2	0.1	mg/L	U	0.2	Wichita	619501	2013
Premium Solvent	Vinyl Chloride	180-2356-1	0.2	0.1	mg/L	U	0.2	Boise	118308	2011
Premium Solvent	Vinyl Chloride	180-591-1	0.2	0.1	mg/L	U	0.2	Charlotte	303101	2011
Premium Solvent	Vinyl Chloride	C1D280567001	0.2	0.1	mg/L	U	0.2	Avon	202802	2011
Premium Solvent	Vinyl Chloride	180-13289-1	0.2	0.1	mg/L	U	0.2	Vinton	7091	2012
Premium Solvent	Vinyl Chloride	180-14205-1	0.2	0.1	mg/L	U	0.2	Tallahassee	7094	2012
Premium Solvent	Vinyl Chloride	180-14023-1	0.2	0.1	mg/L	U	0.2	Omaha	7157	2012
Premium Solvent	Vinyl Chloride	180-14585-1	0.2	0.1	mg/L	U	0.2	Dodge City	7178	2012
Premium Solvent	Vinyl Chloride	480-20539-1	9.9	4.95	mg/L	U	0.1	Lackawanna	202801	2012

Exhibit C-15

Annual Recharacterization Data
Key of Terms

General information: The macro will use the last 3 years of analytical data in the non-parametric statistical analysis developed by Dr. Gibbons. For example, the National Waste Codes for 2012 were based on data from 2011, 2010, and 2009. Ideally, 50 data points will be available for each waste stream, but at least 30 are required. If 30 data points are not available for a stream for the last 3 years, then data from earlier years will be used.

STATE:	State where the Safety-Kleen facility resides where the sample was pulled.
CLIENT_ID:	Type of sample collected.
PARAMETER:	The parameter for which the results are reported for the line.
BRANCH_ID:	The Safety-Kleen assigned Branch Number where the sample was pulled.
LAB_SAMPLE_ID:	Lab assigned identifier for the sample.
RESULT:	Actual lab result from the sample analytical.
RANKED DATA:	The result used in the data ranking for the sample type. This RANKED DATA will be equal to the RESULT for most entries. The RANKED DATA will differ from the actual RESULT when the RESULT indicates a non-detect. In these situations, the RANKED DATA will be one half the RESULT. For example, if the lab reports Tetrachloroethylene (D039) for a given sample as "<1.0 ppm", a concentration of 0.5 ppm will be used in the statistical analysis.
UNITS:	The unit of measure for the RESULT, RANKED DATA, and REPORTING LIMIT.
QUALIFIERS:	<p>B – Sample tested positive for a given parameter and the associated analytical/method blank was contaminated with the parameter in question</p> <p>E – Concentration of parameter exceeds highest calibration standard for method in question. Sample requires dilution and re-analysis.</p> <p>H – Hold time exceeded for parameter in question</p> <p>J - Result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value.</p> <p>U - Indicates the parameter was analyzed for but not detected above the lab's reporting limit (RL) (U is equivalent to a less than sign <)</p>
REPORTING LIMIT:	A lab's reporting limit (RL) is typically equivalent to the lowest concentration analytical standard used to calibrate a piece of analytical equipment (e.g., gas chromatograph) for a given parameter. The method detection limit (MDL) for a given parameter, on the other hand, is statistically derived. Labs will typically only report concentrations that exceed the RL. If the lab detects and reports a concentration between the MDL and the RL, it will be flagged with a "J" qualifier, designating an <u>approximate</u> concentration.
Uth:	The 90% UCL for the mean concentration obtained from a series of <i>n</i> representative samples
YEAR:	The year the sample for the data point was originally collected.
COUNT:	Number of data points used in the statistical analysis for a given parameter (<i>n</i> representative samples)
CITY:	City where the Safety-Kleen facility resides where the sample was pulled.

Exhibit C-16

AR Waste Name - Data Cross Reference

Exhibit C-16 Waste Name - Data Cross Reference

Waste Name	AR Data Header	F Code Waste Constituent of Concern
Aqueous Brake Cleaner	ABC	N/A
Aqueous Part Washer	APW	N/A
Used Parts Washer Solvent 150	Premium if Drum, PWS Bulk Tank if in Tank	N/A
Parts Washer Solvent Tank Bottoms	PWS Tank Bottoms	N/A
Used Antifreeze	Antifreeze	N/A
Parts Washer Solvent Dumpster Sludge	Dumpster Sludge	N/A
Used Immersion Cleaner	IC_Petroleum	N/A
Dry Cleaning Waste (Perc)	DC Perc Bottoms	F002 Perchloroethylene
Dry Cleaning Waste (Naphtha)	DC Naphtha Bottoms	F002 Perchloroethylene
Paint Gun Cleaner	Paint Gun_Cleaner	F003 Acetone, Xylene, Methyl Isobutyl Ketone, Ethyl Acetate, n-Butyl Alcohol, Ethyl Benzene, Methanol F005 Toluene, Methyl Ethyl Ketone
Clear Choice Paint Gun Cleaner	Paint Gun_Cleaner	F003 Acetone
Paint Waste Other	Paint Gun_Cleaner	F003 Acetone, Xylene, Methyl Isobutyl Ketone, Ethyl Acetate, n-Butyl Alcohol, Ethyl Benzene, Methanol F005 Toluene, Methyl Ethyl Ketone

UHCs are found at the end of the waste stream's data in Exhibit C-4.1

Exhibit C-18

Machine Placement Document
Waste Agreement



Machine Placement Document Waste Agreement

Exhibit C-18

BEFORE USING SAFETY-KLEEN SOLVENTS, CLEANING SOLUTIONS OR EQUIPMENT, READ ALL APPLICABLE MATERIAL SAFETY DATA SHEETS (MSDS) LABELS, AND INSTRUCTIONS. IF YOU HAVE ANY QUESTIONS OR NEED ADDITIONAL INFORMATION PLEASE CONTACT YOUR LOCAL SAFETY-KLEEN SERVICE CENTER OR CALL 1-800-669-5740.

GENERAL TERMS AND CONDITIONS

The following general terms and conditions ("General Terms") apply to all services provided by Safety-Kleen Systems, Inc. or any of its subsidiaries and affiliates (collectively "SK"). To the extent that the General Terms conflict with any term or condition of an executed agreement between SK and Customer (the "Agreement"), the terms and conditions of the Agreement shall govern to the extent of such conflict.

1. Compliance. (a) Customer acknowledges placement of the equipment and materials, including, but not limited to containers, solvents, and aqueous cleaning solutions, listed in a SK placement form, service acknowledgement, invoice, or similar agreement ("Equipment"). Customer agrees that all servicing, repair and maintenance of Equipment will be performed only by SK. All SK owned or provided Equipment ("SK Property") will remain the property of SK and will be returned to SK upon termination of service. Customer agrees to pay for replacement of SK Property due to loss or damage. All Customer-owned equipment will be serviced by SK, but will be maintained, repaired by, and remain the property of Customer. (b) Customer agrees that it will not (i) introduce any substance into the SK Property, including, without limitation, any hazardous waste or hazardous waste constituent, except to the extent such introduction is incidental to the normal use of the SK Property, and (ii) place parts or paint guns that have been contaminated with, or otherwise introduce, polychlorinated biphenyls ("PCBs"), herbicides, pesticides, dioxins, or listed hazardous wastes into the solvent or aqueous cleaning solution. (c) Customer will submit a separate description ("Material Profile") for each waste material tendered or delivered by Customer to SK ("Waste"). Customer, upon request by SK, will submit a sample of the Waste described in the Material Profile with the Material Profile. Customer acknowledges and agrees that SK bases its testing, evaluation, collection, handling, and processing procedures on the description of the Waste contained in the Material Profile. Customer agrees not to mix the Waste with any other materials (including, without limitation, materials containing PCBs) or otherwise alter the characteristics of the Waste. Customer will inform SK of any process changes that may alter the characteristics of the Waste. (d) If Customer disposes of aqueous cleaning solutions provided by SK at Customer's site ("On-site Disposal"), title to such aqueous cleaning solutions will pass to Customer at the time of the On-site Disposal. (e) If Customer requests oil services, Customer will properly classify the Waste as used oil or nonhazardous waste in accordance with all applicable laws, rules, and regulations, including, but not limited to the provisions of 40 CFR 262.11. (f) Safety-Kleen has the capacity and is permitted to accept, store, transport and/or reclaim the spent solvents provided to Customer hereunder.

2. Customer Agreements, Representations and Warranties: Customer agrees, represents, and warrants that: (a) Customer is and will remain in compliance with all requirements of any laws, rules, regulations or ordinances applicable to the rights or obligations contained in these General Terms ("Applicable Laws"). (b) When Customer is responsible for packaging and marking the Waste, Customer will describe, code, package and label the Waste in accordance with all Applicable Laws. (c) All Material Profiles are and will be true, accurate and complete and the Waste will conform to the Material Profile. If the Waste does not conform to the description contained in the Material Profile or if any packaging and/or marking provided by Customer is not in accordance with Applicable Laws (i) the Waste will be considered nonconforming and (ii) SK may, in its sole discretion, refuse to accept, or revoke its acceptance of such nonconforming Waste. A revocation of acceptance will operate to revert title, risk of loss, and all other incidents of ownership in or to such nonconforming Waste in Customer at the time of revocation. Customer will be subject to a nonconforming waste charge, including the cost of equipment decontamination and subsequent disposal. (d) The SK service acknowledgement, invoice, or similar form signed by Customer will accurately reflect the type and quantity of Wastes generated by Customer and Customer's generator status. (e) When SK provides its nonhazardous parts cleaner, paint gun cleaner, paint waste, or fluid recovery service to Customer, the solvent, aqueous cleaning solution, paint waste, fluid or other non-hazardous waste ("Nonregulated Waste") has not been and will not be mixed, combined or otherwise blended in any quantity with any material that would render the Nonregulated Waste hazardous under Applicable Laws and certifies that the Nonregulated Waste was generated in the same process that generated the Nonregulated Waste that was sampled and analyzed by SK to qualify the Nonregulated Waste for nonhazardous treatment. (f) Customer grants to SK reasonable access to Customer's premises for purposes of providing services.

3. Indemnification. (a) SK agrees to indemnify, hold harmless and defend Customer from and against any and all liabilities, claims, penalties, and the reasonable costs and expenses incident thereto, which Customer may hereafter incur, become responsible for, or pay out as a result of death or bodily injury to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of Applicable Laws, to the extent that such liability was caused by: (i) SK's breach of any term or provision of these General Terms or (ii) any negligent act or omission or willful misconduct of SK or its employees or agents. (b) To the extent any liability or loss is incurred by SK as a result of (i) Customer's breach of any term or provision of these General Terms; (ii) the failure of any representation or warranty of Customer to be true, accurate and complete; or (iii) any negligent act or omission or willful misconduct of Customer or its employees or agents, Customer will indemnify, hold harmless and defend SK from and against any and all liabilities, claims, penalties, suits, (including all costs and expenses incident thereto), for bodily injury, property damage, contamination of or adverse effects on the environment, or any violation of Applicable Laws. (c) In the event that any claims, penalties, losses, damages, costs, expenses and other liabilities referred to above are contributed to by the breach of contract, negligence, willful misconduct or violation of law of both SK and Customer, the parties agree that all such claims, penalties, losses, damages, costs, expenses and other liabilities will be apportioned among the parties on the basis of their comparative degrees of fault. (d) SK will not be liable for any special, indirect, incidental or consequential damages, whether based in contract, warranty, indemnity or tort, negligence or strict liability.

4. Payment Terms. Customer agrees to pay SK according to SK's standard price schedules, which are subject to change from time to time, without notice. Applicable taxes or similar assessments are not included in the service prices as quoted and will be billed separately on invoices. SK may, in its sole discretion, charge a reasonable fuel surcharge. Payments are due upon Customer's receipt of a service acknowledgment, invoice, or similar document. Amounts due that are not paid within 30 days are subject to an interest charge equal to the lesser of 1.5% per month (18% per annum) or the maximum rate allowed by law.

5. Miscellaneous Terms. Any waiver by either party of any provision or condition of these General Terms will not be construed or deemed to be a waiver of any other provisions or conditions. If any section of these General Terms is found to be unenforceable, such finding will not affect the enforceability of any other section or these General Terms as a whole. The paragraph headings in these General Terms do not in any manner affect these General Terms. The parties agree that preprinted terms and conditions on a Customer purchase or work order will be of no force and effect, even if signed by both parties. If any legal action is commenced because of an alleged dispute, breach, default or misrepresentation, the prevailing party will be entitled to recover attorney's fees.

Customer Name

Customer's Authorized Signature

Date

Printed Name and Title

Exhibit C-19

Sales/Service Document
Waste Agreement

Sales/Service Receipt Waste Agreement - Example

Customer certifies that (i) the above-named materials are properly classified, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and (ii) no material change has occurred either in the characteristics of the waste/material or in the process

generating the waste/material. Customer agrees to pay the above charges and to be bound by the terms and conditions (1) set forth in (a) the General Terms and Conditions provided separately to Customer or (b) any SK agreement signed by Customer and SK, and (2) incorporated herein by reference. Unless otherwise indicated in the payment received section, SK is authorized to charge Customer's account for this transaction. Customer certifies that the individual signing this Service Acknowledgement is duly authorized to sign and bind Customer. The following provision is applicable to Safety-Kleen's parts cleaner and paint gun cleaner services: Customer agrees that it will not introduce any substance into the solvent or aqueous cleaning solution, including without limitation any hazardous waste or hazardous waste constituent, except to the extent such introduction is incidental to the normal use of the machine. Customer further agrees that it will not clean parts/paint guns that have been contaminated with or otherwise introduce polychlorinated biphenyls (PCB's), herbicides, pesticides, dioxins or listed hazardous waste into the solvent or aqueous cleaning solution. Safety-Kleen has the capacity and is permitted to accept, store, and/or reclaim the spent parts washer solvent; paint thinners, solvents and paints generated by customer; or dry cleaning filter cartridges, powder, and still residues containing perchloroethylene, petroleum naphtha, or trifluorotrichloroethane dry cleaning solvents. Customer agrees that it is responsible for properly classifying its waste streams as Used Oil or Nonhazardous Waste in accordance with the provision of 40 CFR 262.11 and applicable state laws. Customer agrees that it will not introduce any non-conforming substance into the SK Property, including, without limitation, any hazardous waste or hazardous waste constituent, (i.e., polychlorinated biphenyls ("PCBs"), herbicides, pesticides, dioxins, or listed hazardous wastes) except to the extent such introduction is incidental to the normal use of the SK Property. In the event of the introduction of such non-conforming hazardous waste, Customer agrees that it will be responsible for all costs and remediation expenses related to or arising from the proper management and disposal of the non-conforming waste, including the cost of equipment decontamination and subsequent disposal. If any legal action is commenced because of an alleged dispute, breach, default or misrepresentation, the Customer also agrees that the prevailing party will be entitled to recover reasonable attorney's fees and costs associated with the non-conforming contamination event. Safety-Kleen's failure to screen Customer's material or take a retain sample, in no way constitutes a waiver of Customer's obligation to properly classify its materials. Safety-Kleen relies on Customer's representations and Customer is responsible for informing Safety-Kleen of any process changes that may alter the characteristics of the materials provided. IN THE EVENT OF AN EMERGENCY CALL 24 HR EMERGENCY # 1-800-468-1760 (Safety-Kleen)

CUSTOMER SIGNATURE

Exhibit C-20

ODEQ Used Antifreeze Policy



Hazardous Waste/Toxics Use Reduction Policy Clarification



POLICY: Used Antifreeze Management

POLICY NUMBER: 97-004

EFFECTIVE DATE: November 21, 1997

PURPOSE

The Department is concerned that the burden faced by generators in determining what constitutes a representative sample of various antifreeze wastestreams, and the expense of conducting analytical analyses for hazardous waste determinations impedes recycling efforts. The purpose of this policy is to encourage environmentally sound recycling of used antifreeze and promote antifreeze management activities that are protective of human health and the environment. Generators may follow the best management practices outlined in this policy to ensure compliance with the State's hazardous waste regulations.

Based on available analytical studies the Department finds that used antifreeze generated from motor vehicles, motorized equipment, industrial/commercial processes and deicing activities, that is recycled and managed according to the best management practices outlined herein, generally does not exhibit hazardous waste characteristics. Therefore, used antifreeze managed according to these best management practices will be presumed to be managed in accordance with the State's hazardous waste regulations.

To promote recycling the Department intends to adopt rules to allow an alternative management program for antifreeze that is recycled. In the interim, this policy is adopted to provide guidance regarding used antifreeze management.

APPLICABILITY

This policy is applicable to generators and recyclers of used antifreeze. Used antifreeze is defined as a solution of ethylene glycol or propylene glycol, water and additives, which has been used as a coolant in motor vehicles or motorized equipment (either stationary or mobile), industrial/commercial processes, or as a deicing material. For purposes of this policy, qualifying recycling activities include the filtering, distillation, and addition of additives to processed antifreeze to make a useable glycol product.

This policy statement is intended solely as guidance for employees of the Department of Environmental Quality (DEQ). It does not constitute rulemaking by the Environmental Quality Commission and may not be relied upon to create a right or benefit, substantive or procedural, enforceable by law or in equity, by any person.

POLICY DESCRIPTION

Used antifreeze that is recycled on-site or off-site shall be presumed to be managed in accordance with 40 CFR 262 - 270 and OAR Chapter 340 Division 100 - 106, provided the following best management practices are employed to ensure protection of human health and the environment. Used antifreeze that is to be recycled does not count toward monthly hazardous waste generator totals.

Used Antifreeze Best Management Practices

1. Immediately contain used antifreeze and store it in compatible containers that are in good condition and labeled "Used Antifreeze."
2. Used antifreeze must not be mixed with any waste or other material (e.g., solvents, cooling system flushes, used oil, motor fuels).
3. Antifreeze collection, storage and transport containers or tanks must be dedicated solely to the transfer and storage of antifreeze, in order to minimize the risk of cross-contamination.
4. Used antifreeze containers must be kept closed, except when emptying or filling, to minimize the potential for spillage.
5. Used antifreeze containers must be located in a secure area and properly maintained so that they do not leak, rupture, or tip over when being opened, handled, or stored.
6. Spills of used antifreeze must be cleaned up immediately and appropriately managed. (Non-recyclable spill cleanup wastes must undergo a hazardous waste determination prior to disposal.)
7. Volumes of accumulated used antifreeze should be minimized by routinely recycling to reduce the potential for environmental harm. Used antifreeze shall not be stored for longer than 12 months prior to recycling.
8. Proof of recycling (e.g., a log for on-site recycling or an invoice or bill of lading for off-site recycling) must be maintained by the generator and recycling facility.
9. Generators shall inform employees who handle or otherwise manage used antifreeze of proper handling and spill response procedures.

Used antifreeze that is not legitimately recycled according to all of the above best management practices is subject to applicable regulation under 40 CFR Parts 260 - 270 (OAR Chapter 340 Divisions 100-106 and 111). Used antifreeze mixed with other waste or material, such as mixing automobile antifreeze with caustic radiator flushing chemicals, or mixing antifreeze with used oil for the purpose of burning for energy recovery, is not considered legitimate recycling under this policy. Generators are responsible for conducting hazardous waste determinations for these used antifreeze wastes. If the waste is determined to be a hazardous waste it must be managed and properly disposed of as such.

Transportation of Used Antifreeze

Used antifreeze destined for recycling as delineated by this policy is presumed to be managed in accordance with the state's hazardous waste management requirements. Transportation of used antifreeze that has been managed by a generator in accordance with this policy does not require a hazardous waste manifest in Oregon. Generators may self-transport their antifreeze to a collection or recycling facility. Generators transporting used antifreeze outside of Oregon must comply with the laws of the receiving state(s).

Antifreeze Recycling Facilities

Generators may recycle their antifreeze on-site or transport it to an off-site facility approved to process used antifreeze by the EPA or the State authority for the facility's location. A hazardous waste determination must be made on any antifreeze waste which is not recyclable and any residues from the distillation/recycling of used antifreeze, including still bottoms and filters generated from recycling process equipment.

Off-site commercial antifreeze recycling facilities in Oregon are required to obtain and operate in accordance with a site-specific solid waste permit. Recycling facilities must maintain records adequate to document that received antifreeze has been recycled, including information regarding shipments and quantities received, amounts treated, wastes generated, waste shipped, product recovered, and product shipped. Commercial recycling facilities will not be required to conduct a hazardous waste determination on used antifreeze received provided the recycling facility manages and legitimately recycles the antifreeze in accordance with these best management practices and the operating permit.

POINT OF CONTACT:

Questions on implementation of this policy should be directed to Rick Volpel at (503) 229-6753.

Used Antifreeze

Why is used antifreeze a concern?

Antifreeze is a common engine coolant used in automobiles. It usually contains ethylene glycol or propylene glycol. Small amounts of ethylene glycol can cause health problems if swallowed by people or pets. Environmental contamination can occur when antifreeze is improperly disposed of or handled. Spent antifreeze poured onto the ground or into septic systems may eventually contaminate the groundwater. Antifreeze poured into storm drains, ditches, streams, lakes, etc., will contaminate surface water. Improper disposal may also result in drinking water supplies becoming contaminated.

How is used antifreeze regulated?

Used antifreeze that is generated by businesses, institutions or public agencies is subject to applicable state and federal hazardous waste management requirements. Under these requirements generators must determine if their wastes are hazardous. Refer to DEQ's Waste Determination Fact sheet for more information at www.deq.state.or.us/lq/pubs/factsheets/hw/HazardousWasteDetermination.pdf. Management of used antifreeze produced by household "Do-It-Yourselfers" is not subject to these management requirements, and is discussed at the end of this fact sheet.

Oregon's antifreeze policy

The Oregon Department of Environmental Quality (DEQ) has determined that used antifreeze that is recycled and properly managed according to the following "Best Management Practices" (BMPs) generally will not exhibit hazardous waste characteristics. Waste antifreeze managed according to the following practices will not be considered to be hazardous waste by the DEQ.

Used antifreeze Best Management Practices

Generators that use the following Best Management Practices and legitimately recycle their used antifreeze are presumed by DEQ, to comply with hazardous waste management requirements. Make sure that:

- Used antifreeze is stored in containers that are in good condition and labeled with the words "Used Antifreeze."
- Used antifreeze is not mixed with any waste or other material (e.g., solvents, cooling system flushes, used oil, motor fuels). Used antifreeze must be managed according to applicable hazardous waste regulations if it

has been mixed with listed or characteristic hazardous waste.

- Antifreeze collection, storage and transport containers or tanks are dedicated solely to the transfer and storage of antifreeze, to prevent the risk of cross-contamination.
- Used antifreeze containers are kept closed, except when emptying or filling, to minimize the potential for spillage.
- Used antifreeze containers are located in a secure area and properly maintained so that they do not leak, rupture, or tip over when being opened, handled, or stored.
- Spills of used antifreeze are cleaned up immediately and appropriately managed. (Non-recyclable spill cleanup wastes must undergo a hazardous waste determination before disposal.)
- Volumes of accumulated used antifreeze are minimized by routinely recycling to reduce the potential for environmental harm.
- The used antifreeze generator and the recycling facility maintain proof of recycling (e.g., a log for on-site recycling or an invoice or bill of lading for off-site recycling).
- Employees who handle or otherwise manage used antifreeze know proper handling and spill response procedures.

Used antifreeze that is not legitimately recycled according to the above Best Management Practices is subject to management as a potential hazardous waste. Used antifreeze mixed with other waste or material, such as caustic radiator flushing chemicals or used oil, reduces the recyclability of the antifreeze and is not considered legitimate recycling under this policy.

Antifreeze management options

Acceptable methods for managing used antifreeze include: recycling; disposal at a hazardous waste treatment, storage, or disposal (TSD) facility; or discharge to a wastewater treatment plant (with prior approval of the operator). Please note that many wastewater treatment plant operators prohibit the disposal of used antifreeze to their systems because of the possibility of damaging the treatment system.

Antifreeze should not be disposed of by throwing it in the trash, pouring it down the storm sewer, or putting it into septic systems. Many storm sewers discharge directly to surface waters, such as ponds or streams. If poured into a



State of Oregon
Department of
Environmental
Quality

Land Quality Division
811 SW 6th Avenue
Portland, OR 97204
Phone: (503) 229-5913
(800) 452-4011
Fax: (503) 229-6954
www.oregon.gov/DEQ/



septic system, the antifreeze may damage the system by killing the microorganisms necessary for waste decomposition.

Recycling used antifreeze is the preferred option.

Not only is recycling the most environmentally safe and responsible option, but it may also be more cost efficient than disposing of the waste and buying new product. Widely available antifreeze recycling options include distillation, ion exchange and filtration.

Used antifreeze may be recycled at the generator's facility, or it may be transported to a recycling facility for reclamation.

A hazardous waste determination must be made on all wastes produced by the recycling process, such as filters and sludges, produced by the recycling process and the waste managed appropriately.

Used antifreeze generated by household do-it-yourselfers

Used antifreeze from households should be taken to a hazardous waste collection facility or collection event for proper recycling or disposal.

If you live in the Portland metropolitan area, contact the Metro Recycling Information Center at (503) 234-3000 for used antifreeze disposal/recycling locations. If you live outside the Portland metro area, contact the toll-free hotline at 1-800-732-9253 for facilities that accept used antifreeze for recycling or upcoming household hazardous waste collection events. If collection is not available in your community, contact the local sewer district to see if disposal of small amounts of used antifreeze to the sanitary sewer is permitted. **Never** pour used antifreeze on the ground, down a dry well or storm drain, or in your septic system.

Used antifreeze recycling services

The following companies recycle or dispose of used antifreeze. This list is neither a DEQ endorsement nor a guarantee that the used antifreeze will be managed according to federal or state regulations. It is not a complete list of companies managing used antifreeze in Oregon.

Many of the companies listed also sell recycled antifreeze. When choosing a management company be sure that you know how the used antifreeze is managed and recycled. Not all companies claiming to recycle antifreeze produce a useable recycled product that can be used as a glycol feedstock or antifreeze product. Unusable materials end up being disposed, frequently in a manner that can adversely affect the environment. It is the responsibility of the generator to ensure their waste is managed properly.

Emerald Services

(Vancouver, WA) (888)832-3008

Industrial Oils

(Klamath Falls) (541) 884-9124

MSE Environmental

(Washougal) (206) 767-7990

Oil Rerefining

(Portland) (800) 367-8894

Onyx Environmental Services

(Vancouver, WA) (360) 607-3097

Philip Services Corporation

(Washougal, WA) (800) 547-2436

Romic Environmental / Antifreeze Environmental Service Corp.

(Clackamas) (888) 242-8592

Safety Kleen Systems, Inc.

(Clackamas) (503) 655-5798

(Springfield) (541) 747-5804

Thermo Fluids

(Portland) (503) 788-4612

Univar, USA

(Portland) (503) 222-1721

For more information

For additional information on specific hazardous waste management requirements, contact DEQ's Waste Reduction Assistance Program at the location nearest you:

- **Bend:**
Jeannette Freeman (541) 388-6146 x229
- **Medford:**
Lisa Freeman (541) 776-6010 x239
- **Portland:**
Dave Kunz, (503) 229-5336
Peter Anderson, (503) 229-5564
Rich Grant (503) 229-5560

Alternative Formats

Alternative formats (such as large type or Braille) of this document can be made available. Contact the DEQ Office of Communication and Outreach for more information: (503) 229-5696.

EXHIBIT D

PROCESS INFORMATION

D1-1	Not Used
D1-2	Not Used
D1-3	SK Drum Spreadsheet
D1-4	Flow Diagram for SK's Customer Waste
D1-5	Flow Diagram Gun Cleaner (Paint Waste) at RC
D1-6	Flow Diagram Immersion Cleaner at RC
D1-7	Flow Diagram Dry Cleaner at RC
D1-8	ChemTec One Technical Data Sheet and Epoxy Coating Product Description
D1-9	Secondary Containment Crack Repair Plan
D2-1	Not Used
D2-2	Not Used
D2-3	Vertical Tank Gauging Chart
D2-4	Solvent Pump Piping Installation Details
D2-4.1	Tank Farm-Return & Fill Used Solvent Piping Schematic
D2-4.2	Not Used
D2-5	Tank Farm Shelter Plan with Containment Calculations
D2-6	Not Used
D2-7	Concrete Tank Farm Plan
D2-8	High Level Alarm System Diagram
D2-9	Handling Process for Used Solvent at Branch
D2-10	Process Flow Used Solvent at SK Recycle Center
D2-11	Not Used
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D2-13	Drum Washer Isometric
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D2-15	Not Used
D2-16	Access Container Fabrication Details (Tanker)
D2-17	Marlow Pump Spec Sheets
D2-18	Not Used
D2-19	Used Solvent Tank Installation Assessment Tera 93-409-089
D2-20	Not Used
D2-21	HLA XPS-15 Transducer Diagram
D2-22	Yellow Control Panel 7134-4100-403
D2-23	RF Control Panel SK#5213 Wiring Diagram
D2-24	Tan Drum Washer Control Panel Diagram 7

Exhibit D1-3

Safety-Kleen Drum Spreadsheet

SAFETY-KLEEN DRUMS

Exhibit D1-3

SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
13348	Drum	Steel	16	X	X	X	X	X			Body 20, bottom 18	Red-O.H.	Rust inhibitor, inside bottom head epoxy-phenolic (L-15X)	Rust inhibitor	1A2/Y1.6/200	Parts Washer
3348	Drum	Steel	16	X	X	X	X	X			Body 20, bottom 18	Red	Rust inhibitor	Rust inhibitor	UN exempt	Parts Washer
3348	Drum	Steel	16		X	X	X	X			Body 20, bottom 18	Red	Rust inhibitor	Rust inhibitor	UN exempt	Parts Washer
3398	Drum	Steel	16	X	X	X	X	X			19	Red	Rust inhibitor (L-35)	Rust inhibitor	UN exempt	Parts Washer
3264	Drum	Steel	16		X		X	X		X	Drum, cover, bottom 22 gauge	Red (drum with 3/4" flange in side wall, lid color red with 1 2" and 3 3/4" bungs, bolt ring 14 X 18 gauge)	Pigmented 100% phenolic lining			Solvent (Minimizer)
13393	Drum	Steel	16	X	X	X	X	X			Body 20, bottom 18	Green	inside bottom head epoxy-	Rust inhibitor	1A2/Y1.6/200	Parts Washer
3250	Drum	Steel	16	X	X	X	X	X			Body 20, bottom 18	Black	Rust inhibitor lined only	Rust inhibitor	1A2/Y1.6/200	Gas Filter
3324	Drum	Steel	16	X	X		X	X		X	Body 20, bottom 18	Black (White lid with 2" center bung SK part # 3225, ring is 12 gauge SK part # 3389)	Rust inhibitor lined only	Rust inhibitor	1A2/Y1.6/200	FRS
3387	Drum	Steel	16		X		X		X		Straight 18	Gray (4 brackets spot welded)			1A2/Y1.6/200	Immersion Cleaner
3362	Drum	Steel	16			X	X	X		X	Straight 20	Black with 3/4" and 2" bungs	Purchased as new no lining	100 % phenolic (9967 and 9968)	1A1/Y1.2/100	Paint Refinishing
9967	Drum	Steel	16			X	X	X		X	Straight 20	Yellow with 3/4" and 2" bungs (Litho-Multi use US)	100 % phenolic	Rust inhibitor	1A1/Y1.8/300	Paint/Thinner (6568)
9968	Drum	Steel	16			X	X	X		X	Straight 20	Yellow with 3/4" and 2" bungs (Litho-Multi use Can)	100 % phenolic	Rust inhibitor	1A1/Y1.8/300	Paint/Thinner (6568)

SAFETY-KLEEN DRUMS

SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
13349	Drum	Steel	30	X	X		X	X			Straight 18	Red	Rust inhibitor, inside bottom head epoxy-phenolic (L-15X)	Rust inhibitor	1A2/Y1.6/100	Parts Washer
3349	Drum	Steel	30	X	X		X	X			Straight 20	Red	Rust inhibitor	Rust inhibitor	UN exempt	Parts Washer
3349	Drum	Steel	30	X	X		X	X			Body 20, bottom 18	Red	Rust inhibitor	Rust inhibitor	UN exempt	Oil Recovery, Parts Washer
3399	Drum	Steel	30	X	X		X	X			Body 20, bottom 18	Red	Epoxy-phenolic (L-35)		UN exempt	Parts Washer
701140	Drum	Stainless Steel	30	X	X		X				22 gauge	Red Stainless Steel				Solvent (Minimizer)
13395	Drum	Steel	30	X	X		X	X			Straight 18	Green	Rust inhibitor, inside bottom head epoxy-phenolic (L-15X)	Rust inhibitor	1A2/Y1.6/100	Parts Washer
3395	Drum	Steel	30	X			X	X			Straight 20	Green	Rust inhibitor	Rust inhibitor	UN exempt	Parts Washer
3395	Drum	Steel	30	X	X		X	X			Body 20, bottom 18	Green	Rust inhibitor	Rust inhibitor	UN exempt	Oil Recovery, Parts Washer
3391	Drum	Steel	30	X	X		X			X	Straight 18	Yellow w/label (Yellow lid with 2" bung standard location SK part # 3218, ring is 12 gauge SK part # 3342)	Rust inhibitor	Rust inhibitor	1A2/Y1.6/100	Absorbent
3391	Drum	Steel	30	X	X		X			X	Straight 18	Yellow w/label (Yellow lid with 2" bung standard location SK part # 3218, ring is 12 gauge SK part # 3342)	Rust inhibitor	Rust inhibitor	1A2/Y1.6/100	Absorbent
3392	Drum	Steel	30	X	X		X				Straight 18	Yellow (no/label)	Rust inhibitor	Rust inhibitor	1A2/Y1.6/100	Absorbent
3252	Drum	Steel	30	X	X		X				Straight 18	Black	Rust inhibitor	Rust inhibitor	1A2/Y1.6/100	Gas Filler

SAFETY-KLEEN DRUMS

SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
3345	Drum	Steel	30	X	X			X		X	Straight 18	Black (White lid with 2" center bung SK part # 3245, ring 12 gauge sk part # 3342)	Rust inhibitor	Rust inhibitor	1A2/Y1.6/100	FRS
3360	Drum	Steel	30	X	X		X				Straight 18	Blue	Rust inhibitor	Rust inhibitor, 100% phenolic, 70% phenolic, 30% epoxy	1A2/Y1.6/100	Aqueous Parts Washer
3303	Drum	Steel	30		X			X	X	X	Top 18, body 20, bottom 18	Black with 3/4" and 2" bungs			1A1/Y1.2/100	Paint Refinishing
3369	Drum	Steel	55		X			X	X	X	Top 18, body 20, bottom 18	Black (Black lid with 3/4" bung and 2" bung SK part # 3370, ring is 12 gauge SK part # 3371)			1A2/Y1.8/200, 1A2/Y1.6/150	FRS/Paint Refinishing/Oil Filters
3383	Drum	Steel	55		X			X	X	X	Top 18, body 20, bottom 18	Green	Rust inhibitor	Rust inhibitor	1A2/Y1.8/200, 1A2/Y1.6/150	Oil Filters
8003369	Drum	Steel	55	X	X			X		X	Top 18, body 18-20, bottom 18	Black (Black lid with 3/4" bung and 2" bung SK part # 3370, ring is 12 gauge SK part # 3371)	Rust inhibitor	Rust inhibitor	1A2/Y1.2/100 (US and CAN), Non-UN (CAN)	FRS/Paint Refinishing/Oil Filters
Non-part	Drum	Steel	55		X			X		X	bottom 20	Black	100% Phenolic		1A1/Y1.8/200 (US)	Solvent/Thinner/IC
Non-part	Drum	Steel	55		X			X		X	Top 18, body 20, bottom 20	Black			1A1/Y1.8/300 (US), 1A1/Y1.8/200 (US), 1A1/Y1.2/100 (CAN)	Solvent/Thinner/IC
Non-part	Drum	Steel	55		X			X		X	Top 18, body 18-20, bottom 20	Black				
3300	Drum	Steel	85		X			X		X	Straight 16	Yellow (Yellow lid with 3/4" bung standard location SK part # 3220, ring is 12 gauge SK part # 3221)			1A2/X435/S (US), 1A2/X440/S (CAN)	FRS/Overpack
8003300	Drum	Steel	85						X	X	Straight 16	Yellow (Yellow lid with 3/4" bung standard location SK part # 3220)			1A2/X400-440/S	FRS/Overpack
5415	Drum	Plastic	15	X	X		X					Yellow			1H2/Y80/S	Imaging
15415	Drum	Plastic	15	X	X		X					Black			1H2/Y80/S	TFS
3270	Drum	Plastic	15	X	X		X					Black			1H2/Y1.2/80	Dry Cleaning
3280	Drum	Plastic	15	X	X		X					Black(Split 30)			1H2/Y1.2/80	Dry Cleaning

SAFETY-KLEEN DRUMS

SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
5552	Drum	Plastic	15			X	X			X		Blue with 3/4" and 2" bungs			1H1/1.8/100	Imaging
5430	Drum	Plastic	30	X	X		X					Yellow			1H2/Y100/S	Imaging
15430	Drum	Plastic	30	X	X		X					Black			1H2/Y100/S	TFS
5553	Drum	Plastic	30			X				X		Blue with two 2" bungs one NPS and one buttress			1H1/1.8/100	Imaging
5455	Drum	Plastic	55	X	X		X					Yellow			1H2/Y140/S	Imaging
15455	Drum	Plastic	55	X	X		X					Black			1H2/Y140/S	TFS
5555	Drum	Plastic	55			X				X		Blue with two 2" bungs one NPS and one buttress			1H1/1.8/100	Imaging
Non-part	Drum	Plastic	55			X						Blue cut out OH			Exempt	RC waste
8500	Drum	Plastic	95	X	X							Yellow--Salvage Drum			1H2/X/340 S	Overpack
8550	Drum	Fiber	5	X	X							Brown			UN1G/X30/S	Lab Pack
8510	Drum	Fiber	10	X	X							Brown			UN1G/X60/S	Lab Pack
8515	Drum	Fiber	15	X	X							Brown			UN1G/X71/S	Lab Pack
8520	Drum	Fiber	20	X	X							Brown			UN1G/Y108/S	Lab Pack
8530	Drum	Fiber	30	X	X							Brown			UN1G/X75/S	Lab Pack
3388	Lid	Steel	16					X			Straight 18	Epoxy gray (SK drum 3387)				Immersion Cleaner
3213	Lid	Steel	16				X				Straight 18	Red (SK drum 13348 and 3348)				Parts Washer
103320	Lid	Steel	16			X					Straight 20	Red (SK drums 3398 and 3348)				Parts Washer, Oil Recovery
3217	Lid	Steel	16			X					Straight 18	Green (SK drum 13393)				Parts Washer
3225	Lid	Steel	16			X				X	Straight 18	White with 2" center bung (SK drum 3324)				FRS
3450	Lid	Steel	16			X				X	Straight 18	White with 2" center bung (SK drum 3250)				Gas Filter
230044	Lid	Steel	16					X		X	18 gauge	Purchased non-painted lightly oil, painted black by SK, 3 2" bungs, (SK drum 3324)				Oil recovery (Oil trap)
3214	Lid	Steel	30			X					Straight 18	Red (SK drums 13349, 3349 and 3360)				Parts Washer
103334	Lid	Steel	30			X					Straight 20	Red (SK drum 3399)				Parts Washer, Oil Recovery
3215	Lid	Steel	30			X					Straight 18	Green (SK drum 13395, 3395 and 3360)				Parts Washer
3218	Lid	Steel	30			X			X	X	Straight 18	(SK drum 3392)				Absorbent
3245	Lid	Steel	30			X			X	X	Straight 18	(SK drum 3345)				FRS
3452	Lid	Steel	30			X			X	X	Straight 18	White with 2" center bung (SK drum 3252)				Gas Filter

SAFETY-KLEEN DRUMS

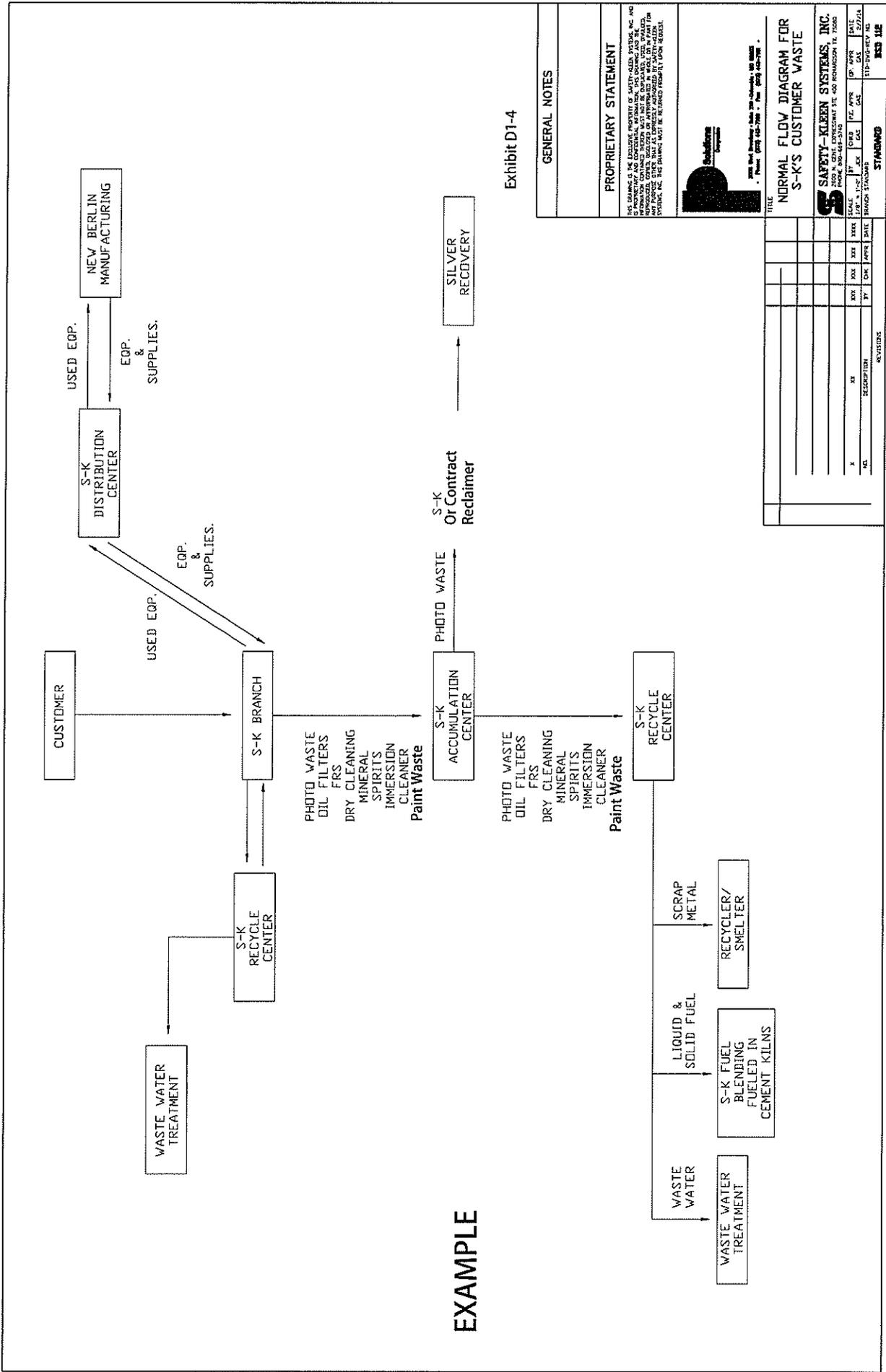
SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
230021	Lid	Steel	30						X	X	18 gauge	Purchased non-painted lightly oil, painted black by SK, 3 2" bungs, (SK drum 3345)				Oil recovery (Oil trap)
3370	Lid	Steel	55						X	X	Straight 16	Black with 3/4" bung and 2" bung (SK drum 3369)				FRS/Paint Refinishing/Oil Filters
230003	Lid	Steel	55						X	X	18 gauge	Purchased non-painted lightly oil, painted black by SK, 3 2" bungs, (SK drum 3369)				Oil recovery (Oil trap)
3220	Lid	Steel	85				X			X	Straight 16	Yellow with 3/4" bung standard location (SK drum 3300)	Epoxy-phenolic			FRS/Overpack Imaging
5471	Lid	Plastic	15							X		Yellow with 2" bung (SK drum 5415)				Imaging
15471	Lid	Plastic	15							X		Black with 2" bung (SK cover for 15415 (black))				Imaging
3272	Lid	Plastic	15				X			X		Black with 2 3/4" vents and combination 2" bung and 3/4" vent (SK drum 3270)	Level 5 Fluorination			Dry Cleaning
5434	Lid	Plastic	30							X		Yellow with 2" bung (SK drum 5430)				Imaging
15434	Lid	Plastic	30							X		Black with 2" bung (SK drum 15430)				Imaging
3282	Lid	Plastic	30				X					Black (SK drum 3280)	Level 5 Fluorination			Dry Cleaning
5476	Lid	Plastic	55						X	X		Yellow with 2" bung (SK drum 5455)				Imaging
15476	Lid	Plastic	55						X	X		Black with 2" bung (SK drum 15455)				Imaging
8501	Lid	Plastic	95					X				Yellow (SK drum 8500)				Overpack
3289	Ring	Steel	16								Straight 12	Lever-lock/bolt(SK part # 3387, 3250, 13348 and 13393)				Parts Washer, Immersion, Gas Filter
3389	Ring	Steel	16								Straight 12	Bolt ring (SK drum 3324)				FRS
3342	Ring	Steel	30								Straight 12	Bolt ring (SK drums 3391, 3392 and 3345)				FRS, Absorbed Filter
3242	Ring	Steel	30								Straight 12	3348, 13395, 3395, 3360 and 3252)				Filter
3371	Ring	Steel	55								Straight 12	Bolt ring (SK drum 3369 and 8003369)				FRS/Paint Refinishing/Oil Filters
3221	Ring	Steel	85								Straight 12	Bolt ring (SK drum 3300 and 8003300)				FRS/Overpack
5472	Ring	Plastic	15								Straight 16	Lever-lock (SK drums 5415/15415)				Imaging
3274	Ring	Plastic	15								Straight 14	Lever-lock (SK drum 3270)				Dry Cleaning
5435	Ring	Plastic	30								Straight 16	Lever lock (SK drums 5430/15430)				Imaging
3284	Ring	Plastic	30								Straight 12	Lever-lock (SK drum 3282)				Dry Cleaning

SAFETY-KLEEN DRUMS

SK Invented Part #	Category	Type	Size (gal)	Nestable	Open-Head	Tight-Head	Drum Only	Lined	Un-lined	Bung Gasket	Gauge	Description	Manufactured Lining	Reconditioned Lining	UN-Rating	Primary Usage
5477	Ring	Plastic	55								Straight 16	Lever-lock (SK drum 5455/15455)				Imaging
3211	Gasket	Nitrile	16									Gasket for 16 gal OH steel drum lids				Parts Washer, FRS, Gas Filter
3212	Gasket	Nitrile	30									Gasket for 30 gal OH steel drum lid				Parts Washer, FRS, Immersion Cleaner, Gas Filter
3273	Gasket	Nitrile	15									Gasket for 15 gal OH plastic drum lid				Dry Cleaning
3283	Gasket	Nitrile	30									Gasket for 30 gal OH plastic drum lid				Dry Cleaning
3372	Gasket	EDPM	55									Gasket for 55 gal OH steel drum lid				FRS/Paint Refinishing/Oil Filters
8503	Gasket	Nitrile	95									Gasket for 95 gal OH plastic drum lid				Overpack

Exhibit D1-4

Container Process Flow at Branch



EXAMPLE

Exhibit D1-4

GENERAL NOTES

PROPRIETARY STATEMENT

THE DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

Safety-Kleen Systems, Inc.
 2500 N. STATE STREET, SUITE 400, ROCKFORD, IL 61103
 PHONE: 815-398-5100 FAX: 815-398-5101

TITLE: **NORMAL FLOW DIAGRAM FOR S-K'S CUSTOMER WASTE**

DATE: _____ BY: _____ DATE: _____

REVISED

NO.	DESCRIPTION	BY	CHK	APPRO	DATE
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STANDARD: **ESD 112**

Exhibit D1-5

Paint Waste Process Flow at Recycle Center

Exhibit D1-6

Immersion Cleaner Process Flow at
Recycle Center

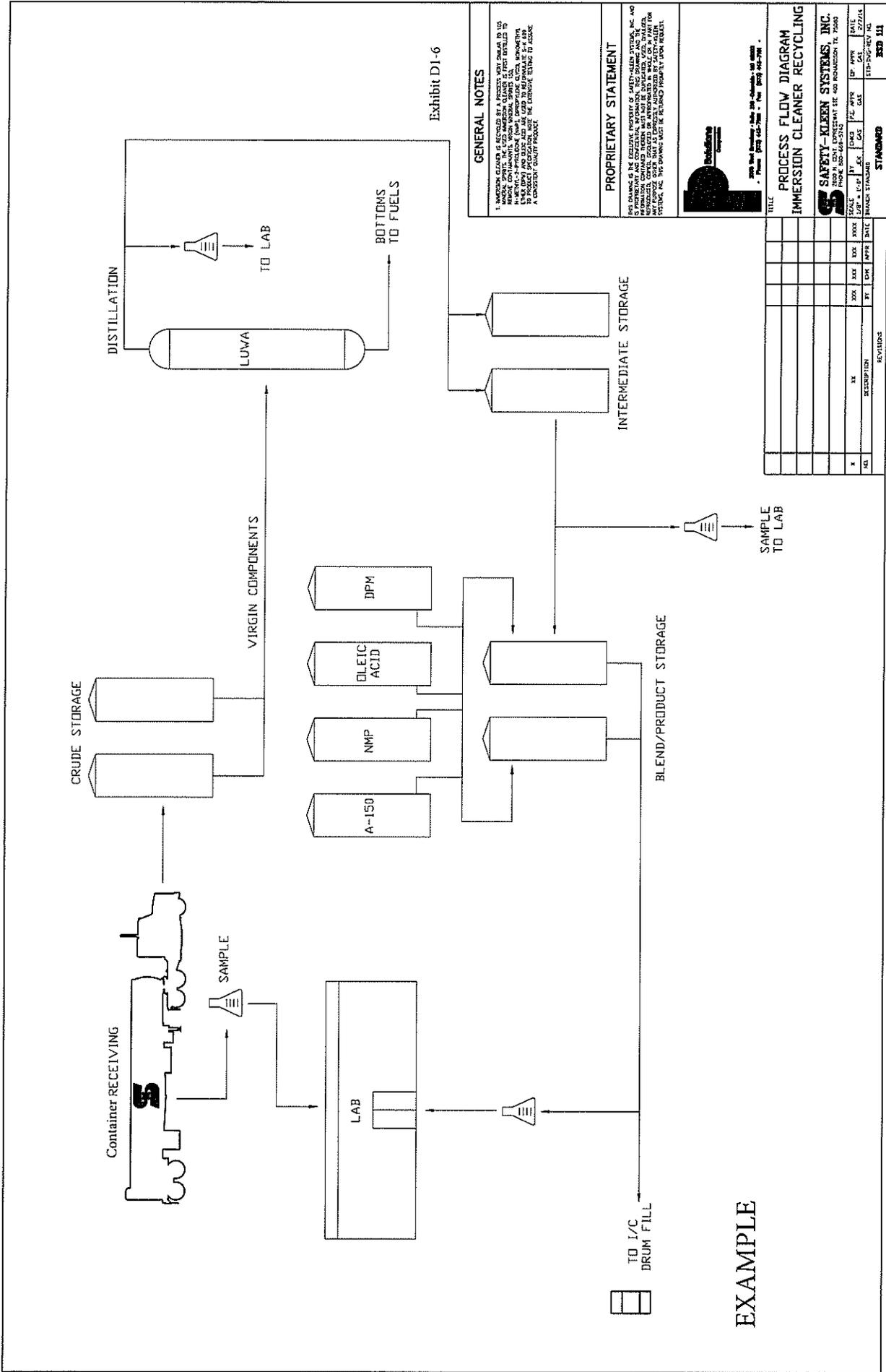


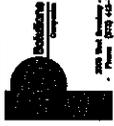
Exhibit D1-6

GENERAL NOTES

1. IMMERSION CLEANER IS RECYCLED BY A PROCESS VERY SIMILAR TO 105 REFINING. CONTAMINANTS WITHIN THE CLEANER ARE REFINED TO REMOVE CONTAMINANTS WITHIN NORMAL SPENTS. THE REFINED CLEANER IS THEN RECYCLED TO BE USED IN THE CLEANING PROCESS. THE REFINED CLEANER IS THEN RECYCLED TO BE USED IN THE CLEANING PROCESS. THE REFINED CLEANER IS THEN RECYCLED TO BE USED IN THE CLEANING PROCESS.

PROPRIETARY STATEMENT

THE DESIGN IS THE SOLE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THE DRAWINGS ARE THE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF SAFETY-KLEEN SYSTEMS, INC. THE DRAWINGS MUST BE RETURNED PROMPTLY UPON REQUEST.



PROCESS FLOW DIAGRAM
IMMERSION CLEANER RECYCLING

SAFETY-KLEEN SYSTEMS, INC.
 3520 N. DENT EXPRESSWAY, FT. WORTH, TEXAS 76107
 PHONE: 817-448-5122 FAX: 817-448-5188

TITLE: _____
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 APPROVED BY: _____

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	ISSUE	EDM	11/14/98
2	REVISED	EDM	11/14/98
3	REVISED	EDM	11/14/98
4	REVISED	EDM	11/14/98
5	REVISED	EDM	11/14/98
6	REVISED	EDM	11/14/98
7	REVISED	EDM	11/14/98
8	REVISED	EDM	11/14/98
9	REVISED	EDM	11/14/98
10	REVISED	EDM	11/14/98

EXAMPLE

Exhibit D1-7

Dry Cleaner Process Flow at
Recycle Center

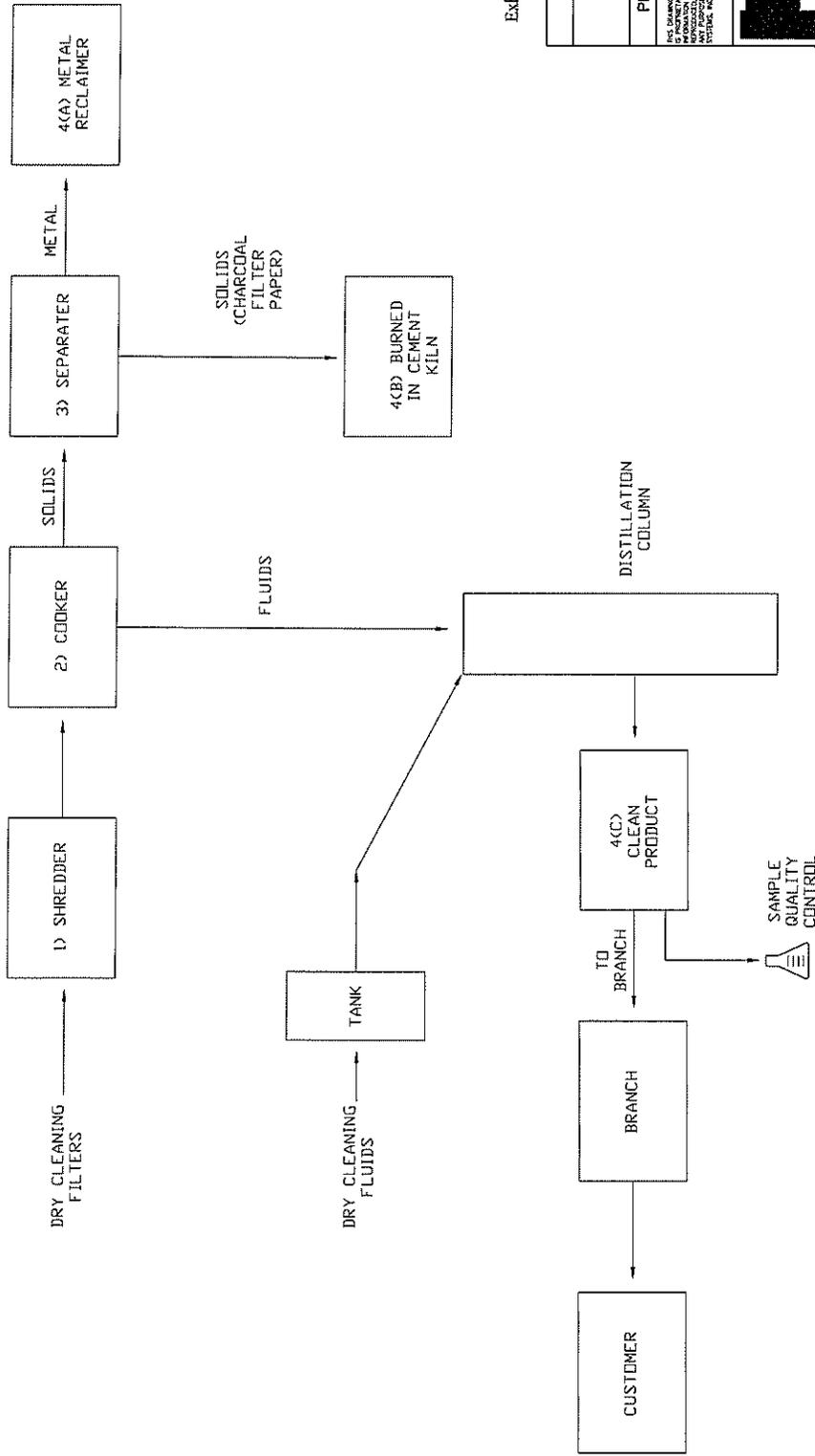


Exhibit D1-7

GENERAL NOTES

PROPRIETARY STATEMENT

THE DRAWINGS ARE THE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS CONFIDENTIAL AND PROPRIETARY INFORMATION. NO REPRODUCTION OR DISSEMINATION OF THIS INFORMATION IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF SAFETY-KLEEN SYSTEMS, INC. THE DRAWINGS MUST BE RETURNED PROMPTLY UPON REQUEST.



TITLE

PROCESS FLOW DIAGRAM FOR DRY CLEANING FILTERS

SAFETY-KLEEN SYSTEMS, INC.
 2400 N. GOLF COURSE BLVD. SUITE 100
 JACKSONVILLE, FL 32216
 PHONE: 904-444-5142
 FAX: 904-444-5141

STANDARD

REVISED

NO.	DATE	DESCRIPTION	BY	CHK	APPR	DATE
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

EXAMPLE

Exhibit D1-8

ChemTec One Technical Data Sheet



TECHNICAL DATA

CHEMTEC INT'L

1. PRODUCT NAME

CHEMTEC ONE™

High Performance Water Based Non-Toxic Chemical Treatment that hardens, strengthens, stabilizes, protects, increases the mass & density and extends the useful life of concrete structures.

2. MANUFACTURER

CHEMTEC INT'L INC.

7771 Woodstone Drive, Suite 100
Cincinnati Ohio 45244-2855
Phone (513) 474-2090
Fax (513) 474-2054

3. PRODUCT DESCRIPTION

A colorless non-toxic chemical that penetrates the concrete permeable zones producing an insoluble by-product that directly encapsulates the Cementitious properties of concrete, thereby greatly reducing the porosity, increasing the surface hardness and compression strength. Protecting the concrete from attack by liquids acids, salts and other contaminants

PROTECTING CONCRETE

This process actually produces a reactive by-product that fills the gel pours, shrinkage cracks and alligator cracks of the concrete. The by-product can in some cases reach depths of over 3 inches into the concrete, making the concrete extremely resistant to water and contaminant penetration. The process allows the concrete to breathe while still giving excellent protection. This process keeps the alkaline content (pH) high, and in cases where deteriorated concrete is being treated, actually raises the pH of the concrete thereby stabilizing and in some cases reversing the deterioration. This process should be used prior to concrete repair, because of its ability to raise the pH of existing deteriorated concrete.

HARDENING

Because *CHEMTEC ONE* produces a reactive and solid by-product in the concrete, it increases the mass and density thereby making the surface harder and increasing the compression strength. Lab test have shown up to 45% increase in hardness of treated samples with *CHEMTEC ONE* vs non-treated samples. Reactive products have been used for years as commercial floor protectors / hardeners. We now have the proper formula for deep penetrating protection for all fully cured concrete as well.

USES

CHEMTEC ONE'S primary use is for protecting new and existing dense concrete structures such as Commercial Floors, Parking Facilities, Bridges, Loading Ramps, Driveways, Walkways, Roads, Runways, Taxiways and any concrete structure. *CHEMTEC ONE* can increase the useful life of normal concrete up to 40%. This process is designed for normal, dense high strength concrete and should not be used on porous concrete blocks or similar type concrete.

4. TECHNICAL DATA

TEMPERATURE LIMITS:

CHEMTEC ONE can be applied in temperatures as low as 38° F and as high as 95° F. Do not allow the surface to freeze for at least 12 hours after the final application.

DRYING TIME: Normal drying time is about 2 to 4 hours depending on the temperature and humidity. The surface must be completely dry prior to applying *CHEMTEC ONE*, except when it will be used as a floor hardener/ sealer on new steel troweled surfaces.

PAINTING / COATINGS: The surface can be painted on 24 hours after the surface has completely dried. However, it is recommendation that you wash off the surface with fresh water and let thoroughly dry before painting lines or anything else on the surface.

INTERNAL MAKEUP: A proprietary blend of reactive silicates and surface active agents. Non-Toxic, Non-flammable, Non-Hazardous. NO special handling requirements under environmental regulations.

CAUTIONS: *CHEMTEC ONE* is high in alkaline content. Wear protective clothing, gloves, breathing apparatus as soon. Make sure there is adequate ventilation See MSDS, product label or installation instruction booklet for complete safety details.

DO NOT apply or splash on glass or painted surfaces, protect decorative door fronts as this product may stain them. If you do splash on these surfaces, clean with fresh water immediately. **DO NOT** store in aluminum, containers or use aluminum spraying equipment. **CLEAN UP** equipment with soap and water as soon as possible after use **CAUTION**, leaving residue in spraying equipment may damage equipment.

COLOR: *CHEMTEC ONE*

is a clear liquid and comes pre mixed. **DO NOT** dilute. A slight brown tint may appear on the surface of the concrete after the final application. This is a sign that iron is present in the concrete. This will wash / wear off in of time.

PACKAGING: 55-Gallon drums and 5-Gallon buckets / bulk shipments available.

COVERAGE: the average coverage for fully cured brushed finished concrete will range between 100 to 125 square feet per gallon per application. Two applications are necessary on these types of concrete surfaces. The coverage for commercial steel troweled concrete floors should be between 175 and 250 square feet per gallon, and generally only one application is necessary.

ANTICIPATED TREATMENT RESULTS: The *CHEMTEC ONE* treatment can produce the following results.

- Reduce the porosity of existing concrete by up to 90%.
- Increase the surface hardness in existing concrete by up to 45% as results of ASTM C-779
- Increase Compression strength in deteriorated concrete.

- Reduce chloride penetration.
- Inhibit chemical attack of treated concrete.
- Form a gelling to a solid by-product in the micro-cracks, gel pours and alligator cracks in the concrete to the depth of penetration.
- Retard scaling of high strength concrete. Meets ASTM C-672
- Raise the pH of deteriorated concrete
- Reduces water absorption by up to 98% as results of ASTM C-642

5. INSTALLATION

METHOD OF APPLICATION:

Simply pour, pump or spray the formula from the container or pumping system.

TOOLS NEEDED: Low pressure sprayers, brooms, safety equipment and protective gear.

SURFACE PREPARATION: The surface of the concrete must be clean and free of foreign material, such as grease and coatings that would prevent the CHEMTEC formula from penetrating into the concrete. Thoroughly clean dirty areas. Concrete must be completely dry before application of the formula can begin on fully cured surfaces.

IMPLEMENTATION: Pre-determine the amount of formula (gallons) that will be needed to complete the project.

A) Application on steel troweled surfaces. CHEMTEC ONE is applied in ONE application (except where specified differently) at a rate of 175 to 250 square feet per gallon. On new floors the formula can be installed as soon as possible after the finish troweling operation. After the surface is hard enough to walk on without marking. Simply saturate the surface with the formula, keeping the entire surface wet. Keep moving the formula around the floor with bristle brooms until the formula starts to react and becomes slippery under foot, approximately 15 to 40 minutes after you apply the formula. If the material starts to gum up prior to removal then re-mist the floor with fresh water, do not flood the surface, just enough to make the formula easy to push around, then squeegee the formula off the surface or use a mechanical vacuum to remove the formula, and allow the floor to dry. DO NOT allow areas to prematurely dry while you are working the formula in. On existing floors, thoroughly clean the floor so they are water permeable. The existing floor must be completely dry

before you apply the formula. Use the same application procedure as above. A sheen will normally develop over time. CAUTION, DO NOT allow areas to puddle and dry as they will leave hard white crystals on the surface. Dispose of waste properly, per federal, state or local environmental regulations if required. Please see the 3 page application installation instructions for complete and recommended application procedure for all surfaces.

B) Application on brushed finished fully cured surfaces, such as bridge decks, roads, loading ramps, parking facilities and so on. CHEMTEC ONE is applied in TWO applications at the same rate of 100 to 125 square feet per gallon per application. Simply saturate the surface and let it dry using the following method. Puddling areas should be brushed over to dryer areas. Areas that dry prematurely should have more formula brushed to it or be re-sprayed. Brush the formula around the surface until it is absorbed in, then just let it dry. The goal is to get the proper amount of formula to penetrate as uniformly as possible. The second application is a repeat of the first application. WAIT a minimum of 4 to 6 hours between the first and second applications. CAUTION, there must be a minimum of 12 hours with NO WATER being allowed on the surface after the last application has dried. It is recommended that you flush Bridge Decks and Roadways with fresh water 24 hours after the last application has dried, to prevent any unreacted material that may be on the surface from becoming slick at the first rain.

6) AVAILABILITY:

CHEMTEC ONE is available in 5-gallon (20-liter) buckets and 55-gallon (205-liter) drums. The product is available only through CHEMTEC INT'L.

WARRANTY:

CHEMTEC INT'L warrants that CHEMTEC ONE in its original sealed containers, will be free of defects and when used as instructed will retard deterioration of concrete surfaces.

MAINTENANCE:

Should you want to clean the concrete. Wash with mild detergent and flush with fresh water

TECHNICAL SERVICES:
 Technical information and assistance may be obtained from CHEMTEC INT'L INC., Cincinnati Ohio 45244
 (513) 474-2090
 Toll Free 1-888-889-7779



CHEMTEC ONE

Installation instruction for CHEMTEC ONE concrete protector.

CHEMTEC ONE is a proprietary blend of water diluted and carried reactive silicates and surface active agents . concrete treatment that penetrates the concrete's permeable zones producing a solid, insoluble, irreversible reaction products residing in the gel pores.. dramatically reducing porosity of the concrete . increasing adhesion qualities...maintaining the concrete's ability to breathe...chemically protecting, stabilizing and strengthening concrete. CHEMTEC ONE WILL PROTECT, HARDEN, DENSIFY, STRENGTHEN, SEAL & INCREASE THE USEFUL LIFE OF YOUR CONCRETE

"THE ULTIMATE CONCRETE PROTECTION"

CHEMTEC INT'L INC. (513) 474-2090

7771 WOODSTONE DRIVE, SUITE 100, CINCINNATI OHIO 45244-2855

WARNING AND STATEMENT OF HAZARD: IRRITATING TO SKIN, EYES, MUCOUS MEMBRANES OF THE RESPIRATORY AND DIGESTIVE TRACTS.

MODERATE HEALTH HAZARD...1,

MINIMAL REACTIVITY HAZARD ...0,

MINIMAL FIRE HAZARD...0,

WEAR PERSONAL PROTECTION WHEN USING CHEMTEC ONE: PROTECT YOUR EYES AND SKIN BY WEARING RUBBER GLOVES, SAFETY GOGGLES, FACE SHIELDS, STURDY WORK BOOTS, LONG SLEEVE SHIRTS AND LONG PANTS. IF MISTING OR SPRAYING WEAR MIST RATED BREATHING PROTECTION.

WARNING AND STATEMENT OF HAZARD CONTINUED:

- ☛ DO NOT INGEST BUT IF SWALLOWED DO NOT INDUCE VOMITING - SEEK IMMEDIATE MEDICAL HELP
- ☛ IF SKIN CONTACT OCCURS, PROMPTLY WASH WITH WATER. IF EYE CONTACT OCCURS, IMMEDIATELY FLUSH WITH A DIRECT STREAM OF WATER FOR 15 MINUETS.
- ☛ IF IRRITATION OR ILL EFFECTS DEVELOP OR PERSIST SEEK IMMEDIATE MEDICAL HELP.
- ☛ TREAT ACCORDING TO THE INDIVIDUAL'S CONDITION AND SPECIFICS OF THE EXPOSURE.
- ☛ THIS FORMULA IS NOT SUBJECT TO RESTRICTIVE OR SPECIAL HANDLING DEFINED UNDER ENVIRONMENTAL REGULATIONS.
- ☛ KEEP CONTAINER CLOSED WHEN NOT IN USE. WHEN CONTAINER IS EMPTY, CONTINUE TO OBSERVE ALL SAFETY PRECAUTIONS.
- ☛ DO NOT REUSE CONTAINER UNLESS COMMERCIALY CLEANED.
- ☛ REFER TO THE MSDS FOR ADDITIONAL HANDLING AND SAFETY INFORMATION.

WARNING: Wear personal protective clothing that will shield you from contact with this formulation. Avoid contact with skin. Avoid contact with eyes Do not ingest. Ventilate the work area well. If a runny nose begins and persist go to fresh air until symptoms stop If asthmatic symptom begin go to fresh air until they stop. Vapor rated respirators are recommended in closed areas if good ventilation can-not be achieved. There are however no special handling requirements defined in environmental regulations

Preparation prior to working with CHEMTEC ONE... an alkaline soluble formulation that is likely to irritate on contact with the body. Wear face shields and safety glasses. Wear tough standard work boots. Wear long pants. Wear long sleeve shirts. Wear long gloves Wear other protective gear that is mandated by the environment.

HOW TO APPLY THE CHEMTEC ONE FORMULATIONS

PREPARATION: Prior to implementing the project. Remove debris from the concrete to be treated. **Be sure to clean the concrete to a state which is water permeable and porous.** Cover drains to prevent loss and waste of material. Install temporary fan or ventilation in enclosed areas. Bring opened container of the material or pumping system into the area to be treated. Bring tools for all members of the implementation team for the distribution of the material in the project area like squeegees, brooms, sprayers and so on. New floors do not need any preparation.

APPLICATION: Pre-determine the amount of formula (Gallons) that will be needed to complete the project.

A) Application on Steel troweled Surfaces: CHEMTEC ONE is applied in **ONE** application at a rate of 175 to 250 square feet per gallon. On new floors, you can install the formula as soon as possible after the finish troweling operation. After the surface is hard enough to walk on with out marking. It is recommended that you do not treat an area to large to manage, normally two to three people can control three section wide the length of the slab at a time. Simply saturate the surface with the formula, keeping the entire surface wet. Keep moving the formula around the floor with bristle brooms or mechanical scrubbing machines until the formula starts to react and become slippery under foot, approximately 15 to 40 minutes after you apply the formula. If the material starts to gum up prior to removal then re-mist the floor with fresh water do not flood the surface with water, just enough to make the formula easy to move around. Then squeegee the formula off the surface or use a mechanical floor vacuum to remove the formula, and allow the floor to dry. Do not allow areas to prematurely dry while you are working the formula in. On existing floors, thoroughly clean the floors so that they are water permeable. The existing floor must be completely dry. Use the same application as above. A sheen will normally develop over time. **CAUTION: DO NOT** allow areas to puddle and dry as they will leave a hard white crystal on the surface. A recommended step for applicators that want to have a slight sheen immediately after the application, is to lightly mist the surface with CHEMTEC ONE formula (do not flood the surface) and work it in with a lambs wool applicator until the floor is about dry and **NO** puddles are visible.

A.2) Application on Steel troweled Surfaces in Food Preparation, Retail Grocery, Harsh Environments or Dusting Problem Areas AND FOR WAL-MART NEIGHBORHOOD GROCERY ACCOUNT. CHEMTEC ONE is applied in **TWO** application at a rate of 175 to 250 square feet per gallon. On new floors, you can install the formula as soon as possible after the finish troweling operation. After the surface is hard enough to walk on with out marking. It is recommended that you do not treat an area to large to manage, normally two to three people can control three section wide the length of the slab at a time. Simply saturate the surface with the formula, keeping the entire surface wet. Keep moving the formula around the floor with bristle brooms or a mechanical scrubber until the formula starts to react and become slippery under foot, approximately 15 to 40 minutes after you apply the formula, then squeegee the formula off the surface or use a mechanical floor vacuum to remove the formula, and allow the floor to dry for approximately 30 minutes, then apply the 2nd application the same as the 1st application and allow the floor to dry for 30 minutes. Do not allow areas to prematurely dry while you are working the formula in during the first 2 applications. On existing floors, thoroughly clean the floors so that they are water permeable. The existing floor must be completely dry. Use the same application as above. A sheen will normally develop over time. **CAUTION: DO NOT** allow areas to puddle and dry as they will leave a hard white crystal on the surface. PLEASE CONSULT THE LATEST WAL-MART SPECIFICATION FOR ALL OTHER INFORMATION REGARDING BURNISHING OPERATION

B) Application on brushed finished fully cured surfaces such as bridge decks, roads, loading ramps, parking facilities, driveways and so on. CHEMTEC ONE is applied in **TWO** applications at a rate of 100 to 125 square feet per-gallon for each application. Simply saturate the surface and let it dry using the following method. Puddling areas should be pushed over to dryer areas. Areas that dry prematurely should have more formula pushed to it or be re-sprayed. Brush the formula around the surface until it is absorbed in, then just let it dry. The goal is to get the proper amount of formula to penetrate as uniformly as possible. The second application is a repeat of the first application. **WAIT** a minimum of 4 to 6 hours between applications. (Page 2 of 3)

CAUTION: There must be a minimum of 12 hours with **NO** water being allowed on the surface after the last application. A quality control step to make sure you have reached proper saturation levels is to, take an eye dropper with muriatic acid with 28% HCL level and randomly test the concrete with a drop of acid immediately after the second application has dried. Put a drop of acid on the treated surface and observe it for a few seconds, then wipe it up. If you get very little to no reaction to the acid you have reached the proper saturation level. If it reacts you need to put more material on those areas until the acid does not react. C) Application on Vertical or underneath bridge decks or parking facility ceiling surfaces. Because you are working against the force of gravity and using the wicking acting of the concrete to draw the formula in on these surfaces, you will need to apply CHEMTEC ONE at a slower rate with a minimum of two to three applications. Use a paint roller or a mist sprayer to apply the formula. The surface must be completely dry before proceeding. On vertical surfaces apply the formula starting at the top of the surface, working you way down. Apply the formula by saturation the surface, but not creating excessive run off. Wait until the surface is dry approximately 2 to 3 hours before applying the second and third applications. Use the same procedure on each application.

When applying the formula on the underneath of bridge decks or parking facilities ceilings, saturate the surface until the formula starts to drip back out. Wait until the surface is dry, approximately 2 to 3 hours and perform the second and third applications the same as the first application. This particular type surface application will take 3 application. Coverage will vary with particular concrete being treated, the temperature and the amount of waste generated by the applicator. Normal coverage rate for this type of application should be 175 to 200 square feet per gallon for each application.

☛ It is likely that the treated concrete will have a brown tint when the project is complete that will not remain, but it is an indication that iron is present in the concrete. After the last application has dried traffic can return to the area. Roughly three hours after the completion of the project.

CHEMTEC ONE

"THE ULTIMATE CONCRETE PROTECTION"

Manufactured by

CHEMTEC INT'L INC. Cincinnati Ohio

(513) 474-2090 Toll Free 1-888-889-7779 www.concretesealer.net

☛ Please watch the weather reports, it is crucial that the surface of the concrete not get wet for at least 10 to 12 hours after the final application of the product. **CAUTION** Avoid applying or splashing on glass, painted surfaces, or aluminum. Product may stain these surfaces. Protect decorative fronts from contact. Keep out of traffic pattern when treating roadways or bridges. It is recommended that you flush Bridge Decks and Roadways with fresh water 24 hours after the last application has dried, to prevent any un-reacted material that may be on the surface from becoming slick at the first rain. If you intend to paint lines or install toppings on the surface after treatment, flush surface with fresh water and let dry prior to your installation. Dispose of waste properly per federal, state or local environmental regulations if required. **DO NOT STORE IN ALUMINUM OR METAL CONTAINERS.**

ctii 205



WHAT THE CHEMTEC ONE PROCESS CAN DO.

- 1) Reduce the porosity of existing concrete & effectively seal out contaminants.
- 2) Increase the Surface Hardness and Abrasion Resistance of new and deteriorated concrete.
- 3) Increase Compression Strength of new and deteriorated concrete.
- 4) Reduce Chloride Penetration.
- 5) Inhibit chemical attack of treated concrete.
- 6) Form a solid by-product in the micro cracks and gel pores.
- 7) Retard scaling of high strength properly finished concrete
- 8) Increase the Mass & Density of concrete
- 9) Produce a sheen on dense steel troweled non-air entrained concrete floors over time.

WHAT THE CHEMTEC ONE PROCESS WILL NOT DO.

- 1) **Make good concrete out of bad concrete.**
- 2) Correct structural deficiencies .
- 3) Correct substrate or erosion problems.
- 4) Seal large cracks (Designed to fill alligator, micro and shrinkage cracks)
- 5) Totally stop scaling of high slump or non air entrained concrete. or stop mortar flaking due to delaminated surfaces caused by poor finishing.
- 6) Fill large voids in concrete do to high water content prior to curing.

CHEMTEC INT'L INC. (Member CSI).

CHEMTEC INT'L

MATERIAL SAFETY DATA SHEET

MSDS DATE : 1 January 1997
PRODUCT NAME : CHEMTEC ONE

I PRODUCT IDENTIFICATION

MANUFACTURER

CHEMTEC INT'L For information call 513-474-2090 Fax 513-474-2054
7771 Woodstone Drive, Suite 100 Toll Free 1-888-889-7779
Cincinnati Ohio 45244-2855

CHEMICAL:

CHEMTEC ONE ... A PROPRIETARY BLEND OF WATER SOLUBLE REACTIVE SILICATES.

DOT proper shipping name: NA DOT Hazard Class: NA
DOT Identification Number: NA DOT Hazardous Substance: NA
H.S. 2839.19.0000

HMIS HAZARD RATINGS National painting & Coatings Association

Health Hazard 2 Fire Hazard 0 Reactivity 0

SARA / TITLE III HAZARD CATEGORIES

Immediate (ACUTE) health : yes Reactivity : no Fire : no
Delayed (CHRONIC) health : no Sudden release of pressure : no

II HEALTH HAZARD INFORMATION

WARNING LABELING

SIGNAL WORD: WARNING

STATEMENT OF HAZARD: Irritating to skin, eyes, mucous membranes of the respiratory and digestive tract.

EMERGENCY AND FIRST AID PROCEDURES

- Irritating to skin, eyes, mucous membranes of the respiratory tract, mouth throat esophagus and stomach
- **EYES:** Immediately flush eyes with a directed stream of water for at least 15 minutes while forcibly holding eye lids apart to ensure complete irrigation of all eye and lid tissue. Get Medical Attention Immediately
 - **SKIN:** Wash and flush skin thoroughly with soap and cool water for at least 15 minutes after contact to avoid irritation. Wash contaminated clothing before reuse. Get Medical Attention If Irritation Develops or Persists

II HEALTH HAZARD INFORMATION continued

- **INHALATION:** If vapors are inhaled remove to fresh air. Breathing oxygen maybe administered if required. If respiration stop perform CPR. Get Medical Attention Immediately If Symptoms Develop
- **INGESTION:** NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF SWALLOWED DON'T INDUCE VOMITING. Give large amounts of water, If available give 16 plus ounces of milk. If vomiting occurs spontaneously KEEP AIRWAYS CLEAR. Get Medical Attention Immediately.

ROUTES OF EXPOSURE

INHALATION: Exposure to mist or spray may cause coughing, sneezing or other symptoms of upper respiratory tract irritation. SKIN Can cause irritation of skin. EYES: Causes irritation and pain, redness and tearing. INGESTION: Can cause irritation to mucous membranes of the digestive tract.

CHEMTEC INT'L

EFFECTS OF OVER EXPOSURE:

ACUTE: Irritating to skin, eyes, mucous membranes of the respiratory and digestive tract.
CHRONIC: No known chronic effects.
TOXICOLOGY: OF CONCENTRATE LD50 2000 TO 3000 mg/kg

PRECAUTIONARY STATEMENTS: This proprietary formulation is not subject to restrictive or special handling defined under environmental regulations. OSHA regulations are being complied with by these statements.

- When handling material use personal protective equipment such as long pants, long sleeve shirts, chemical splash goggles, face shield, rubber gloves and boots...clean immediately with soap and water.
- Avoid getting material in eyes or on skin
- Use only with adequate ventilation
- Avoid breathing mist or spray asthma symptoms may be aggravated
- Use mist rated respiratory protective equipment when exposed to mist or spray
- Do not ingest
- Avoid contact with acidic material when in the liquid state -- it will gel
- Use no aluminum containers or equipment.
- Do not allow contact with glass, paint or aluminum...wash thoroughly and immediately with soap and water after contact to avoid chemical reaction
- Keep container closed.

III IMPORTANT COMPONENTS

CHEMTEC ONE

- PROPRIETARY BLEND OF A WATER SOLUBLE REACTIVE SILICATES. COMPONENTS ARE NOT A LISTED CARCINOGEN.

IV FIRE AND EXPLOSION DATA

FLASH POINT: NA AUTOIGNITION: NA FLAMMABLE LIMITS IN AIR % BY VOLUME: NA
EXTINGUISHING MEDIA: NA THIS PRODUCT IS NON-COMBUSTIBLE
FIRE FIGHTING PROCEDURE: FIRE FIGHTERS SHOULD USE THE BEST AVAILABLE MEANS TO PUT OUT THE FIRE. FIRE FIGHTERS SHOULD BE WEARING PROTECTIVE CLOTHING TO PROTECT FROM EXPOSURE.

V SPECIAL PROTECTION

VENTILATION REQUIREMENTS: WHERE MIST OR SPRAY MAY BE GENERATED USE ADEQUATE LOCAL EXHAUST VENTILATION.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

- **RESPIRATORY:** Use a NIOSH/MSA approved mist rated respirator following manufacturer's recommendations where mist or spray may be generated especially in a confined space.
 - **EYES:** Wear chemical safety goggles, plus full face shield to protect against splashing when appropriate
 - **GLOVES:** Rubber gloves should be worn. Gloves may be cleaned by washing with a mild soap and water
 - **OTHER CLOTHING AND EQUIPMENT:** Standard skin covering work clothing. Standard work shoes. Wash and dry soiled clothing before reuse. Shower and eyewash facilities should be accessible.
-

CHEMTEC INT'L

VI. PHYSICAL DATA

pH: 11.3 concentrate (ready to use)
BOILING POINT@ 760 mm Hg: 214-216 oF
FREEZING POINT: 30°F
VAPOR PRESSURE: NA
SPECIFIC GRAVITY (H2O=1) : 1.41 @ 20°C concentrate (ready to use is less)
SOLUBILITY IN H2O BY WEIGHT: 100%
VAPOR DENSITY (AIR=1): NA
APPEARANCE AND ODOR: Colorless, turbid liquid; none to slightly soapy odor.

VII. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY:

Under normal conditions the material is stable.

INCOMPATIBILITY:

This product is alkaline and gels when mixed with acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

None

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATIONS:

None known.

VIII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Do not store in aluminum containers as flammable hydrogen gas can be generated. Do not use aluminum fittings or transfer lines. Contact with acids will cause gelling of the silicate component and also may produce some heat. CLEAN up equipment with soap and water as soon as possible after use. CAUTION, leaving residue in spraying equipment may damage equipment.

IX. ENVIRONMENTAL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If significant amount of concentrate material is spilled, steps should be taken to contain liquids and prevent discharges to streams or sewer systems. Spills should be reported, if required, to the appropriate local, state and federal regulatory agencies. READY TO USE FORMULATIONS CAN BE DILUTED AND WASHED TO DRAINS WITH PLENTY OF WATER WHEN NOT SIGNIFICANT AMOUNTS. IF OVER 109 GALLONS, RETAIN FOR PROPER DISPOSITION.

WASTE DISPOSITION METHOD: This ready to use formulation is not subject to restrictive or special handling defined under environmental regulations. For concentrate clean-up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials may be regulated and action to spilled materials must meet the applicable rules. The appropriate agencies should be assured proper action being taken. If any questions exist ...call CHEMTEC INT'L @ 513-474-2090

X. ADDITIONAL INFORMATION

OSHA Standard 29CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to make all information in this Material Safety Data Sheet available to your employees.

FOR INDUSTRIAL USE ONLY The information presented is based on data considered to be accurate at the time of preparation of this MSDS. No warranty or representation expressed or implied is made as to the accuracy or completeness of this information. Additionally no responsibility will be assumed for any damage or injury resulting from abnormal or misuse, from failure to adhere to recommended practices, or from hazards inherent in the nature of this product

Exhibit D1-9

Secondary Containment Crack Repair

Chandler Arizona

Secondary Containment Crack Repair

This containment crack repair plan is written to address areas that have been treated with Chem Tech One Sealer.

Small Crack Repair (cracks greater than 1/16 inch to 1/8 inch in width)

All cracks and/or gaps in the containment are to be immediately repaired (or as soon as possible if inclement weather prevents the immediate repair) by branch personnel within 48 hours (exclusive of weekends and holidays) of the inspection that discovered the flaw. This can be accomplished by thoroughly abrading and cleaning the crack and surface to be repaired using a wire brush to ensure any loose concrete is removed and the edges are clean and smooth. Wash the area to be repaired thoroughly with water and allow the surface to dry. Once the surface is prepared, fill the crack with a polysulfide caulking material or a SikaFlex 1a caulk (for use in the tank farm and Return and Fill).

Note: Due to the chemical make-up of the caulking material and the surface to be repaired, weather conditions may dictate the application of the repair. The surface being repaired must be clean and dry. Repairs must not be made either during or after rain and snow events until the surface area is completely dry. Extreme temperatures may also affect repair times. At high temperatures >100F the caulking material may react too quickly for the repair to be successful. At temperatures <32F (some caulking brands suggest not applying if the temperature is <50F) the resins in the caulking material may not react, creating an unsuccessful repair.

Large Crack Repair (cracks greater than 1/8 inch in width)

If the scope of work is beyond the branch's resources then branch personnel must temporarily repair the crack as outlined above and notify your branch engineer of the problem so that they may schedule a contractor to make a permanent repair.

Using the recommended materials guide below, each branch must contact a qualified vendor to order and keep a steady supply of caulking on hand so that immediate repairs can be made following the above guidance.

Containment Caulking Specifications

If the contractor is proposing an equivalent coating material they must submit the technical data, installation instructions and a sample for consideration. If a pre-approved material is being used then the contractor must prove that they are familiar with the manufacturers recommended installation instructions and provide those instructions to

the S-K manager overseeing the project. The contractor shall schedule a meeting not less than 7 days before beginning the project to review/confirm the installation schedule with the responsible S-K manager.

Environmental, Safety & Health Requirements

The contractor shall follow all applicable environmental, safety and health regulations at the Federal, State and Local levels. The contractor must follow all cautions and warnings printed by the manufacturer of the coating product. These items will be found on the installation instructions and Safety Data Sheet.

Design and Performance Requirements

Existing cracks must be prepared per the manufacturer recommendations.

Caulking must withstand the following surface temperature conditions:

High: 140 degrees F

Low: 0 degrees F

Thermal Shock: +/- 50 degrees F per hour

Elastomeric Strength: 140 degrees F to 0 degrees F.

Safety-Kleen's standard color for all concrete coatings is medium to dark gray. The contractor shall take steps to minimize fading of the caulking, which occurs on outside surfaces.

Coatings must resist the impact and abrasions of foot traffic. Coatings must resist cracking due to rapid temperature changes and freeze/thaw cycling.

Safety-Kleen Responsibilities

- S-K shall supply the contractor with drawings/sketches of the area to be coated.
- S-K shall supply electric, water, lighting and interior heat as needed.
- S-K shall vacate/remove S-K equipment and materials from the area to be repaired during the preparation and application process.
- S-K shall provide for trash removal/disposal of all debris, empty cans/pails of caulking material, etc. S-K shall provide empty drums for disposal of removed concrete from prep work.
- S-K shall provide a proper storage area for all caulking materials as indicated by manufacturer/contractor.
- S-K shall become familiar with the manufacturers recommended preparation and installation requirements and insure that the contractor is adhering to them. Preparation work is of utmost importance. All unsound and incompatible material must be removed from the concrete and a proper profile (clear and smooth surface) achieved before new material is installed.

- S-K reserves the right to test the contractor's work and materials at any time during the course of the project. Testing shall be done by an independent third party testing laboratory.

Contractor Responsibilities

- Contractor shall **follow all manufacturers' guidelines for preparation and installation** of the particular caulking material being installed.
- **Preparation work is of utmost importance.** All unsound and incompatible materials must be removed by mechanical abrasion before new material is installed.
- Contractor shall provide a **three-year warranty** for coating work.
- Contractor must clearly indicate to S-K what their needs are for utilities, schedule and storage of materials.
- Contractor shall work out a manageable schedule with S-K and indicate proper cure times.
- Contractor is responsible for all material deliveries and quantities.
- Contractor is responsible for any testing that may be necessary to provide a three-year warranty.
- Contractor is responsible for completing a "Hot Work Permit" before commencing any grinding, scarifying, chipping, shotblasting, etc. and is responsible for any testing associated with this permit work.
- All surface imperfections shall be corrected as required to achieve proper caulking performance.
- Contractor shall be responsible for any temporary protection.
- Contractor shall broom sweep the entire work area and keep/leave it free of debris and major dust.

Warranties

Safety-Kleen requires printed warranties for workmanship and manufacturer warranties for materials. Warranties shall cover a period of at least three (3) years. The contractor is responsible for providing both types of warranties to Safety-Kleen prior to performing any work. Contractor warranties shall include but not be limited to coating repair, crack repair and joint construction. Product warranties shall include but not be limited to performance and chemical resistance capability.

Chemical Resistance List

Below is the list of chemicals that the coating material must resist.

Tank Farms and "Return and Fill":

Petroleum Naphtha
Used Petroleum Naphtha
Used Oil

Ethylene Glycol

Container Storage Area:

Paint Thinners

Perchloroethylene

Used Petroleum Naphtha

Caustic Solutions

Monoethanolamine solutions in IC

Exhibit D2-3

Vertical Tank Gauging Chart

Waste Solvent/Waste AA

Exhibit D2-3

SAFETY KLEEN CORPORATION

Vertical Tank Gauging Chart

10 1/2" DIAMETER

12,000 GALLON NOMINAL CAPACITY

HEAD CAPACITY IS 715 GALLONS

INCHES	GALLONS	INCHES	GALLONS	INCHES	GALLONS	INCHES	GALLONS	INCHES	GALLONS
1	54	25.5	1,366	50	2,678	74.5	3,989	99	5,301
1.5	80	26	1,392	50.5	2,704	75	4,016	99.5	5,328
2	107	26.5	1,419	51	2,731	75.5	4,043	100	5,355
2.5	134	27	1,446	51.5	2,758	76	4,070	100.5	5,382
3	161	27.5	1,473	52	2,785	76.5	4,097	101	5,409
3.5	187	28	1,499	52.5	2,811	77	4,123	101.5	5,435
4	214	28.5	1,526	53	2,838	77.5	4,150	102	5,462
4.5	241	29	1,553	53.5	2,865	78	4,177	102.5	5,489
5	268	29.5	1,580	54	2,892	78.5	4,204	103	5,516
5.5	295	30	1,607	54.5	2,918	79	4,230	103.5	5,542
6	321	30.5	1,633	55	2,945	79.5	4,257	104	5,569
6.5	348	31	1,660	55.5	2,972	80	4,284	104.5	5,596
7	375	31.5	1,687	56	2,999	80.5	4,311	105	5,623
7.5	402	32	1,714	56.5	3,026	81	4,338	105.5	5,650
8	428	32.5	1,740	57	3,052	81.5	4,364	106	5,676
8.5	455	33	1,767	57.5	3,079	82	4,391	106.5	5,703
9	482	33.5	1,794	58	3,106	82.5	4,418	107	5,730
9.5	509	34	1,821	58.5	3,133	83	4,445	107.5	5,757
10	536	34.5	1,847	59	3,159	83.5	4,471	108	5,783
10.5	562	35	1,874	59.5	3,186	84	4,498	108.5	5,810
11	589	35.5	1,901	60	3,213	84.5	4,525	109	5,837
11.5	616	36	1,928	60.5	3,240	85	4,552	109.5	5,864
12	643	36.5	1,955	61	3,267	85.5	4,579	110	5,891
12.5	669	37	1,981	61.5	3,293	86	4,605	110.5	5,917
13	696	37.5	2,008	62	3,320	86.5	4,632	111	5,944
13.5	723	38	2,035	62.5	3,347	87	4,659	111.5	5,971
14	750	38.5	2,062	63	3,374	87.5	4,686	112	5,998
14.5	776	39	2,088	63.5	3,400	88	4,712	112.5	6,024
15	803	39.5	2,115	64	3,427	88.5	4,739	113	6,051
15.5	830	40	2,142	64.5	3,454	89	4,766	113.5	6,078
16	857	40.5	2,169	65	3,481	89.5	4,793	114	6,105
16.5	884	41	2,196	65.5	3,508	90	4,820	114.5	6,131
17	910	41.5	2,222	66	3,534	90.5	4,846	115	6,158
17.5	937	42	2,249	66.5	3,561	91	4,873	115.5	6,185
18	964	42.5	2,276	67	3,588	91.5	4,900	116	6,212
18.5	991	43	2,303	67.5	3,615	92	4,927	116.5	6,239
19	1,017	43.5	2,329	68	3,641	92.5	4,953	117	6,265
19.5	1,044	44	2,356	68.5	3,668	93	4,980	117.5	6,292
20	1,071	44.5	2,383	69	3,695	93.5	5,007	118	6,319
20.5	1,098	45	2,410	69.5	3,722	94	5,034	118.5	6,346
21	1,125	45.5	2,437	70	3,749	94.5	5,060	119	6,372
21.5	1,151	46	2,463	70.5	3,775	95	5,087	119.5	6,399
22	1,178	46.5	2,490	71	3,802	95.5	5,114	120	6,426
22.5	1,205	47	2,517	71.5	3,829	96	5,141	120.5	6,453
23	1,232	47.5	2,544	72	3,856	96.5	5,168	121	6,480
23.5	1,258	48	2,570	72.5	3,882	97	5,194	121.5	6,506
24	1,285	48.5	2,597	73	3,909	97.5	5,221	122	6,533
24.5	1,312	49	2,624	73.5	3,936	98	5,248	122.5	6,560
25	1,339	49.5	2,651	74	3,963	98.5	5,275	123	6,587

SAFETY KLEEN CORPORATION

10 5/8" DIAMETER

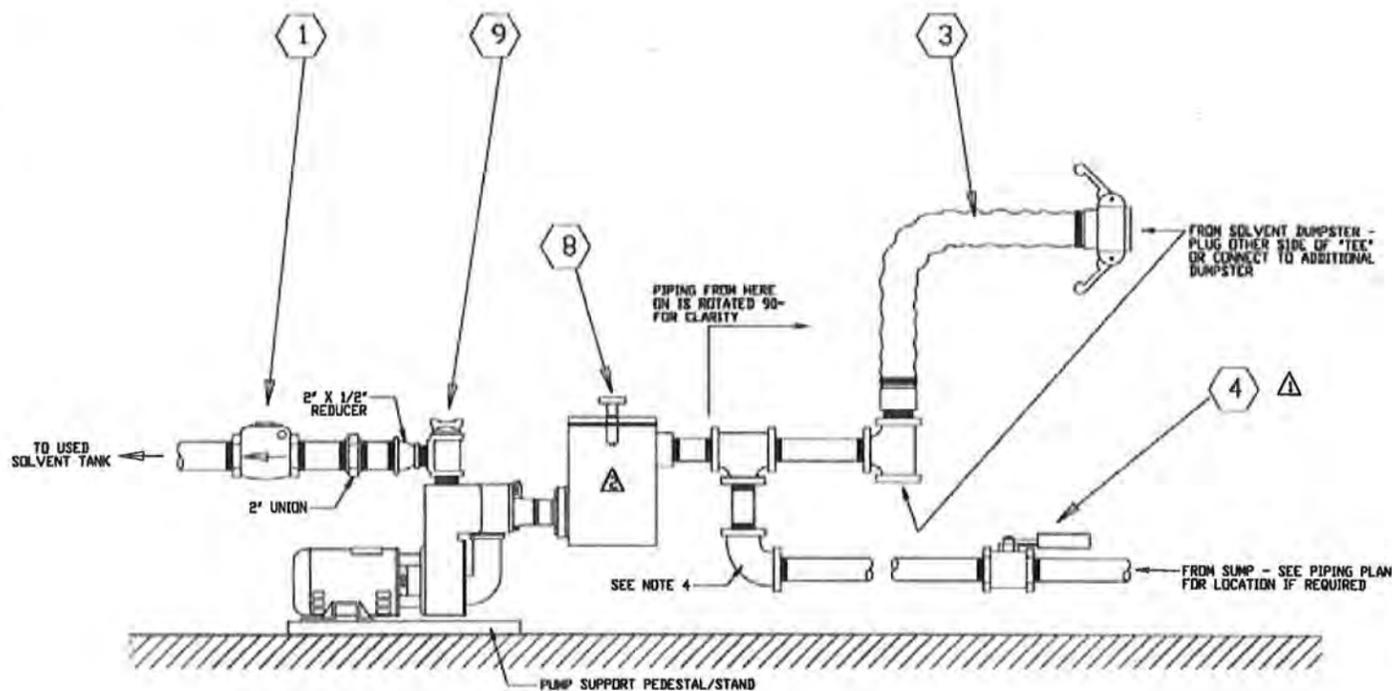
12,000 GALLON NOMINAL CAPACITY

PAGE 2

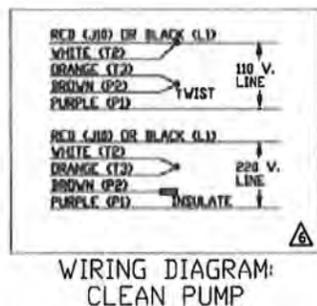
INCHES	GALLONS	INCHES	GALLONS	INCHES	GALLONS	INCHES	GALLONS
123.5	6,613	148	7,925	172.5	9,237	197	10,549
124	6,640	148.5	7,952	173	9,264	197.5	10,576
124.5	6,667	149	7,979	173.5	9,291	198	10,603
125	6,694	149.5	8,006	174	9,318	198.5	10,630
125.5	6,721	150	8,033	174.5	9,344	199	10,656
126	6,747	150.5	8,059	175	9,371	199.5	10,683
126.5	6,774	151	8,086	175.5	9,398	200	10,710
127	6,801	151.5	8,113	176	9,425	200.5	10,737
127.5	6,828	152	8,140	176.5	9,452	201	10,764
128	6,854	152.5	8,166	177	9,478	201.5	10,790
128.5	6,881	153	8,193	177.5	9,505	202	10,817
129	6,908	153.5	8,220	178	9,532	202.5	10,844
129.5	6,935	154	8,247	178.5	9,559	203	10,871
130	6,962	154.5	8,273	179	9,585	203.5	10,897
130.5	6,988	155	8,300	179.5	9,612	204	10,924
131	7,015	155.5	8,327	180	9,639	204.5	10,951
131.5	7,042	156	8,354	180.5	9,666	205	10,978
132	7,069	156.5	8,381	181	9,693	205.5	11,005
132.5	7,095	157	8,407	181.5	9,719	206	11,031
133	7,122	157.5	8,434	182	9,746	206.5	11,058
133.5	7,149	158	8,461	182.5	9,773	207	11,085
134	7,176	158.5	8,488	183	9,800	207.5	11,112
134.5	7,202	159	8,514	183.5	9,826	208	11,138
135	7,229	159.5	8,541	184	9,853	208.5	11,165
135.5	7,256	160	8,568	184.5	9,880	209	11,192
136	7,283	160.5	8,595	185	9,907	209.5	11,219
136.5	7,310	161	8,622	185.5	9,934	210	11,246
137	7,338	161.5	8,648	186	9,960	210.5	11,272
137.5	7,363	162	8,675	186.5	9,987	211	11,299
138	7,390	162.5	8,702	187	10,014	211.5	11,326
138.5	7,417	163	8,729	187.5	10,041	212	11,353
139	7,443	163.5	8,755	188	10,067	212.5	11,379
139.5	7,470	164	8,782	188.5	10,094	213	11,406
140	7,497	164.5	8,809	189	10,121	213.5	11,433
140.5	7,524	165	8,836	189.5	10,148	214	11,460
141	7,551	165.5	8,863	190	10,175	214.5	11,486
141.5	7,577	166	8,889	190.5	10,201	215	11,513
142	7,604	166.5	8,916	191	10,228	215.5	11,540
142.5	7,631	167	8,943	191.5	10,255	216	11,567
143	7,658	167.5	8,970	192	10,282		
143.5	7,684	168	8,996	192.5	10,308		
144	7,711	168.5	9,023	193	10,335		
144.5	7,738	169	9,050	193.5	10,362		
145	7,765	169.5	9,077	194	10,389		
145.5	7,792	170	9,104	194.5	10,415		
146	7,818	170.5	9,130	195	10,442		
146.5	7,845	171	9,157	195.5	10,469		
147	7,872	171.5	9,184	196	10,496		
147.5	7,899	172	9,211	196.5	10,523		

Exhibit D2-4

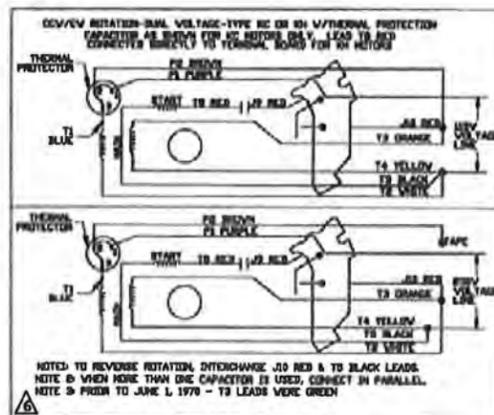
Solvent Pump Piping Installation details



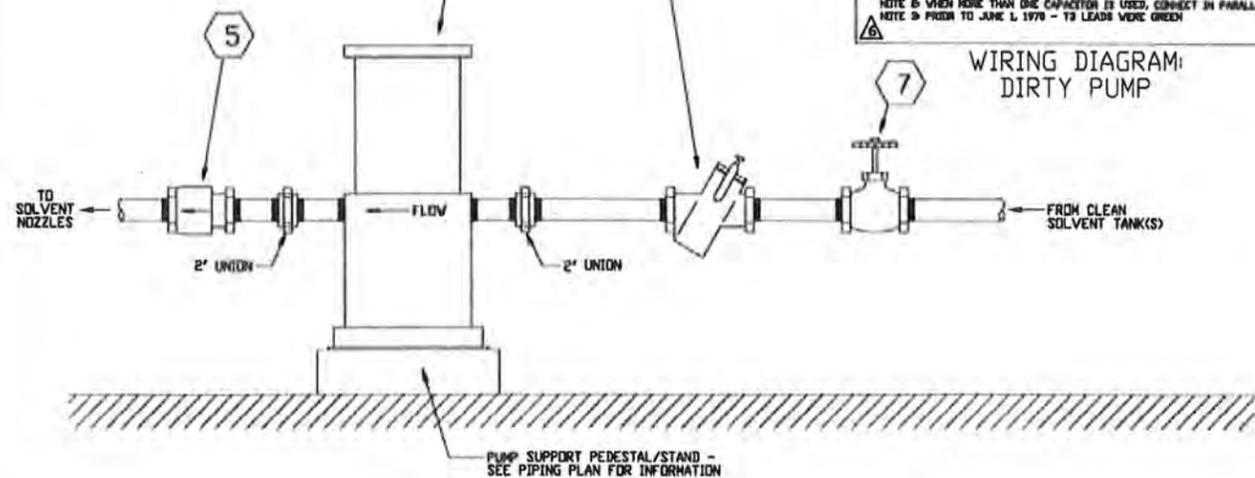
USED SOLVENT PUMP INSTALLATION



WIRING DIAGRAM: CLEAN PUMP



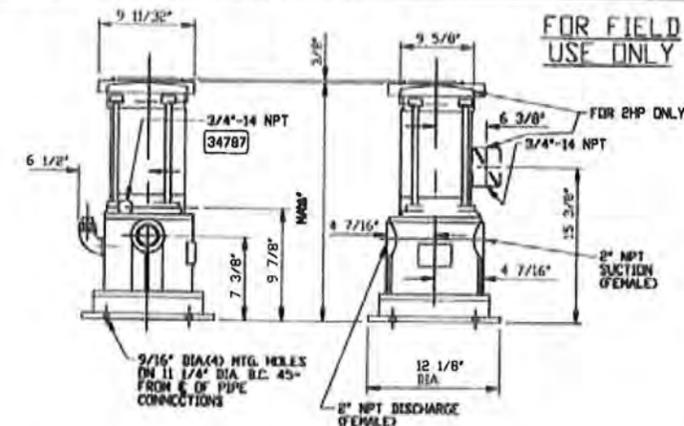
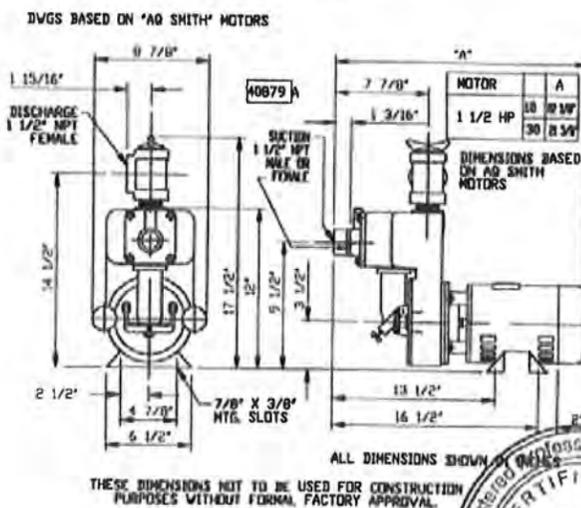
WIRING DIAGRAM: DIRTY PUMP



CLEAN SOLVENT PUMP INSTALLATION

EQUIPMENT / FIXTURE SCHEDULE				
MARK	SIZE	DESCRIPTION	SK PART NO.	REMARKS
1	2"	2" BRONZE CHECK VALVE - MORRISON BROS. FIG. 246-A	5288	
2	2"	2" MARLOW PUMP - 20 EVP 10A 1 HP EXPLOSION PROOF MOTOR W/JUNCTION BOX - VITON FITTED	5240	SEE SPECIFICATION DETAILS ON SAFETY-KLEEN DWG. A1110 BELOW
3	2"	2" DUMPSTER HOSE ASSEMBLY	5234	SEE SAFETY-KLEEN DWG. D10452 FOR DETAILED INFORMATION
4	2"	2" APOLLO BALL VALVE, BRONZE BODY W/STAINLESS STEEL BALL & TRIM, TEFLOM SEALS & CONFRACO SPRING LOADED SELF CLOSING DEADMAN HANDLE	5272	
5	2"	2" BACK PRESSURE VALVE VERTICAL TYPE WITH 6 PSI SPRING SETTING - MORRISON BROS. FIG. 150-B/PR (15 P.S.I. OPEN)	5268	FOR ABOVEGROUND TANK INSTALLATION ONLY
6	2"	2" LINE STRAINER W/TOP CLEAN-OUT W/200 MESH MORRISON BROS. FIG. 286	5269	
7	2"	2" BRONZE GATE VALVE MORRISON BROS. FIG. 233	5236	
8	2"	2" MARLOW SUCTION STRAINER ASSEMBLY MODEL 2810X W/STAINLESS STEEL BASKET W/ 1/4" PERFORATIONS	5313	FLANGED DISCHARGE PORT OF STRAINER SERVES AS UNION ON SUCTION SIDE OF PUMP
9	1 1/2"	1 1/2" MARLOW PUMP - 1 1/2" DR49SEC. SINGLE PHASE, EXPLOSION PROOF, BUNA FITTED, SELF PRIMING CENTRIFUGAL	5330	SEE DETAIL BELOW LEFT

PUMP UNITS WITH OPEN MOTORS 1 1/2HR49EC



GENERAL NOTES

- MODEL TO BE USED BY SAFETY-KLEEN CORP. - MODEL 20 EVP-10A 1 HP - 2" WITH EXPLOSION PROOF MOTOR W/JUNCTION BOX & VITON FITTED, SINGLE PHASE 60 CYCLE 115/230V.
- SEE INDIVIDUAL SERVICE CENTER SITE PLANS FOR LOCATION OF THE INSTALLATION.

G.E. EXPL. PROOF MOTORS				
S-K PART NO.	HP	PHASE	CYCLE	A
5240	1	60	20 13/32"	115/230

GENERAL NOTES

- THIS DRAWING SUPERCEDES SAFETY-KLEEN CORP. DRAWING A1110
- SEE INDIVIDUAL SERVICE CENTER SITE & PIPING PLANS FOR LOCATIONS & ARRANGEMENT OF THESE DETAILS.
- FOR UNDERGROUND TANK INSTALLATIONS, A 90° CHECK VALVE MORRISON BROS. FIG. 137 OR APPROVED EQUAL SHOULD BE INSTALLED AT TOP OF TANK ON CLEAN PUMP SUCTION LINE (CLEAN TANKS ONLY).
- ALL PIPING TO BE 2" SCHEDULE 40 GALVANIZED UNLESS OTHERWISE SPECIFIED. ALL CHANGES OF DIRECTION IN DIRTY SOLVENT PIPING TO BE ACCOMPLISHED USING EITHER (2)-45° ELBOWS OR (1)-LONG RADIUS 90° ELBOW.
- THIS DRAWING CONTAINS INFORMATION PROPRIETARY TO SAFETY-KLEEN CORP. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING IS EXPRESSLY PROHIBITED EXCEPT BY SAFETY-KLEEN OR AS SAFETY-KLEEN MAY AGREE IN WRITING.
- ALL ITEMS WITH SAFETY-KLEEN PART NO. REFERENCES WILL BE SUPPLIED TO CONTRACTOR.



NO.	DESCRIPTION	BY	DATE	APPR.
1	CHANGED ITEM 6 TO NEW TYPE VALVE	W.L.J.	12/18/82	
2	ADDED ITEM 8 & ADDED TO NOTE 4	W.L.J.	8/21/84	
3	ADDED PUMP SPECS - DWG A1110	W.L.J.	5/3/84	
4	ADDED NOTE 6	W.L.J.	10/23/84	
5	ADDED NEW PUMP FOR DIRTY SOLVENT TO VITON & TANKS ADDED PUMP SPECS	RD	4/18/86	
6	ADDED V.I.'S FOR CLEAN & USED PUMPS	RD	9/6/88	
7	CHANGED ITEM 1 TO NEW TYPE VALVE	RD	8/22/94	

TITLE: SOLVENT PUMP PIPING INSTALLATION DETAILS

Safety-Kleen Corp.
1500 NORTH RANDALL ROAD, ELGIN, ILLINOIS 60123
PHONE (708)897-8400

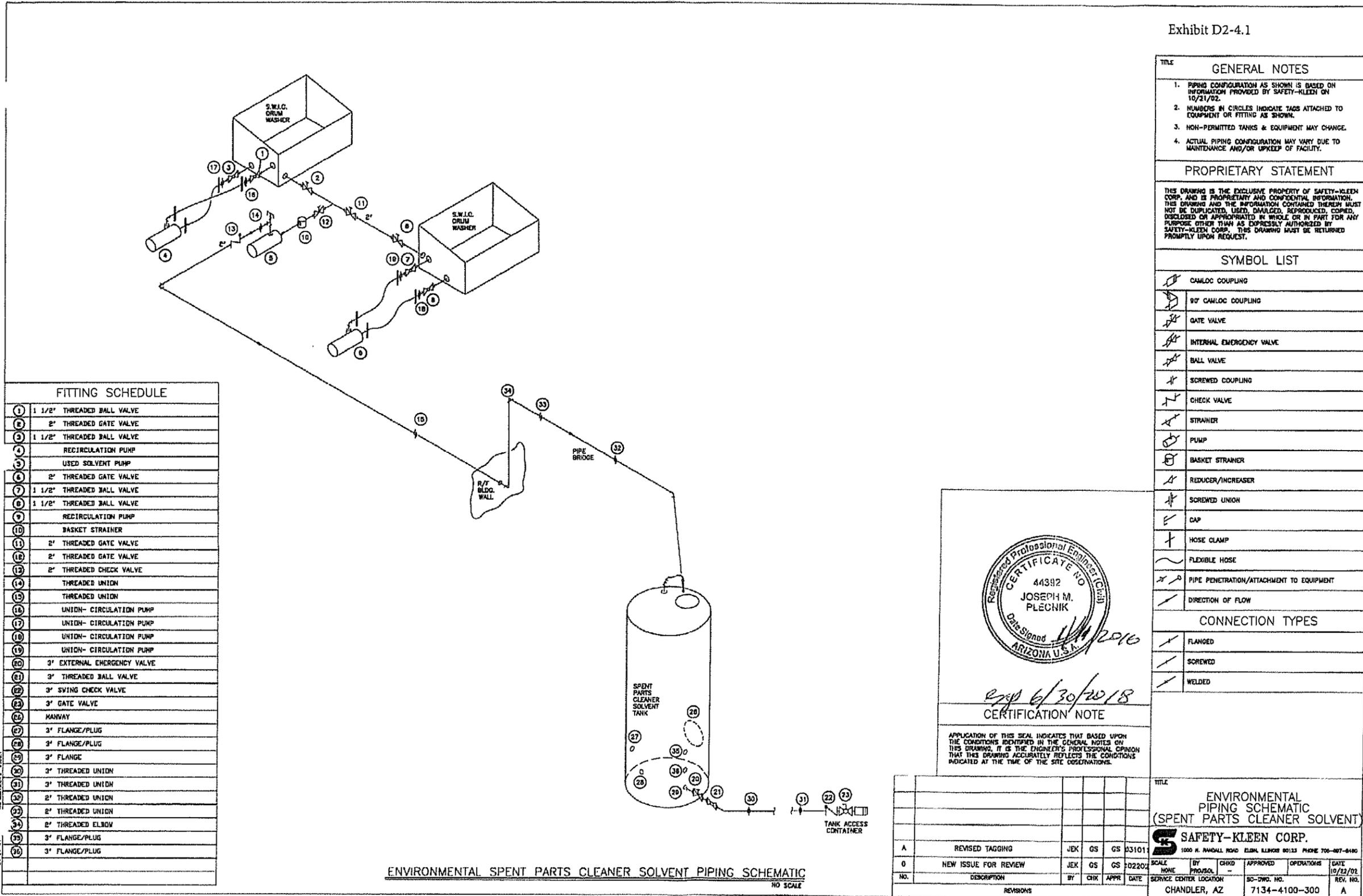
SCALE: NO SCALE
DATE: 2/24/89
BRANCH: FOR BRANCH SERVICE CENTER
DRAWING NO.: D11150
REV.:

Exhibit D2-4.1

Tank Farm-Return & Fill Used Solvent Piping
Schematic

Tank Farm-Return & Fill Used Solvent Piping Schematic

Exhibit D2-4.1



FITTING SCHEDULE	
1	1 1/2" THREADED BALL VALVE
2	2" THREADED GATE VALVE
3	1 1/2" THREADED BALL VALVE
4	RECIRCULATION PUMP
5	USED SOLVENT PUMP
6	2" THREADED GATE VALVE
7	1 1/2" THREADED BALL VALVE
8	1 1/2" THREADED BALL VALVE
9	RECIRCULATION PUMP
10	BASKET STRAINER
11	2" THREADED GATE VALVE
12	2" THREADED GATE VALVE
13	2" THREADED CHECK VALVE
14	THREADED UNION
15	THREADED UNION
16	UNION- CIRCULATION PUMP
17	UNION- CIRCULATION PUMP
18	UNION- CIRCULATION PUMP
19	UNION- CIRCULATION PUMP
20	3" EXTERNAL EMERGENCY VALVE
21	3" THREADED BALL VALVE
22	3" SWING CHECK VALVE
23	3" GATE VALVE
24	MANWAY
25	3" FLANGE/PLUG
26	3" FLANGE/PLUG
27	3" FLANGE
28	3" THREADED UNION
29	3" THREADED UNION
30	2" THREADED UNION
31	2" THREADED UNION
32	2" THREADED UNION
33	2" THREADED ELBOW
34	3" FLANGE/PLUG
35	3" FLANGE/PLUG

GENERAL NOTES

1. PIPING CONFIGURATION AS SHOWN IS BASED ON INFORMATION PROVIDED BY SAFETY-KLEEN ON 10/21/02.
2. NUMBERS IN CIRCLES INDICATE TAGS ATTACHED TO EQUIPMENT OR FITTING AS SHOWN.
3. NON-PERMITTED TANKS & EQUIPMENT MAY CHANGE.
4. ACTUAL PIPING CONFIGURATION MAY VARY DUE TO MAINTENANCE AND/OR UPKEEP OF FACILITY.

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN CORP. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN CORP. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

SYMBOL LIST

	CAMLOC COUPLING
	90° CAMLOC COUPLING
	GATE VALVE
	INTERNAL EMERGENCY VALVE
	BALL VALVE
	SCREWED COUPLING
	CHECK VALVE
	STRAINER
	PUMP
	BASKET STRAINER
	REDUCER/INCRASER
	SCREWED UNION
	CAP
	HOSE CLAMP
	FLEXIBLE HOSE
	PIPE PENETRATION/ATTACHMENT TO EQUIPMENT
	DIRECTION OF FLOW

CERTIFICATION NOTE

APPLICATION OF THIS SEAL INDICATES THAT BASED UPON THE CONDITIONS IDENTIFIED IN THE GENERAL NOTES ON THIS DRAWING, IT IS THE ENGINEER'S PROFESSIONAL OPINION THAT THIS DRAWING ACCURATELY REFLECTS THE CONDITIONS INDICATED AT THE TIME OF THE SITE OBSERVATIONS.

6/30/2018

JOSEPH M. PLECHNIK

44382

Professional Engineer (Civil)

ARIZONA U.S.A.

CONNECTION TYPES

	FLANGED
	SCREWED
	WELDED

ENVIRONMENTAL SPENT PARTS CLEANER SOLVENT PIPING SCHEMATIC
NO SCALE

REVISIONS		NO.	DESCRIPTION	BY	CHK	APPR	DATE
A	REVISED TAGGING	JEK	GS	GS			03101
0	NEW ISSUE FOR REVIEW	JEK	GS	GS			02201

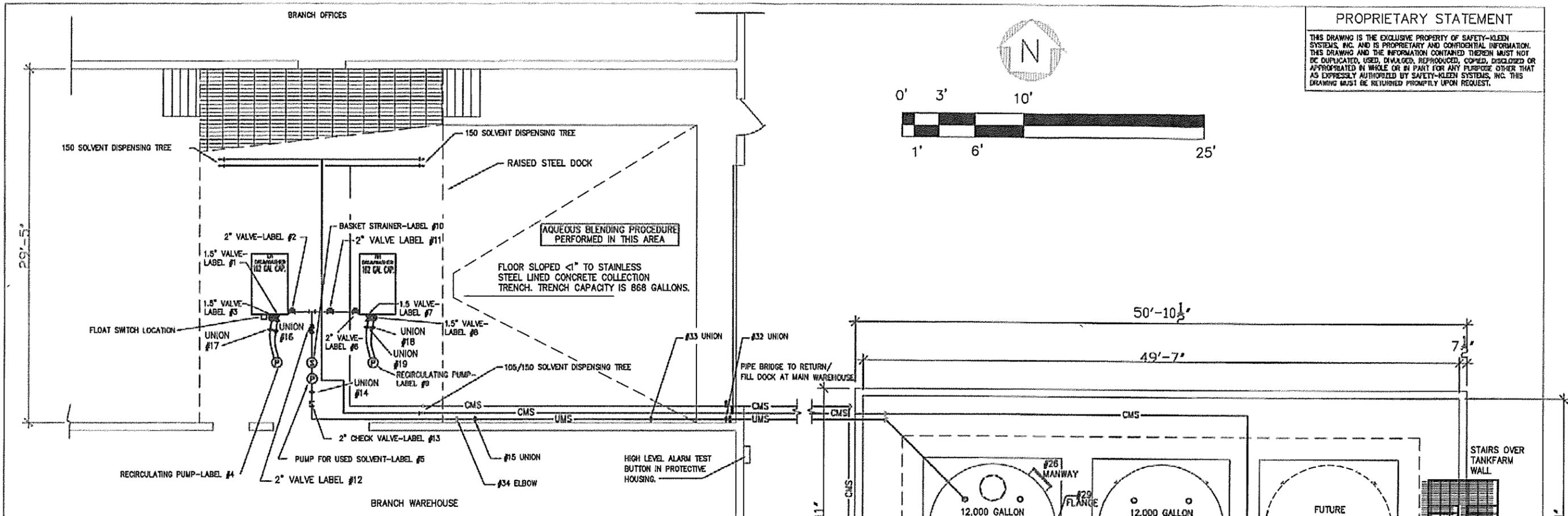
ENVIRONMENTAL PIPING SCHEMATIC (SPENT PARTS CLEANER SOLVENT)

SAFETY-KLEEN CORP.
1000 N. RANDALL ROAD, ELGIN, ILLINOIS 60120, PHONE 708-807-8400

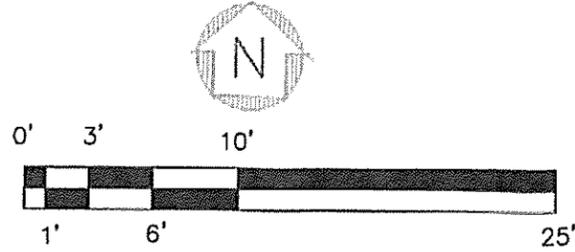
SCALE	BY	CHKD	APPROVED	OPERATIONS	DATE
	JEK	GS	GS		10/22/02
SERVICE CENTER LOCATION		30-DWG. NO.		REV. NO.	
CHANDLER, AZ		7134-4100-300		A	

Exhibit D2-5

Tank Farm Containment Calculations



PROPRIETARY STATEMENT
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPLICATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.



SYMBOL LIST

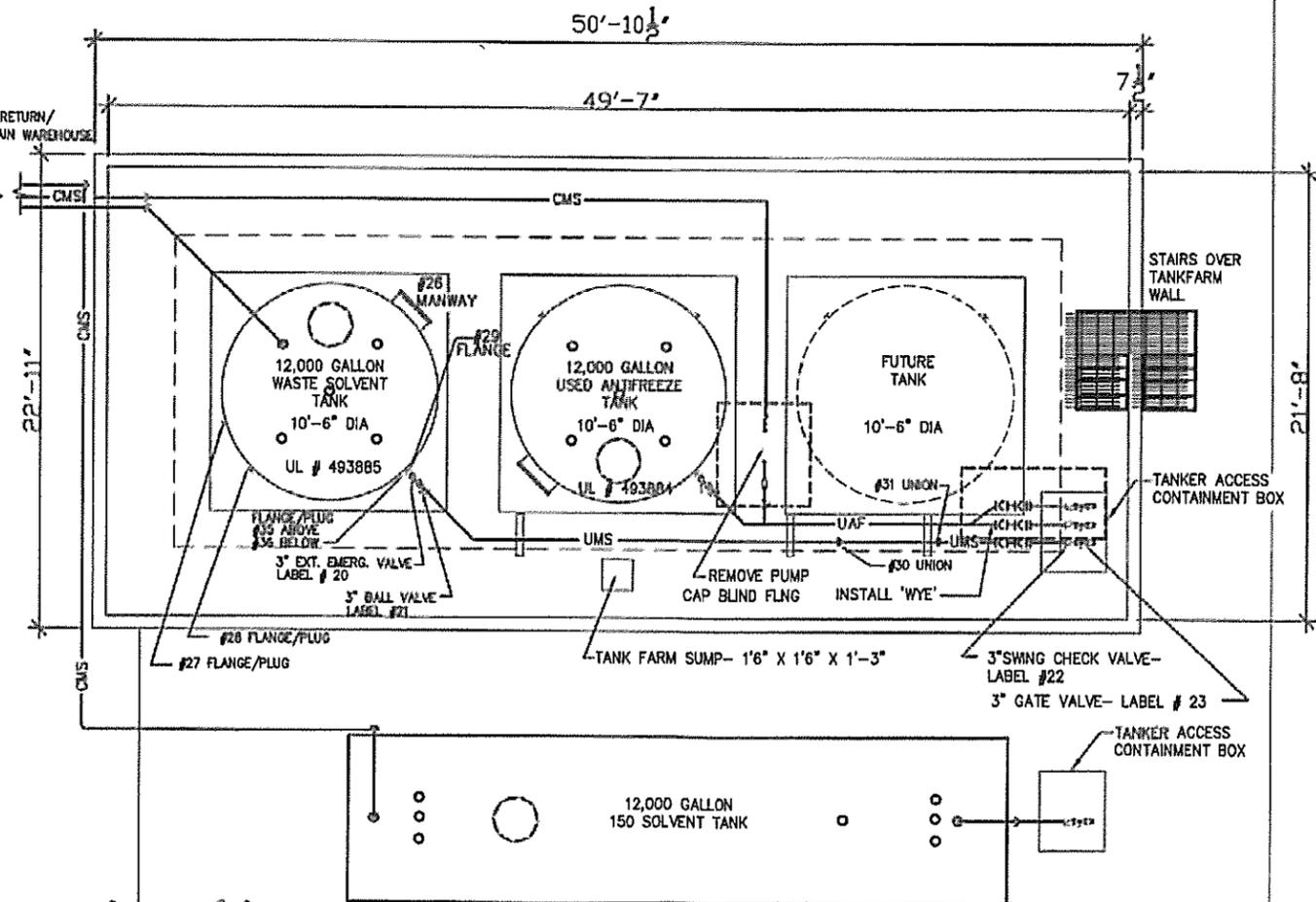
□	CAWLOC COUPLING
○	ELBOW
⊗	GATE VALVE
⊗	INTERNAL EMERGENCY VALVE
⊗	BALL VALVE
⊗	SCREWED COUPLING
⊗	CHECK VALVE
⊗	PUMP
⊗	BASKET STRAINER
⊗	SCREWED UNION
⊗	FLEXIBLE HOSE
⊗	SOLVENT DISPENSING TREE
⊗	ELBOW DOWN
CMS	CLEAN MINERAL SPIRITS
UMS	USED MINERAL SPIRITS

DIKE VOLUME CALCULATION - 12,000 GAL STORAGE TANK (DISH BOTTOM) DIKE HEIGHT 3'-0" CALC4

FORMULAE USED:
 $(\pi/3) T^2 h^2 (3r-h) \times 7.48 \text{ GAL/CU. FT.} = \text{TANK HEAD DISPLACEMENT VOLUME (GAL'S)}$
 $\pi R^2 (H_1 - H_2) \times 7.48 \text{ GAL/CF} = \text{TANK SHELL DISPLACEMENT VOLUME (GAL'S)}$
 $(L_1 \times W_1 \times H_1) \times 7.48 \text{ GAL/CF} = \text{TANK PAD DISPLACEMENT VOLUME (GAL'S)}$
 $\pi R^2 (H_2) \times 7.48 \text{ GAL/CF} = \text{TANK SHELL DISPLACEMENT VOLUME (GAL'S)}$

R (TANK RADIUS) = 5.25 FT.
 R₂ (TANK RADIUS) = 5.29 FT.
 L (DIKE LENGTH) = 49.55 FT.
 W (DIKE WIDTH) = 21.65 FT.
 H (DIKE HEIGHT) = 3.54 FT.
 r (DISH RADIUS) = 10.50 FT.
 h (DISH HEIGHT) = 1.61 FT.
 S (SKIRT HEIGHT) = 2.0 FT.
 L₁ (TANK PAD LENGTH) = 42.96 FT.
 W₁ (TANK PAD WIDTH) = 15.06 FT.
 H₁ (TANK PAD HEIGHT) = 0.167 FT.
 H₂ (TANK BAR HEIGHT) = 0.083 FT.
 H₃ (TANK HEIGHT) = 2.916 FT.

DIKE VOLUME:
 $(49.55 \times 21.65 \times 3.54 \times 7.48) = 28,405 \text{ GAL. (-)}$
SUMP VOLUME:
 $(\pi \times 7.5^2 \times 1.25 \times 7.48) = 16 \text{ GAL. (-)}$
VOLUME OF LARGEST TANK WITHIN DIKED AREA:
 $(\pi/3) \pi \times 10.5^2 \times (3 \times 10.5 - 1.61) \times 7.48 + (\pi \times 5.25^2 \times (3.54 - 2.0 - 0.167) \times 7.48) = 607 + 887.0 = 1,494 \text{ GAL. (-)}$
TANK PAD DISPLACEMENT VOLUME:
 $42.96 \times 15.06 \times 0.167 \times 7.48 = 808 \text{ GAL. (-)}$
2% MISC. DISPLACEMENT FOR PUMPS, PIPING, FITTINGS, SUPPORTS
 $2\% \text{ MISC. DISPLACEMENT FOR PUMPS, PIPING, FITTINGS, SUPPORTS} = 204 \text{ GAL. (-)}$
RAINFALL ALLOWANCE: 25 YR/24 HR = 0.417"
 $49.55 \times 21.65 \times 0.417 \times 7.48 = 3,346 \text{ GAL. (-)}$
TOTAL (EXCESS) = 10,489 GAL. (-)



Joseph M. Plecnik
 Registered Professional Engineer
CERTIFICATE NO. 44392
JOSEPH M. PLECNIK
 State of Arizona
 1/2/2016
 2/27/2018

NO.	DESCRIPTION	BY	CHK	APPR	DATE	REVISIONS
07	REVISED FOR PERMIT	JEK	MC	MC	090215	
06	105 PIPING CONVERSION	GAS	GAS	GD	030411	
05	REVISED PER SITE INSPECTION	JEK	MC	MC	100807	
04	REVISED PER SITE INSPECTION	JEK	MC	MC	071007	
04	SHOW 12K 150 SOLVENT TANK	VEY	-	-	120994	
03	HURRY TO AS BUILT	VEY	-	-	121493	
02	ADDED HIGHLIGHTED PUMP/PIPING NOTES	KJP	-	-	021492	
01						

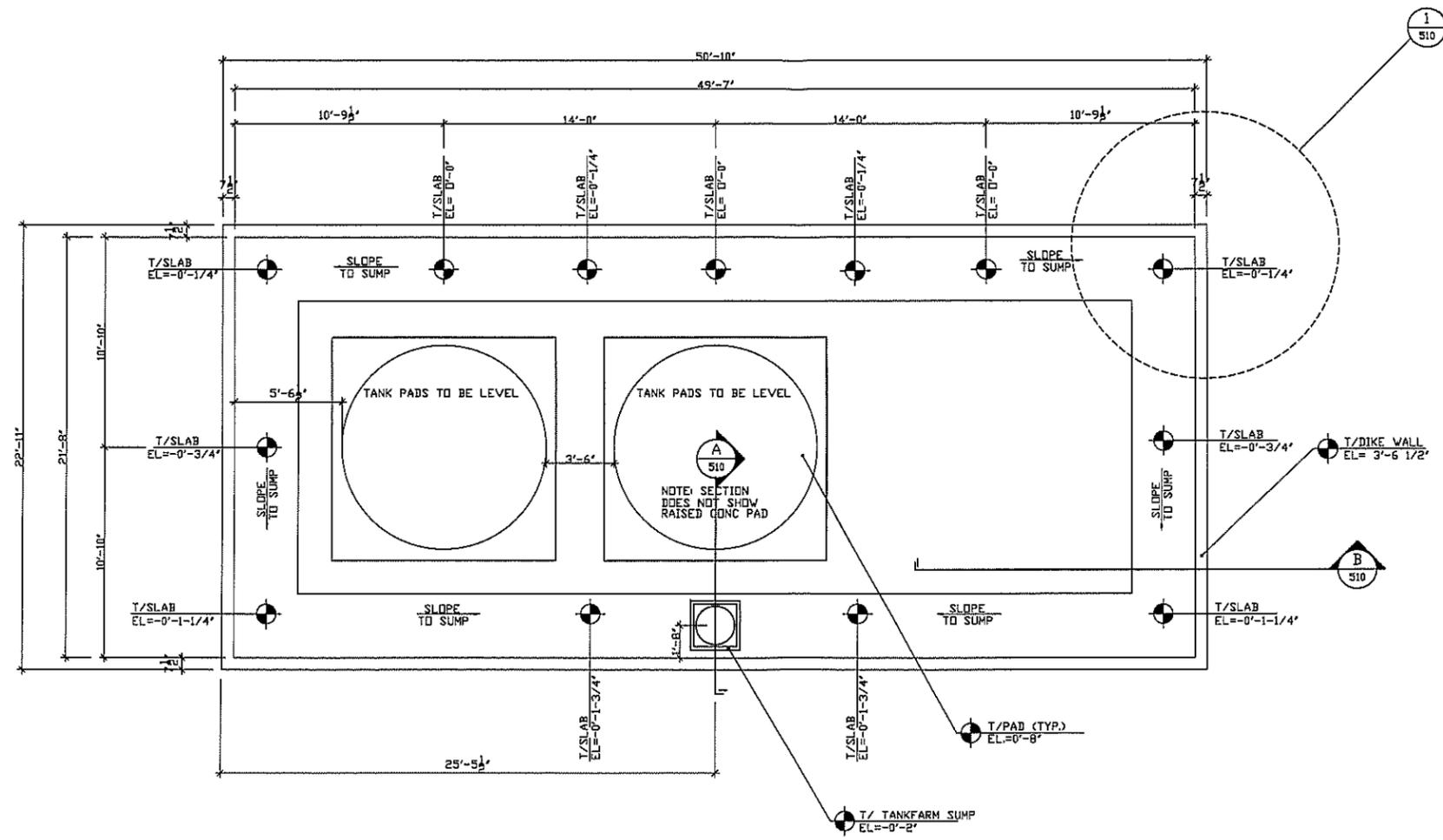
TANK FARM/ SHELTER PLAN

SAFETY-KLEEN SYSTEMS, INC.
 8500 N. COCHISE DRIVE, SUITE 400, CHANDLER, ARIZONA, 85226
 PHONE: 480-489-8748

SCALE: 1/4" = 1'-0"
 SERVICE CENTER LOCATION: CHANDLER, ARIZONA
 SC-DWG NUMBER: 7134-4100-150
 DATE: 01-01-20
 REV. NO.: 07

Exhibit D2-7

Concrete Tank Farm Plan



3 PACK CONCRETE TANKFARM PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

- 1.) ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, 315 AND 318 LATEST EDITIONS. FOLLOW ACI RECOMMENDATIONS FOR COLD AND HOT WEATHER CONDITIONS.
- 2.) ALL CONCRETE SHALL BE COVERED WITH BURLAP AND KEPT CONTINUOUSLY MOIST FOR A MINIMUM PERIOD OF FIVE DAYS.
- 3.) SLOPE CONCRETE AS SHOWN ON PLAN.
- 4.) MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3" FOR CONCRETE CAST AGAINST SOIL AND 2" FOR CONCRETE EXPOSED TO WEATHER.
- 5.) ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS WITH MAX. SIZE AGGREGATE OF 1 1/2" AND ENTRAINED AIR OF 4% - 6% IN ADDITION FOR TRUCK STATION MIN. MODULUS OF RUPTURE OF 600 PSI AT 28 DAYS WITH MAX. W/C RATIO OF .50 AND MIN. CEMENT FACTOR OF 560 LB/CY.
- 6.) ALL REBAR SHALL BE GRADE 50 BILLET STEEL CONFORMING TO ASTM A-615.
- 7.) TANK FARM ELEVATIONS ARE RELATIVE AND SHALL BE BASED ON THE ASSIGNED REFERENCE ELEVATION OF 0'-0" FOR EXISTING GRADE LEVEL.
- 8.) TANK FARM REQUIRED PREPARATION: REMOVE SURFACE AND UNDERCUT SOIL TO THE PROPER SUB GRADE ELEVATION. SCARIFY AND RECOMPACT THE TOP 8" OF EXISTING SUB GRADE SOIL. INSTALL MIRAFI 500X GEOTEXTILE OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. BACK FILL AND COMPACT WITH AN 8" LAYER OF STRUCTURAL FILL (3" MINUS WELL GRADED CRUSHED STONE) AND 6" LAYER OF GRANULAR FILL (1" MINUS WELL GRADED CRUSHED STONE). SUBGRADE MATERIAL SHALL BE COMPACTED TO 95% STRUCTURAL FILL AND GRANULAR FILL MATERIALS SHALL BE COMPACTED TO 100% OF THE STANDARD PROCTOR MAX. DRY DENSITY AND UNIFORM OVER THE ENTIRE AREA. ACTUAL GRADE PREPARATION MAY VARY DUE TO EXISTING SOIL CONDITIONS.

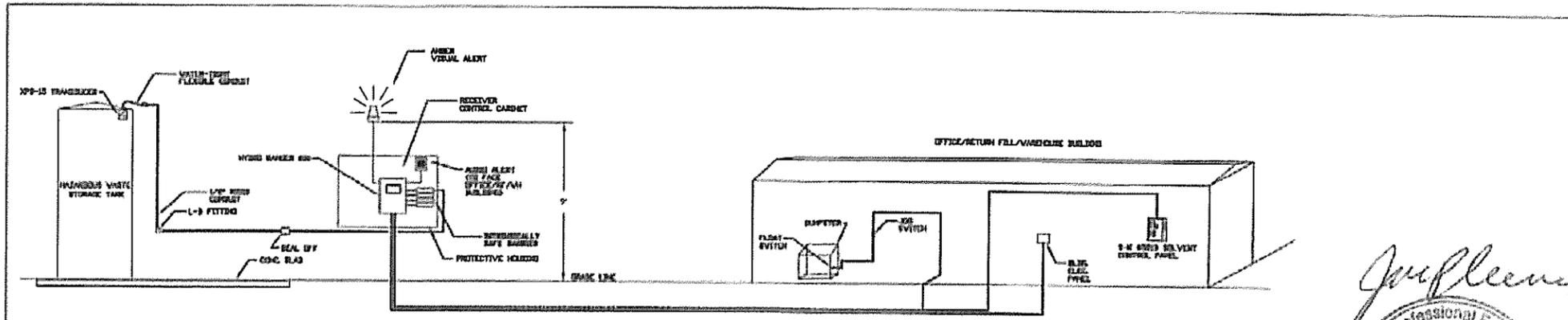
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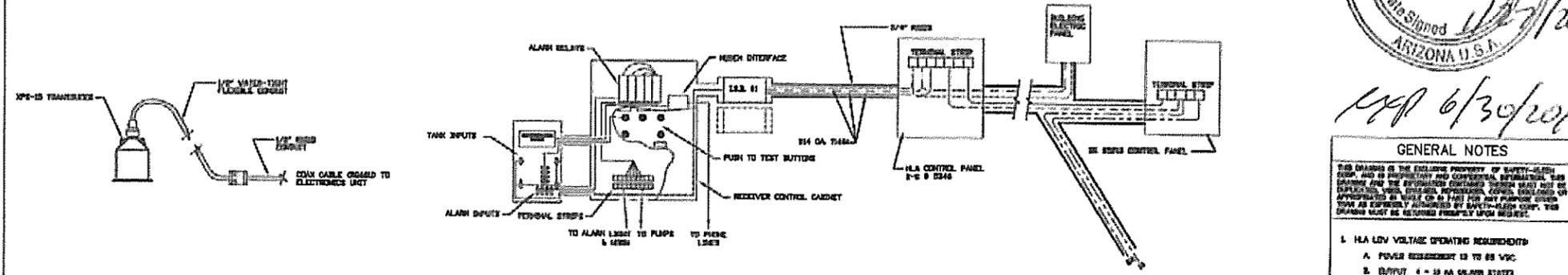
TITLE		3 PACK CONCRETE TANKFARM PLAN	
SAFETY-KLEEN SYSTEMS, INC.		2600 N. CENT. EXPRESSWAY STE 400 RICHARDSON, TX. 75080 PHONE 800-669-5740	
NO.	DESCRIPTION	BY	CHK
0	MADE FROM DRAWING STD-5501.	RD	KJM
REVISIONS		APPR	DATE
		102793	
SCALE	1/4" = 1'-0"	BY	R.D.
CHKO	KJM	APPROVED	OPERATIONS
SERVICE CENTER LOCATION	CHANDLER, AZ.	STD-DWG NUMBER	7134-4100-500
DATE	11-12-93	REV. NO.	0

Exhibit D2-8

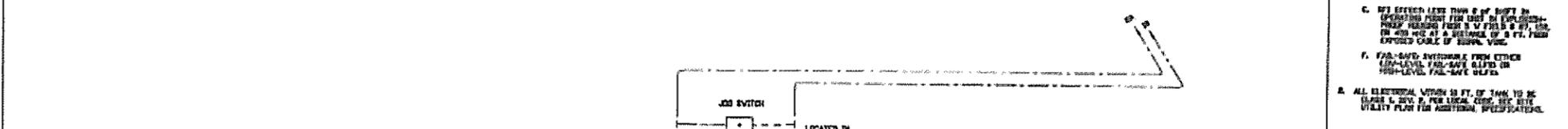
High Level Alarm Diagram



HIGH LEVEL ALARM SYSTEM DIAGRAM



TYPICAL TANK HLA SYSTEM CONTROL WIRING LAYOUT



LEVEL LEVEL SENSOR AND CONDULET DETAIL



RETURN/FILL WIRING DETAIL

Joseph M. Plecnik
 Registered Professional Engineer
 CERTIFICATE NO. 44392
 JOSEPH M. PLECNIK
 Date Signed *11/27/2016*
 ARIZONA U.S.A.

Exp 6/30/2018

- GENERAL NOTES**
1. HLA LOW VOLTAGE OPERATING REQUIREMENTS
 - A. POWER REQUIREMENT IS TO 24 VDC
 - B. OUTPUT A - IS 24 MA NORMAL STATE
IS - 23 MA NORMAL STATE
 - C. OPERATING TEMP. -40F TO 140F
 - D. SHOCK-TO-GROUND CLEARANCE
IS 1/4\"/>
 - E. WTS SPECIFIC LESS THAN 2\"/>
 - F. FIBER-OPTIC INTERFERENCE FROM OTHER
LOW-LEVEL, HIGH-LEVEL, ULTRA-LEVEL OR
HIGH-LEVEL, FIBER-OPTIC DEVICES
 2. ALL ELECTRICAL WIRING IS TO BE
CLASS 1, DIV 2, PER LOCAL CODE, SEE SITE
UTILITY PLAN FOR ADDITIONAL SPECIFICATIONS

TITLE									
ULTRASONIC HIGH LEVEL ALARM-SYSTEM DIAGRAM									
SAFETY-KLEEN SYSTEMS, INC.									
1000 N. 10TH AVENUE SUITE 100 CHANDLER, AZ 85226									
NO.	ISSUED FOR	REV.	BY	CHK.	APP.	DATE	SCALE	BY	DATE
1	ISSUED FOR PERMIT								
2	ISSUED FOR BIDD								
3	ISSUED FOR CONSTRUCTION								

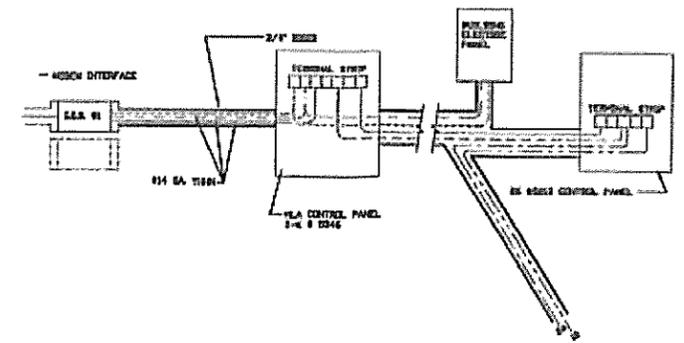
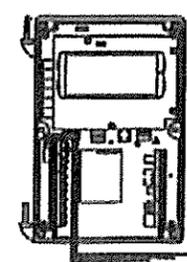
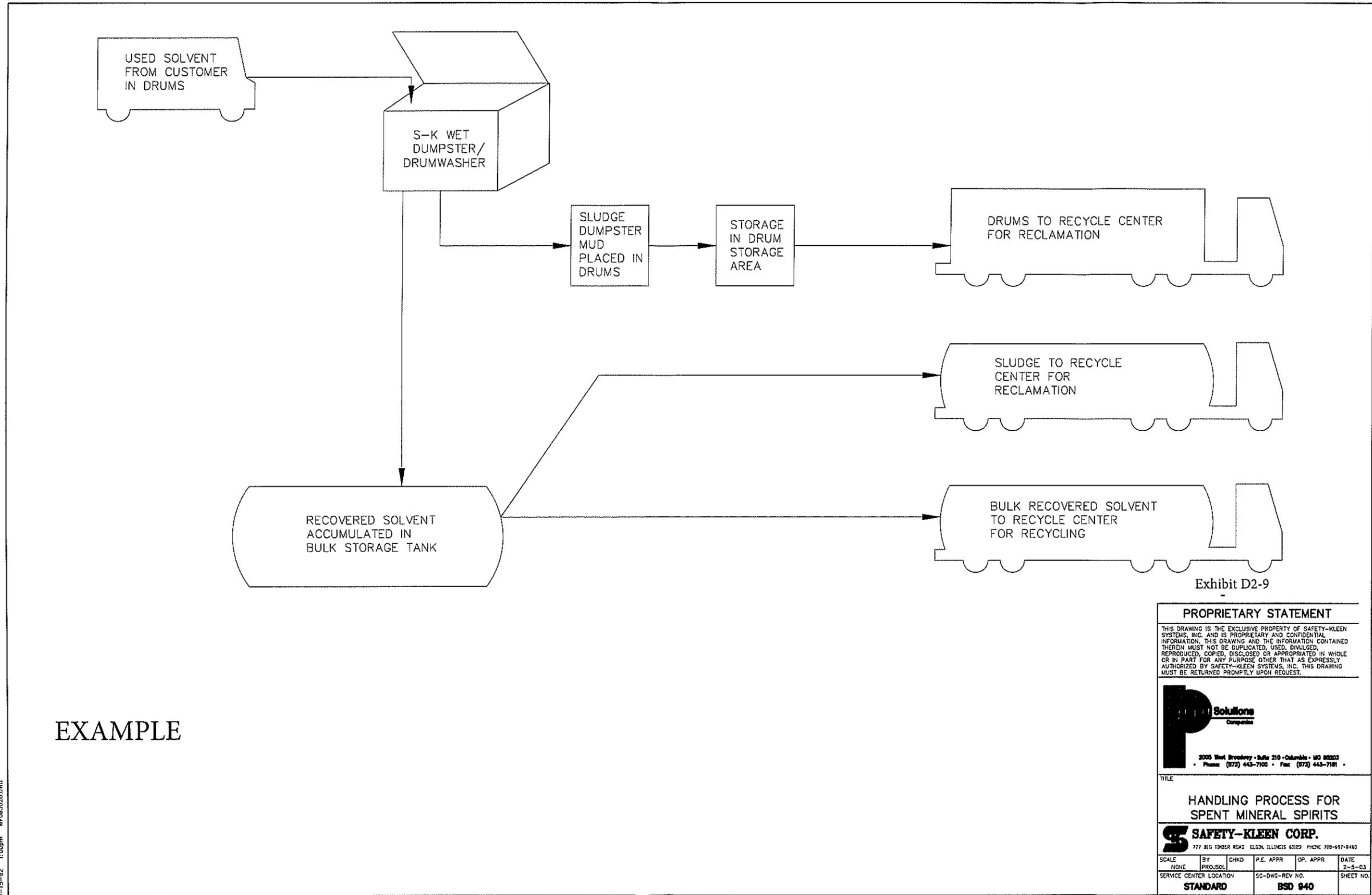


Exhibit D2-9

Handling Process for
Used Solvent at Branch



EXAMPLE

Exhibit D2-9

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2035 West Broadway - Suite 210 - Columbia - MO 65203
 Phone (672) 443-7100 • Fax (672) 443-7181

TITLE
HANDLING PROCESS FOR SPENT MINERAL SPIRITS

SAFETY-KLEEN CORP.
 777 BIG TOWER ROAD ELSON, ILLINOIS 62529 PHONE 708-687-8460

SCALE NONE	BY PROJ/SOL	CHKD	P.E. APPR	OP. APPR	DATE 2-5-03
SERVICE CENTER LOCATION STANDARD	SC-DWG-REV NO. BSD 840	SHEET NO.			

Exhibit D2-10

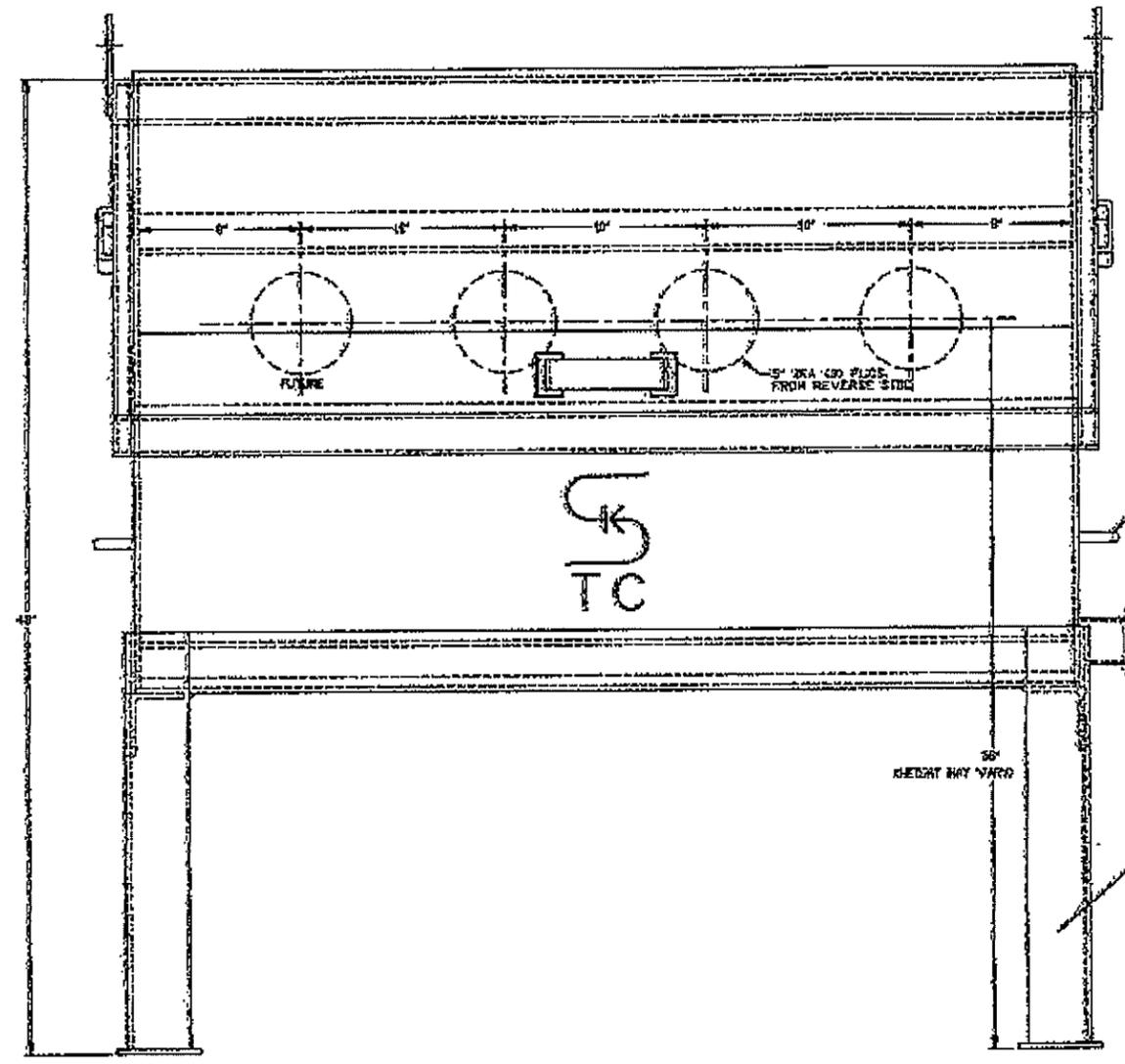
Used Solvent Process at Safety-Kleen
Recycle Center

Exhibit D2-13

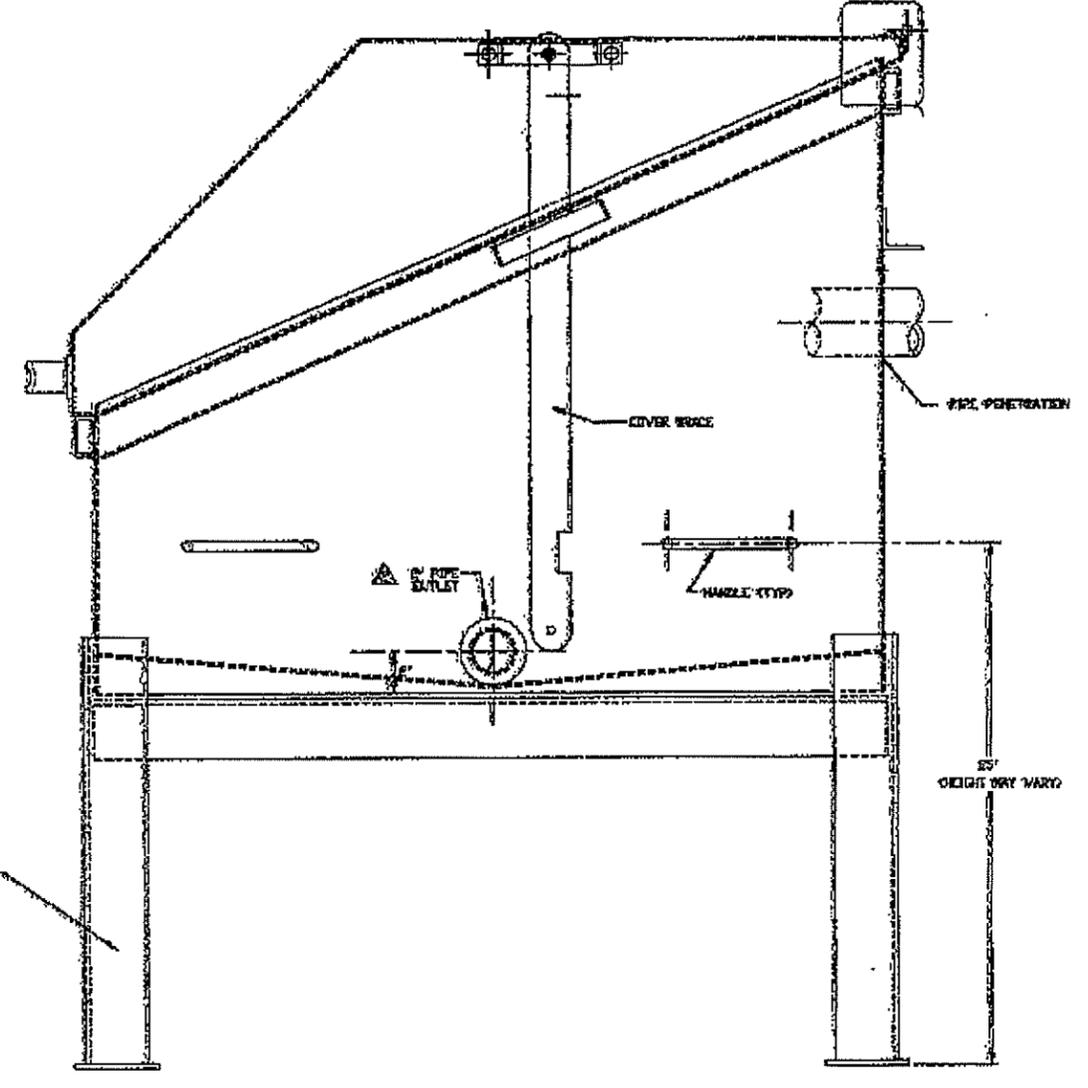
Drum Washer Isometric

Exhibit D2-16

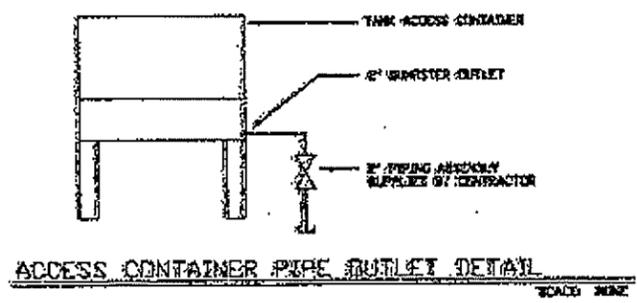
Tanker Access Containment Box



STORAGE TANK ACCESS CONTAINER - FRONT VIEW
SCALE: 1/4"=1'-0"



STORAGE TANK ACCESS CONTAINER - SIDE VIEW
SCALE: 1/4"=1'-0"



ACCESS CONTAINER PIPE OUTLET DETAIL
SCALE: 3/4"=1'-0"



Joseph M. Plecnik
1/11/2018

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TITLE ACCESS CONTAINER FABRICATION DETAILS	
 SAFETY-KLEEN SYSTEMS, INC. 2800 VA SENT EXPRESSWAY STE 400 HOUSTON, TX 77060 PHONE: (281) 486-8700	
SCALE: 1/4"=1'-0"	DATE: 12/18/18
BY: JPM	APPROVED: JPM
DESCRIPTION: ACCESS CONTAINER	SERVICE CENTER LOCATION: CHANDLER, AZ
REV. NO.: 0	REV. DATE: 12/18/18

Exhibit D2-17

Marlow Pump Spec Sheets

SK5330

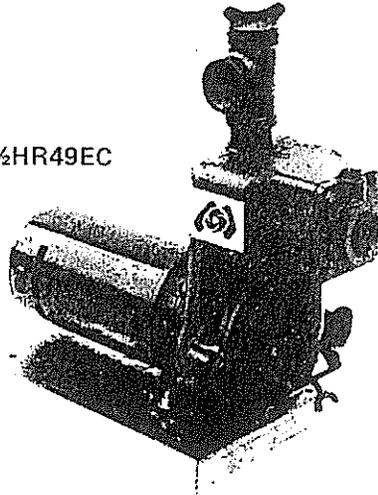


PUMPS AND EQUIPMENT DIVISION
ITT CORPORATION
MIDLAND PARK, NEW JERSEY 07432 • (201) 444-6900
LONGVIEW, TEXAS 75601 • (214) 753-7211

MODEL 1½HR49EC & 3CR18EC

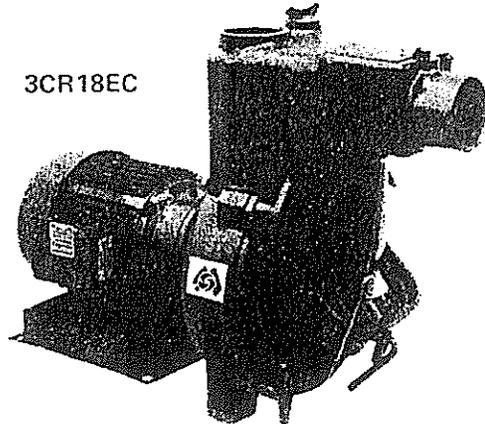
SOLIDS HANDLING
SELF-PRIMING CENTRIFUGAL PUMPS
CLOSE-COUPLED

1½HR49EC



WMS
PUMP

3CR18EC



FEATURES

Pump and motor are combined in a single, compact, complete unit. Easy to install and ready to operate.

GENERAL SPECIFICATIONS

Cast iron fitted construction with heavy duty two vane impeller and replaceable volute. (Removable wear plate offered on Model 3CR18EC only as standard equipment.) Pre-loaded suction check valve. Easy-off suction elbow and cover for quick access to all working parts of pump. Stainless self-lubricating mechanical shaft seal. 1½" NPT wing type fill plug. Units offered with or without baseplate.

Model	Sphere Handling Ability	Port Sizes	Shaft Seal Method	Motor	Static Prime Limit*
1-1/2HR49EC	1" Dia. (2.5 cm)	1-1/2" N.P.T. (3.8 cm)	Mech. Seal	1 hp-1-1/2 hp 3450 RPM	25 Ft. 7.6 m
3CR18EC	1-1/2" Dia. (3.8 cm)	3" N.P.T. (7.6 cm)	Mech. Seal	3 hp-5 hp 1750 RPM	23 Ft. 7.0 m

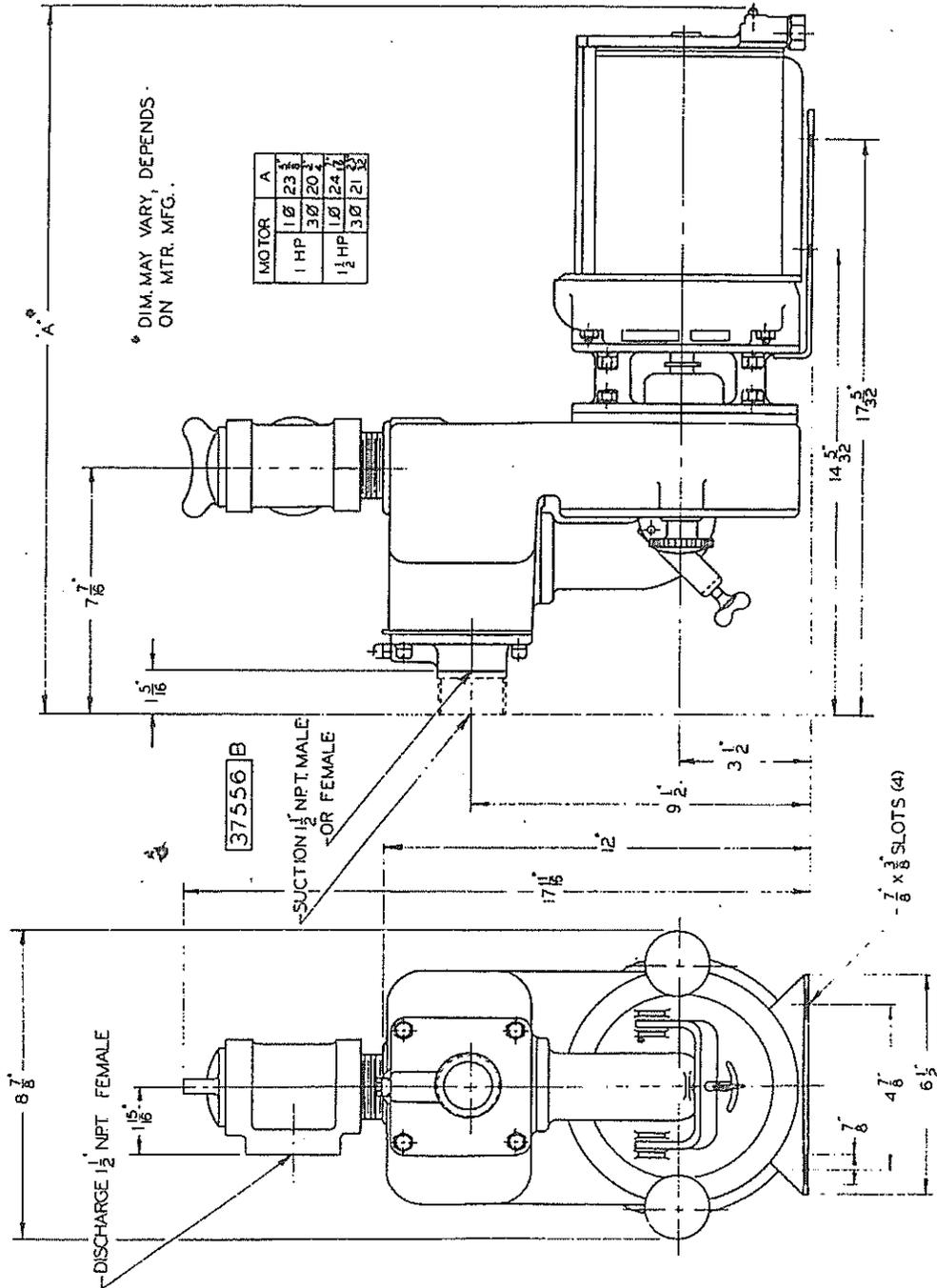
WMS
PUMP

*Note: Based on nominal pipe sizes with 5 ft. of horizontal length and 0 discharge head.

DIMENSIONS:

THESE DIMENSIONS NOT TO BE USED FOR CONSTRUCTION PURPOSES WITHOUT FORMAL FACTORY APPROVAL.

**PUMP UNITS with EXPLOSION PROOF MOTORS
 1½HR49EC**



* All dimensions shown in inches

PERFORMANCE CURVES

The performance curves shown in this manual and other published literature were taken from actual tests of standard production pumps, and reflect an average performance of the pumps indicated.

WMS
PUMP

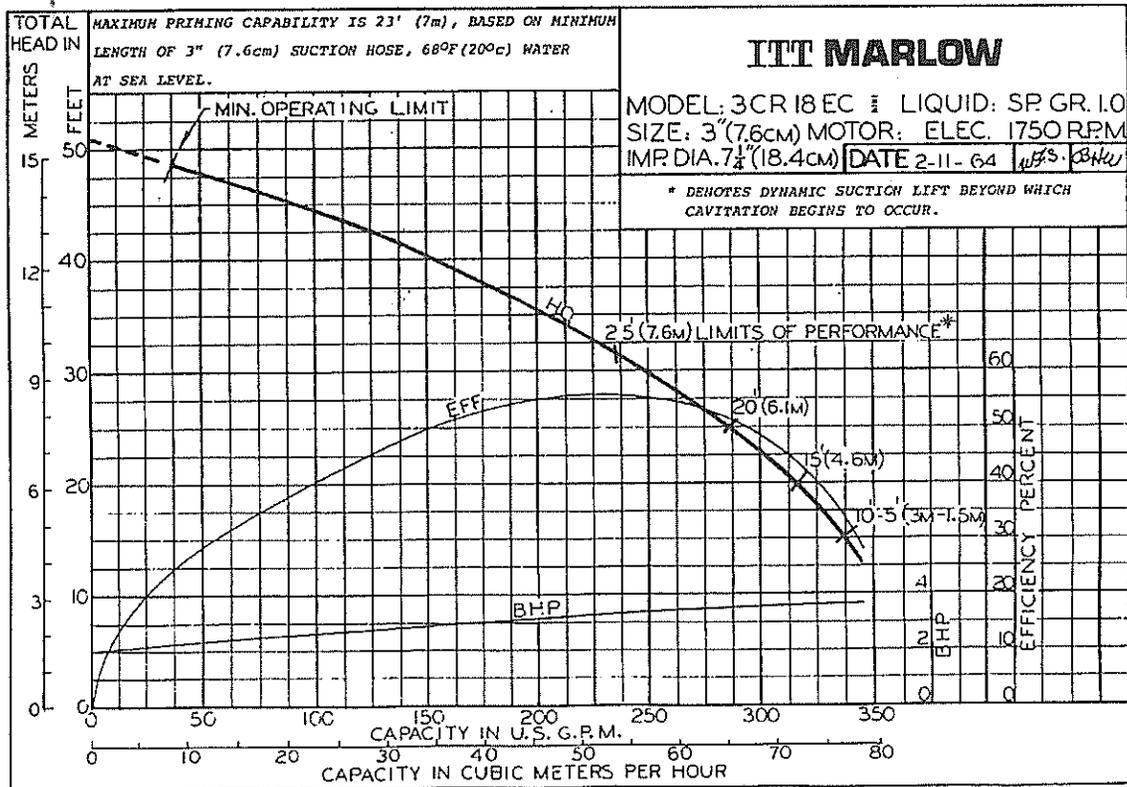
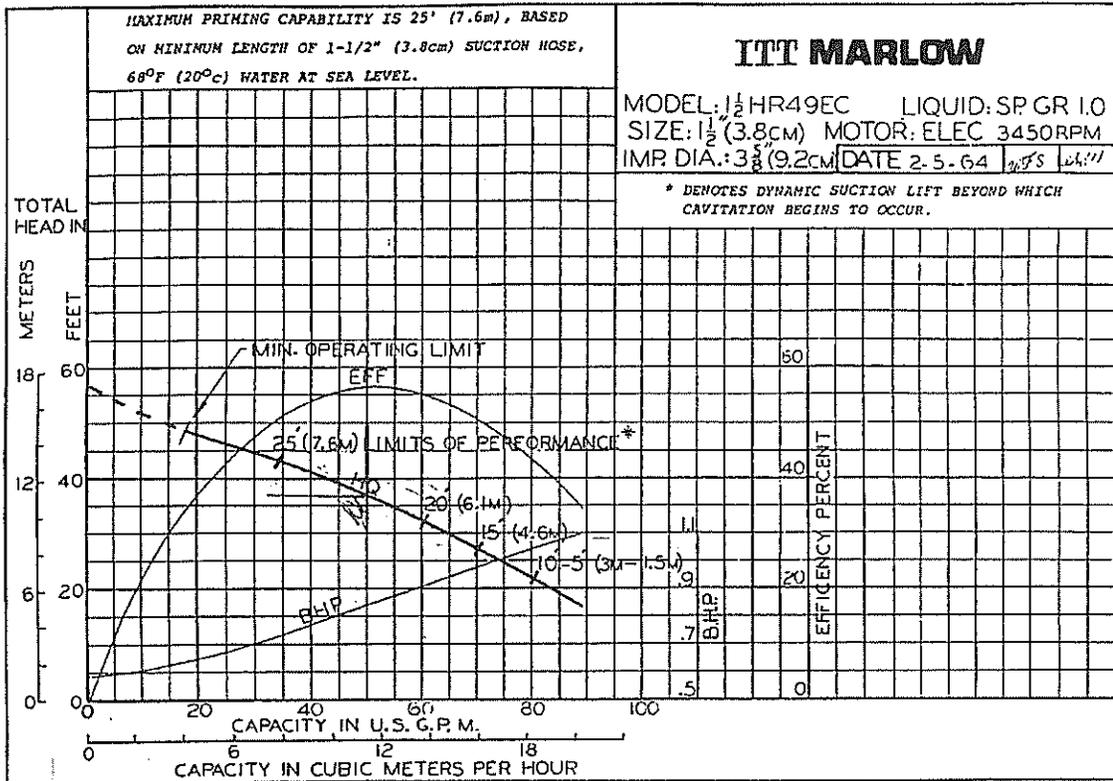


Exhibit D2-19

Used Solvent Tank Installation Assessment
Tera 93-409-089

TERA Report No. 93-409-089

INSTALLATION ASSESSMENT
USED SOLVENT STORAGE TANK SYSTEM
CHANDLER, ARIZONA

SAFETY-KLEEN CORP.
Elgin, Illinois



TERA, Inc.

3100 South Gessner Road, Suite 650
P.O. Box 770039, Houston, Texas 77215-0039, Tel. (713) 783-6292, Fax (713) 783-3698

93-409-089

TANK SYSTEM CERTIFICATION

I have supervised the installation assessment dated December 1, 1993, of the used solvent storage tank system at the Safety-Kleen Corp. facility in Chandler, Arizona. The EPA ID Number for this facility is: AZD 981969504.

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 and 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

Arizona No. 23203

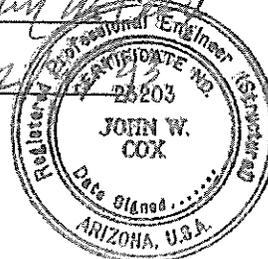
TERA, Inc.

P. O. Box 770039

Houston, Texas 77215-0039

Signed: 

Date: 12/1/93





TERA, inc.

3100 South Gessner Road, Suite 650
P.O. Box 770039, Houston, Texas 77215-0039, Tel. (713) 783-6292, Fax (713) 783-3698

December 1, 1993
93-409-089

SAFETY-KLEEN CORP.
8795 Folsom Blvd., Suite 108
Sacramento, California 95826

Attention: Mr. Eddie Young

Subject: Installation Assessment
Used Solvent Storage Tank System
Chandler, Arizona

Dear Eddie:

Submitted here is our assessment report for the used solvent storage tank system at your Chandler 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 713/783-6292 if you have any questions.

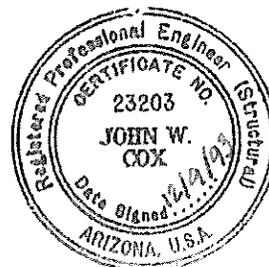
Very truly yours,

TERA, Inc.

John W. Cox, Ph.D., P.E., CHMM
Vice President and Chief Engineer

JWC/da

Enclosure: Five (5) Copies



93-409-089

INSTALLATION ASSESSMENT
USED SOLVENT STORAGE TANK SYSTEM
CHANDLER, ARIZONA

* * *

To

SAFETY-KLEEN CORPORATION
Elgin, Illinois

* * *

By

TERA, Inc.
Houston, Texas
December, 1993

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<u>Title</u>	<u>Page No.</u>
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CONSIDERATIONS OF INSTALLATION ASSESSMENT	2
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2. Tightness Testing	2
3. Ancillary Equipment	3
4. Secondary Containment System	3
5. Secondary Containment System Capacity	4
CONCLUSIONS OF ASSESSMENT	4
APPENDIX A - Installation Documentation	
APPENDIX B - Calculations	
APPENDIX C - Inspection and Test Reports	
APPENDIX D - Photos	

TANK SYSTEM ASSESSMENT

This report documents the installation assessment performed for the used solvent storage tank system at the Safety-Kleen facility in Chandler, Arizona. This assessment is referenced to the design assessment on this system (Report No. 91-159) dated May 31, 1991. The assessment described here is written to address the requirements of 40 CFR 264.192 and 40 CFR 264.193, and the corresponding requirements of the Arizona Administrative Code at R18-8-264.

SYSTEM DESCRIPTION

Used solvent liquids will be received from offsite generators in tank trucks and unloaded through aboveground piping into the aboveground steel storage tank of 12,000-gallon capacity. Accumulated used solvent will be periodically pumped from this tank to a tank truck for offsite disposal. Sludge and solids that accumulate in the tank will be removed through a manway for offsite disposal.

The storage tank is a skirt-supported, vertical cylinder with a shallow cone roof and a dished bottom. The skirt has access ports to facilitate inspection of the tank bottom and for leak detection. The tank is located inside a steel-reinforced concrete containment area which is coated for impermeability. The used solvent storage tank is vented to the atmosphere. Tank liquid level is monitored by reading a level indicator. A high level alarm is provided to prevent overfilling.

SYSTEM DESCRIPTION (Continued)

For the purpose of this assessment the used solvent storage tank system has been defined to include the storage tank, the drum washers, the transfer pump, the tank access container, the aboveground piping which connects them, and the secondary containment systems for these components. Modifications that have taken place since the design assessment (Report 91-159) was issued are documented in this report and the Appendices.

CONSIDERATIONS OF INSTALLATION ASSESSMENT

1. Tank System Inspection (40 CFR 264.192(b))

The used solvent storage tank system was inspected for, and found to be free of, any evidence of damage due to improper handling, weld breaks, punctures, scrapes of protective coatings, cracks or corrosion. There was no evidence of any other structural damage, inadequate construction or installation. See documentation in the Appendices.

2. Tightness Testing (40 CFR 264.192(d))

The tank system was tested for tightness and found to be free of leaks. See documentation in Appendix C.

CONSIDERATIONS OF INSTALLATION ASSESSMENT (Continued)3. Ancillary Equipment (40 CFR 264.192(e))

The piping and related ancillary equipment items of the tank system was inspected and found to be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion or contraction. To assure the pipe rack will withstand Chandler, Arizona wind loads, pipe rack bracing between the pipe rack and the warehouse building will be modified as shown on the two-page design calculations in Appendix B titled Pipe Rack Brace.

4. Secondary Containment System (40 CFR 264.193(b) and (c))

The tank farm secondary containment was inspected and found to be capable of collecting and accommodating releases so as to prevent migration to the soil, ground water or surface water. The structure was noted to be constructed of reinforced concrete and lined with an impermeable, chemical-resistant coating material. A welded 12' x 12' stainless steel plate has been placed between the impermeable coating on the tank pedestal and the tank (see documentation letter in Appendix A and photos in Appendix D). The drum washers secondary containment is a sloped concrete base to a stainless steel lined trench. The base is coated with an impermeable, chemical-resistant material. The secondary containment was inspected and found to be capable of collecting and accommodating releases so as to prevent migration to the soil, ground water or surface water. See materials documentation and as built drawings in Appendix A and inspection reports in Appendix C.

CONSIDERATIONS OF INSTALLATION ASSESSMENT (Continued)5. Secondary Containment System Capacity (40 CFR 264.193(e)(2))

The tank farm secondary containment was measured and found to have sufficient volume to contain the contents of the largest tank within the system plus the precipitation from a 25-year, 24-hour rainfall. The drum washers secondary containment trench was measured and found to have sufficient volume to contain the contents of one of the drum washers. The drum washers are under roof and not subject to rainfall. See calculations in Appendix B.

CONCLUSIONS OF ASSESSMENT

Based on visual inspections and the information presented above and included in the Appendices to this report, the used solvent storage tank system at the Safety-Kleen facility in Chandler, Arizona, appears to be installed without any significant defects with one exception. The pipe rack carrying pipes between the return and fill station and the tankfarm requires modified bracing between the pipe rack and the warehouse building as stated in section three of the Considerations of Installation Assessment and shown in Appendix B on the two-page Pipe Rack Brace Calculations. With this one exception, the tank system appears to be fit for its intended service and meets the requirements of 40 CFR 264.192. Also based on visual inspections and the information presented above and included in the Appendices to this report, the secondary containments for this system appear to meet the requirements of 40 CFR 264.193.

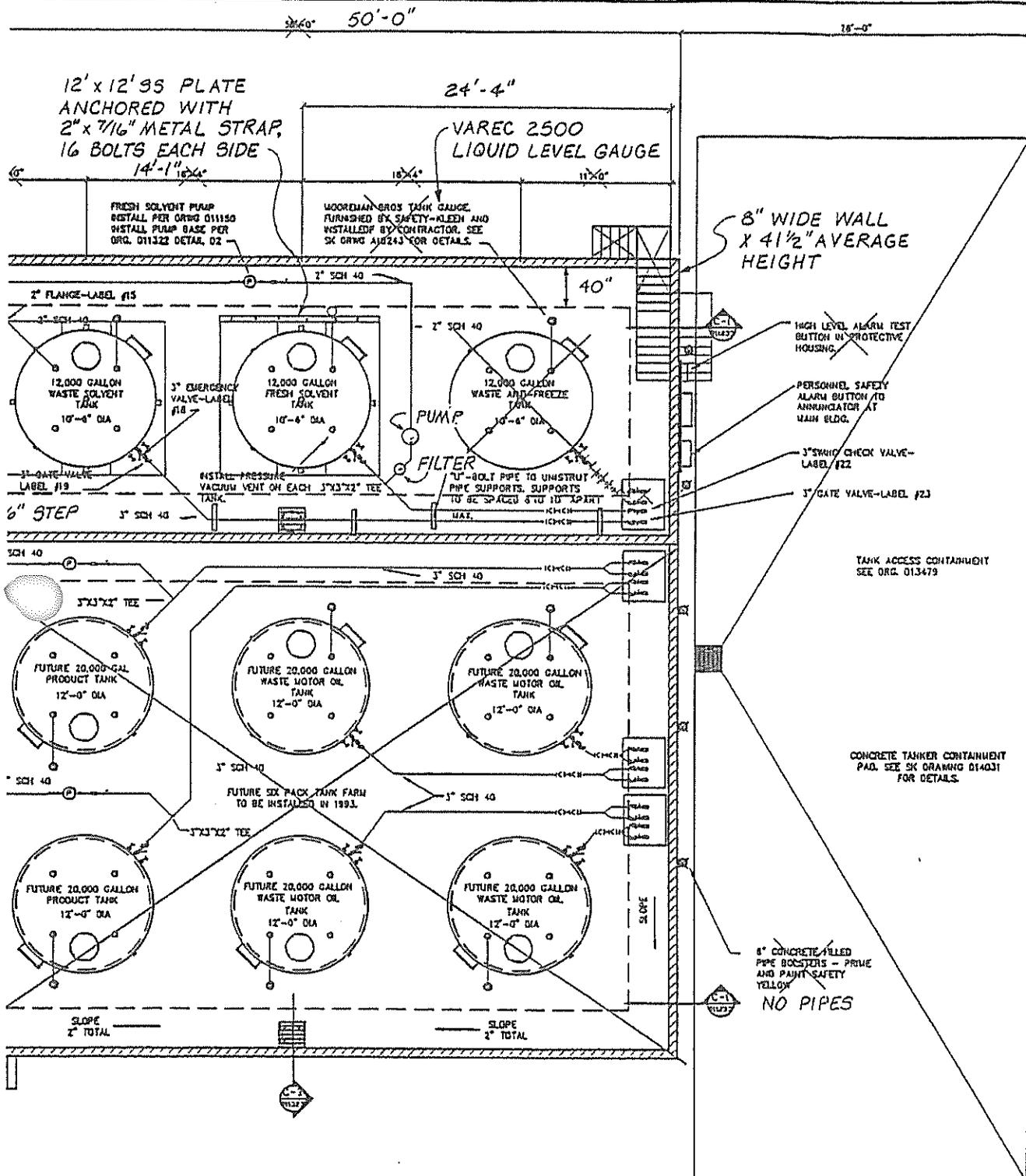
APPENDIX A
Installation Documentation

APPENDIX A

Installation Documentation

TABLE OF CONTENTS

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As Built-Tank Farm Plan - 2001	A- 1
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Varec 2500 Series Liquid Level Gauge	A- 9
ICO-Guard 51 Product Data Sheet	A-12
Cohen Contracting Inc. Letter	A-14



TANK VOLUME CALCULATION - 12,000 GAL. STORAGE TANK (EACH BOTTOM EDGE HEIGHT 7'-0")

FORMULA USED
 $0.13 \text{ FT}^3 \text{ GAL}^{-1} \times 12,000 \text{ GAL} = 1,560 \text{ FT}^3$ = TANK HEAD REPLACEMENT VOLUME (GAL)
 $12 \text{ FT} \times 10 \text{ FT} \times 10 \text{ FT} = 1,200 \text{ FT}^3$ = TANK SHELL REPLACEMENT VOLUME (GAL)
 $1,560 \text{ FT}^3 + 1,200 \text{ FT}^3 = 2,760 \text{ FT}^3$ = TANK PAB REPLACEMENT VOLUME (GAL)
 $2,760 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 20,645 \text{ GAL}$ = TANK PAB REPLACEMENT VOLUME (GAL)

SEE VOLUME CALCULATIONS IN APPENDIX B

SIZE VOLUME
 $0.42 \text{ FT}^3 \text{ GAL}^{-1} \times 12,000 \text{ GAL} = 5,040 \text{ FT}^3$ = 5,040 GAL (-)
VOLUME OF LARGEST TANK WITHIN SPACE AREA
TANK REPLACEMENT VOLUME
 $12 \text{ FT} \times 10 \text{ FT} \times 10 \text{ FT} = 1,200 \text{ FT}^3$ = 1,200 GAL (-)
 $1,200 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 8,976 \text{ GAL}$ = 8,976 GAL (-)
TANK PAB REPLACEMENT VOLUME
 $1,560 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 11,645 \text{ GAL}$ = 11,645 GAL (-)
TOTAL (EXCESS) = 21,621 GAL (-)

TANK VOLUME CALCULATION - 20,000 GAL. STORAGE TANK (EACH BOTTOM EDGE HEIGHT 7'-0")

FORMULA USED
 $0.13 \text{ FT}^3 \text{ GAL}^{-1} \times 20,000 \text{ GAL} = 2,600 \text{ FT}^3$ = TANK HEAD REPLACEMENT VOLUME (GAL)
 $20 \text{ FT} \times 10 \text{ FT} \times 10 \text{ FT} = 2,000 \text{ FT}^3$ = TANK SHELL REPLACEMENT VOLUME (GAL)
 $2,600 \text{ FT}^3 + 2,000 \text{ FT}^3 = 4,600 \text{ FT}^3$ = TANK PAB REPLACEMENT VOLUME (GAL)
 $4,600 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 34,408 \text{ GAL}$ = TANK PAB REPLACEMENT VOLUME (GAL)

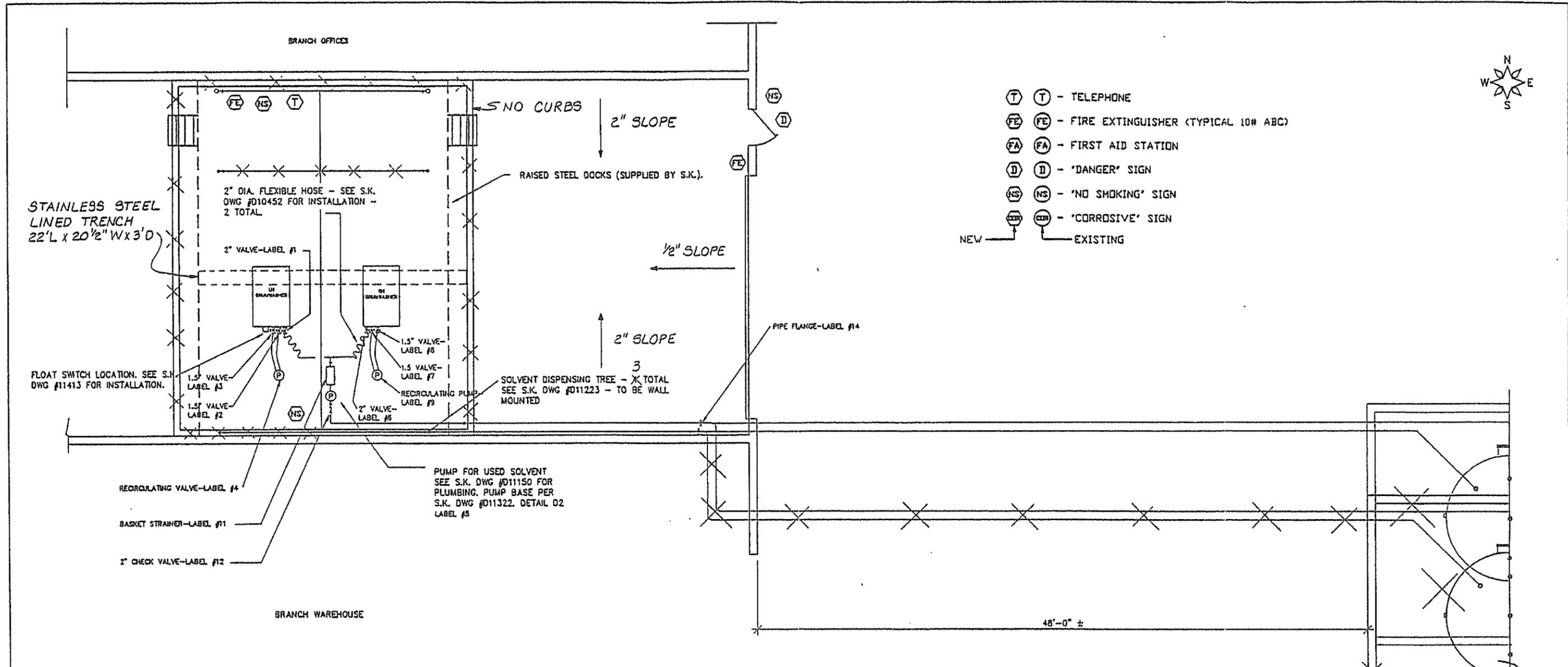
SIZE VOLUME
 $0.42 \text{ FT}^3 \text{ GAL}^{-1} \times 20,000 \text{ GAL} = 8,400 \text{ FT}^3$ = 8,400 GAL (-)
VOLUME OF LARGEST TANK WITHIN SPACE AREA
TANK REPLACEMENT VOLUME
 $20 \text{ FT} \times 10 \text{ FT} \times 10 \text{ FT} = 2,000 \text{ FT}^3$ = 2,000 GAL (-)
 $2,000 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 14,960 \text{ GAL}$ = 14,960 GAL (-)
TANK PAB REPLACEMENT VOLUME
 $4,600 \text{ FT}^3 \times 7.48 \text{ GAL} \text{ FT}^{-3} = 34,408 \text{ GAL}$ = 34,408 GAL (-)
TOTAL (EXCESS) = 51,368 GAL (-)

TANKER CONTAINMENT PAB CALCULATION - 0.2578 GAL/2.000

FORMULA USED
 $1/3 \text{ LUN} \text{ (TAS GAL/2/C FT)} / 2$
 $L = \text{LENGTH} = 60.0 \text{ FT.} = 02'-00"$
 $V = \text{VOLUME} = 13.8 \text{ FT.} = 02'-00"$
 $H = \text{HEIGHT} = 7.5 \text{ FT.} = 07'-00"$

TANKER CONTAINMENT VOLUME
 $0.2578 \text{ FT}^3 \text{ GAL}^{-1} \times 13.8 \text{ FT}^3 = 3.56 \text{ GAL}$

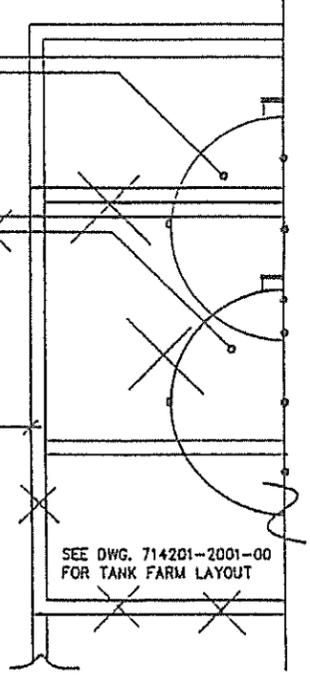
GENERAL NOTES



- Ⓣ Ⓣ - TELEPHONE
- Ⓕ Ⓕ - FIRE EXTINGUISHER (TYPICAL 10# ABC)
- Ⓕ Ⓕ - FIRST AID STATION
- Ⓕ Ⓕ - 'DANGER' SIGN
- Ⓕ Ⓕ - 'NO SMOKING' SIGN
- Ⓕ Ⓕ - 'CORROSIVE' SIGN
- NEW ——— EXISTING



Installation Modifications
 11/18/93
 Thomas F. Troller

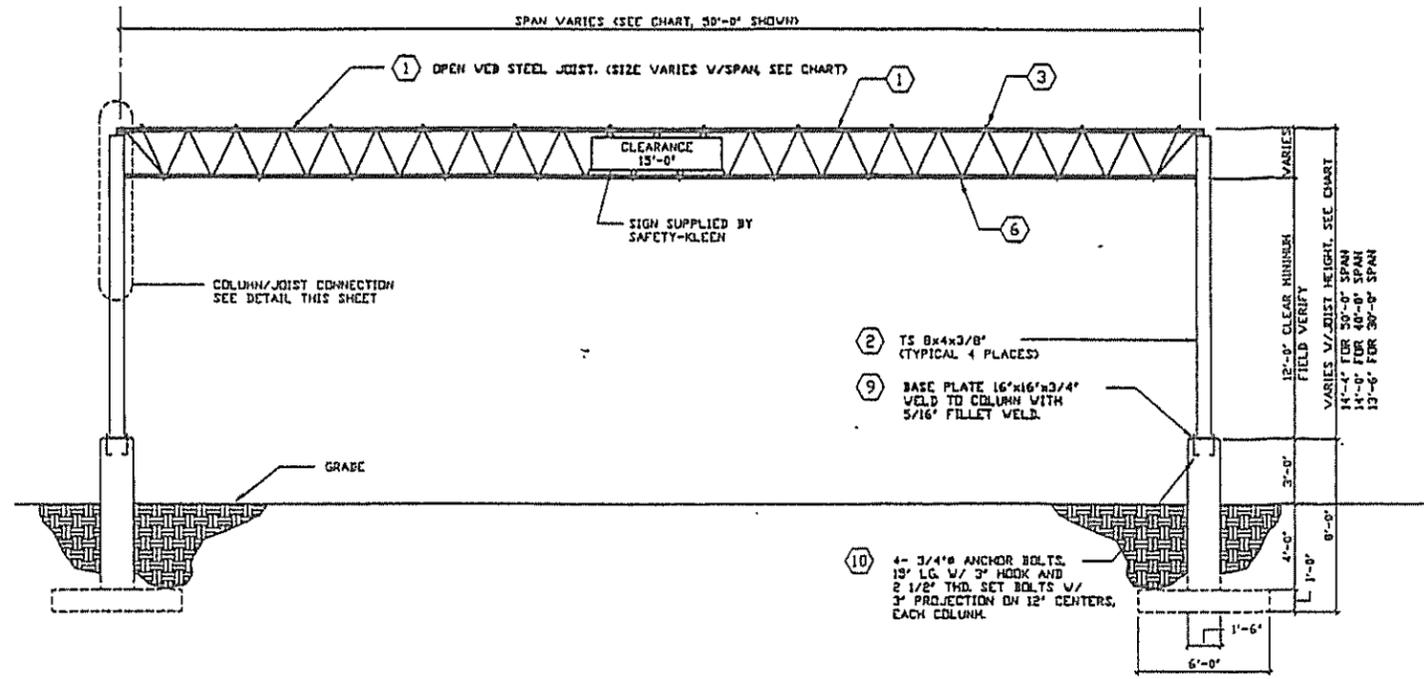


NOTES:
 HIGH LEVEL ALARM TO BE INSTALLED PER SAFETY KLEEN DWG #011538, 013102, AND 013120.
 ALL PIPING FROM RETURN/FILL DOCK TO TANK FARM WELDED SCHEDULE 40 BLACK PIPE, TO BE PRIMED AND PAINTED, COLORS TO BE BROWN FOR WASTE LINE AND ORANGE FOR U.S. PRODUCT.
 SEE DWG. 714201-2001 FOR ADDITIONAL PIPING NOTES.



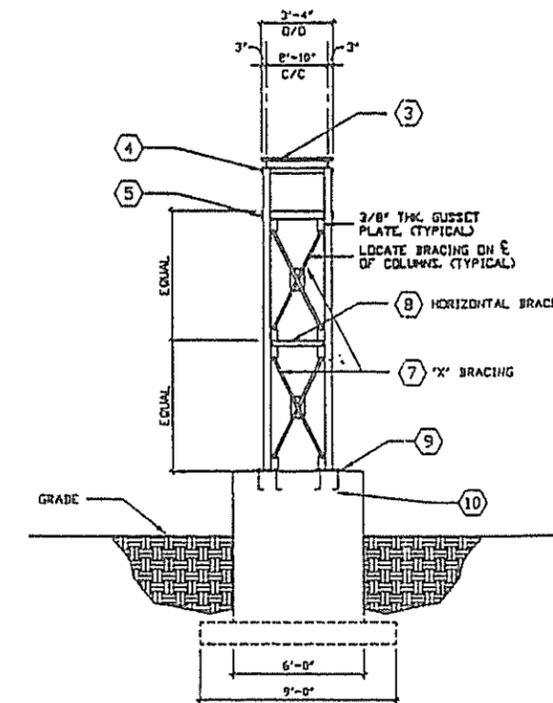
GENERAL NOTES			
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TITLE			
TANK FARM/ SHELTER PLAN			
TERA, INC. HOUSTON, TEXAS			
NO.	DESCRIPTION	BY	DATE
01	ISSUED FOR PERMIT	JFC	1/23/93
02	CHANGED TITLE BLOCK	HLF	12/17/93
SCALE		BY	DATE
1/4" = 1'-0"		ALL	04-04-90
SERVICE CENTER LOCATION		SC-DWG NUMBER	REV. NO.
CHANDLER, ARIZONA		714201-2002	02

NO.	DESCRIPTION	BY	CHK	APPR	DATE



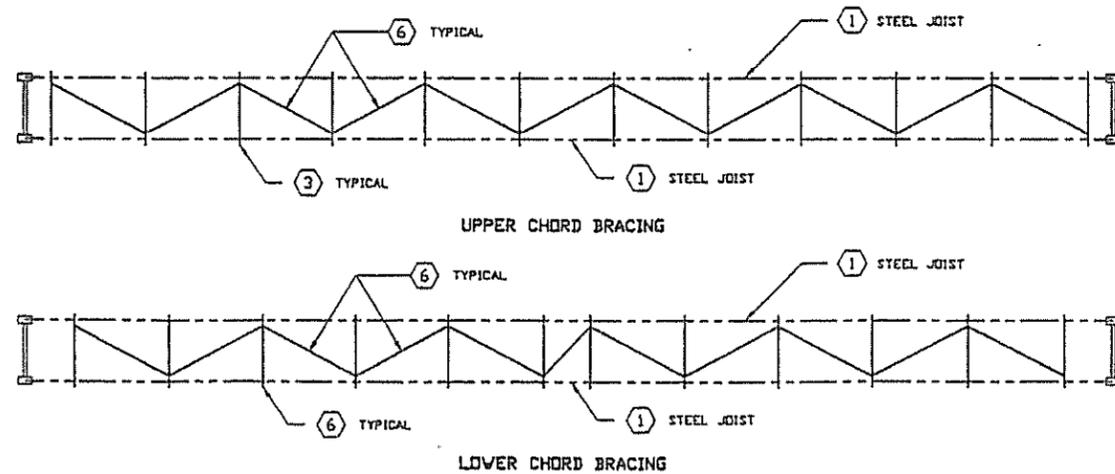
LONGITUDINAL ELEVATION

SCALE: 1/4" = 1'-0"



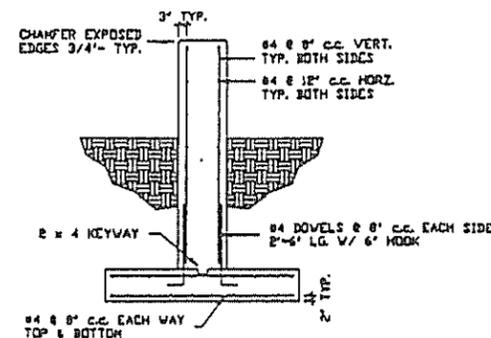
END ELEVATION

SCALE: 1/4" = 1'-0"



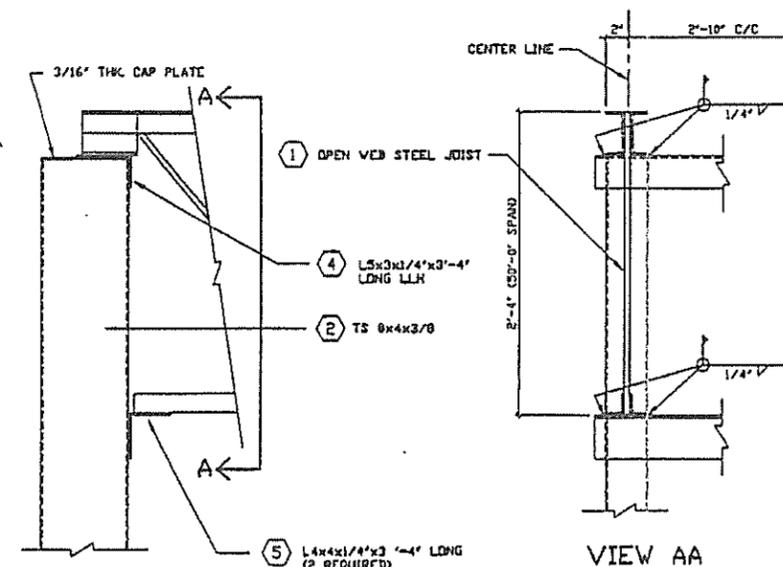
JOIST BRACING PLAN

SCALE: 1/4" = 1'-0"



FOUNDATION SECTION

SCALE: 3/8" = 1'-0"



COLUMN/JOIST CONNECTION DETAIL

SCALE: 1 1/2" = 1'-0"

STEEL JOIST CHART

JOIST SPAN	STEEL JOIST SERIES
0'-0" TO 30'-0"	K-SERIES 18K3
31'-0" TO 40'-0"	K-SERIES 24K4
41'-0" TO 50'-0"	K-SERIES 28K7

PARTS LIST

PART	QTY.	DESCRIPTION
(1)	2	STEEL JOIST - SEE JOIST CHART
(2)	4	TS 8"x3/8" (TYPICAL 4 PLACES)
(3)	QTY.	TS 2" x 2" x 3/16" BRACING & PIPE SUPPORT
(4)	2	L5" x 3" x 1/4" x 3'-4" LONG LLK
(5)	2	L4" x 4" x 1/4" x 3'-4" LONG
(6)	QTY.	L1 1/2" x 1 1/2" x 3/16" BRACING
(7)	8	L2" x 2" x 1/4" x (MEASURE)
(8)	2	L2" x 2" x 1/4"
(9)	4	BASE PLATE 16" x 16" x 3/4"
(10)	16	3/4" DIAMETER ANCHOR BOLT
(11)	16	3/4" DIAMETER NUT AND WASHER (NOT SHOWN)

Installation Modifications
The pipe bridge foundation appears to be monolithic with the warehouse wall foundation and the tank farm secondary containment wall foundation on respective ends. The pipe bridge structure support bracing to the warehouse building wall will be modified to the TERA, Inc. two page Pipe Rack Brace Report in Appendix B of this report.

Thomas J. Troller
11/30/93

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- DESIGN LIVE LOAD OF 100 PLF/JOIST.
- SHOP ASSEMBLE SUPPORT FRAME. USE 1/4" FILET WELDS AT ALL CONNECTIONS UNLESS NOTED OTHERWISE.
- SHOP PAINT ALL MEMBERS (EXCEPT AT CONNECTIONS) WITH 1 COAT PRIMER, AFTER SURFACE PREPARATION APPLY 1 COAT OF WHITE OXIDE PAINT AND 2 COATS OF ALKYL BASE GLOSS WHITE STRUCTURAL ENAMEL, C.A. MOBILE 12-V-1. ALLOW PAINT TO DRY 16-24 HOURS BETWEEN COATS TO INSURE PROPER SEALING.
- SUBBASE BEARING PRESSURE TO BE NOT LESS THAN 2000 PSF.

PARALLEL STEEL JOIST PIPE BRIDGE

TERA, Inc.
HOUSTON, TEXAS

NO.	DESCRIPTION	BY	CHK	APPR	DATE	SERVICE CENTER STANDARDS	STD-DWG NUMBER	REV. NO.
01	ISSUED FOR PERMIT	JFG	AVC	JVC	1/23/99			
02	REPLACED DRAWING D13425	JAD	-	-	05/29/00			
REVISIONS						SCALE AS NOTED	BY JAD	DATE 05-29-99
						STRUCTURAL	STD-6001	01

SUBMITTAL DATA FOR:

MILLTRONICS ULTRASONIC AIRRANGER DPL (DUAL POINT)
MULTI-RANGE LEVEL MEASUREMENT SYSTEM

FOR:

TERA INC.

PROJECT:

ENGINEER:

CONTRACTOR:

- Relays are 4 alarm control relays, 1 form C SPDT contact per relay, rated at 5 A at 250 VAC non-inductive, deadband deadband is parameter set
- Data link is transmit only, single +/- 20 mA bipolar current loop at 9600 baud
- Calibrator is general purpose ABS plastic, 2.6" X 4" X 1", operating temperature is -5 to 122 degree F, power is 9 VDC battery, weight is 0.3 lbs.

2 2 ST25CT4 Transducer with the following features:

- Power is from electronics and is impedance matched to electronics
- Element is piezoelectric barium titanite crystal
- Range is from 2 to 25 Feet
- Frequency is 41.5 Khz
- Beam angle is 12 degree
- Temperature range is from -40 to 200 degree F
- Housing is CPVC with 4" flange
- Facing is Teflon
- Cable length is 1 meter
- Approvals are:

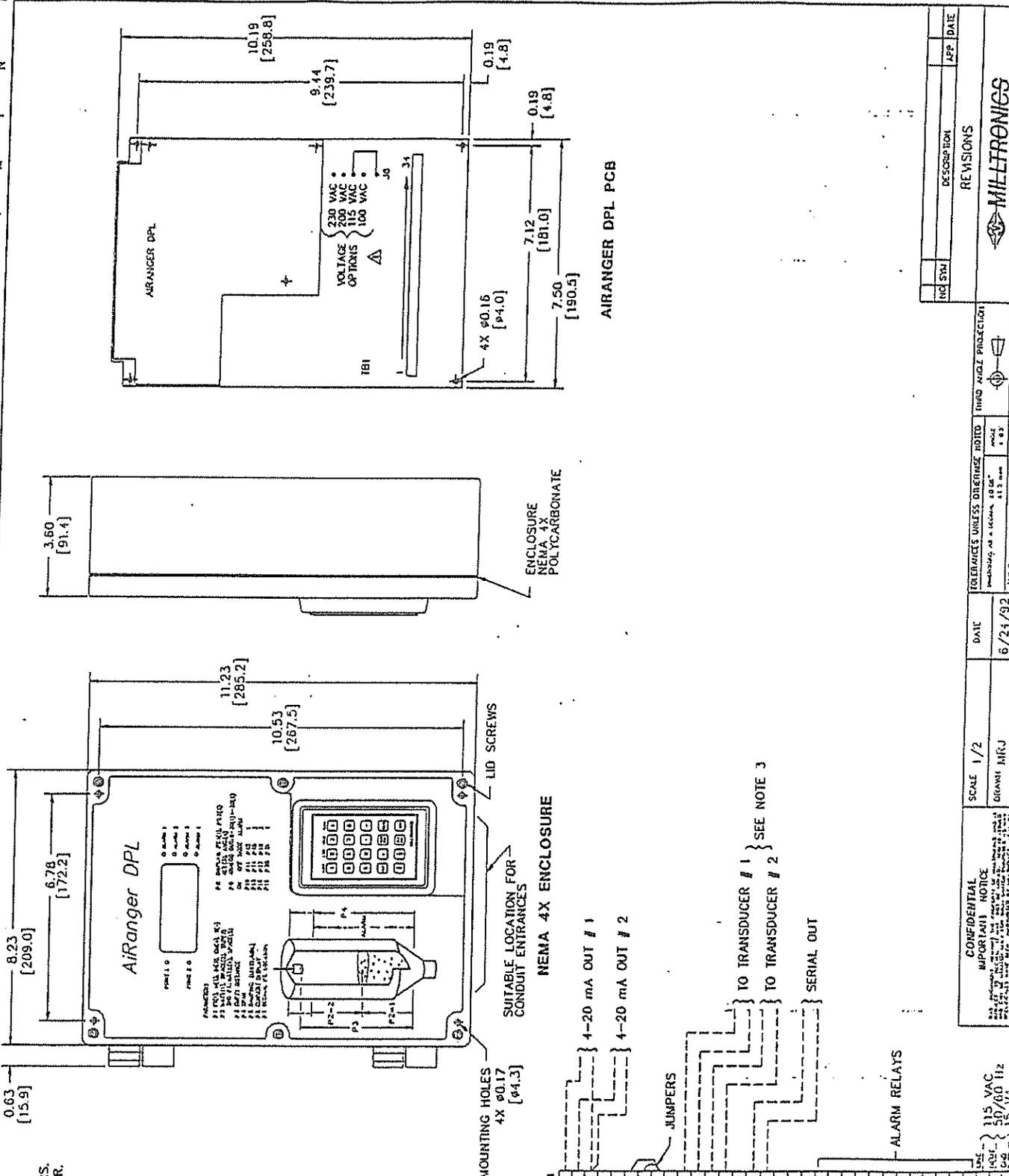
CSA Class I, Gr. A, B, C, & D
Class II, Gr. E, F, & G

FM Class I, Div, I Gr. A, B, C, & D
Class II, Div. I GR. E, F, & G

Milltronics Job# Pre-submittal

NOTES

1. ALL DIMENSIONS IN INCHES
2. [] DIMENSIONS IN MILLIMETERS
3. WIRING BY CUSTOMER
4. RC62U OR RC62U/A



AIRRANGER DPL PCB

RELAYS SHOWN
IN DE-ENERGIZED
POSITION

ALARM RELAYS

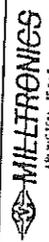
115 VAC
50/60 Hz
15 VA

REV	DESCRIPTION	APP	DATE

REV	DESCRIPTION	APP	DATE

SCALE	DATE	DESIGNER	CHECKED
1/2	6/24/92	MRJ	PS

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MILLERTRONICS
ANalog IECAS

AIRRANGER DPL W/ 2 TRANSDUCERS
OUTLINE DIM & EXT CONNECTIONS

FILE # 20232200 DRAWING NUMBER 52

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- MILLITRONICS MAINTAINS AN APPLICATIONS ENGINEERING DEPARTMENT, FOR ASSISTANCE. CALL (817) 277-3543.
- TRANSUDER CABLE / RG62U CONNECTION MAY BE SOLDERED OR ASSEMBLED ON A TERMINAL STRIP.
- ALL PULL BOXES, CONDUITS, AND JUNCTION BOXES MUST BE GROUNDED TO THE CONDUIT. TRANSUDER CABLE MUST BE RUN IN A GROUNDED CONDUIT SYSTEM WITH NO OTHER ELECTRICAL CIRCUITS.
- ROUTE CONDUIT FOR LOWEST EMF INTERFERENCE FROM MOTOR DRIVES, POWER BUSES, ETC. OBSERVE STANDARD WORK PRACTICES, AND LOCAL REGULATIONS.
- MAX TEMPERATURE IS 93° C.

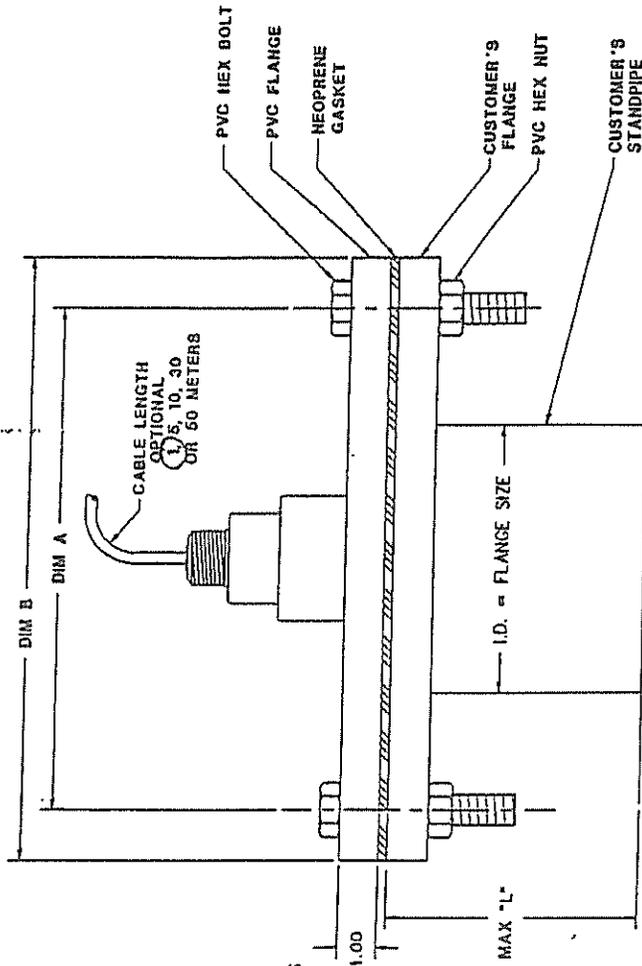
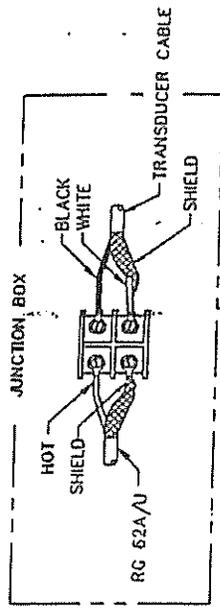
INSTALLATION DO'S:

- CONNECT THE GROUND WIRE AT THE TRANSEIVER.
- RUN THE SIGNAL CABLES (TRANSUDER, TEMP. COMP.) IN A GROUNDED CONDUIT, EXCLUSIVE OF ANY POWER WIRING.
- SYNCHRONIZE UNITS THAT ARE IN THE SAME CABINET OR WHOSE CABLES RUN IN THE SAME CONDUIT.
- USE FLEXIBLE CONDUIT BETWEEN RIGID (IF USED) AND PVC COUPLING ON THE TRANSDUCER.
- MOUNT TRANSDUCER AT THE REQUIRED DISTANCE ABOVE THE HIGHEST MATERIAL LEVEL. THIS IS THE BLANKING DISTANCE, WHICH IS DEVICE-SPECIFIC. CONSULT OPERATING MANUAL FOR SPECIFICATION.
- LOCATE TRANSDUCER AWAY FROM FILL STREAMS AND OTHER SOURCES OF SONIC INTERFERENCES.
- LOCATE TRANSDUCER SO THAT FOR EVERY 10 FEET OF SOUND TRAVEL, IT HAS ONE RADIAL FOOT OF CLEARANCE PARALLEL TO THE TRANSDUCER FACE.
- ENSURE THAT STANDPIPE DIMENSIONS CONFORM TO THOSE IN THE TABLE.
- ENSURE THAT STANDPIPE CONSTRUCTION IS WELDNICK OR SIMILAR, LAP JOINT (LJ) FLANGES ARE UNSUITABLE.
- ENSURE THAT I.D. SURFACES AND OPENING OF STANDPIPE ARE SMOOTH.
- ALWAYS USE PVC COUPLING AND NIPPLE PROVIDED.

INSTALLATION DON'TS:

- DON'T MOUNT TRANSDUCER OVER OBSTRUCTIONS, AS IT REQUIRES A CLEAR LINE OF SIGHT TO THE MATERIAL.
- DON'T MOUNT TRANSDUCER CLOSE TO FILL POINTS, DUST COLLECTOR, ETC., AS ACOUSTICAL AIR TURBULANCE CORRESPONDS TO ELECTRICAL NOISE.
- DON'T IGNORE TEMPERATURE LIMITS OF EQUIPMENT, ESPECIALLY TRANSDUCERS.
- DON'T MOUNT TRANSDUCER DIRECTLY TO METAL, SO AS TO AVOID ACOUSTIC FEEDBACK.
- DON'T MOUNT TRANSDUCERS TOO CLOSE TO VERTICAL BEAMS, TANK SIDES, ETC.
- DON'T RUN ANY CABLE OTHER THAN RG62U TO TRANSDUCERS.
- DON'T DEVIATE FROM STANDARD ELECTRICAL PRACTICES.

TRANSDUCER TYPES		
DESIGNATION	FACING MATERIAL	APPLICATION
ST25C	POLYURETHANE	STANDARD
ST25CP	FOAM	DUSTY
ST25CT	TEFLON	CORROSIVE



**ST25C TRANSDUCERS
FLANGE MOUNTED**

SIZE	FLANGE DIMENSIONS		BOLT SIZES	
	DIM A	DIM B	BOLT HOLE	MAX "L"
3"	6.00	7.50	0.75	9.00
4"	7.50	9.00	0.75	12.00
6"	9.50	11.00	0.88	18.00
8"	11.75	13.50	0.88	24.00
10"	14.50	16.00	1.00	30.00
12"	17.00	19.00	1.00	36.00

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SCALE: NONE
ORIGIN: DEW
CHECKED: BEP

DATE: 3/26/92
DATE: 4/27/92

ISSUES: UNLESS OTHERWISE NOTED THROUGH PROJECTION
DIMENSIONS AS A REFERENCE TO 20°

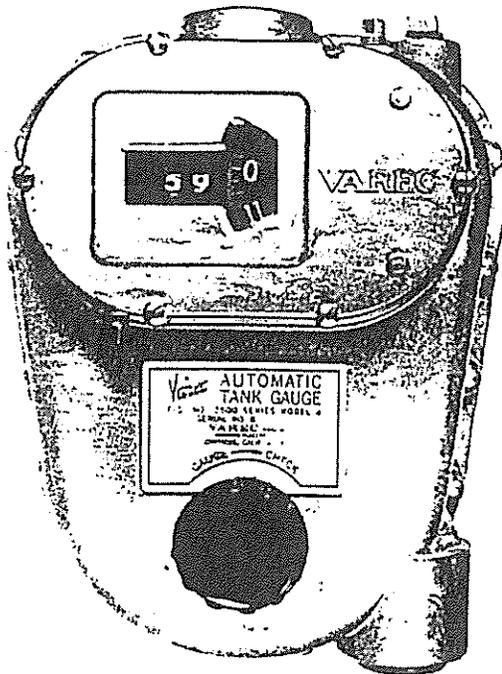
ST25C-FLANGED TRANSDUCER

REVISIONS

NO.	DATE	DESCRIPTION	APP.	DATE

MILLITRONICS
ARABIAN, TEXAS
TEL: 7207000000 FAX: 7207000000

Only Varec's Figure 2500 Series Gauges Offer All These Features As Standard Equipment



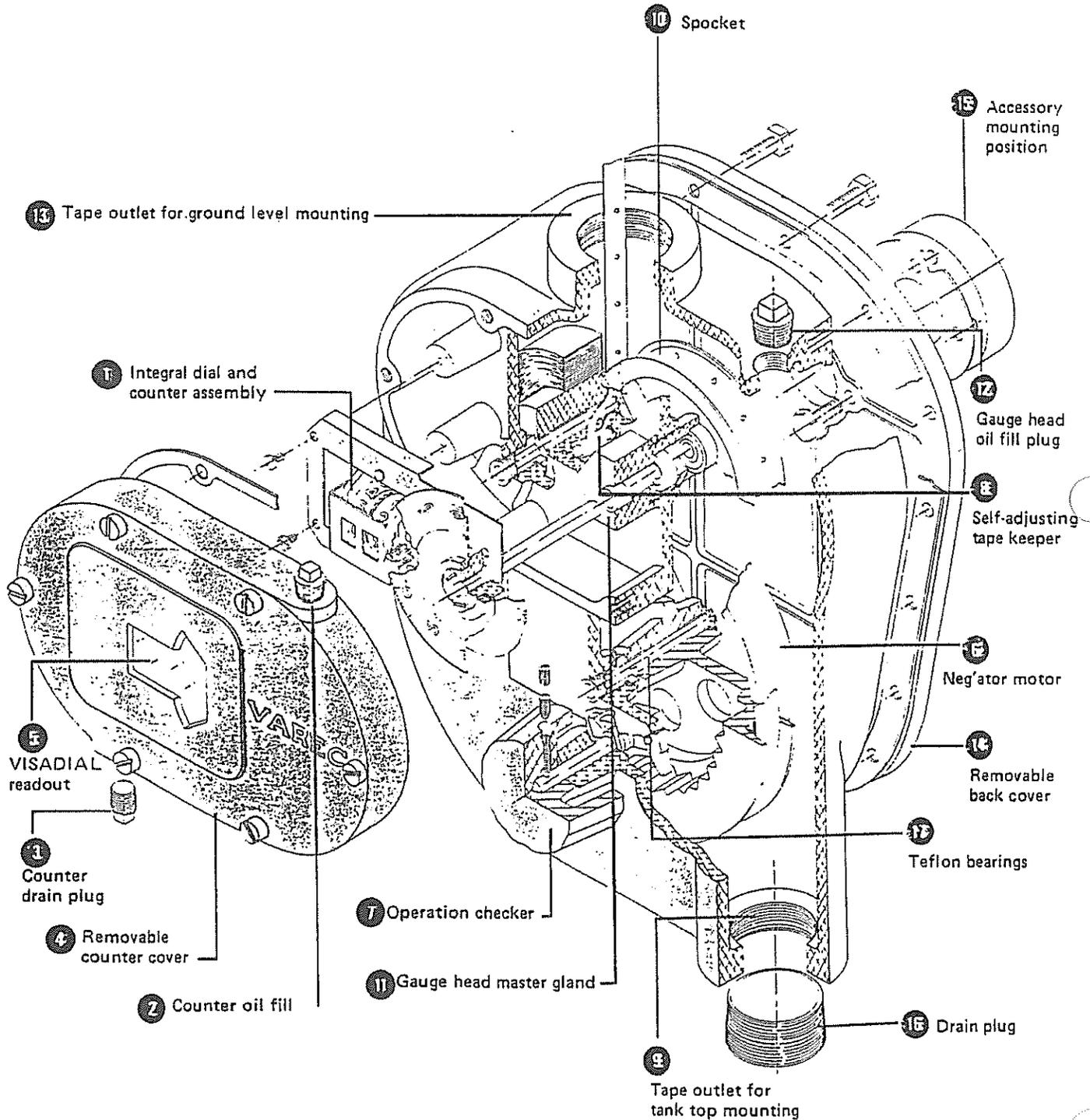
Standard General Features

- "A" Frame mounting of gauge improves accuracy.
- Rugged, circular, stainless-steel encased foam glass float.
- "Harness-hitch" quickly connects float . . . tape and neg'ator motor may be attached to the drums without use of tools.
- All metals and materials exposed to product are corrosion resistant; internal components are either aluminum or stainless-steel.
- Varec offers a complete line of accessory devices including electric limit switches; automatic temperature bulb selection switches; liquid-level pneumatic transmitters; electronic analog liquid-level transmitters and pulse Code digital liquid-level transmitters.
- Simplified design with fewer parts provides quick, simple access to all parts.

Varec supplies a complete package except for interconnecting tape piping.

- 1 Dial and counter are a unique integral assembly.
- 2 Counter compartment can be independently oil-filled.
- 3
- 4 Removable counter cover.
- 5 Improved VISADIAL readout provides precise at-a-glance digital readings to 1/16 inch, utilizing conventional scale. Minimizes the possibility of parallax.
- 6 Constant force neg'ator motor powered for sure, dependable operation.
- 7 Positive operation checker tests gauge operation.
- 8 Self-adjusting tape keeper.
- 9 Top mounting tape outlet standard on universal gauge head.
- 10 Tape sprocket sheave.
- 11 Master gland in gauge head improves bearing load and sealing characteristics.
- 12 Gauge head, as well as counter compartments, can be independently oil-filled.
- 13 Tape outlet is provided as standard for ground level or top mounting.
- 14 Removable back cover.
- 15 Accessory devices are easily mounted on the back of the gauge head.
- 16 Drain plugs provided.
- 17 Teflon bearings as standard.

Figure 2500 Model B Series Gaugehead



Standard Low Pressure Configuration

OPERATING DESCRIPTION

Varec's Fig. No. 2500 Model B Series Gauge is designed to measure liquid level in all types of low pressure cone roof, floating roof and underground tanks. It is available for pressure ranges to 50 psig on tanks to 60 feet¹ in height. The gauge combines simple, proven operation with important design innovations to make low pressure gauging easy and accurate at low cost.

The gauge is float-actuated and measures changes in liquid level as a function of float travel. The float acts upon a counter-balanced, non-graduated, perforated tape which moves a dial-counter. The gauge's new large, circular 316 stainless steel, jacketed float is non-sinkable, using an improved foam-glass material that is corrosion-resistant.

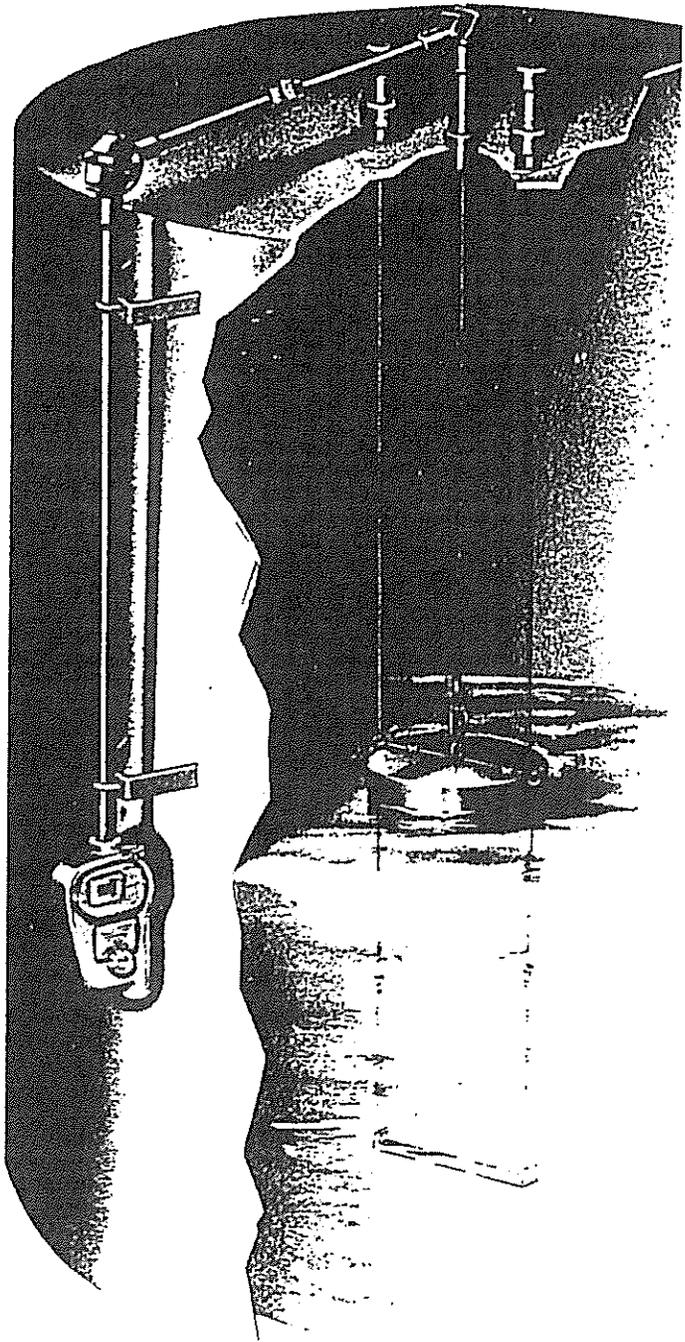
The Varec gauge is gas-tight and powered by a neg'ator motor that maintains constant tension from initial to entire deflection. Dial and counter reading eliminates possibility of error inherent in reading old-type devices using a graduated tape. The counter assembly is independent of the main gauge head housing. This permits independent adjustment of counter assembly without the need of entering the main housing. A unique operation checker provides positive testing of gauge operation.

Fig. No. 2500 Model B Series Gauge mounts either at the bottom of the tank as a conventional ground reader, with piping coming in from the top of the gauge head, or at the top of the tank with piping coming in from the bottom . . . without requiring modification or attitude change of the gauge.

An "A"-Frame bracket firmly supports the gauge head apart from the tank in conventional "at grade" mounting as a ground reader. This eliminates the possibility of measurement error due to vertical shift and permits "front reading" or "side reading" positioning. The gauge head is also available as a separate unit, and can be used to replace older type tank gauges utilizing graduated tapes.

A new built-in design feature provides for the independent oil filling of the head and counter compartment assembly for applications where continuous lubrication for protection from corrosive elements is desired.

Quality materials and Varec workmanship ensure the unit's long-life and trouble-free operation. The gauge is designed for use in petroleum, petro-chemical, chemical, edible products and other process industries.



STANDARD MATERIALS OF CONSTRUCTION

Component	Material
² Head-Housing and Sheaves	Aluminum
² Elbow-Housings	Aluminum
Tape (Perforations on 1" Centers)	316 Stainless Steel
Support Brackets	Steel
Top and Bottom Anchors	Steel
Guide Wire	316 Stainless Steel
³ Float	316 Stainless Steel Encased foam glass

¹ Special neg'ator spring motor available for tank heights up to 96 feet.

² Other materials such as cast iron, steel and stainless steel available.

³ Hollow shell, welded type floats available for various applications.



**INTERNATIONAL
COATINGS INC.**

**Resilient
Epoxy
Flooring
and
Grouting
Systems**

**PRODUCT
DATA SHEET**

ICO-GUARD™ 51

Product Description

ICO-Guard™ 51 is a three-part, solvent-free 100% solids, epoxy flooring system. It is USDA approved for installation in food plants. Because of its resin-rich characteristics, it is ideally suited for hand trowelled applications in one pass in any thickness down to 3/16" without need of a primer or top sealer coat. Such a one-step application enables the floor to be installed in one day and returned to service the next.

Its high gloss retention facilitates cleaning. Anti-slip characteristics are enhanced by addition of silica quartz, or in extremely heavy wear conditions by aluminum oxide, broadcast in during application of the floor. ICO-Guard™ 51 is available in fast cure version (ICO-Guard™ FC51) that enables full cure at application temperatures as low as 32°F. For freezer conditions, ICO-Guard Cold Cure™ is available.

Typical Applications

ICO-Guard™ 51 is particularly recommended for the food, dairy and beverage industries where its high chemical resistance, resilience and resin-rich formulation provides extra security against premature failure due to chemical attack, thermal or mechanical shock as well as heavy wear. Normally applied over concrete, ICO-Guard™ 51 also has excellent adhesion to most metal, wood and wood block, brick and tile, and vinyl tile surfaces. It has especially good bonding characteristics to damp surfaces.

Chemical Resistance

ICO-Guard™ 51 is recommended for areas subjected to such chemical solutions as 50% sulfuric, 30% nitric, 30% phosphoric, 50% sodium hydroxide, toluene and xylene. A more complete list of chemical resistances is available in the International Coatings Chemical Resistance Chart or contact ICO Technical Assistance.

Physical Properties

Tensile Strength (ASTM C-307)	2030 psi	Flammability (D-635)	self extinguishing
Tensile Elongation (C-307)	3%	Vapor Transmission Rate (E-96)	.03 perms
Flexural Strength (C-580)	2550 psi	Coefficient of Thermal Expansion (D-696)	1.7 x 10 ⁻⁵ per °F
Compression Strength (C-578)	6170 psi	Gardner Impact (D-2794)	> 160 ft lbs.
Hardness, Shore D (D-2240)	75	Water Absorption (D-570)	0.3% in 24 hours
Bond Strength to Quarry Tile	> 1000 psi		

Physical Characteristics

Density, lbs./gal	Mixing Ratios	By Volume	By Weight		
Pt. A 9.5	Pt. A : Pt. B	1.8:1	2:1		
Pt. B 8.6	Aggregate: Liquid	33:1	5:1		
A & B Mixed 9.2					
Viscosity @ 77°F, cps	Curing Times @	32°F	50°F	77°F	90°F
PL A 700	I.G. 51 Pot Life	—	60 min.	50 min.	25 min.
Pt. B 300	I.G. 51 Work Time	—	50 min.	60 min.	35 min.
A & B Mixed 630	I.G. 51 Hard, Foot Traffic	—	18 hrs.	15 hrs.	5 hrs.
	I.G. 51 FC Pot Life	50 min.	45 min.	30 min.	10 min.
	I.G. 51 FC Work Time	5 min.	20 min.	20 min.	15 min.
	I.G. 51 FC Hard, Foot Traffic	18 hrs.	14 hrs.	4 hrs.	3 hrs.

Shelf Life:
1 year at 77°
in unopened containers

Maximum hardness and chemical resistance are achieved after 7 days at 77°F.

Color Availability

Standard colors: white, gray, dark gray, beige, yellow, red, green, blue, brown, black.

Packaging and Coverage Rates

Basic Kit	27 SF at 1/4" depth
Bulk Pack	270 SF at 1/4" depth
Drum Kit	2700 SF at 1/4" depth

SEE REVERSE SIDE FOR WARRANTY AND CAUTION STATEMENT

NOV 22 '93 10:24 C&L COATINGS 18053226058

P.3/13

Installation

Please refer to our Installation Guide for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation. Do not apply below a substrate temperature of 50°F.

1. New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to insure adequate curing time.
2. All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. The prepared surface should have a pH of 7.
3. The ingredients should be mixed in the prescribed ratios, using a low speed mixer (maximum 750 rpm). Mix Part A for 1-2 minutes then add Part B and mix until uniform in color and consistency.
4. Do not mix less than the prescribed amount of any ingredient or add any solvent to the mix.
5. No priming is necessary on concrete of average porosity. On new concrete or old concrete with an open porosity and on wood surfaces apply ICO-Primer™ to help prevent outgassing, bubbling and pinholing from escaping entrapped air.
6. Allow primer to dry (1-2 hours at 75°F).
7. Apply the mixed material with a medium nap roller, a squeegee or a brush. Apply approximately 160 SF per gallon per coat to achieve 10 mils of coating.
8. Apply a second coat while the first coat is still tacky if using spike shoes or dry enough to walk on, but before 16 hours at 75°F. If more time has elapsed the first coat should be sanded before recoating.
9. A suitable aggregate may be broadcast onto the surface and backrolled to provide more anti-slip profile to the finished surface. It is advisable to test various types and sizes of aggregate to achieve the desired finish profile.

Precautions

WARNING: Severe skin and eye irritants. Use protective clothing, gloves and face shield, along with protective creams, during mixing. Rinse off any material immediately. For further details, refer to Material Safety Data Sheet. Clean up can be done with toluene or xylene. Once the material has set, it can only be removed with paint stripper.

Product Specification

The specified area shall receive an application of **ICO-Super Guard Coating™** as manufactured by **International Coatings, Franklin Park, Illinois**. The system shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing and application. The material shall be a low odor, solvent-free 100% solids high gloss flexibilized epoxy system with good resilience to resist thermal and mechanical shock. It should be able to be roller applied at a minimum of 20 mils thickness per coat on vertical surfaces without sagging (at ambient conditions). It shall have a Gardner Impact Strength of 80 in.-lbs. when tested under ASTM D-2794. Its bond strength to quarry tile shall exceed 1000 psi when tested with an Elcometer pull test. Its hardness shall not exceed 72, as measured on the Shore D scale. The system shall be unaffected by oils and greases and shall withstand chemical attack for at least 7 days against 98% sulfuric, 50% hydrofluoric acid, and 85% phosphoric acid, methylene chloride, dimethyl formamide, acetone, and ethylene dichloride.

Technical Assistance

Our many years of installation experience enable us to provide valuable input on not only proper material selection but also installation techniques that will help assure your satisfaction. We have qualified personnel to inspect your floors, analyze the cause of the problems and design procedures and specifications to prolong the useful life of your floors. We furnish detailed application specifications including drawings of necessary details to be used. We are prepared to offer job site instruction for your in-house maintenance crews or to work closely with your preferred applicator. We can also furnish a list of our network of ICO-trained certified applicators.

The data, statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by us, and we believe such data, statements and recommendations will serve as reliable guidelines. However, this product is subject to numerous uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

WARRANTY - All products manufactured by us are warranted to be first class material and free from defects in material and workmanship.

Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL.

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.



**INTERNATIONAL
COATINGS INC.**

7032 Barry Street, Rosemont, Illinois 60018 • 708 824 6070 • 800 624 8919 • Fax 708 824 6088

12/06/93 13:44 FAX 902 962 9090

COHEN CONT.

001



LICENCE # (P-1) 078855008

December 6, 1993

Mr. Eddie Young
SAFETY-KLEEN CORPORATION
8795 Folsom Blvd., Ste. 108
Sacramento, California 95826

REF: Safety-Kleen
6625 W. Frye Road
CCI Project No. 93-100

Dear Eddie:

Per your request, this is to certify that the concrete sealer (per
Details 1 and 2 of Sheet S6) was applied prior to the installation
of the stainless steel liners.

Sincerely,

COHEN CONTRACTING, INC.

Jeff DeBeron
Project Manager

jd/dp

APPENDIX B
Calculations

APPENDIX B

Calculations

TABLE OF CONTENTS

<u>Title</u>	<u>Page No.</u>
Pipe Rack Brace	B- 1
Tank Farm S/C Capacity	B- 3
Return & Fill Trench Capacity	B- 4

SUBJECT: S-K CHANDLER
PIPE RACK BRACE
 BY: J.W.C. DATE: 11/15/93

TERA, inc.

JOB NO.: 93-409-0089
 FILE: _____
 SHEET: 1 OF: 2

REF. 1. SKETCH FROM E. YOUNG TO T. TROLLER ATTACHED
 2. RCS CALCS. FOR WICHITA PIPE RACK 92-400-66

SIDE LOAD = 876#

T = MOMENT @ CENTER OF TUBE = 876# × 12" = 10,512"##

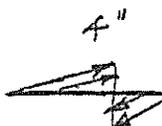
TORSION IN COLUMNS:

$T = 2\tau tA$ $A_{TS4 \times 4 \times 3/16} = 16 \text{ in}^2$

$\tau = \frac{T}{2tA}$ $\tau = \frac{10,512}{2 \times \frac{3}{16} \times 16} = 1,752 \text{ psi} < .4F_y \text{ O.K.}$

ASSUMED

STRESS IN WELDS:



$f = \frac{876}{4} + \frac{10,512}{\frac{4^2}{6}} = 219 + 3942 = 4161 \text{ #/in}$

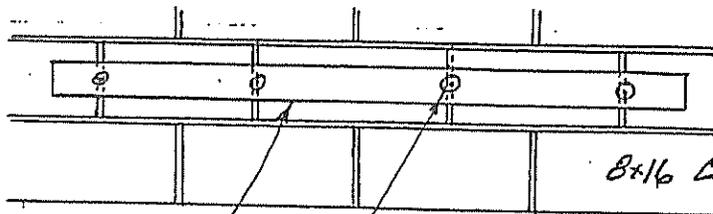
$\frac{4161}{.928} = 4.48$, SAY $\frac{5}{16}$ " E-70 WELD REQ'D.

FORCE IN BOLT:

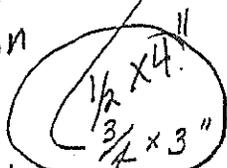
$V = 876\#$

$T = 437 + \frac{10,512}{2} = 5,693\# > \text{UBC ALLOWABLES TABLES 24-D-1 \& 24-D-2, 1991}$
 N.G.

TRY 4 BOLTS ON COMMON BAR:

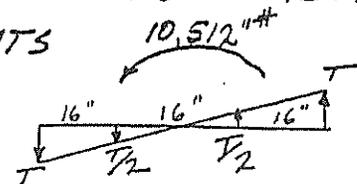


Revised AS
 shown on
 Page 2
 to $\frac{3}{4} \times 4$ "
 $\frac{1}{2} \times 4$ "



$\frac{1}{2}$ " ϕ HILTI BOLTS 4" EMBEDMENT ONLY AT MORTARED HEAD JOINTS
 $\frac{3}{4} \times 3$ " A-36 BAR 48" + LONG AS REQ'D. FOR ATTACHING ANGLE STRUTS

$T = \frac{1}{2}(437) + \frac{10,512}{48 + \frac{1}{2} \times 16} = 219 + 188 = 407\# \text{ O.K.}$



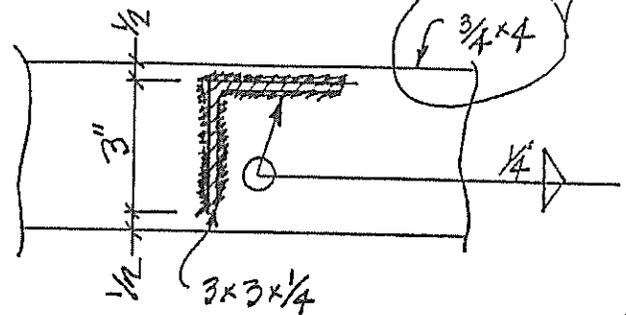
SUBJECT: S-K CHANDLER
PIPE TRUCK BRACE
BY: J.W.L.C. DATE: 11/30/93



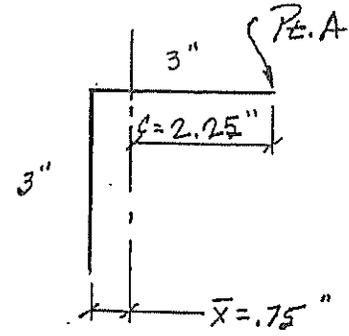
JOB NO.: 93-409-0089
FILE: _____
SHEET: 2 OF: 2

CHANGE TO $\frac{3}{4} \times 4$ BAR TO ALLOW FOR WELDING
 $3 \times 3 \times \frac{1}{4}$ ON BOTH SIDES.

$\frac{1}{2} \times 4$ Approved by
John Cox on 12/7/93
E-70 WELD ROD
Thomas J. Chandler
12/7/93



CHECK WELD:



$$\bar{x} = \frac{3 \times \frac{1}{2}}{3 + 3} = .75''$$

$$L = (3 + 3)2 = 12''$$

$$I = 2 \left[3 \left(\frac{75}{1000} \right)^2 + 3 \left(\frac{15 - 75}{1000} \right)^2 + \frac{3}{12} \right]$$

$$= 11.25 \text{ in}^3$$

$$\text{WELD FORCE @ P.E.A} = \left[\left(\frac{P}{L} \right)^2 + \left(\frac{M c}{I} \right)^2 \right]^{1/2}$$

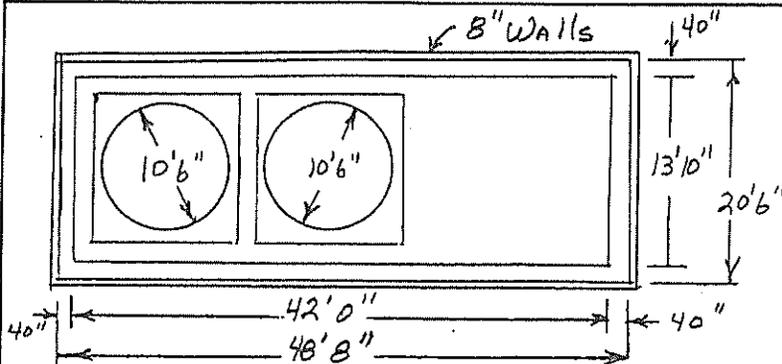
$$= \left[\left(\frac{1876}{12} \right)^2 + \left(\frac{10,512 \times 2.25}{11.25} \right)^2 \right]^{1/2}$$

$$= 2104 \#/\text{in}$$

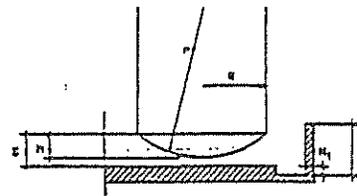
$$\text{WELD SIZE} = \frac{2,104}{.928} = 2,27 \text{ 16}^{\text{th}}\text{'s}, \text{ SAY } \frac{1}{4} \text{ FILLETS}$$

SUBJECT: S-K Chandler Service Center
TANK FARM S/C CAPACITY  **TERA, inc.**
 BY: TFT DATE: 11/22/93

JOB NO.: 93-409-089
 FILE: Calculations
 SHEET: 1 OF: 1



As Built Dimensions



$H = 41.5'' \text{ Ave} = 3.46'$
 $H_1 = 6'' = .5'$
 $S = 2.0' \quad h = 1.61'$

Dike Volume

$20.5' \times 48.67' \times 3.46' = 3452.2 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = 25,822 \text{ gal}$
 TANK PAD $42.0' \times 13.83' \times .5' = 290.43 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = (2,172 \text{ gal})$
 Largest TANK (12000 gal)

Tank Disp = Dish Disp + Cyl. Disp

Dish Disp = $\frac{1}{3} \pi h^2 (3R - h)$
 $= \frac{1}{3} \times 3.1416 \times 1.61^2 (3 \times 5.25 - 1.61) = 38.38 \text{ ft}^3$

Cyl Disp = $\pi R^2 (H - H_1 - S)$
 $= 3.1416 \times 5.25^2 \times .958 = 82.95 \text{ ft}^3$

TANK Disp = $38.38 + 82.95 = 121.33 \text{ ft}^3 \times 7.48 \text{ gal/ft}^3 = (908 \text{ gal})$

Misc Equip Disp. (Pump, Pipes) 2% = (580 gal)

Rain Allowance = 10,162 gal

Chandler 25 year 24 hr RAIN = 3.0"
 $20.5' \times 48.67' \times .25' \times 7.48 = (1866 \text{ gal})$

Spare Capacity = 7050 + 1866 = 8,916 gal

SUBJECT: S-K Chandler Service CenterJOB NO.: 93-409-089Return & Fill Trench Cap. **TERA, inc.**FILE: CalculationsBY: JFT DATE: 11/22/93SHEET: 1 OF: 1

As Built Dimensions

Return & Fill Trench

$$22' \times 1.71' \times 3' \times 7.48 \text{ gal/ft}^3 = 844 \text{ gal.}$$

Drum washer Capacity: 162 gal

Adequate Secondary Containment

APPENDIX C
Inspection and Test Reports

APPENDIX C

Inspection and Test Records

TABLE OF CONTENTS

<u>Title</u>	<u>Page No.</u>
New Tank Inspection Record	C- 1
Used Solvent Tank and Pipe Thickness Measurements	C- 2
Containment Inspection Record	C- 3
NDE Environmental Corp. Leak Test Certification	C- 4

NEW TANK INSPECTION RECORD

CLIENT:	Safety-Kleen Corp.	Sheet:	1 of 1
PLANT LOCATION:	Chandler, Arizona	Job No.:	93-409-089
TYPE INSPECTION:	Exterior	Date:	11/18/93
ITEM NO.:	CODE: Assumed UL 142	By:	TFT
SERVICE:	Used Solvent Tank	YEAR BUILT:	1993

CAPACITY: 12,000 gal. TANK/DRUM TYPE: Vertical
 DIAMETER: 10 ft.- 6 in. ϕ HEIGHT: \approx 19 ft. (taken from S-K Dwg. 9009)

	<u>ROOF</u>	<u>SHELL</u>	<u>FLOOR</u>	<u>JACKET</u>
MATLS:	Mild Steel	Mild Steel	Mild Steel	Mild Steel

SHELL CONDITION: Satisfactory
 ROOF CONDITION: Satisfactory
 BOTTOM CONDITION: Covered by Skirt-dry inside
 JACKET CONDITION: N/A
 SUPPORT TYPE: Skirt mounted
 FOUNDATION TYPE/CONDITION: Satisfactory
 INTERNAL STRUCTURE CONDITION: N/A
 WELD/FLANGE JOINT CONDITION: Satisfactory
 NOZZLE CONDITION: Satisfactory
 LINING/COATING CONDITION: Satisfactory
 INSULATION CONDITION: Skirt fireproofing Satisfactory
 SIGNS OF CRACKS: None
 SIGNS OF PUNCTURES: None
 SIGNS OF COATING DAMAGES: None
 SIGNS OF CRACKS OR MATERIAL DAMAGE: None
 SIGNS OF CORROSION: None
 SIGNS OF OTHER STRUCTURAL DAMAGE OR PROBLEMS: None

TIGHTNESS TEST? YES TYPE: UT Spots
 RESULTS: No leaks and verification of tank shell thickness and pipe schedule.
 OPERATING CONDITIONS: MAX TEMP: Amb. MAX PRESS: Atm. VAC: N/A
 REFERENCE INSPECTION RECORDS: Certification letter

COMMENTS: Tank manufactured by Economy Tank. NOTE: Breather valve Morrison Bros., appears to be 3", in place on roof. Emergency venting by loose manway cover in place. Varc liquid level gauge and Milltronics high level alarm in place. See Appendix for details. Tank and piping thickness measurements attached.

SUBJECT: S-K Chandler, AZ Service Center

JOB NO.: 93-409-089

Used Solvent Tank & Pipe Thickness  TERA, inc.

FILE: Measurements

BY: TFT DATE: 11/18/93

SHEET: 1 OF: 1

*Used Solvent Tank Thickness Measurements using
StressTel T-Mike Ultrasonic Thickness Gauge*

*Shell & Roof
Thickness
.187*

x .199 Roof

.201		.210		.187	
.205		.206			
.199		.202			
.275				.250	
.276					
.277					
.273		.273		.250	
.267	.272	.269	.265		.265
.266	.273	.270	.273		.275
West	South	East	North		

All measurement Through Paint - Paint Allowance .015

2" line in return & fill station going to used solvent tank

Black mill finish - .146 & .147

2" schedule 40 - .154 Nominal - .135 Minimum

3" line going from used solvent tank to truck loading station Through paint measurements -

.217 - .219 - .217

3" schedule 40 - .216 Nominal - .189 Minimum

TERA, Inc.CONTAINMENT INSPECTION RECORD

		Sheet:	1 of 1
CLIENT:	Safety-Kleen Corporation	Job No.:	93-409-089
PLANT LOCATION:	Chandler, Arizona	Date:	11-18-93
TYPE:	Vault	By:	TFT
LEAK DETECTION TYPE:	Visual	YEAR BUILT:	1993
SERVICE:	Contain two 12,000-gal tanks, one clean solvent, one used solvent		
DIMENSIONS:	LENGTH: 48'-8" WIDTH: 20'-6" HEIGHT: 41.5" avg.		
CAPACITY:	LARGEST TANK CAPACITY: 12,000 gal		
	<u>ROOF</u>	<u>SHELL</u>	<u>FLOOR</u>
CONSTRUCTION MATLS:	None	Concrete	Concrete
INTERIOR COATING/LINING OF CONTAINMENT:	Ico Guard		
EXTERIOR COATING/LINING OF PRIMARY COMPONENT:			
JOINT TREATMENTS:	Sikaflex - 1A		
WALL/SHELL CONDITION:	Good		
ROOF/TOP HEAD CONDITION:	N/A		
BOTTOM/BOTTOM HEAD CONDITION:	Good		
SUPPORT TYPE:	Concrete slab on grade		
FOUNDATION CONDITION:	Good		
INTERNAL STRUCTURE CONDITION:	N/A		
JOINT CONDITION:	Satisfactory		
LINING/COATING CONDITION:	Satisfactory		
LIQUID REMOVAL METHOD:	Sump		
SIGNS OF CRACKS:	None		
SIGNS OF LEAKAGE:	None		
SIGNS OF CORROSION:	None		
SIGNS OF EROSION:	None		
OPERATING CONDITIONS:	MAX TEMP: Amb.	MAX PRESS: N/A	VAC: N/A
REFERENCE INSPECTION RECORDS:	--		

COMMENTS: Tanks set on a 42' x 13'-10" pad 6 inches high. Each tank sets on a 12' x 12' stainless steel plate which is made up of three 4' x 12' strips welded together. The plates are held down on all four sides by a 2" x 7/16" bar fasten to the concrete pad with 16 bolts. The stainless steel plate sets on the Ico Guard coated concrete pad. See the Appendix for more details.

**TEST REPORT AND CERTIFICATION OF
SAFETY KLEEN PLANT CHANDLER, ARIZONA
WO# 990204**

Introduction:

NDE Environmental Corporation was contracted by Safety Kleen to perform a series of precision pipeline and tank pressure tests on two, two inch diameter product lines and two twelve thousand gallon above ground storage tanks at a newly constructed facility in Chandler, Arizona.

Procedure:

NDE Environmental Corporation crew consisting of one engineer and one technician arrived on site November 16, 1993 at 1500 hours. The crew assessed the system and decided to isolate the pipeline and tank on the issue system and test the return system as one due to no isolation valve. See system sketch.

Test number one consisted of a precision Ullage test and visual inspection of one two inch steel line starting at the issue tank and continuing above ground one hundred and fifty feet into the building bay area nozzles. The tank outlet valve was closed and instrumentation inserted at the nozzles.

Test number two consisted of one precision Ullage test and visual inspection of one twelve thousand gallon above ground storage tank. The tank was sealed off at the output valve and vents. Instrumentation was inserted at the tank.

Test number three consisted of a precision Ullage test and visual inspection of the return product system, encompassing the twelve thousand gallon above ground storage tank with associated two inch diameter piping.

Results:

Test number one resulted in a pass conclusion with one leak below the testing system allowable leak rate threshold. One minor leak was found at a ninety degree piping elbow in the service bay below the grating. NDE personnel marked the leak with white paint.

Test number two resulted in a pass conclusion but only after some minor adjustments to the tank. The tank manway on top of the tank was not sealed properly nor were other associated fittings tightened completely to allow for nitrogen testing. NDE personnel sealed the manway and adjusted the remaining fittings.

Test number three resulted in a pass conclusion but only after some minor adjustments to the tank. The tank manway on top of the tank was not sealed properly nor were other associated fittings tightened completely to allow for nitrogen testing. NDE personnel sealed the manway and adjusted the remaining fittings. No leaks were detected in the piping system.

Conclusion:

NDE Environmental Corporation concludes that all above ground product piping and tanks are sound with no leaks above the system allowable leakage rate of 0.275 scfh nitrogen flow. NDE recommends the product line elbow in test number one be tightened. Also the tanks in tests two and three are equipped with nylon bolts on the PVC gauge ports and should be replaced with some non-corrosive metal bolts.

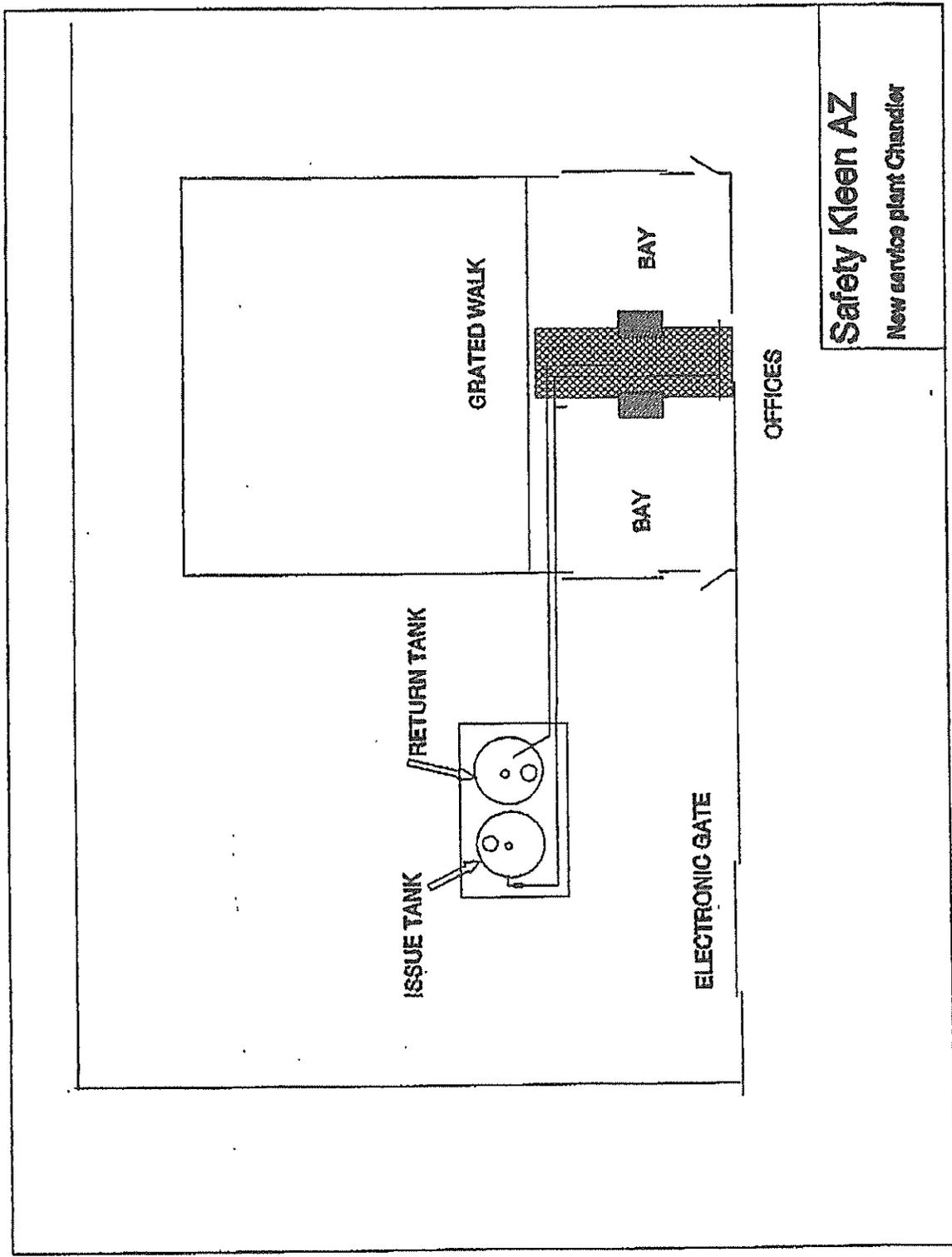
ULLAGE TESTING DATA

NDE utilizes the UTS-4T Ullage Testing System for all precision ullage tests. This system meets or exceeds all federal, state, and local regulatory requirements for precision underground storage tank testing.

	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6
Product:	5500 line	Return line w/ TANK		ISADÉ TANK		
True capacity:						
Ullage volume:	150' x 21" 25.5 gal	25.5	12,000 gal	12,000 gal		
Fluid pressure on tank bottom (PSI):	0	0	0	0		
Test ullage pressure (PSI):	5.0 PSI		1 PSI	1 PSI		
Stabilization time (minutes):	10 min		40 min	40 min		
Fill start time:	0700		1110	0930		
Time to 1 PSI:	1701		1120	0945		
Time to test pressure:	1702		1120	0945		
Start time for test 1:	1715		1200	1035		
Nitrogen flow (cuft per hour (CFH)):	.2		.2	.2		
Ullage temperature:	68		72°	70°		
Finish time for test 1:	1725		1210	1045		
Nitrogen flow (CFH):	.25		0.275	.2		
Start time for test 2:	1725		1220	1045		
Nitrogen flow (CFH):	.2		.2	.2		
Ullage temperature:	68		72°	70		
Finish time for test 2:	1735		1230	1055		
Nitrogen flow (CFH):	.25		0.275	.25		
Start time for test 3:	1735		1230	1055		
Nitrogen flow (CFH):	.2		.2	.2		
Ullage temperature:	68		72°	70°		
Finish time for test 3:	1745		1240	1105		
Nitrogen flow (CFH):	.25		0.275	.25		
PASS/FAIL:	PASS		PASS	PASS		

TESTING SUMMARY

WORK ORDER NUMBER:	990204	SALES REPRESENTATIVE:	Brad Ballreich
TEST DATE:	11/16/93	TEST START TIME:	1500
TECH(S)	Jessy, Sweis	VAN NUMBER:	35
SITE NAME:	Safety Kleen	VAN MILEAGE:	60,000
SITE ADDRESS:	6625 W. Frye Rd	OIL CHECK:	✓
	Chandler AZ	TECHNICIAN SIGNATURE	
SITE PHONE:	(602) 940-7376	OTHER NDE PERSONNEL	Marwan Sweis
SITE ID NUMBER:	(602) 940-7202	TECHNICIAN CERTIFICATION NUMBER:	91-192

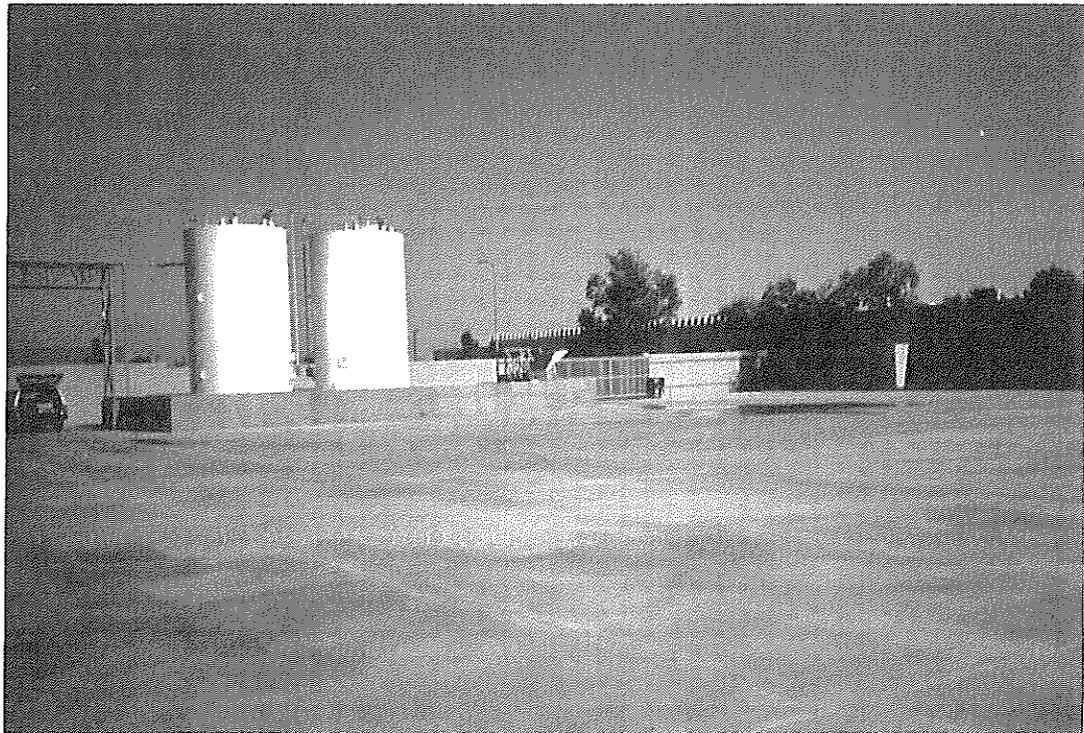


APPENDIX D

Photos

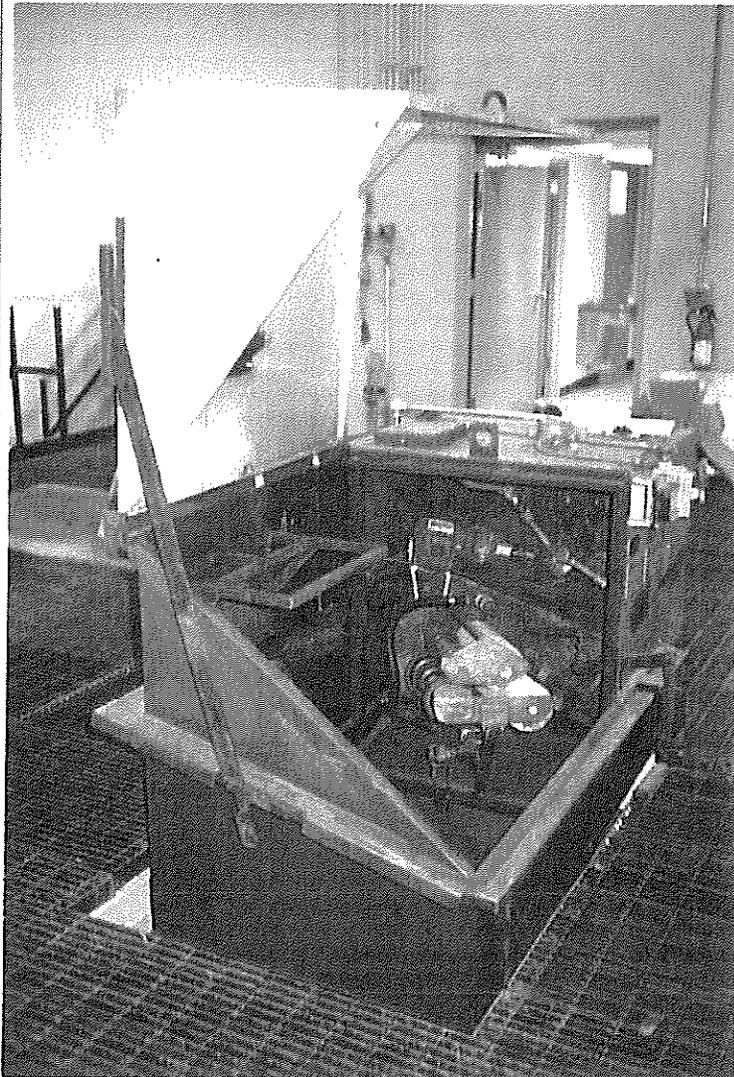
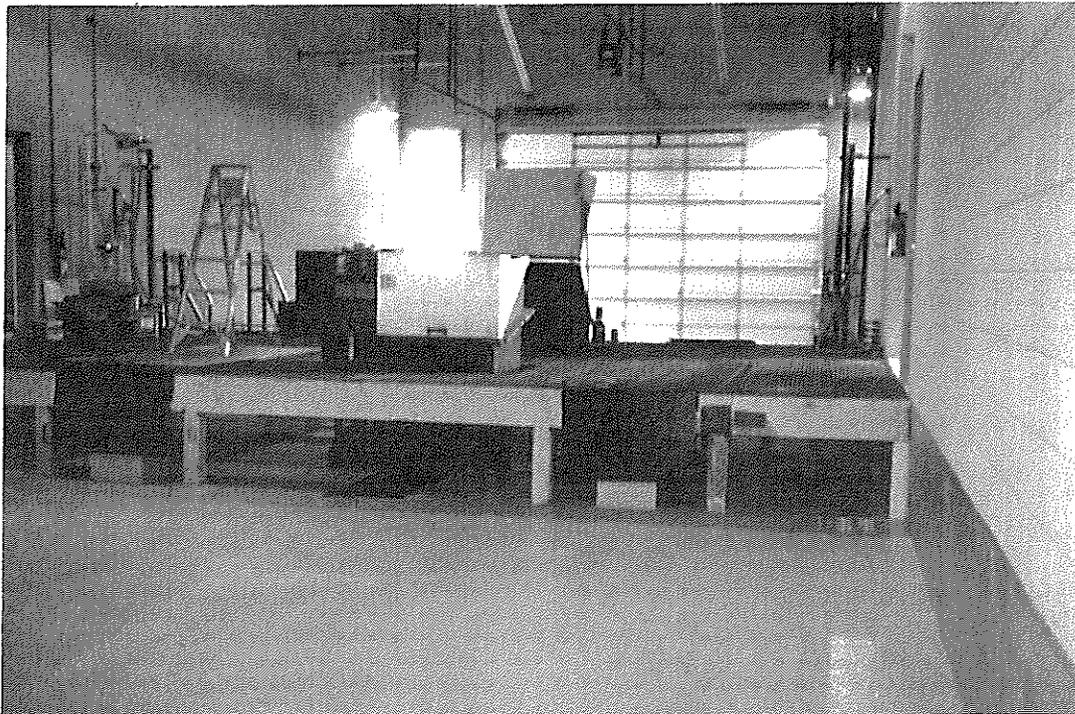


OUTSIDE LOOKING IN



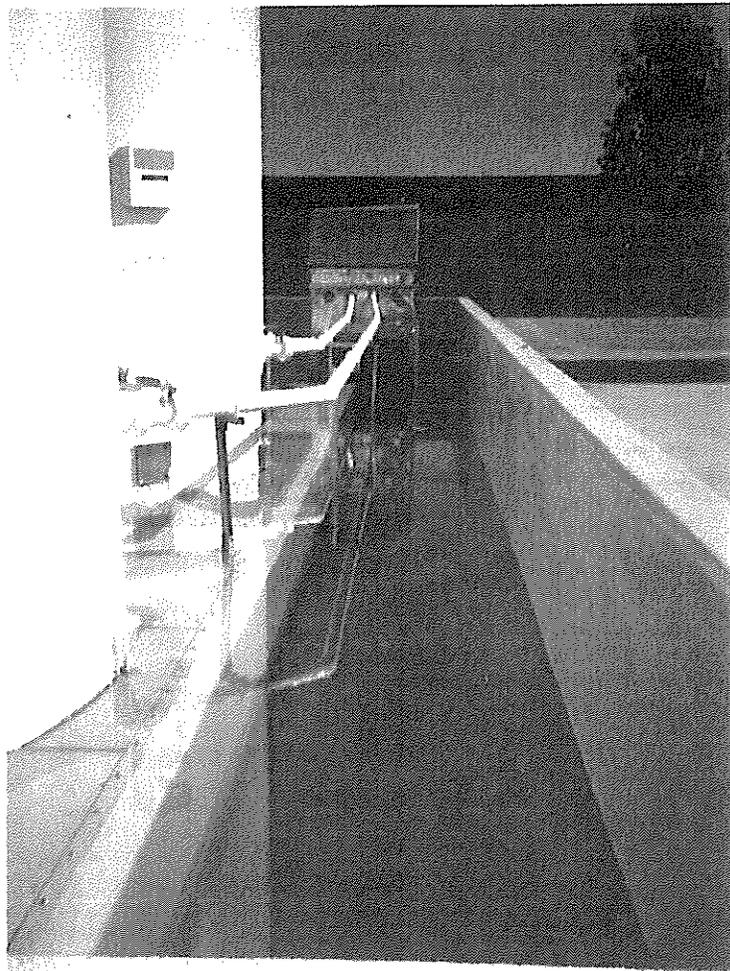
INSIDE LOOKING OUT

SAFETY-KLEEN CHANDLER, ARIZONA



RETURN & FILL STATION
TWO DRUM WASHERS
SPILL TRENCH

DRUM WASHER

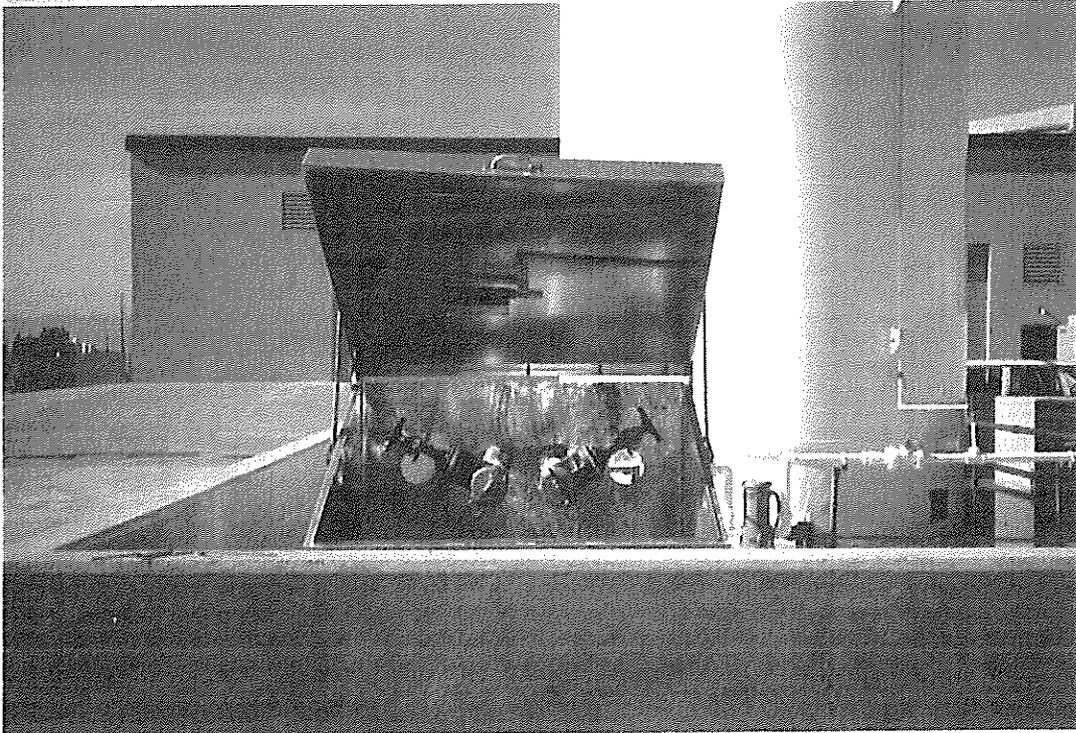


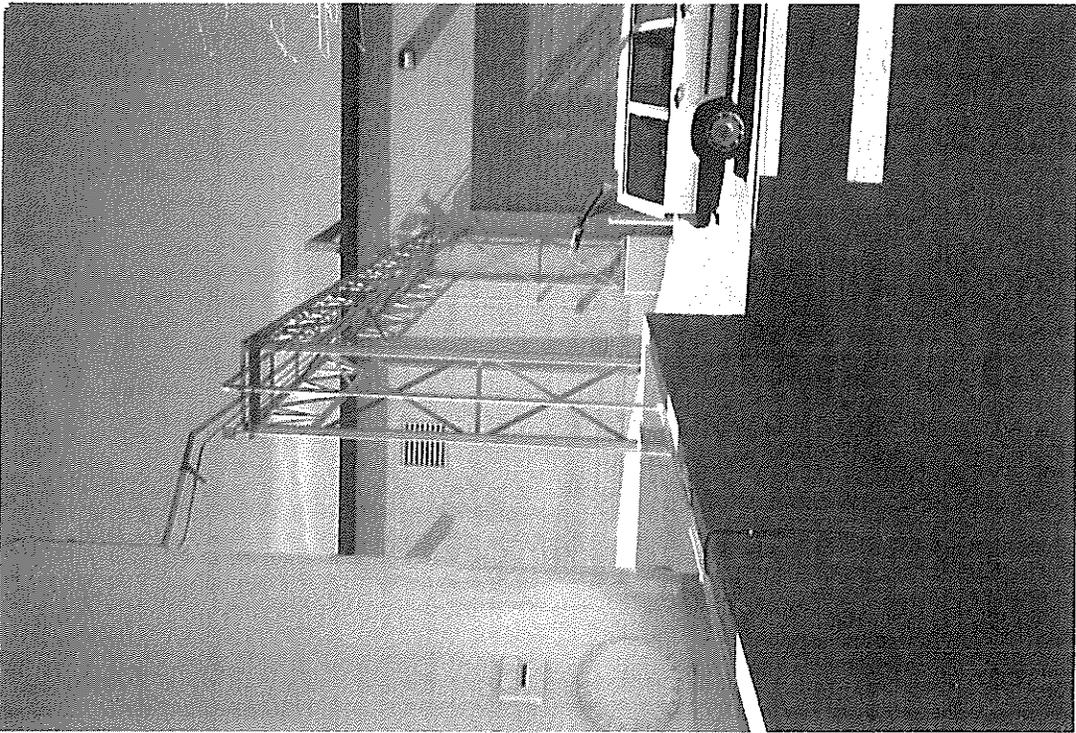
ACCESS CONTAINER;
INSULATED TANK SKIRTS;
LEAK DETECTION PORT;
SPILL COLLECTION TRENCH;
TANK NAME PLATE; SHUT-
OFF VALVES; ANCHOR
BOLTS

TANK FARM

TRUCK HOOK-UP

ACCESS CONTAINER



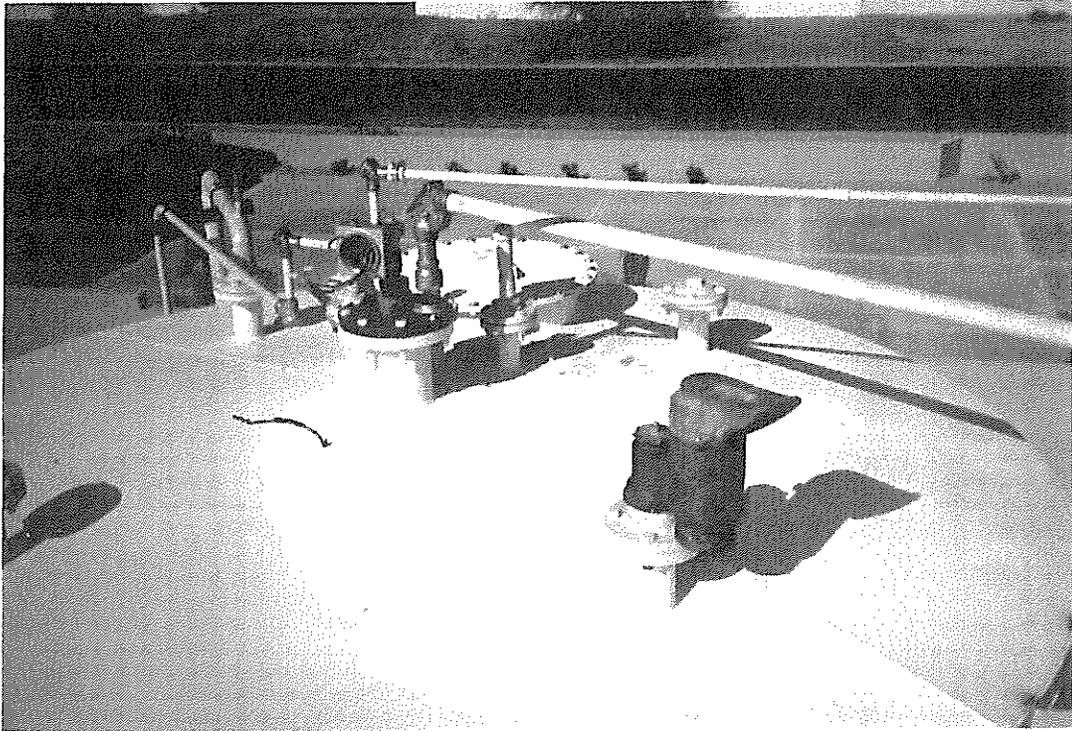


TANKFARM/PIPE RACK/RETURN & FILL

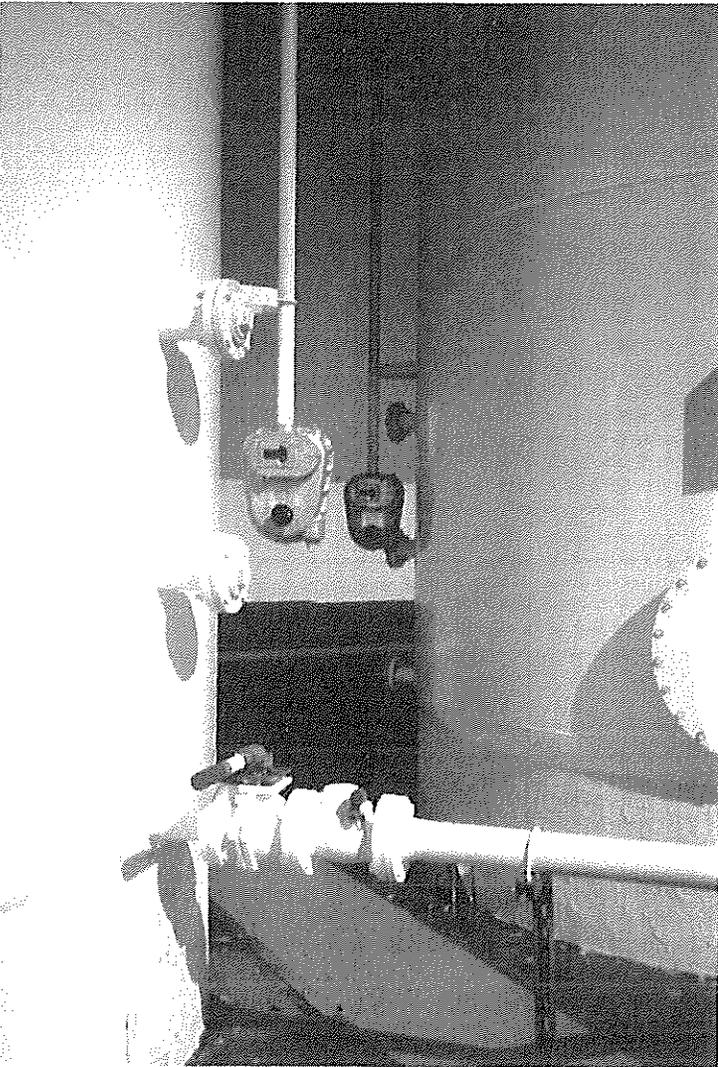


TANK PEDESTAL/COATING; STAINLESS STEEL
PLATE, INSULATED TANK SKIRT; ANCHOR BOLT;

TANK GROUND CABLE (BOTH PHOTOS)



INLET PIPE WITH VACUUM
BREAKER (UPPER LEFT);
HIGH LEVEL ALARM
(CENTER); LIQUID LEVEL
GAUGE; EMERGENCY VENT
(LONG BOLT MANWAY);
PRESSURE-VACUUM VENT



LIQUID LEVEL GAUGE

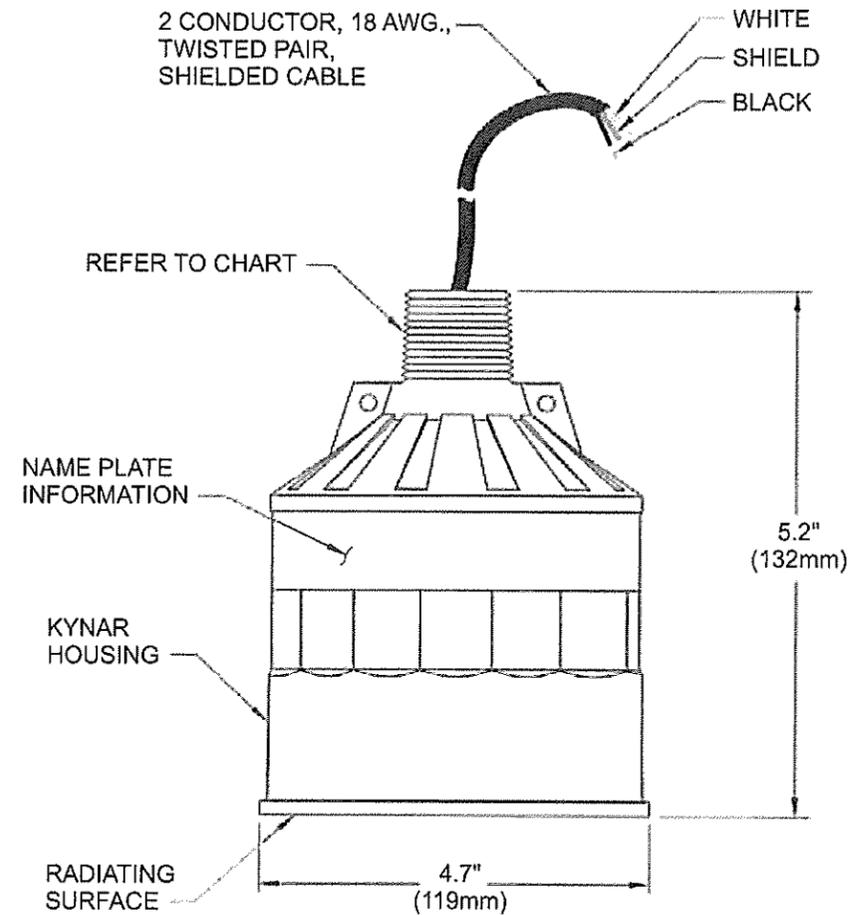
OUTLET PIPE; MANUAL
SHUT-OFF VALVE;
INSULATED TANK SKIRT

EXHIBIT D2-21

**HLA XPS-15 TRANSDUCER PRO-
GRAM**

A | B | C | D | E | F | G | H | I | J

Exhibit D2-21



TRANSDUCER WEIGHT	1.3 Kg (2.8 lbs)
AVAILABLE THREAD TYPE.	1" BSP 1" NPT
AVAILABLE CABLE LENGTHS	1 M (3.3 FT.) 5 M (16.5 FT.) 10M (33 FT.) 30M (99 FT.) 50M (164 FT.) 100M (328.8 FT.)

NOTE:

- 1). FM APPROVED FOR CLASS I, DIV. 2, GROUPS A,B,C,D
CLASS II, III, DIV. 1, GROUP E, F AND G
CSA APPROVED FOR CLASS I, II, III, DIV. 1, GROUPS A,B,C,D,E,F,& G
ATEX II 2GD EEx m II T4,
ANZEX CLASS 1, ZONE 1, Ex SI/II C T4,
INMETRO BR-Ex m II T4
- 2). TEMPERATURE RANGE: -40°C (-40°F) TO 95°C (203°F)
- 3). INGRESS PROTECTION: IP66/68 (2 METERS/24 HOURS)
- 4). ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE
- 5). FOR COMPLETE MOUNTING, INSTALLATION AND WIRING INFORMATION, REFER TO THE INSTRUCTION MANUAL



exp 6/30/2018

USE DIMENSIONS ONLY - DO NOT SCALE		1	FOR CONSTRUCTION		PJF	MC	APRIL 05/2010
DIMENSIONS ARE IN INCHES		Rev.	Revision / ECN Description		Drawn	Appr.	Date
Third Angle Projection	Product Group	ULTRASONICS		Tolerance Unless Otherwise Noted: UCS	Scale:	Size:	
	Date:	05/04/2010		1 Place Decimal ± 0.03	NTS	B	
Drawn:	PJ FROGGATT		2 Place Decimal ± 0.01				
Third Angle Projection	Checked:	A GHOREISHI		3 Place Decimal ± 0.002	TITLE:		
	Approved:	M CAVANAGH		XPS-15 TRANSDUCER CUSTOMER OUTLINE DIAGRAM			
	Location:	PETERBOROUGH		DRAWING No: A5E02964721			
SIEMENS MILLTRONICS PROCESS INSTRUMENTS INC. Peterborough, Ontario, Canada		File No. A5E02964721A01		Plot at: 1:1		Rev. 1	Sheet 1 of 1

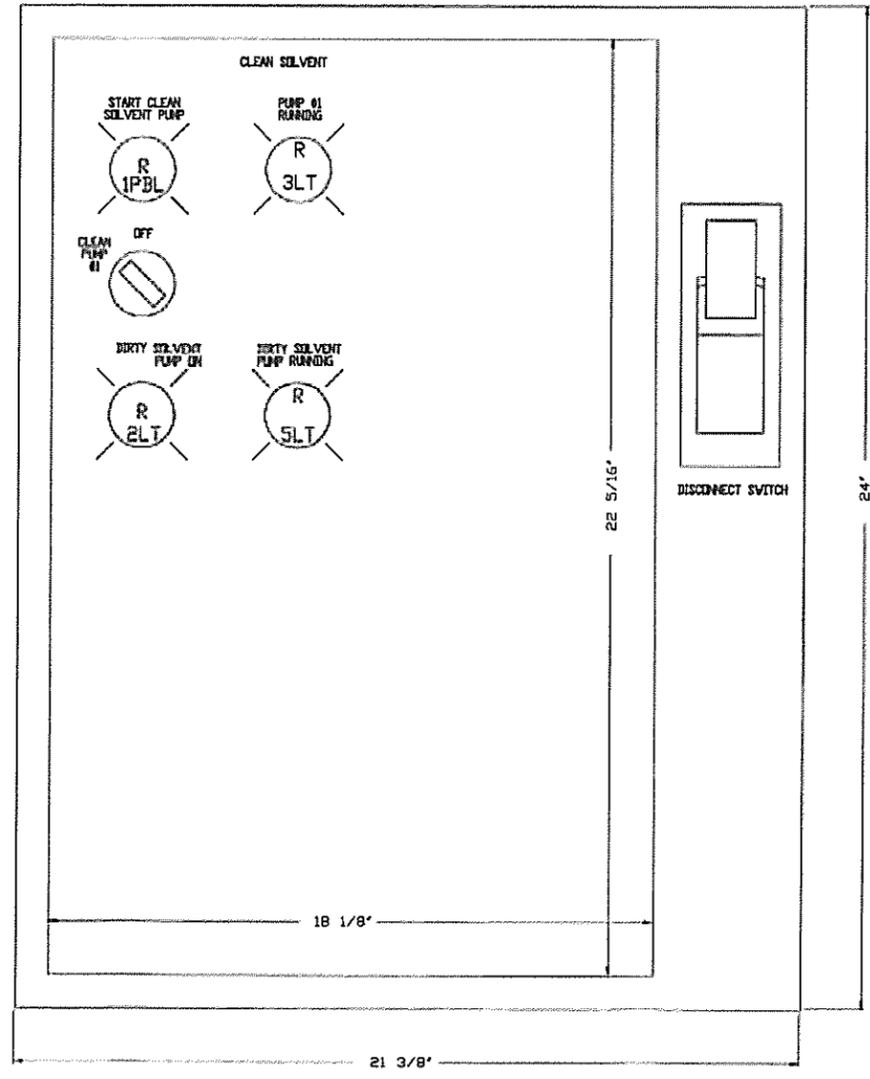
EXHIBIT D2-22

YELLOW CONTROL PANEL

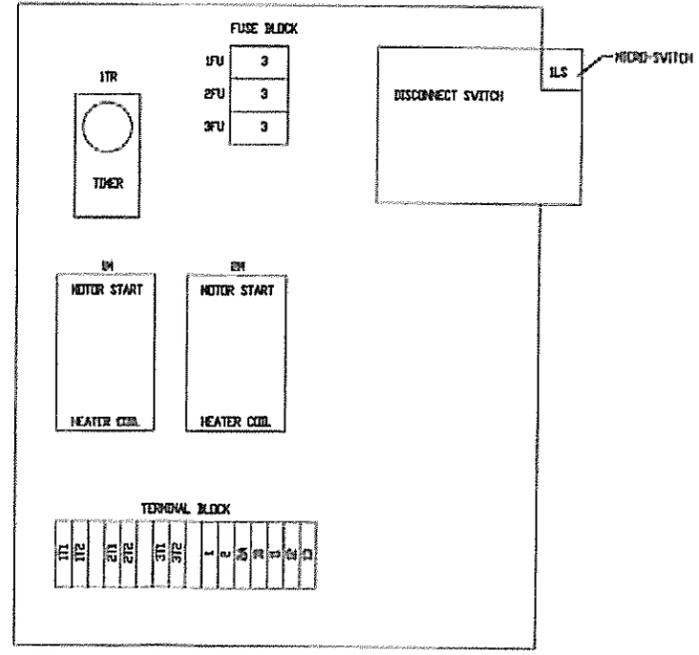
7134-4100-403

S-K #5213 PARTS LIST

QTY.	DESCRIPTION	MANUFACTURER	PART NUMBER
1	ENCLOSURE, NEMA 12	HOFFMAN	A-245A220SLP
1	SUB-PANEL	"	A24P20
1	OPERATING HANDLE	A-B	1494 VH-1
1	DISCONNECT SWITCH	"	1494 V-DS60
1	ROD	"	1494 V-RA1
2	STARTER	"	509-ADD3
2	HEATER	"	V54
1	ILLUMINATED PUSHBUTTON	"	800T-F166R
1	CONTACT BLOCK	"	800T-XA2
2	PILOT LIGHT, 120V	"	800T-P16R
2	PILOT LIGHT, 240V	"	800T-P26R
4	LENS CAP	"	800T-H26R
5	LEGEND PLATE	"	800T-X700
2	FUSE, 5A	FUSETRON	FR45
2	FUSE, 30A	"	FR90
1	TIMER	EAGLE	BR11A601
2	TOGGLE SWITCH	LEVITON	5226-1
2	COVER PLATE	APPLETON	2510
8	TERMINAL BLOCK	CURTIS	"
1	FUSE BLOCK-3 POLE	"	F30A3B
1	MICRO-SWITCH	"	82-0883-A2
1	SEL. SWITCH, 3 POS., 4-POLE	A-B	882T-SEP
2	CONTACT BLOCK	"	800T-XA



S-K #5213 CONTROL PANEL COVER
SCALE: NONE



PANEL INTERNAL COMPONENT LAYOUT DETAIL
SCALE: NONE



Exp 6/30/2018

GENERAL NOTES

- S-K #5213 CONTROL PANEL COMES COMPLETELY ASSEMBLED. PARTS LIST IS FOR MAINTENANCE PURPOSES ONLY.
- SEE DWG. QH06403 FOR WIRING DETAILS.

PROPRIETARY STATEMENT

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TITLE
**CONTROL PANEL
SK #5213**

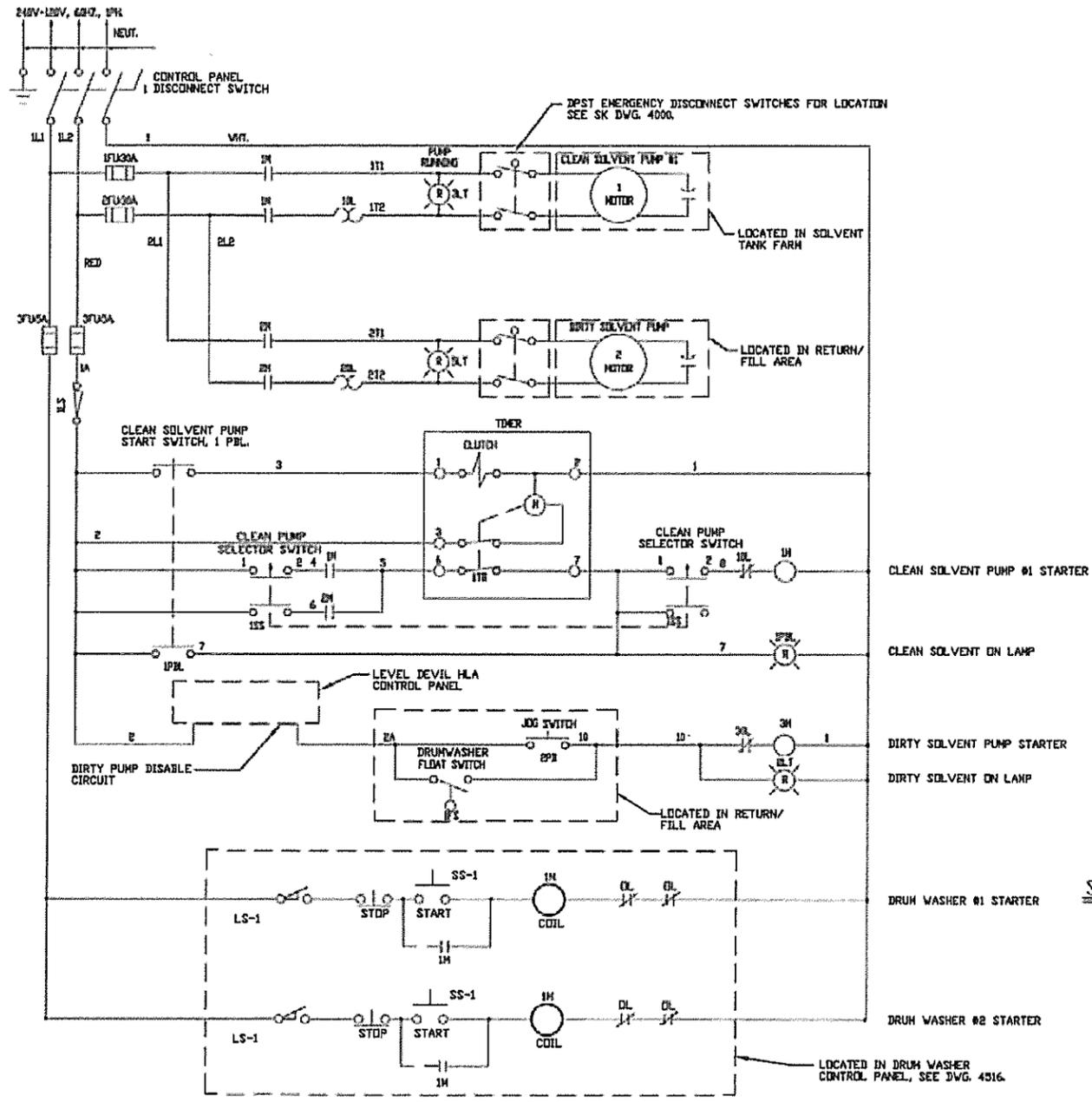
SAFETY-KLEEN SYSTEMS, INC.
2800 N. CENT. EXPRESSWAY STE 400 MESA, AZ 85205
PHONE: 800-499-0740

SCALE: NONE BY: R.D. CHKD: APRR. DATE: 9/23/92
SERVICE CENTER LOCATION: CHANDLER, AZ. SC-DWG NUMBER: 7134-4100-402 REV. NO.: B

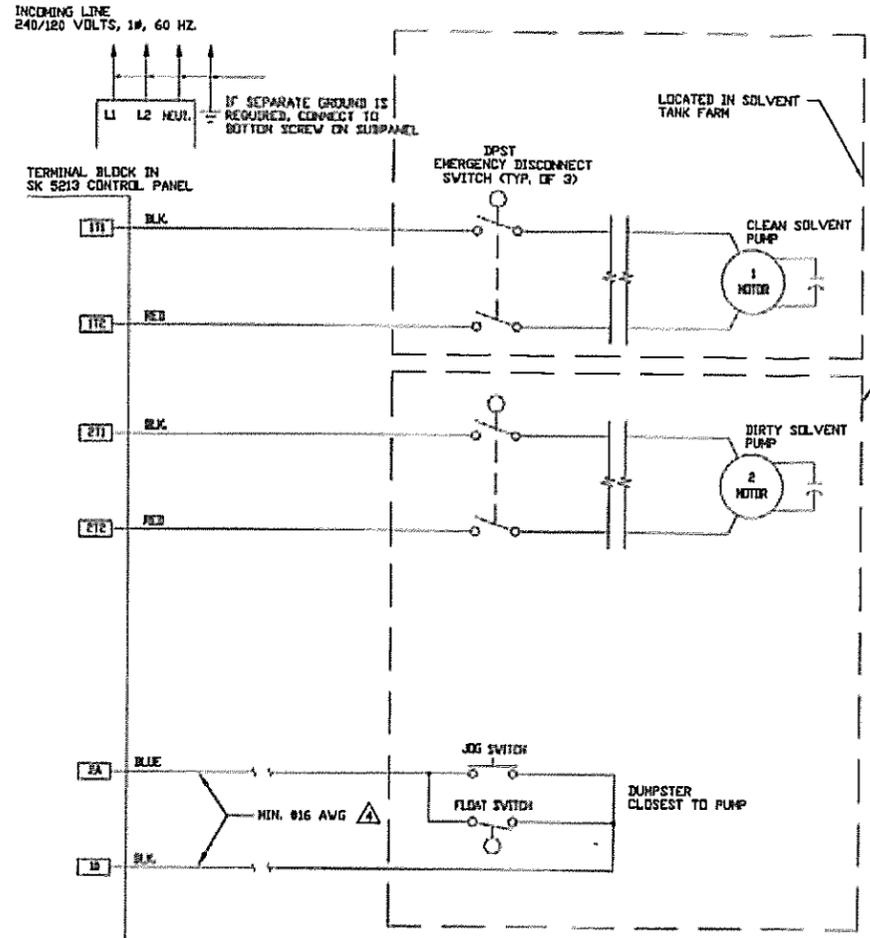
NO.	DESCRIPTION	BY	CHK	APPR	DATE
1	ISSUED FOR PERMIT	JEK	NC	NC	072815
2	ISSUED FOR BIDS.	RD	-	-	09/23/92

Exhibit D2-23

RF Control Panel SK #5213 Wiring
Diagram 7134-4100-403 Model S



SK #5213 CONTROLS WIRING DIAGRAM
SCALE: NONE



SOLVENT PUMPS & PARTIAL RETURN/FILL ELECTRICAL WIRING DIAGRAM
SCALE: NONE



exp 6/30/2018

GENERAL NOTES

- HIGH LEVEL ALARM SYSTEM (HLA) FOR TANKS WILL BE PROVIDED BY A SEPARATE HLA CONTRACTOR. COORDINATE INSTALLATION OF 5213 PANEL WITH HLA CONTRACTOR.
- CONTRACTOR TO PROVIDE ENGINEER WITH A WRITTEN VERIFICATION OF SYSTEM OPERATION PER 'DIRTY SOLVENT PUMP CUTOFF TEST' AS FOLLOWS:
 - A. FILL DRUM WASHER TO ACTIVATE FLOAT SWITCH
 - B. VERIFY THAT DIRTY SOLVENT PUMP IS NOW RUNNING.
 - C. PUSH DIRTY SOLVENT TANK 'PUSH-TO-TEST' BUTTON TO SIMULATE ALARM CONDITION OF 95% FULL TANK.
 - D. VERIFY THAT DIRTY SOLVENT PUMP IS NOW OFF.
 - E. PUSH JOG SWITCH.
 - F. VERIFY THAT DIRTY SOLVENT PUMP DOES NOT RUN.
 - G. DOCUMENT DATE & SEND REPORT TO ENGINEER WITH NAME OF COMPANY AND INDIVIDUAL THAT PERFORMED TEST.

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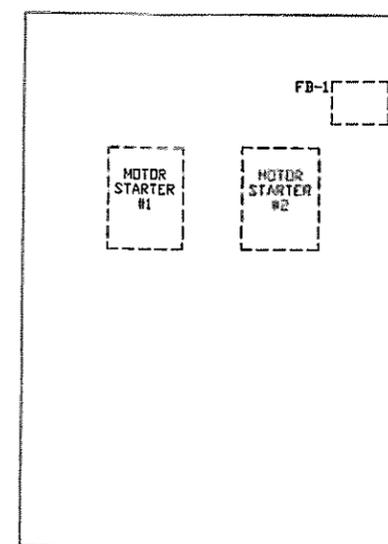
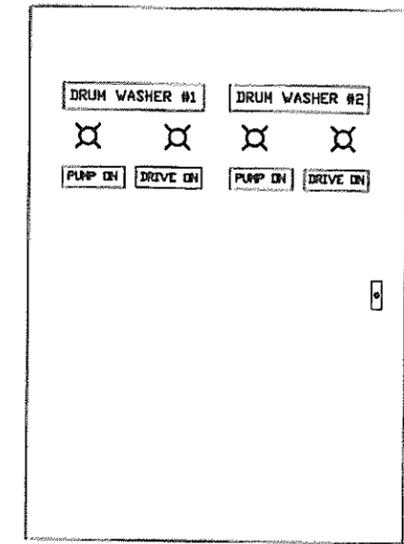
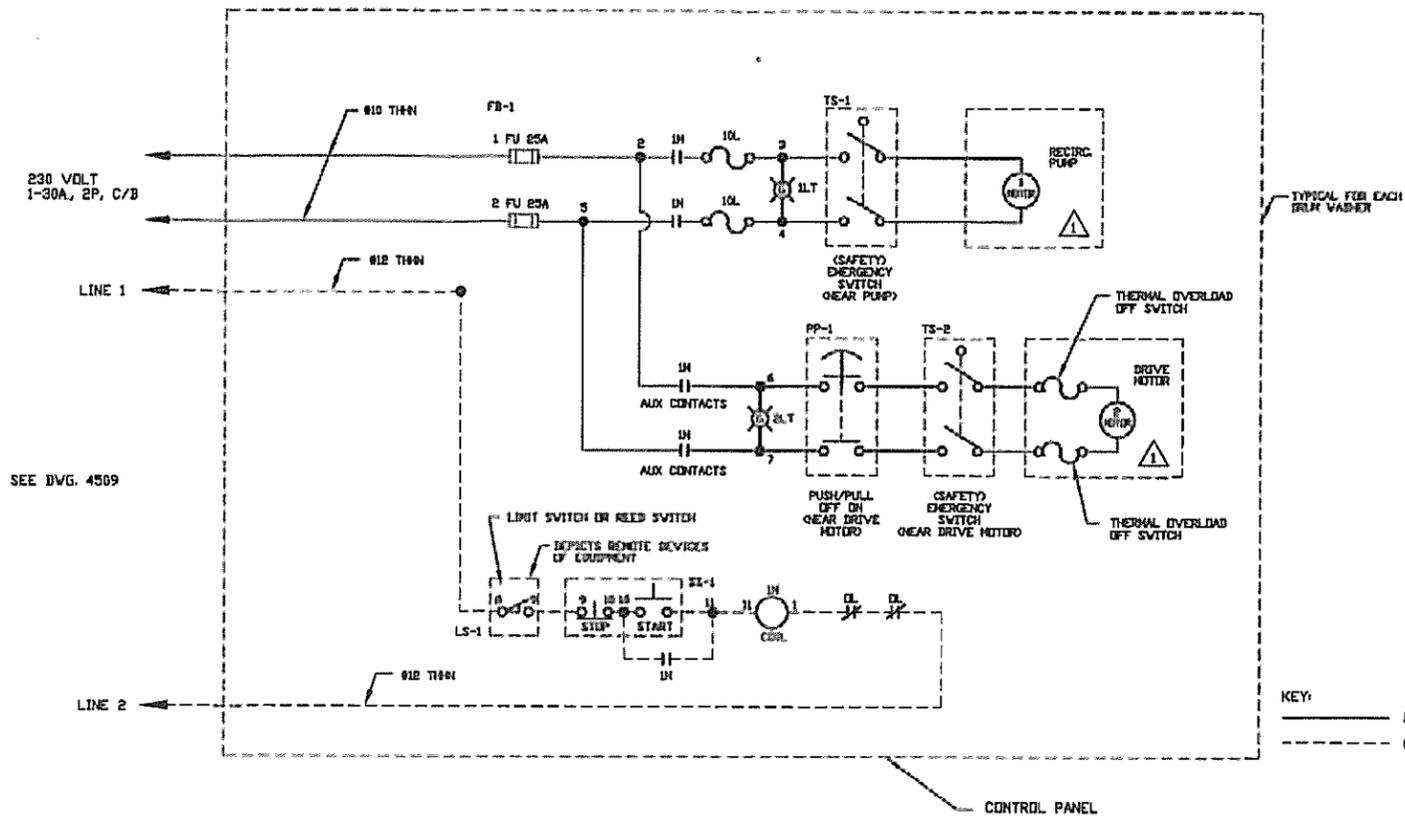
TITLE
CONTROL PANEL, SK #5213
WIRING DIAGRAM

S SAFETY-KLEEN SYSTEMS, INC.
3620 N. CENT. EXPRESSWAY STE 400 RICHMOND, TX 75080
PHONE 800-868-8740

NO.	DESCRIPTION	BY	CHK	APPR	DATE
REVISIONS					

ISSUED FOR PERMIT	JEK	HC	HC	072615			
ISSUED FOR BIDS.	RD			092392			
SCALE	NONE	BY	R.D.	CHKD	APPR	OP. APPR	DATE
SERVICE CENTER LOCATION	CHANDLER, AZ.	SC-DWG NUMBER	7134-4100-403	REV. NO.	B		9/23/02

Exhibit D2-24
Tan Drum Washer
Control Panel Diagram 7
134-4100-404 S



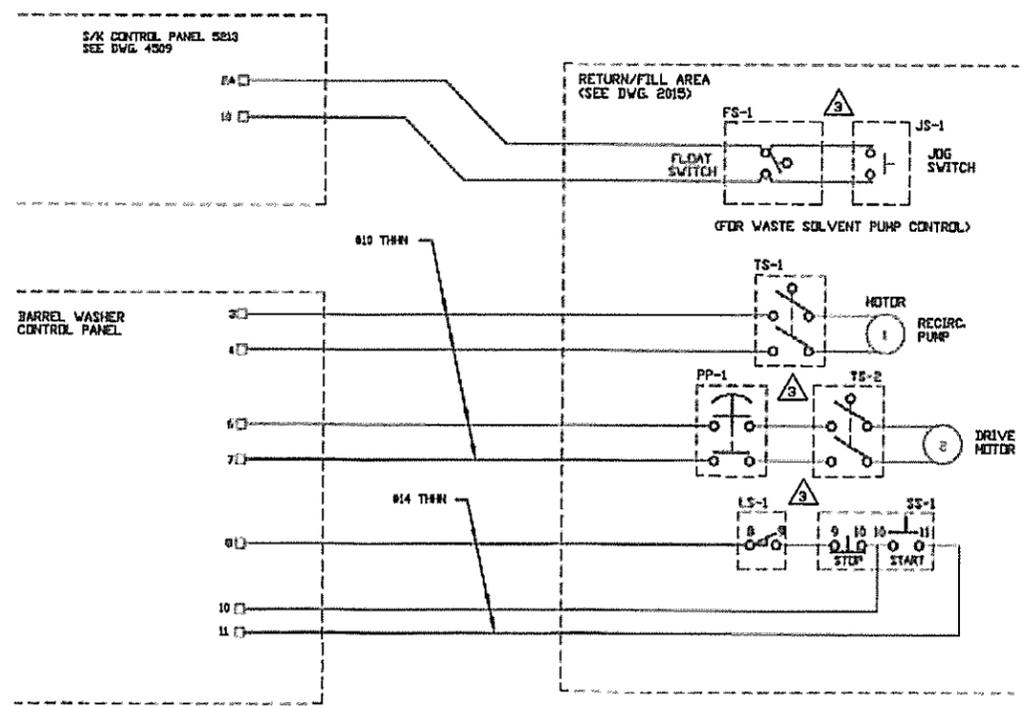
KEY:
 ——— POWER WIRING
 - - - CONTROL WIRING

PANEL FRONT

PANEL INTERIOR

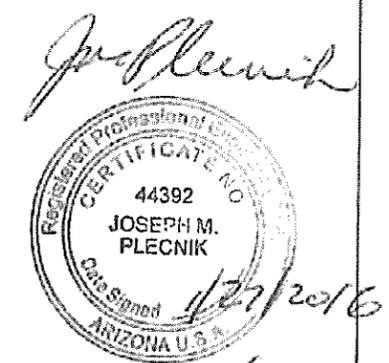
'PANEL WIRING' & ELEMENTARY DIAGRAM
 SCALE: NONE

CONTROL PANEL MAKE-UP
 SCALE: NONE



WIRING DIAGRAM FOR ONE DRUM WASHER
 SCALE: NONE

MATERIALS LIST		
TAG	QUANTITY	DESCRIPTION
FB-1	1	FUSE BLOCK WITH FPN FUSES LITTLE FUSE LH 250 2P FUSES FLNR #3
STARTER	2	NEHA SIZE R1 MAGNETIC STARTER SQ D 6336-390 IS
ILT	2	PUMP PILOT LIGHT - GREEN - 240 VOLT SQ D 9001 KP779 V/ TRANSFORMER
BLT	2	DRIVE MOTOR PILOT - GREEN - 240 VOLT SQ D 9001 KP779 V/ TRANSFORMER
PANEL	1	UNIVERSAL BOX WITH PIANO HINGE, SINGLE POINT L HANDLE LOCK, 8" DEEP, 36" HIGH, 24" WIDE.
REMOTE ITEMS		
SS-1	1	START-STOP STATION 9001 BR205
TS-1,2	2	2-POLE TOGGLE SWITCH, 20A RATED SQ D 2510 KR1
JS-1	1	JOG SWITCH, 1-POLE, 20A RATED
FS-1	1	FLOAT SWITCH, 1-POLE, 20A RATED
LS-1	1	LIMIT SWITCH OR REED SWITCH MAKES WHEN BARREL IS IN PLACE, 9008 CL61J
PP-1	1	2 POLE PUSH/PULL SWITCH, START STOP STATION 2 HP RATING.



exp 6/30/2018
 GENERAL NOTES

- 1. ITEMS SUPPLIED BY SAFETY-KLEEN DRUM WASHER CONTROL PANEL COMES COMPLETELY ASSEMBLED.
- 2. JS-1, TS-1, PP-1 AND TS-2 TO BE MOUNTED BY ELECTRICAL CONTRACTOR. LS-1 AND SS-1 ARE PREMOUNTED ON DRUM WASHER HOUSING.

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TITLE
 DRUM WASHER CONTROL
 PANEL DIAGRAMS

NO.	DESCRIPTION	BY	CHK	APPR	DATE
B	ISSUED FOR PERMIT	JEK	HC	HC	072015
A	ISSUED FOR BIDS.	RD	-	-	092322
REVISIONS					

SAFETY-KLEEN SYSTEMS, INC.
 2800 N. GUY, EXPANSEWAY STE 400 RICHARDSON, TX 75080
 PHONE 800-888-5710

SCALE AS NOTED	BY R.D.	CHKD	APPR.	OP. APPR.	DATE
					9/23/92
SERVICE CENTER LOCATION			SC-DWG NUMBER		
CHANDLER, AZ.			714201-QH06404		
					REV. NO.
					B

SAFETY-KLEEN CHANDLER
EPA ID NO. AZD981969504
EXHIBIT E
DRAFT PERMIT

EXHIBIT E

[NOT USED]

EXHIBIT F

PREPAREDNESS AND PREVENTION PLAN

F-1	Example Daily Inspection Forms
F-2	Example Weekly Safety Security Inspection
F-3	Emergency Equipment and Communication-Office/Warehouse
F-3.1	Site Emergency Equipment - Outer Lot
F-4	Emergency Equipment List
F-5	Emergency Responder & Agency Agreements
F-5.1	Memorandum of Agreement on Contingency Plan Signed Jonathan Holmes
F-5.2	Memorandum of Agreement on Contingency Plan Signed Shawna Francheschini
F-6	Work Place Hazard Assessment - PPE Requirements
F-7	Hotwork Permit Standard
F-8	ADEQ Interoffice Memo Safety-Kleen Dry Well Installation 2-9-93
F-9	Routine Branch Industrial Hygiene Sampling
F-10	Envibro Drainage System Data Sheet
F-11	Monthly Inspection Log – Rainwater System and Vadose Zone Vapor Monitoring
F-12	Example Stormwater Inspection Form
F-13	Fire Line Site Plan
F-14	As-Built Fire Protection Plan
F-15	Vertical Tank Grounding Plan & Details
F-16	ADEQ Annual Dry Wells Inspection Checklist
F-17	City of Chandler Use Permit
F-18	City of Chandler Occupancy Permit

Exhibit F-1

Example Daily Inspection Form

EXAMPLE

Exhibit F-1



CO CSA Inspection

Form Code: 28

Compliance Header	
Inspector Name	
Inspection Date	
Area of Inspection	
CO CSA Inspection Instructions	
Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.	
CO CSA Inspection Items	
Container Placement and Stacking - Check for evidence of failure (e.g., containers on pallets, pallets too high, other).	
Sealing of Containers - Check for evidence of failure (e.g., containers not closed or sealed, open).	
Labeling of Containers - Check for evidence of failure (e.g., no label, improper label, content, other).	
Container Integrity - Check for evidence of failure (e.g., condition, bulging, leaks, other).	
Pallets - Check for evidence of failure (e.g., broken, loose, condition).	
Doors - Check for evidence of failure (e.g., indoor area, broken or not working as intended).	
Base/ Foundation/ Roof - Check for evidence of failure (e.g., cracked, gaps, other).	
Berms/ Racks - Check for evidence of failure (e.g., cracks, gaps, broken, other).	
Debris and Refuse - Check for evidence of	

EXAMPLE

failure (e.g., proper storage, location, container type, other).

Exit Signs - Check for evidence of failure (e.g. missing, lamps, battery backup, other).

Aisle Space - Check for evidence of failure (e.g., minimum 2 ft required, other).

Containment Area - Check for evidence of failure (e.g., secondary containment, curbing, floor, cracks, deterioration, other).

Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).

Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, other).

Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).

Storage Capacity - Check for acceptable limit (e.g., area or permit restrictions, type restriction, volumn limit, other).

Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).

Pumps - Check for evidence of failure (e.g., deterioration or broken, leaks, other).

Inventory Age - Check for acceptable limit (e.g., within area limits, permit restrictions, other).

N/A

Compliance Footer

Inspector Signature

Attach Photo

On Demand Work Ticket

EXAMPLE



CO Return and Fill Area

Form Code: 36

Compliance Header	
Inspector Name	
Inspection Date	
Area of Inspection	
CO Return and Fill Area Instructions	
Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained. Include any repairs changes or corrective actions.	
CO Return and Fill Area Inspection Items	
Pump Seals - Check for evidence of failure (e.g., leaks, other).	
Motors - Check for evidence of failure (e.g., overheating, other).	
Fittings - Check for evidence of failure (e.g., leaks, other).	
Valves - Check for evidence of failure (e.g., leaks, sticking, other).	
Hose Connections and Fittings - Check for evidence of failure (e.g., cracked, loose, leaks, other).	
Hose Body - Check for evidence of failure (e.g., crushed, cracked, thin spots, leaks, other).	
Clam Shell Unit Type - Lid Fusible Link - Check for evidence of failure (e.g., broken, spring missing, other).	N/A
Clam Shell Unit Type - Lid Hinge Assembly - Check for evidence of failure (e.g., broken pivot arm, damaged lid arm, missing pins, other).	N/A
Sliding Lid Unit Type - Gaskets - Check for	N/A

EXAMPLE

<p>evidence of failure (e.g., broken, cracked distorted, other).</p> <p>Sliding Lid Unit Type - Lid/ Slide Assembly - Check for evidence of failure (e.g., damaged lid, rollers, slide rail, temperature gauge, limit switches, other).</p> <p>Roll-up Door Unit Type - Seals - Check for evidence of failure (e.g., broken cracked, distorted, other).</p> <p>Roll-up Door Unit Type - Door/ Roll-up Assembly - Check for evidence of failure (e.g., damaged lid, rollers, slide rail, temperature gauge, limit switch, other).</p> <p>Wet Dumpster - Check for evidence of failure (e.g., leaks, rust, split seams, distortion, deterioration, excess debris, other).</p> <p>Secondary Containment - Check for evidence of failure (e.g., excess sediment, leaks, distortion, deterioration, excess debris, other).</p> <p>Loading/ Unloading Area - Check for evidence of failure (e.g., cracks, ponding or wet spots, deterioration, other).</p>	N/A	
Compliance Footer		
Inspector Signature		
Attach Photo		
On Demand Work Ticket		

EXAMPLE



CO Tank Systems Inspection

Form Code: 27

Compliance Header

Inspector Name

Inspection Date

Area of Inspection

CO Tank Systems Inspection Instructions

Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

CO Tank Systems Inspection Items

Tanks - Check for evidence of failure (e.g., rusty or loose anchoring, distortion, paint failure, other).

Pipes - Check for evidence of failure (e.g., distortion, corrosion, paint failure, other).

Valves - Check for evidence of failure (e.g., disconnected, corrosion, other).

Fittings - Check for evidence of failure (e.g., loose, disconnected, corrosion, other).

Liquid Level - Check for acceptable level. (e.g., high level max, permitted volume, other).

Secondary Containment - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).

Sumps - Check for evidence of failure (e.g., cracks, ponding or wet spots, pitting or deterioration, other).

Bonding and Grounding - Check for evidence of failure (e.g., loose, broken, corrosion or deterioration, other).

Transfer Equipment - Check for availability and

EXAMPLE

condition (e.g., pumps, filters, strainers, hoses, other).

Communication and Alarm System - Check for evidence of failure (e.g., test function, siren, strobe, other).

Satellite Accumulation Containers - Check for condition and appropriate for area (e.g., filter/basket, solids, label and marking, other).

N/A

Manways, Hatches, Other Openings - Check for evidence of failure (e.g., condition, corrosion, closure, other).

Pressure Relief Valves (PRV)/ Flame Arrestors - Check for evidence of failure (e.g., condition, corrosion, other).

Tanks marked with the words "Hazardous Waste" - Check for appropriate markings.

Tanks not used marked as "Out of Service" - Check for appropriate markings.

Tanks marked as to the contents - Check for appropriate markings (e.g., Non-Haz Only).

Monitoring Equipment - Check for evidence of failure (e.g., pressure and temperature gauges, level indicators, other).

Loading/ Unloading Areas - Check condition of area (e.g., available equipment, spill response, containment, pad condition, other).

Compliance Footer

Inspector Signature

Attach Photo

On Demand Work Ticket

Exhibit F-2

Example Weekly Inspection of Safety
Equipment Form

**Compliance Header**

Inspector Name

Inspection Date

Area of Inspection

CO Safety Security Inspection Instructions

Note condition of inspection items. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

CO Safety Security Inspection Items

Perimeter Fences - Check for evidence of failure (e.g., broken ties, corrosion, holes, distortion, other).

Gates - Check for evidence of failure (e.g., locking mechanism, broken ties, corrosion, holes, distortion, other).

Warning Signs - Check for evidence of failure (e.g., missing, faded, other).

Exit Signs - Check for evidence of failure (e.g., missing sign, illumination, lamp bulbs, battery backup, other).

Exits/ Firelanes/ Evacuation Routes - Check that all routes are clear or unobstructed.

Lighting System - Check for evidence of failure (e.g. expired lamps, effectiveness, location, other).

Emergency Lighting System - Check for evidence of failure (e.g., expired lamps, battery backup, effectiveness, other).

Accessibility of Safety Equipment/ Protective Gear - Check for evidence of availability (e.g., hardhats, faceshields, goggles, safety glasses,

EXAMPLE

<p>boots, gloves, clothing, duct tape, absorbents, other).</p> <p>Adequate Supply of Safety Equipment/ Protective Gear - Check for evidence of availability (e.g., inventory available).</p> <p>Condition of Safety Equipment - Check for evidence of failure (e.g., review PPE for damage or excessive wear, other).</p> <p>Breathing Apparatus Accessibility - Check for evidence of availability (e.g. respirators, equipment, other).</p> <p>Breathing Apparatus Adequate Supply/ Full Charge - Check for evidence of availability (e.g., tanks, charged, other).</p> <p>Breathing Apparatus Condition - Check for evidence of failure (e.g., damage, other).</p>	<p>N/A</p>
<p>First Aid Kits - Check for evidence of availability (e.g., adequate inventory, other).</p> <p>Bloodborne Pathogen Kits - Check for evidence of availability (e.g., adequate inventory, other).</p> <p>Emergency Eyewashes - Check for evidence of failure (e.g., disconnected or malfunctioning valves, inadequate pressure, inaccessible, malfunctioning drain, leaking, other).</p>	
<p>Emergency Showers - Check for evidence of failure (e.g., disconnected or malfunctioning valves, inadequate pressure, inaccessible, leaking, other).</p> <p>Internal/ External Communication - Check for evidence of failure (e.g., inadequate supply of phones or radios, malfunctioning intercom, emergency alarm does not work, phone moved from proper location, other).</p> <p>Fire Extinguishers - Check for evidence of failure (e.g., overdue inspection, not charged, inaccessible, other).</p> <p>Absorbent Supply - Check for evidence of availability (e.g., adequate inventory, other).</p>	

EXAMPLE

Recovery Drum Supply - Check for evidence of availability (e.g., adequate inventory, other).

Respirators and Cartridges - Check for evidence of availability (e.g., adequate inventory, other).

Fire Suppression System Accessibility - Check for evidence of failure (e.g., monitors, pull stations, alarms, other).

Fire Suppression System Operable - Check for evidence of failure (e.g., test, other).

Water Lines/ Hydrants - Check for evidence of failure (e.g., blocked, broken, other).

Alarm Systems - Check for evidence of failure (e.g., test, other).

Fire Blankets - Check for evidence of availability (e.g., adequate inventory, other).

Strainer on Fire Suppression System - Check for evidence of failure (e.g., functioning as intended, other).

Surveillance System/ Guard Service - Check for evidence of failure (e.g., equipment or service provided and functioning properly, other).

N/A

Supplied Air Delivery System and Reserve - Check for evidence of failure (e.g., system operational, equipment functioning, other).

N/A

Wind Sock - Check for evidence of failure (e.g., operational, other).

Decontamination Equipment - Check for evidence of availability (e.g., adequate inventory, other).

Portable Sump Pumps - Check for evidence of availability (e.g., adequate inventory, functioning properly, other).

Gasoline Pumps - Check for evidence of failure (e.g., broken parts, leaks, other).

N/A

Loud Speakers - Check for evidence of failure (e.g., test, other).

EXAMPLE

Chocked Wheels on Parked Vehicles - Check for evidence of failure (e.g., chocks not used, missing, deteriorated, other).	
Cylinders Secure - Check for evidence of failure (e.g., properly stored, secured, chained, other).	
Ventilation Operable - Check for evidence of failure (e.g., system working as intended, other).	
Fall Protection - Check for evidence of availability (e.g., adequate inventory, integrity of equipment, other).	N/A
Electrical Boxes - Check for evidence of failure (e.g., closed, not blocked, marked properly, other).	
Emergency Contact Info Posted - Check for evidence of availability (e.g., up-to-date postings, location requirement, other).	
Hearing Protection Available - Check for evidence of availability (e.g., type appropriate per location, other).	
Housekeeping - Check for evidence of failure (e.g., blocked egress, proper storage, procedure followed, other).	
Portable Compressor - Check for evidence of availability (e.g., adequate inventory, functioning properly, other).	
Lime Supply - Check for evidence of availability (e.g., adequate inventory, other).	N/A
QC Lab Hood - Check for evidence of failure (e.g., functioning properly, other).	N/A
Rolloff Parking Area - Check for evidence of failure (e.g., housekeeping, staging, other).	
Dumpster/ Outside Containers - Check for evidence of failure (e.g., housekeeping, condition, appropriate use and storage, other)	
Stormwater Collection System - Check for evidence of failure (e.g., functioning properly,	

EXAMPLE

damaged equipment, integrity, other).

Rally Point - Check for evidence of failure (e.g., location identified, communication, other).

Visitor Log - Check for evidence of failure (e.g., available, communication, proper use, other).

Contingency Plan - Check for evidence of failure (e.g., available, up-to-date, communication, other).

Wind Instrument - Check for evidence of failure (e.g., functioning properly, not broken, other).

Compliance Footer

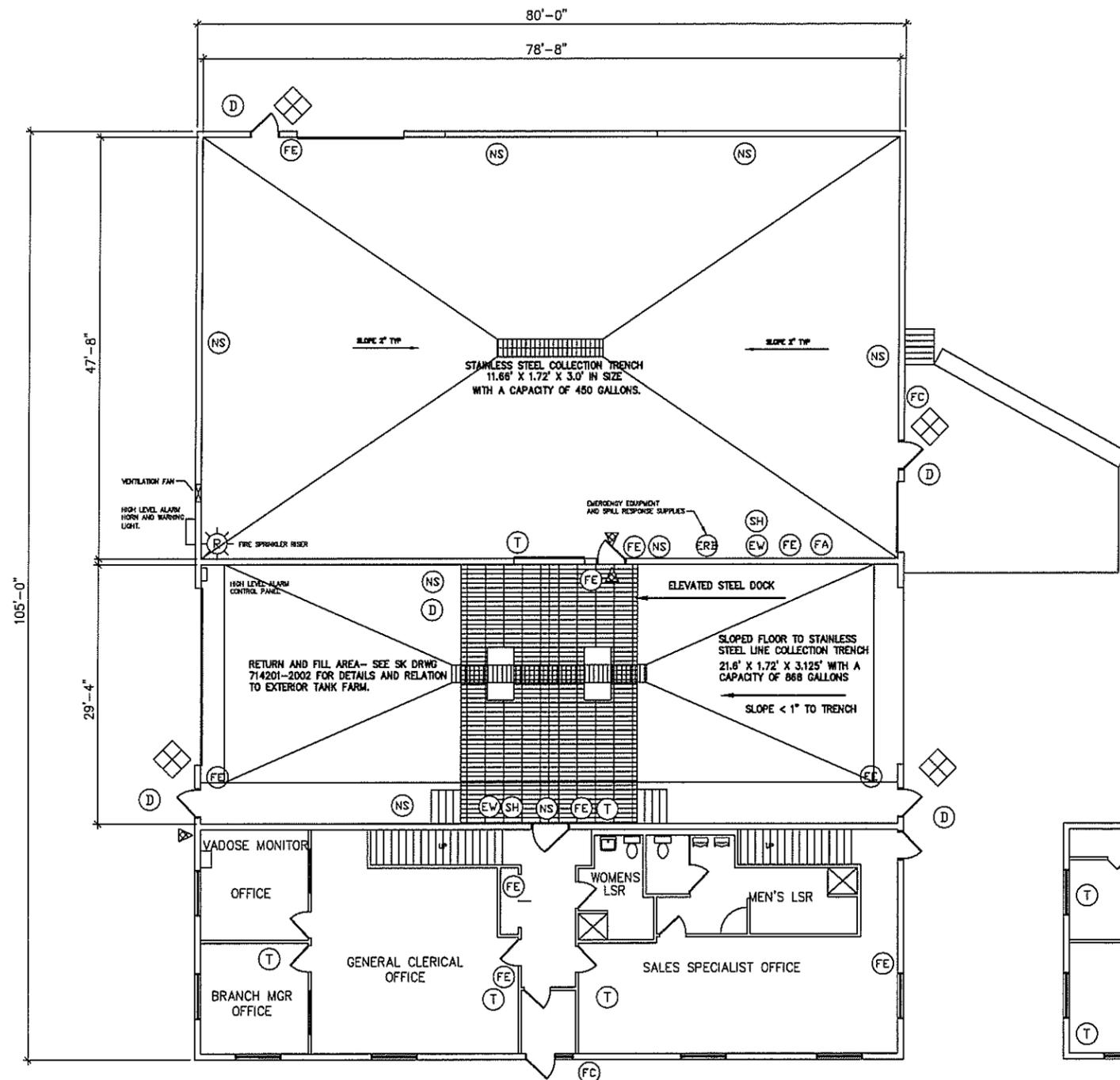
Inspector Signature

Attach Photo

On Demand Work Ticket

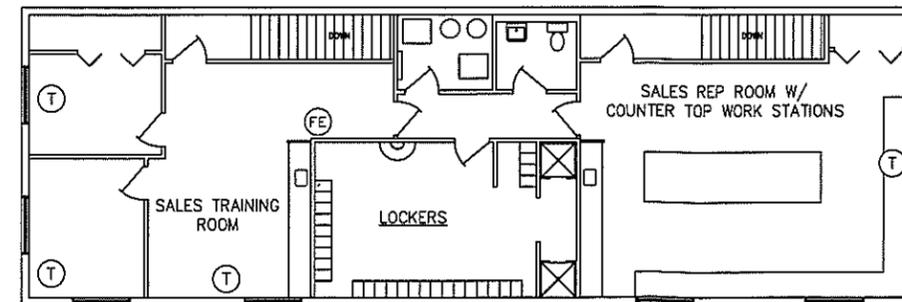
Exhibit F-3

Facility Diagram of Emergency Equipment
Location
Office / Warehouse



GROUND FLOOR PLAN

- LEGEND
- (T) - TELEPHONE
 - (FE) - FIRE EXTINGUISHER (TYPICAL 10# ABC)
 - (FA) - FIRST AID STATION
 - (FC) - FIRE DEPT. CONNECTION
 - (D) - 'DANGER' SIGN
 - (NS) - 'NO SMOKING' SIGN
 - (EW) - EYEWASH STATION
 - (SH) - SAFETY SHOWER
 - (ERB) - EMERGENCY RESPONSE BOARD
 - ▽ - INTERCOM PAGING/WARNING HORN
 - ◇ - NFPA 704 SIGN
 - (R) - SPRINKLER RISER



SECOND FLOOR PLAN

EMERGENCY EQUIPMENT AND COMMUNICATION

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NO.	DESCRIPTION	BY	CHK	APPR	DATE
2	UPDATE LEGEND AND DWG.	JEK	NC	NC	072814
1	UPDATE LEGEND AND DWG.	JEK	-	-	051804
REVISIONS					

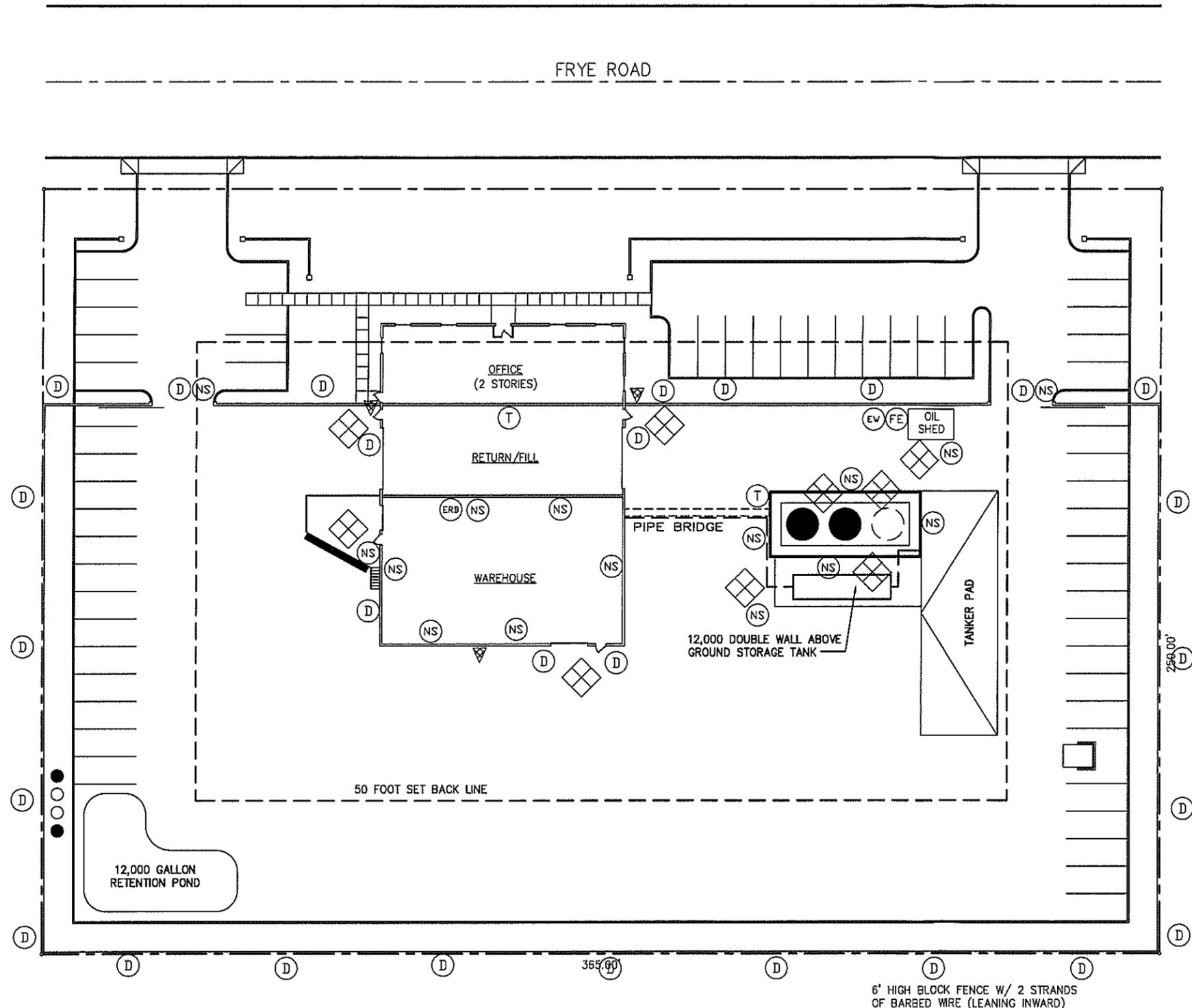
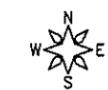
TITLE
**FLOOR PLAN
 OFFICE/WAREHOUSE**

SAFETY-KLEEN SYSTEMS, INC.
 2640 N. CENT. EXPRESSWAY STE. 400 RICHARDSON, TX. 75080
 PHONE 972-669-5748

SCALE 1/8"=1'	BY VEY	CHKD VEY	P.E. APPR -	OP. APPR -	DATE 12-10-93
SERVICE CENTER BRANCH AT CHANDLER, AZ				STD-DWG-REV NO. 7134-WB00-004	

Exhibit F-3.1

Facility Diagram of Emergency Equipment
Location
Outer Lot



LEGEND

- (T) - TELEPHONE
- (FE) - FIRE EXTINGUISHER (TYPICAL 10# ABC)
- (FA) - FIRST AID STATION
- (D) - "DANGER" SIGN
- (NS) - "NO SMOKING" SIGN
- (EW) - EYEWASH STATION
- (SH) - SAFETY SHOWER
- (ERB) - EMERGENCY RESPONSE BOARD
- ▽ - INTERCOM PAGING/WARNING HORN
- ◇ - NFPA 704 SIGN

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN CORP. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN CORP. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

TITLE
SITE EMERGENCY EQUIPMENT LOCATIONS

SAFETY-KLEEN SYSTEMS, INC.
2500 N. CENT. EXPRESSWAY STE 400 RICHARDSON, TX 75080
PHONE: 800-669-3748

NO.	DESCRIPTION	BY	CHK	APPR	DATE
06	REVISE FOR PERMIT	JEX	NC	NC	072515
05	UPDATE TO SHOW 12K AGT FOR PART B	JEX	-	-	042804
04	ADJUST FOR AS-BUILT	WEY	WEY	-	121393
03	ADDED RETENTION POND	MJP	WD	-	040792
02	ADDED SITE DEVEL IMPROVEMENT #'S	MJP	-	-	021392
REVISIONS					

SCALE 1" = 20'-0"	BY WEY	CHKD -	P.E. APPR -	OP. APPR -	DATE 04-23-90
SERVICE CENTER LOCATION CHANDLER, ARIZONA			SC-DWG NUMBER 7134-SP00-004		REV. NO. 06

Exhibit F-4

List of Emergency Equipment

Safety-Kleen Chandler
Emergency Equipment List

(See Exhibit F-3/F-3.1 for Specific Location for equipment)

Description	Location	Quantity*	Capabilities
Gloves -Supported Neoprene Glove -Cut Resistant Gloves	At or near Emergency Response Board (located north wall of CSA)	2 pairs each	Provides personal protection by creating a physical barrier between personnel and potential contaminants
Chemical Resistant Apron**	At or near Emergency Response Board	2	Physical barrier PPE
Eye Wash	On perimeter wall north of tank farm	1	Rapid flushing of eyes if exposed to chemicals
Combination Eyewash and Shower	-Near Emergency Response Board -On north wall of Return and Fill	2	Rapid flushing of eyes and drenching of body if exposed to chemicals
Ventilation	-Fan on east wall of CSA -Louvers on east and west wall of CSA -Air Coolers on south wall of CSA	1-fan 4-louvers 3-Air Coolers	Provide fresh air circulation to prevent build-up of fumes or gases
Fire Extinguishers	-Warehouse CSA -Return and Fill Area -Office Area -Northeast of tank farm	-3 x 20 lb. -4 x 10 lb. -4 x 5 lb. -1 x 10 lb.	Fire suppression of incipient fires
Absorbent Materials	At or near Emergency Response Board	200 sheets or 2 bales, 5 bags	Used for containing and absorbing spilled materials
First Aid Kit	At or near Emergency Response Board	1	Response to minor injuries
Telephones	-North wall of CSA -North wall of Return and Fill -West side of tank farm*** Office Area	1-CSA 1-R&F 1-tank farm 4-Office	Immediate reporting of emergencies
Mops	At or near Emergency Response Board	2	Spill cleanup and decon
Shovels	At or near Emergency Response Board	2	Spreading and removing absorbent
Brooms	At or near Emergency Response Board	2	Spreading and removing absorbent
Rated Flashlight	At or near Emergency Response Board	2	Illumination
Caution Barrier Tape	At or near Emergency Response Board	2	Cordon off spill areas

*Quantities listed are minimum requirements

** Other PPE including leather steel toe boots, respirators and safety glasses are assigned to individual authorized to for chemical handling

*** Tank farm phone is for internal use

Exhibit F-5

Emergency Responder and Agency Agreements

F-5.1

Memorandum of Agreement on Contingency Plan Signed
Jonathan Holmes

F-5.2

Memorandum of Agreement on Contingency Plan Signed
Shawna Francheschini



September 4, 2015

Director of Emergency Services
Chandler Regional Medical Center
1955 W. Frye Rd.
Chandler, AZ 85224

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

To Whom It May Concern:

Safety-Kleen is in the process of renewing its Hazardous Waste Permit at our Chandler site. The Arizona Department of Environmental Quality has asked that we renew our Memorandum of Agreements with our listed primary responders. Your site is the closest hospital to our operation and is likely to be involved should we have a injured personnel. We are requesting that you review the attached documents and sign and return the attached acknowledgement.

To update your files I have included the following emergency documents:

- The most recent copy of our Contingency Plan.
- A current List of Emergency Coordinators.
- A current list of emergency equipment.
- Maps showing the layout of the facility and the location of emergency equipment.
- A list of our currently permitted waste streams for storage.

In addition to the above information, Safety-Kleen does participate in the annual Tier II program that provides information on hazardous materials at our site. We would be happy to provide you with a copy of our submittal upon request.

For your convenience we have enclosed a self-addressed envelope for you to return the Memorandum of Agreement in. We also would like to invite you to take a tour of the site to familiarize yourself with the operation should the need for your services arise. If you'd like to us to contact you to make arrangements simply check the box on the agreement and provide a contact phone number.

Safety-Kleen Systems, Inc.
6625 W Frye Rd | Chandler, AZ 85226
480.940.7202 | 480.940.7376 (f)



September 4, 2015
Page 2

If you have any questions, please feel free to contact me at (480) 940-7202 or our EHS Manager, Nick Culian, at (530) 363-2632, or by email at nick.culian@safety-kleen.com.

Sincerely,



Andrew Welch
Branch General Manager
Safety-Kleen Systems, Inc. – Chandler

cc: Nick Culian, EHS Manager
File 1440

September 4, 2015

Mailing Address:

City of Chandler
Chief of Police
Chandler Police Department
Mail Stop 303, PO Box 4008
Chandler, AZ 85224

Location Address:

Chandler Police Department
250 East Chicago Street
Chandler, AZ 85225

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

To Whom It May Concern:

Safety-Kleen is in the process of renewing its Hazardous Waste Permit at our Chandler site. The Arizona Department of Environmental Quality has asked that we renew our Memorandum of Agreements with our listed primary responders. Your department is the closest site to our operation and is likely to be involved should we have an emergency. We are requesting that you review the attached documents and sign and return the attached acknowledgement.

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Safety-Kleen Systems, Inc.
6625 W Frye Rd | Chandler, AZ 85226
480.940.7202 | 480.940.7376 (f)

September 4, 2015
Page 2

If you have any questions, please feel free to contact me at (480) 940-7202 or our EHS Manager, Nick Culian, at (530) 363-2632, or by email at nick.culian@safety-kleen.com.

Sincerely,



Andrew Welch
Branch General Manager
Safety-Kleen Systems, Inc. – Chandler

cc: Nick Culian, EHS Manager
File 1440

September 4, 2015

Fire Chief
Chandler Fire Department
PO Box 4008, Mailstop 801
Chandler, AZ 85244-4008

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

To Whom It May Concern:

Safety-Kleen is in the process of renewing its Hazardous Waste Permit at our Chandler site. The Arizona Department of Environmental Quality has asked that we renew our Memorandum of Agreements with our listed primary responders. Your department is the closest site to our operation and is likely to be involved should we have an emergency. We are requesting that you review the attached documents and sign and return the attached acknowledgement.

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Safety-Kleen Systems, Inc.
6625 W Frye Rd | Chandler, AZ 85226
480.940.7202 | 480.940.7376 (f)

September 4, 2015
Page 2

If you have any questions, please feel free to contact me at (480) 940-7202 or our EHS Manager, Nick Culian, at (530) 363-2632, or by email at nick.culian@safety-kleen.com.

Sincerely,



Andrew Welch
Branch General Manager
Safety-Kleen Systems, Inc. – Chandler

cc: Nick Culian, EHS Manager
File 1440

September 4, 2015

Clean Harbors
Attn: Jonathan Holmes
PO Box 1949
42 Longwater Drive
Norwell, MA 02061-9149

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

Dear Mr. Jonathan Holmes:

Safety-Kleen is in the process of renewing its Hazardous Waste Permit at our Chandler site. The Arizona Department of Environmental Quality has asked that we renew our Memorandum of Agreements with our listed Qualified Emergency Responders. As a division of Clean Harbors, Safety-Kleen uses the Clean Harbors' Emergency Response group to arrange for a responder when needed. Your company was provided to me as a preferred Emergency Responder in the Chandler, Arizona area. We are requesting that you review the attached documents and sign and return the attached agreement.

To update your files I have included the following emergency documents:

- The most recent copy of our Contingency Plan.
- A current List of Emergency Coordinators.
- A current list of emergency equipment.
- Maps showing the layout of the facility and the location of emergency equipment.
- A list of our currently permitted waste streams for storage.

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Safety-Kleen Systems, Inc.
6625 W Frye Rd | Chandler, AZ 85226
480.940.7202 | 480.940.7376 (f)

September 4, 2015
Page 2

If you have any questions, please feel free to contact me at (480) 940-7202 or our EHS Manager, Nick Culian, at (530) 363-2632, or by email at nick.culian@safety-kleen.com.

Sincerely,



Andrew Welch
Branch General Manager
Safety-Kleen Systems, Inc. – Chandler

cc: Nick Culian, EHS Manager
File 1440

September 4, 2015

Clean Harbors
Attn: Shawna Franceschini
4004 W Earhart Way
Chandler, AZ 85226

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

Dear Ms. Shawna Franceschini:

Safety-Kleen is in the process of renewing its Hazardous Waste Permit at our Chandler site. The Arizona Department of Environmental Quality has asked that we renew our Memorandum of Agreements with our listed Qualified Emergency Responders. As a division of Clean Harbors, Safety-Kleen uses the Clean Harbors' Emergency Response group to arrange for a responder when needed. Your company was provided to me as a preferred Emergency Responder in the Chandler, Arizona area. We are requesting that you review the attached documents and sign and return the attached agreement.

To update your files I have included the following emergency documents:

- The most recent copy of our Contingency Plan.
- A current List of Emergency Coordinators.
- A current list of emergency equipment.
- Maps showing the layout of the facility and the location of emergency equipment.
- A list of our currently permitted waste streams for storage.

In addition to the above information, Safety-Kleen does participate in the annual Tier II program that provides information on hazardous materials at our site. We would be happy to provide you with a copy of our submittal upon request.

For your convenience we have enclosed a self-addressed envelope for you to return the Memorandum of Agreement in. We also would like to invite you to take a tour of the site to familiarize yourself with the operation should the need for your services arise. If you'd like to us to contact you to make arrangements simply check the box on the agreement and provide a contact phone number.

Safety-Kleen Systems, Inc.
6625 W Frye Rd | Chandler, AZ 85226
480.940.7202 | 480.940.7376 (f)

Clean Harbors
PO Box 1949
42 Longwater Drive
Norwell, MA 02061-9149

Safety-Kleen Systems, Inc.
6625 W Frye Rd
Chandler, AZ 85226-3322

Re: Safety-Kleen Systems, Inc. – Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

Dear Mr. Welch:

This letter is to acknowledge receipt of your current Contingency Plan and related documents for the Safety-Kleen Chandler site. The documents have been reviewed and we will act in accordance with it, should an emergency situation occur.

Sincerely,

Signature *Jon Holmes*

Print Name: Jonathan Holmes

Date: 12/16/15

____ I'd like to arrange for a site tour.
The number to call to make arrangements is: _____.

File 1440

Clean Harbors
4004 W Earhart Way
Chandler, AZ 85226

Safety-Kleen Systems, Inc.
6625 W Frye Rd
Chandler, AZ 85226-3322

Re: Safety-Kleen Systems, Inc. - Chandler
EPA ID #: AZD 981 969 504
Memorandum of Agreement on Contingency Plan

Dear Mr. Welch:

This letter is to acknowledge receipt of your current Contingency Plan and related documents for the Safety-Kleen Chandler site. The documents have been reviewed and we will act in accordance with it, should an emergency situation occur.

Sincerely,



Signature

Print Name: SHAWNA FRANCESCHINI

Date: 12/23/15

I'd like to arrange for a site tour.
The number to call to make arrangements is: _____

File 1440

Exhibit F-6

Work Place Hazard Assessment –
PPE Requirements

BRANCH PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS

Exhibit F-6

WORKPLACE HAZARD ASSESSMENT SUMMARY 2015

TASK	GLOVES	UNIFORM	APRON	FOOT WEAR	SAFETY GLASSES	Hard Hat	HEARING PROTECTION	RESPIRATOR / PROTECTION
AQUEOUS BLENDING (MANUAL)	Yes (Np)	Yes		S.T w/M	Goggles	Yes	Yes, w/ pneumatic	
AQUEOUS SERVICE - COLD	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
AQUEOUS SERVICE - HEATED	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
AQUEOUS TEST ANALYSIS	Yes (Nr or Cp)	Yes		S.T w/SR	Yes			
BRAKE CLEANING (ABC)	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
COOLANT SERVICE	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
CONTAINERIZED WASTE (CWS)	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
DRY CLEANER SERVICES	Yes (Np)*	Yes		S.T w/M	Yes	Yes		
GUN CLEANERS - UNVENTED	Yes (Np/Cp)*	Yes		S.T. w/M	Yes	Yes		APR = HF or FF / organic vapor
GUN CLEANERS - VENTED	Yes (Np/Cp)*	Yes		S.T. w/M	Yes	Yes		
IMAGING SERVICES	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
IMMERSION CLEANER SVC.	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
LIGHT BULB SERVICE	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
MATERIAL HANDLING	Yes (Cr)*	Yes		S.T. w/M	Yes	Yes*		
OIL SERVICES	Yes (Np)	Yes		S.T w/SR	Yes	Yes		
Parts Washer Minor Repair	Yes (Cr/Np)	Yes		S.T. w/M	Yes	Yes		
PARTS WASHER SERVICE	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
Pre/Post Trip Inspection	Yes (Cr)	Yes		S.T. w/M	Yes	Yes		
RETURN/FILL OPERATIONS	Yes (Np)	Yes	Yes	S.T. w/M	Yes	Yes	Yes, w/ pneumatic	
RETURN PRODUCT SERVICE	Yes (Np)	Yes		S.T. w/M	Yes	Yes		
SAMPLING - FIELD	Yes (Nr)	Yes	Yes	S.T w/SR	Yes			
SPILL RESPONSE (INCIDENTAL)	Yes (Np)	Yes	Yes	S.T w/SR	Yes	Yes		APR = FF / org. vapor/acid gas
TANK TRUCK LOAD/UNLOAD	Yes (Np)	Yes		S.T w/SR	Yes	Yes		APR = HF or FF / org. vapor/acid gas
TANK TRUCK TOP SAMPLING	Yes (Np)	Yes		S.T w/SR	Yes	Yes		
VAC SERVICES	Yes (Np)	Yes		S.T w/SR	Yes	Yes	Yes, w/ pump on	
VISITOR IN OPS AREAS				closed toe	Yes	Yes*		
WWF SERVICE	Yes (Np)	Yes		S.T w/SR	Yes	Yes		

Service Reps - must have Hard Hat and Safety Vest available

GLOVES

Cr = Cut Resistant glove (work glove)
 Np = Supported Neoprene Glove (Outer Glove)
 Cp = Chloroprene (5m) (Inner Glove)

(Cr)* = Cut Resistant glove (if chemical present - Supported Neoprene)
 (Nr) = Nitrile (8m) glove
 (Np)* = discard at end of day or if degradation occurs
 (Np/Cp)* = discard at end of day or if degradation occurs

HARD HAT*

Hard Hat to be available at all times. Hard Hats to be used for oil services, vac services, and while material handling.

APRON

Tychem QC apron w/ sleeves

= discard if show signs of breakthrough (breakthrough = discoloration, interior wet, etc.)

FOOTWEAR

S. T. w/M = Steel Toes with Metatarsal Guard

S. T. w/SR = Steel Toes with Slip Resistant Soles

RESPIRATOR / CARTRIDGE TYPE

APR = half face (HF) or full face (FF) air purifying respirator (respirator users must be clean shaven per safety standard)

Exhibit F-7

Hotwork Procedure

	Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS	
	Revised By: Health & Safety	Revision Date: 29-Aug-2013	Revision Number: 02
	Owner: Health & Safety	Review Date: 29-Aug-2013	

Hot Work Permit Standard

Controlled Copy

Copy Assigned to: _____

Copy Control #: _____

NOTICE: This document is electronically controlled. Printed copies are deemed uncontrolled, unless otherwise indicated above, and must be verified against the current electronic version prior to use.

	Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS
	Revision Date: 29-Aug-2013	Revision Number: 02
Document Name: Hot Work Permit Standard		

Revision Summary

Section	Revision Detail (Please provide rationale)	Approved By (Name & Title)	Date Revised
Appendix 4	Removed Incineration - Incinerator Only and replaced it with Alternative	Jerry Huber, Director H&S	29-Aug-2013



Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS
Revision Date: 29-Aug-2013	Revision Number: 02

Document Name:
Hot Work Permit Standard

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Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS
Revision Date: 29-Aug-2013	Revision Number: 02

Document Name:
Hot Work Permit Standard

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	Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS
	Revision Date: 29-Aug-2013	Revision Number: 02
Document Name: Hot Work Permit Standard		

1.0 PURPOSE

The purpose of this Standard is to prevent fires, explosions, or other incidents, which could be caused through uncontrolled use of heat-producing tools or equipment such as, but not limited to, welding apparatus, cutting torches, brazing torches, chipping hammers, electrical arc producers, grinding tools, etc.

Local municipalities may have in place specific requirements for the issuance of hot work permits from the local fire or building department. Clean Harbors, Inc., and its subsidiaries (hereinafter referred to as "Clean Harbors") Hot Work Permit Standard IN NO WAY supersedes local or state/provincial hot work requirements. All local or state/provincial requirements must be addressed in addition to complying with this Standard. Each location should contact the local fire department to verify any local and/or state/provincial regulations regarding hot work operations.

2.0 SCOPE

Hot work permit procedures shall apply to operations requiring the use of heat-producing tools or equipment at any Clean Harbors' facility or job site. This Standard shall also apply to contractors and subcontractors working at a Clean Harbors' facility or job site.

3.0 RESPONSIBILITIES

3.1 Executive Management

Executive Management shall ensure all Policies and Procedures associated with the Company's Hot Work Permit Standard are in place, monitored, updated as necessary and followed by all employees in the organization.

3.2 Facility and Field Management

- (1) Granting authority to authorized persons to issue Hot Work Permits, in cooperation with Health & Safety;
- (2) Enforcing compliance with the requirements of this Standard;
- (3) Notifying contractors of the requirements of this Standard, and providing them an opportunity to review them;
- (4) Providing equipment and personnel to effectively implement this Standard.
- (5) Informing Health & Safety and/or Compliance Department of pending or scheduled hot work;
- (6) Preparing job site in accordance with instructions contained in this Standard;
- (7) Obtaining hot work permit as indicated in this Standard;
- (8) Assuring compliance with all conditions specified on hot work permit;
- (9) Discussing permit conditions with crew and assuring their understanding of the work and their job assignments prior to start of work. This discussion shall be documented on a Job Safety Briefing Form (JSB).

	Issued By: Health & Safety	Document Control No: HS.00035.T2S-10HS
	Revision Date: 29-Aug-2013	Revision Number: 02
Document Name: Hot Work Permit Standard		

3.3 Authorized Persons

Due to the need for multiple reviews and expeditious handling of Hot Work Permit requests, Health & Safety and Compliance may designate individuals to issue Hot Work Permits. These individuals will be designated as "authorized persons" capable of issuing hot work permits provided that they meet the following criteria:

- (1) Individual must have approval of both Facility/Field G.M. and Health & Safety to perform duties of authorized person. This approval will be given in writing and inserted into the employee's training file.
- (2) Must have attended Hot Work training program (see section 5.0) and successfully passed Hot Work Exam. The training must also address welding safety issues such as completing the permit, setting up fire watches, selecting and wearing correct PPE, proper use of monitoring equipment, etc.
- (3) Must be current (within one year) on training in use of fire extinguishers.
- (4) No safety violations involving hot work operations within the last year.
- (5) Initial certification to issue permits shall be granted provided Items 3.3(1) to 3.3(4) are met. Final approval shall be granted once Health & Safety or an individual authorized by Health & Safety has audited hot work site(s) to ensure that authorized person is competent in the duties assigned. The results of this audit shall be documented and maintained in the employee's training file.

3.4 Health & Safety

- (1) Developing safe hot work procedures;
- (2) Providing guidance to Facilities and Field Services Health & Safety Representatives and Compliance Managers in the interpretation of this Standard and its application.
- (3) Issuing hot work permits in accordance with this Standard;
- (4) Granting authority to authorized person(s) of Facility or Operations to issue Hot Work Permits;
- (5) Advising Operations personnel in proper preparation of work area for hot work;
- (6) Auditing Compliance with permit requirements.
- (7) Health & Safety will review, approve and distribute this Standard and all related Policies to all locations, sites and offices as applicable. Health & Safety will also coordinate all revisions of all Standards and related Policies as required. Lastly, Health & Safety will directly support Policy and Standard implementation and report any exceptions and will provide support to all locations, sites and offices as necessary.

4.0 DEFINITIONS

Adequate Ventilation:

Mechanical dissipation and removal of welding/cutting fume or smoke. For significant amounts of continuous welding/cutting, supplemental exhaust (local exhaust ventilation at source of hot work) ventilation may be necessary. **NOTE:** Local exhaust ventilation is required for any cutting (oxygen, chemical flux or iron powder, or gas-shielded arc cutting) on stainless steel.



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- Combustible Liquid:** Liquids, which as a group exhibit flash points greater than 100 degrees F/ 37.8 degrees C (FLPT > 100°F). Common examples of combustible liquids are 2, 4, and 6 oil, kerosene, and diesel fuel.
- Flammable Liquid:** Liquids, which, exhibit flash points less than 100 degrees F/ 37.8 degrees C (FLPT < 100°F). Common examples of flammable liquids are gasoline, alcohols, mineral spirits (paint thinners) and lacquers.
- Fire-Proof Blanket:** Blanket made of fire-proof (non-ignitable/non-combustible) material such as NOMEX, KEVLAR, or treated wool. In addition to the materials listed above, canvas-welding tarps may also be utilized. These can be used to cover combustible materials to prevent their ignition from sparks/flames/heat from hot work operations. They may also be used to protect equipment or material from damage from sparks/heat if the object being covered is not combustible.
- Hot Work:** Work requiring the use of tools/equipment that may produce temperatures, which could reasonably be expected to ignite a flammable/combustible material or atmosphere in the vicinity of the work. Such tools/equipment may be capable of producing sparks, open flames, heat, or electrical arcs. Common hot work operations include: Welding, cutting, grinding, sawing (metal to metal), or chipping, etc. **HOT WORK IS NOT LIMITED TO CUTTING AND WELDING!**
- Hot Work Permit:** A form which provides conditions that must be satisfied for the safe performance of hot work. It indicates requirements for safety in areas where hot work is not normally performed. The hot work permit identifies: The employee performing the hot work; the location; conditions that must be met before work is started; the results of pre-work inspection; the time that work is completed; and provisions for a post-work inspection. Permits are issued individually for each job and are not valid until all required signatures have been affixed to the permit form. Incineration groups developed an INCIN-ONLY Hot Work Permit specifically for their unique operations. Both forms are found in the appendices. Either form can be used, as appropriate.
- Fire Watch:** Process of observing hot work operations to assure ignition of surrounding material does not occur. Observer will be equipped with a fully charged fire extinguisher of a type and size, which is suitable for the type of fire hazard(s) in the vicinity of the work. The fire watch may not be assigned any other duties if other than a minor fire hazard exists in the area in which the work is to be performed.

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The number of fire watches will be determined by the location and configuration of the area. It may be necessary to have more than one fire watch on a single job due to the unique nature of the work or the area in which it is performed. An example of such a situation would be when cutting or welding must be performed through or against a wall or floor and the opposite side cannot be viewed from the side where the hot work is being performed.

**Auto-Ignition Temperature:
(AIT)**

The minimum temperature required to initiate or cause self-sustained combustion of any substance in the absence of an ignition source (spark or flame). The most likely low auto-ignition compounds to be encountered are kerosene (AIT 410oF) and mineral spirits (AIT 446°F).

Hazardous Atmosphere:

A location or an adjacent location in which hazardous concentrations of flammable gases or vapors exist continuously, intermittently or periodically, or a location in which volatile flammable liquids or flammable gases are handled, processed, or used. Hazardous locations include locations where flammable vapors or gases exist under normal operations and locations where vapors or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems; or in case of abnormal operation of equipment; or abnormal operation of ventilating equipment. Hazardous locations also include locations that are hazardous because of the presence of combustible dusts; or locations that are hazardous because of the presence of easily ignitable fibers or filings.

Classification, Electrical:

The designation given in the National Electrical Code, Article 500 (NEC) which dictates the minimum class of electrical equipment that must be used in a plant area as determined by the atmosphere contaminants (gases, vapors or dusts) which may be present in the area.

**Industrial Powered Trucks:
(Forklifts)**

Fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors or internal combustion engines. Safety requirements relating to fire protection, design, maintenance and use of these powered industrial trucks are specified and regulated by the local or national authority with jurisdiction.

Clean Harbors Supervisor:

The Clean Harbors Supervisor exercises overall ownership of the area, which includes responsibility for controlling all activities in the area. The Clean Harbors Supervisor is responsible for the safe operation of the equipment in their area. This includes shutting the equipment down when repair is necessary, removing process materials, cleaning

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and isolating the equipment to make it safe for maintenance or other work to proceed.

The primary hot work functions of the Clean Harbors Supervisor are to: evaluate the potential hazards of the hot work; establish the boundaries of the hot work; assure that the equipment and the area has been properly prepared and that the permit conditions have been met; review the potential hazards of the job with the work group using the Job Safety Briefing; and to release the permit to the work group when it is safe to begin hot work. Designated members of Clean Harbors Supervision may approve hot work permits if all of the permit conditions have been met. Each facility will designate the members of Clean Harbors Supervision that may approve hot work permits. Specific functions of Clean Harbors Supervision include:

- Taking combustible gas readings;
- Installing personnel barricades or barrier tape at the perimeter of the hot work job;
- Clearing and isolating equipment;
- Completing and issuing Hot Work Permits and Job Safety Briefings.

Clean Harbors Management: The primary function of Clean Harbors Management is to make sure that permits have been properly completed, to authorize hot work permits, and to ensure the permit conditions are being met during hot work. If special procedures are needed, designated members of Clean Harbors Management must authorize them.

Work Group: A work group is any group which repairs, modifies, or services the facility's equipment. A work group could be the plant's Maintenance Department, or it could be a contractor. In some circumstances, the Clean Harbors Supervisor and the work group may be the same. For example, the Maintenance Department is typically the supervisor over boilers. If a boiler needs to be repaired, the Maintenance Department will typically be the work group. The work group is responsible for safely performing the work as specified in the permit, and for conforming to the requirements of the permit. The work group must request an additional permit before starting any work beyond the work specified in the permit.

Outside Contractors may be considered a work group. However, they usually don't understand the fire hazards within our facilities. A facility employee should always be assigned to directly supervise outside contractor. Contractors should not be allowed to authorize their own hot work permits and should never be allowed to impair

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Equipment Inspection, Clearing and Isolation:

fixed fire protection equipment without direct authorization from designated plant personnel. Contract welders are responsible to ensure they have the appropriate training and certifications for the work they are to perform.

It is the responsibility of the Clean Harbors Supervisor to prepare equipment for hot work. The equipment must be cleared and isolated prior to beginning hot work. Some key points are as follows:

- The equipment must be shut down following standard operating procedures.
- After shutdown, the equipment must be completely cleared of all flammable and combustible materials. This may involve steaming, washing, or other methods.
- Equipment must be physically isolated from other equipment by using the lock out tag out procedure. The Master Tag Out List (MTOL) number must be listed on the Hot Work Permit. After isolating, locking and tagging the equipment, the testing procedure must be used.
- After the equipment has been cleared, it must be inspected and/or tested for the presence of flammable material. A test for flammable vapor must show 0% LEL. If flammable vapors are present, additional cleaning is required. Using an inert gas blanket to exclude it, or an airflow to dilute possible flammable vapor, may sometimes be desirable for added protection. But, neither technique should be used to compensate for inadequate removal of flammable material.
- If essentially complete removal of a high-hazard material cannot be achieved, a special work plan must be developed and approved by proprietary management.
- Any equipment found to be in an unsafe condition shall not be used until it has been repaired.

5.0 TRAINING PROGRAM

These are the training requirements (components) for personnel involved in Hot Work operations.

5.1 Basic Hot Work Training Program

- (1) Completed hands on fire extinguisher training.
- (2) Completed the following courses: HS2100-OSHA 24 Hr Hazwoper, or HS2000-OSHA 40 Hr Hazwoper.



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- (3) Completed course: HS1049-Fire Safety / Cold Stress refresher module on fire safety annually.
- (4) Trained and competent with atmospheric testing equipment.
- (5) Complete and pass Hot Work Exam.

5.2 Authorized Person

- (1) Completed training as outlined in the Hot Work Standard Program.
- (2) Completed Hot Work Permit procedure training.
- (3) Obtained written approval from both the Facility General Manager and the Health & Safety Manager to perform the applicable work.

5.3 Cutting Operations

- (1) Completed training as outlined in the Hot Work Standard Program.
- (2) Completed training on cylinder handling.
- (3) Trained on the proper use of the appropriate Personal Protective Equipment (PPE) for the work to be performed.
- (4) Trained on the procedures for equipment inspections, including, but not limited to hoses, gauges and regulators.
- (5) Familiar with the standards as defined by ANSI Z49.1: Safety in Welding and Cutting, or CAN/CSA-W117.2-06: Safety in Welding, Cutting and Applied Processes.

5.4 Welding

- (1) Completed training as outlined in the Hot Work Standard Program.
- (2) Trained on the proper use of the appropriate Personal Protective Equipment (PPE) for the work to be performed.
- (3) Trained on the procedures for equipment inspections, including, but not limited to hoses, gauges, regulators, and cables.
- (4) Familiar with the standards as defined by ANSI Z49.1 - Safety in Welding and Cutting, or CAN/CSA-W117.2-06: Safety in Welding, Cutting and Applied Processes.
- (5) If the welder is required to weld on a structure, e.g. a containment vessel, the welder will be certified to do so.

6.0 HAZARDS

- (1) Fire / Explosions;
- (2) Burns;
- (3) Oxygen deficiencies;
- (4) Hearing loss;
- (5) Hazardous fumes.

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7.0 REQUIREMENTS

7.1 General Procedures

7.1.1 Training

Personnel (especially those with fire watch responsibility) involved in hot work operations have received training on Hot Work Procedures and use of portable fire extinguishers.

7.1.2 Inspection

An authorized person knowledgeable with Hot Work Permit Procedures and the identification, evaluation and control of fire and explosion hazards shall inspect the work area to identify fire/explosion hazards and specify control measures. Contractors are not authorized to complete or sign hot work permits.

7.1.3 Monitoring

Air monitoring for oxygen, explosive vapors, and/or toxic vapors may be necessary and are mandatory under certain conditions: i.e. work on or around flammable or combustible materials. Specific requirements are listed in this Standard. Health & Safety must be contacted to review certain operations.

7.1.4 Toxic Materials

Area/surface where hot work will be performed shall be tested for the presence of toxic coatings/vapors (i.e. lead paint) prior to the start of that work if their presence is known or suspected.

7.1.5 Hot Work On or In Containers

Hot Work conducted on or in containers or vessels (tanks, piping, etc.) poses additional hazards and safety risks. All such work must first be reviewed and approved by Health & Safety. Specific guidelines, including those for Tank Cutting, are detailed in this Standard.

7.1.6 Hot Work Permit

When all required inspections and tests have been completed, an authorized person shall complete a Hot Work Permit for the operation. The permit shall bear all conditions which must be met for safe work and the signature of the authorized person issuing the permit indicating the work may commence.

7.1.7 Safety Meeting

The condition for safe work contained on the Hot Work Permit shall be discussed in a meeting or meetings with the involved employees, contractors, and subcontractors prior to the start of the operation. The meeting shall be documented along with the names and signatures of those in attendance.



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7.1.8 Fire Extinguishing Equipment

Portable or fixed fire extinguisher equipment of a type and size consistent with the fire hazard present shall be available; in proper working order, and ready for immediate use during hot work operation.

7.1.9 Fire Watches

Fire watch personnel shall be selected and stationed in accordance with this Standard.

7.1.10 Confined Spaces

Hot work performed within confined spaces shall be subject to the requirements of the Company's Confined Space Entry Standard as they apply to the job being performed.

7.1.11 Lock-Out

Hot work shall be subject to the provisions of the Company Lock-out/Tag-out Program Standard as they apply to the job being performed.

7.1.12 Post Work Inspection

A final inspection of the area in which the hot work was performed shall be conducted 30 minutes after the work has been completed to assure there are no smoldering fires caused by the work.

7.2 Alternative Method

The Supervisor will evaluate and confirm that hot work must be used to accomplish the task.

Before deciding to do a hot work task in an area covered by this Standard, management should consider the following alternatives:

- (1) Avoid the need for hot work in the hazardous area by removing the work to a non-hazardous area.
- (2) Remove flammable sources when practical along with flammable material from all equipment, piping, and tanks in the area.
- (3) Isolate flammable hazards. Safeguard against entry of flammable vapor or liquids into the hot work zone.
- (4) Substitute less hazardous work methods such as bolting (versus welding), or sawing (versus oxy-acetylene cutting.)
- (5) Hot work shall be prohibited in the presence of flammable or explosive atmospheres or in areas where flammable or explosive atmospheres may develop during the hot work. Hot work on equipment that has contained flammable or combustible material can result in fires and/or explosions. Hot work tasks near flammable liquids or gases can also be very hazardous. It is the responsibility of immediate management to inform the work group of the potential hazards associated with the hot work, to make sure that plant equipment and areas have been properly prepared, and to formally approve a hot work permit before

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allowing hot work to begin. It is also the responsibility of management to ensure that the equipment and area is maintained in a safe condition for the duration of the hot work.

7.3 Painted Surfaces

When hot work is to be performed on painted metals, the paint should be analyzed for the presence of toxic materials. Obtaining paint scrapings from the surface to be worked on and providing them to a laboratory for analysis can accomplish this. Materials of concern are metals such as lead, chromium, and cadmium. Contact the Health & Safety Department for information and guidance regarding this requirement.

7.4 Area Preparation

7.4.1 Arrangement of Hot Work Areas

Hot work areas are to be arranged prior to the request for a permit, as detailed below. Contact local fire department or client for permit or other notification requirements (if required).

- (1) Relocate flammable and combustible materials such as gasoline, paints and thinners, oil paper, rags and other flammable/combustible materials a minimum distance of 35 feet/10 meters from the work.
- (2) Cover combustible material and/or equipment which cannot be relocated with a fire-proof blanket if it could be damaged or ignited from hot work.
NOTE: Blankets cannot be used in lieu of moving objects that can be relocated.
- (3) Remove residual contamination. This may include surface removal of paints or coatings, draining and flushing lines that contain or contained materials, etc. (See Section 7.8 for information on toxic monitoring.)
HOT WORK SHALL NOT BE PERFORMED ON OR IN TANKS, PIPING, VESSELS OR ANY OTHER SURFACE WHERE THERE IS RESIDUAL CONTAMINATION OF ANY KIND, UNTIL HEALTH & SAFETY HAS BEEN CONTACTED AND ADVISED OF THE WORK TO BE PERFORMED.
- (4) Perform visual inspection of the area where the hot work will be done. Floors should be inspected and cleaned, if needed. Trenches, sewers and drains should be checked for the presence of flammable or combustible materials, and flushed, plugged, or covered if needed. Trenches that may allow flammable or combustible material into or through the hot work area may need to be dammed. When running water is used, the Clean Harbors Supervisor shall ensure that contained areas are drained to minimize the potential for electric shock.
- (5) Obtain appropriate fully-charged portable fire extinguisher(s). A minimum of two 4A:60 BC (10 lb.) extinguishers (or one 20 lb. extinguisher) are required. Fire extinguishers shall be selected according to the potential fire hazards in the vicinity of the hot work:
 - (a) Class A - Ordinary combustibles such as wood, paper, rubber, and some plastics;
 - (b) Class B - Flammable/combustible liquids;

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- (c) Class C - Energized electrical equipment or where a non-conducting extinguishing agent is desired;
- (d) Class D - Special extinguishing agent for combustible metals. (**NOTE:** Contact Health & Safety for guidance selecting fire extinguishers for combustible metal.);
- (e) Extinguishers are rated according to their extinguishing effectiveness:
 - (i) Class A - 4A
 - (ii) Class B - 10B
 - (iii) Class C - C
 - (iv) Class D - Contact Health & Safety Department
 - (v) General 4A:60BC - Minimum
- (6) Stage all compressed gas cylinders at least 35-ft/10 meters away from areas where hot slag or sparks could contact them. Properly secure cylinders to stable fixtures or a cart.
- (7) For elevated hot work, combustible materials should be either relocated a minimum of 50 ft from the hot work area; or properly protected with fire retardant welding blankets; or the hot work operation isolated with welding screens. Suspend fire-resistive welding blankets under hot work conducted near the ceiling. Place noncombustible screens around hot work at the floor to trap sparks. Every elevated hot work operation needs to be evaluated on a case-by-case basis to determine a reasonable safe distance from hot work combustible occupancies or construction. The physical conditions involved may dictate relocation of combustibles beyond 50 ft.
- (8) Any time a combustible dust is processed or handled, a potential for explosion exists. The degree of explosion hazard will vary depending on the type of combustible dust and processing methods used.
- (9) A relatively small initial dust deflagration can disturb and suspend in air dust that has been allowed to accumulate on the horizontal and vertical surfaces of a building or equipment. This dust cloud provides fuels for secondary deflagration, which can cause damage. Combustible dust accumulations should be vacuumed clean prior to hot work being performed. Vacuum cleaners shall be listed for use in Class II Hazardous Locations or shall be listed for use in Class I and Class II Hazardous Locations when flammable vapors or gases are also present.

7.5 Fire Watch

This is the person assigned to provide a look-out/overview of the immediate area where hot work activity is to be carried out. The responsibility of the fire watch is to observe the work area for a fire in its initial stage, to extinguish the fire if one were to start, and to follow the facility fire alarm and notification procedures as indicated in this Standard.

- (1) A minimum of one fire watch will be assigned to each hot work operation. This employee should have received fire extinguisher training within the last year, be



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- (6) Permit shall be filed at the facility and be audited by Health & Safety or the Compliance Department when hot work operations have been completed.

7.7 Atmospheric Monitoring

Health & Safety, Compliance, or the authorized person may require atmospheric monitoring if conditions and/or job site warrant the monitoring. Monitoring shall be performed with a properly calibrated instrument capable of monitoring: Oxygen, combustible gas levels; and organic vapors and/or toxic metals, etc. as appropriate. All monitoring results must be recorded on the Hot Work Permit or on a Clean Harbors' Air Monitoring Log. Atmospheric monitoring **MUST BE PERFORMED** prior to and during all hot work when any of the following conditions apply:

NOTE: Monitor prior and during conditions 7.7(1), 7.7(2), & 7.7(3). Monitor only during condition 7.7(4).

- (1) Flammable liquids have been or are stored or used within 35'/10 meters of the location where hot work operations are going to be performed;
- (2) Hot work operation is performed in below grade areas adjacent to or on a downhill slope from, flammable or combustible liquid storage or dispensing areas;
- (3) Hot work will be performed on or in a confined space, vessel, tank, piping or other container;

NOTE: Hot work shall not be performed on, in, or adjacent to vessels, tanks, piping or any other containers which have held flammable/combustible liquids and/or gases until Health & Safety has been contacted and advised of the work to be performed, and given authorization for the work.

- (4) Painted Surfaces.

7.8 Toxic Vapor Monitoring

Monitoring for the presence of metals or decomposition products shall also be performed when their presence is known or anticipated. Conditions requiring such monitoring would include the following:

- (1) Work involving the use, storage, or presence of organic chlorinated and/or other halogenated solvents in or adjacent (within 200 ft.) to the job site;
- (2) Hot work will be performed on painted or coated surfaces found to contain lead or other toxic metals.

7.9 Hot Work Prohibition

Hot work permit **CANNOT** be issued if any of the following conditions exist:

- (1) Oxygen level exceeds 22%.
- (2) Lower explosive limit exceeds 0%.
- (3) Concentrations of organic vapors above 10 PPM are measured within a 35 ft/10 meter radius of the location where the hot work operations will take place. (Ventilation may be used as a control; contact Health & Safety for guidance.)
- (4) Health & Safety Department shall be contacted for guidance if any of the conditions in Section 7.8 are discovered during pre-hot work inspection.

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- (5) See Appendix 2 for Tank Cutting Standards: Oxygen and LEL levels.

7.10 Work Commencement

7.10.1 Facilities

- (1) Supervisor will contact Health & Safety Representative, Compliance Manager, or authorized person upon completion of site preparation as outlined in Section 7.4 of this Standard. Health & Safety, Compliance or authorized person will then inspect the site.
- (2) Health & Safety Representative, Compliance Manager or authorized person will complete the permit and authorize hot work to be performed if all conditions are satisfactory at the time of inspection.

7.10.2 Field Operations

- (1) Supervisor will contact Health & Safety Representative, Compliance Manager or authorized person to discuss hot work to be performed.
- (2) Health & Safety Representative, Compliance Manager or authorized person will complete Hot Work Permit and specify conditions for safe performance of work.
- (3) Supervisor/foreman will assure the area has been prepared in accordance with instructions and will then authorize commencement of work.

7.11 Designated Hot Work Areas

7.11.1 Conditions

Designated areas where hot work may be conducted on a routine basis shall be allowed provided all of the following conditions are met:

- (1) The location chosen is an area where there are no flammable or combustible materials stored within 35'/10 meters.
- (2) Welding shields are used to protect employees not involved in the hot work operation from sparks and from viewing harmful light rays from any angle.
- (3) The area must have adequate ventilation.

NOTE: Local exhaust ventilation is required for any cutting (oxygen, chemical flux or iron powder, or gas-shielded arc cutting) on stainless steel.
- (4) There must be a minimum of two (2) fire extinguishers rated 4A:60BC (10 lb. multi-purpose) permanently located within the area. One extinguisher shall be located in the immediate vicinity of the designated area; the other extinguisher must be within a 50'/15 meters travel distance of the designated area.
- (5) Approval has been granted by the Health & Safety and local fire department or state fire marshal if required.



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7.11.2 Area Inspection

- (1) Once all of the conditions in Section 7.11.1 have been met, the Compliance Manager, Health & Safety Representative or authorized person must be contacted to inspect the area.
- (2) Once the inspection is completed and all required conditions have been met, then a blanket permit may be issued. This permit shall be good for a period of one year. It shall be the responsibility of the area supervisor to ensure that the permit is current. If an area has been issued a blanket permit, there is no need to obtain a hot work permit before each hot work operation in this area.

***** One copy of this permit shall remain in the approved area in a protective covering (i.e., laminating or a plastic sleeve); a second copy of the permit shall be placed in a hot work file at the facility. Any changes in status or conditions shall render the blanket permit invalid. Compliance, Health & Safety or the authorized person must be contacted for further guidance.**

7.12 Hot Work In and On Containers/Tanks/Piping/Etc.

Hot work operations that must be performed in or on containers such as tanks, tankers, pipes, drums, etc MUST BE REVIEWED WITH HEALTH & SAFETY PRIOR TO THE COMMENCEMENT OF THE HOT WORK OPERATION. The following information must be obtained in order to properly evaluate the hazards:

- (1) Scope of work to be performed (i.e., welding, oxyacetylene cutting, grinding, etc.).
- (2) Size of vessel.
- (3) Previous contents of tank, pipes or container (sampling and analytical testing may be required to properly evaluate contents).
- (4) Methods used or to be used to clean vessel (See Cleaning Procedures Appendix 2).
- (5) Contents of any vessels or processes within 50 ft/15 meters of hot work or in some way connected to vessel through piping or other means.
- (6) Type of metal on which the hot work is to be conducted.
- (7) Any coatings (See sections 7.3 and 7.4).
- (8) Are other safer methods available to achieve same or similar results (threaded or bolted vs. welded, nibbler, pneumatic sawzall vs. torch cutting etc.).
- (9) The following precautions shall be taken before and during the operation:
 - (a) Hot work in or on tanks must be accomplished following the standards listed in Appendix 2 of this document.

NOTE: No entry will be made into any tank or vessel that contains an inert atmosphere.

- (b) Vessel shall not be cleaned with cleaners/solvents that will increase hazards to the operation (i.e., chlorinated or flammable solvents).
- (c) Methods to remove residues include, but are not limited to: steam cleaning, pressure washing, scraping, etc.

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- (d) All pipelines and ducts where hot work is to be conducted, which are connected to a vessel, shall be disconnected and blocked (See Lock-out/Tag-out Standard).
- (e) Clean Harbors Confined Space Entry Standard shall be followed.
- (f) Local ventilation shall be used for each hot work operation in a space and shall be sufficient to prevent toxic or flammable vapor accumulation.
- (g) Toxic and flammable air monitoring shall be conducted continuously. Monitoring for potential by-products of combustion shall be included in monitoring strategy.
- (h) Entrants conducting hot work shall be protected from sparks and flame. Welding coveralls or other suitable flame/spark resistant clothing shall be worn to prevent burns.
- (i) Electrodes shall be removed from holders and disconnected from power source when work has stopped for breaks or at the end of workday. Electrodes or leads shall be inspected daily for damage to leader. Any leads found to have damage to insulation or connectors shall be tagged out of service and replaced.
- (j) Torches shall be equipped with shut-off valves inside and outside the space. Both valves shall be turned off when not in use. Hoses shall be inspected daily for potential leaks of oxygen or acetylene. A soap solution shall be utilized to test any area that, upon visual inspection, is suspected of leaking. Torches and hoses shall be removed from the space when not in use. ****DO NOT UTILIZE ANY OPEN FLAME OR HEAT PRODUCING DEVICE TO TEST FOR THE PRESENCE OF OXYGEN LEAKS.**
- (k) Compressed gas cylinders shall be properly secured outside the space. Wheeled cylinder holders shall be secured to prevent movement. Never bring compressed gas cylinders inside a confined space. Cylinders shall be positively closed and torches removed from space any time work stops in the space for breaks or at the end of the day.
- (l) After hot work activities are complete, the hot metal area shall be marked or other means shall be provided to warn workers of the potential burn hazard that is present.
- (m) Attendant for confined space entries shall be equipped with appropriate filtered eye shields during welding operations.
- (n) Brazing (welding) filler materials shall be evaluated for fluorine's, lead, cadmium, beryllium and other hazardous substances. Appropriate monitoring, engineering controls and training shall be conducted as directed by Health & Safety.

7.13 Permit Validity

Hot work permits are not valid until all necessary inspections and tests have been performed and the required signatures have been affixed.

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7.14 Permit Duration

Hot work permits shall be valid for the shortest of the following durations: shift; duration of hot work; changes in LEL/O₂, toxic, etc. levels from those initially obtained during monitoring.

7.15 Permit Retention

Completed permits shall be kept on file at the service center or facility for a period of one year.

7.16 Permit

A copy of the permit is attached as Appendix 3.

8.0 RELATED SUPPORT DOCUMENTS

8.1 Policies

None

8.2 Standards

Lock-out/Tag-out Standard
 Fire Protection Standard
 Flammable & Combustible Tank Vehicle Cutting Standard

8.3 Standard Operating Procedures & Safe Work Practices

Portable Arc Welders (OPR.00006.SWP-98WU)
 Welding Cutting and Burning (OPR.00005.SWP-98WU)

8.4 Additional Support Documents

Hot Work Permit
 Incineration - Incinerator Only Hot Work Permit (Form CHI 227)

Review of Policy completed by:

Doug Smith
 Lead Editor (Name & Signature)

07-12-11
 Date

David Blackburn
 Associate Editor (Name & Signature)

07.25.11
 Date

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APPENDIX 1: Hot Work Permit Guidelines

PROGRAM INTRODUCTION

The following guidelines are to be used for the control of hot work at Clean Harbors, Inc. facilities or Field Service job sites. The procedure and program are intended to be general in nature and may not address a specific situation encountered. Please contact the Health & Safety Department for advice when unusual situations develop.

Many local municipalities have in place specific requirements for the issuance of hot work permits from the local fire or building department. The Clean Harbors Hot Work Permit Standard IN NO WAY supersedes local, state, or provincial requirements for performing hot work. All local, state or provincial requirements that may be in place regarding hot work must be addressed, in addition to complying with this Standard. Each location should contact the local fire department to verify any local and/or state regulations regarding hot work operations. Additionally, certain clients or facilities may also have specific hot work permit requirements, which must be followed for work at their sites. Contact the Health & Safety Department for guidance should there be conflicts between requirements.

1.0 GUIDELINE SUMMARY

- (1) Designate those persons at each Facility or Branch who shall be authorized to issue Hot Work Permits (See Section 3.2 & 3.4 of the Hot Work Permit Standard).
- (2) Instruct all employees that Hot Work cannot be performed without a valid Hot Work Permit (See Definition of Hot Work Permit contained in Section 4.0 of the Hot Work Permit Standard).
- (3) When it has been determined that hot work is necessary, these general steps apply: (Refer to full program for complete guidance.)

2.0 FACILITIES

- (1) Supervisor or individual performing hot work prepares the work area in accordance with Standard requirements (See Sections 7.3 and 7.4 of the Standard), and notifies Authorized person.
- (2) Authorized person inspects designated work area, completes permit, and authorizes work, provided all acceptable conditions are met.
- (3) Supervisor or individual conducting hot work, reviews permit with all crew members, posts permit in area, ensures conditions have not changed, and work is conducted.
- (4) Stop job in sufficient time to allow 30 minute cool down period and final inspection of work area before departure from area (See Section 7.6(5) of the Standard).
- (5) Final inspection of area made 30 minutes after completion of the hot work (See Section 7.6(5) of the Standard).
- (6) Permit is signed by person performing final inspection indicating that area was free of fire and evidence of fire following completion of work (See Section 7.6(5) of the Standard).
- (7) Permit is placed in file and maintained for period of one year.

3.0 FIELD SERVICE OPERATIONS

- (1) Supervisor/foreman reviews work to be performed with Health & Safety or Authorized Person (See Section 7.10.1(1) of the Standard).
- (2) Health & Safety or Authorized Person completes Hot Work Permit.



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- (3) Supervisor/foreman inspects work area, ensures all necessary conditions are met, reviews permit with work crew, and authorizes and signs permit, along with each crewmember.
- (4) Permit is posted and work conducted.
- (5) Stop job in sufficient time to allow for 30 minute cool down period and final inspection of work area before departure from area (See Section 7.6(5) of the Standard).
- (6) Final inspection of area made 30 minutes after completion of hot work (See 7.6(5) of the Standard).
- (7) Permit is returned to Health & Safety and placed in file and maintained for period of one year.
- (8) Permit is signed by person performing final inspection indicating that the area was free of fire and evidence of fire following completion of work (See 7.6(5) of the Standard).

4.0 SPECIAL CONDITIONS

- (1) **Coatings:** Coatings should be tested before hot work to determine whether they contain hazardous materials. However, this may not always be possible. When a painted surface cannot be determined to be free of hazardous materials, they must be assumed to contain them and employees must be protected accordingly. Coatings must be stripped back to provide an uncoated surface prior to performing hot work. The coating should be removed a distance of 4" on both sides of the area where the hot work is to take place. It may be necessary to utilize engineering controls, PPE and perform exposure monitoring. HOT WORK SHALL NOT BE PERFORMED ON OR IN TANKS, PIPING, VESSELS OR ANY OTHER SURFACE WHERE THERE IS RESIDUAL CONTAMINATION OF ANY KIND, UNTIL HEALTH & SAFETY HAS BEEN CONTACTED AND ADVISED OF THE WORK TO BE PERFORMED.
- (2) **Organic Vapors:** When organic vapors are present, or are suspected to be present, air monitoring must be performed before hot work commences to evaluate the potential for generation of hazardous decomposition products. If organic monitoring indicates levels of 10 PPM or greater within a 35 ft/10 meters radius of the area where the hot work is going to be conducted, Health & Safety must be contacted to approve the hot work activity.
- (3) Keep all chlorinated solvents at least 200 ft/65 meters away from hot work. Additionally any surfaces that have been cleaned with a chlorinated solvent must be thoroughly dry prior to performing any hot work on that surface.

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APPENDIX 2: Flammable & Combustible Tank Cutting Guidelines

1.0 Flammable Tank Cutting Standards (Flash Point less than 100°F/37.8°C)

- (1) Clean - (Water Wash).
- (2) Vent (to 0% LEL).
- (3) Inert (Dry ice [or other inert gas with Health & Safety approval] to less than 8% Oxygen).
- (4) Cut into the tank starter holes and full cuts with pneumatic equipment only cooled with water.

2.0 Combustible Tank Cutting Standards (Flash Point greater than 100°F/37.8°C)

- (1) Entry possible. For tanks last containing fuel oil (K-1,#2,4,6) that can be entered, may be cut using a torch, carbide blade (cut-off saw), reciprocating saw (sawzall), etc. provided all of the following criteria are met:
 - (a) Entered through an existing opening and cleaned of residual product and sludges;
 - (b) The tank is vented with an appropriate air-driven coppus blower or equivalent;
 - (c) Periodic monitoring is conducted (every five [5] minutes) of the tank atmosphere and the surrounding area. Record all data, readings, etc.)
 - (d) LEL readings remain at 0%.
- (2) Entry not possible. For tanks last containing fuel oil (K-1#2,4,6) and which CANNOT BE ENTERED FOR CLEANING may be cut using an electric reciprocating saw (sawzall) (protected with a GFCI) (or pneumatic reciprocating saw) (sawzall) provided all of the following criteria are met:
 - (a) All free (pumpable) product is removed.
 - (b) Initial air monitoring of the interior of the atmosphere of the tank indicates LEL% level or 0%.

******NOTE**** If initial LEL% readings are higher than 0% the tank must first be vented to 0% LEL before any cutting may take place.**
 - (c) The tank is vented with an appropriate air-driven coppus blower or equivalent.
 - (d) Periodic monitoring is conducted (every five [5] minutes) of the tank atmosphere and the surrounding area (Record all data, readings, etc.).
 - (e) LEL readings remain at 0%.
 - (f) Upon cutting access to the tank, following note below (*cutting*), standard confined space entry procedures should be implemented for cleaning operations. If additional cutting of the tank is required (i.e., for scrap dealer) **AND** the conditions in (Combustible **(A)** Entry Possible) above are met, then a torch may be utilized at that time. End plates may then be cut.

NOTES:

- *Flammables
- Waste Oil: Due to the potential of containing "flammable" material, tanks containing waste oil should be treated as last containing flammables.
- Previous Contents: If the previous content of the tank was a flammable material, the tank should be considered a FLAMMABLE tank under this Standard. Exceptions to the requirements under FLAMMABLE MATERIALS will be evaluated by Health & Safety on a case-by-case basis.

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Cutting: Due to tank weak points, cutting should be performed on the body of the tank (cylindrical portion) and NOT THE END (PLATES). If local regulations require the tank to be rendered "unusable" by having holes cut in the end plates, these cuts should only be made after entry and cleaning.



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APPENDIX 3: Hot Work Permit

HAZARDOUS WORK PERMIT			
<input type="checkbox"/> HAZARDOUS WORK <input type="checkbox"/> HOT WORK <input type="checkbox"/> LINE/EQUIP OPENING <input type="checkbox"/> LOCKOUT/TAGOUT (Check all the Apply)			
Permit authorization and permit termination for each type of permit must be completed on the last page of this permit			
DATE:	EXPIRES:	START TIME:	COMPLETION TIME:
CLIENT:	CLIENT CONTACT:	CLIENT PHONE #:	DIG SAFE #:
CLEAN HARBORS JOB #:		CLEAN HARBORS LOCATION:	
CLEAN HARBORS PHONE #:		HEALTH & SAFETY REPRESENTATIVE:	
JOB LOCATION:			
SCOPE OF WORK			
Task 1:		Task 4:	
Task 2:		Task 5:	
Task 3:		Task 6:	
SPECIAL CONDITIONS:			
EMERGENCY TELEPHONE NUMBERS:			
Fire:	Police:	Ambulance/Rescue:	
EMERGENCY ASSEMBLY AREA:			
PRIMARY:		SECONDARY:	
HOSPITAL NAME & LOCATION:			
HAZARD IDENTIFICATION			
(Circle Task Number)		(List Specific Substances in Air Monitoring Section)	
CHEMICAL BIOLOGICAL:			
^{1 2 3} / _{4 5 6} Toxic	^{1 2 3} / _{4 5 6} Corrosive	^{1 2 3} / _{4 5 6} Flammable	^{1 2 3} / _{4 5 6} Combustible ^{1 2 3} / _{4 5 6} Reactive
^{1 2 3} / _{4 5 6} Shock Sensitive	^{1 2 3} / _{4 5 6} Path Waste	^{1 2 3} / _{4 5 6} Oxygen Deficiency	
PHYSICAL			
^{1 2 3} / _{4 5 6} Abrasive Blasting	^{1 2 3} / _{4 5 6} Extreme Cold/Heat	^{1 2 3} / _{4 5 6} Lighting	^{1 2 3} / _{4 5 6} Sharp Objects
^{1 2 3} / _{4 5 6} Underground Utilities			
^{1 2 3} / _{4 5 6} Drum Sumps	^{1 2 3} / _{4 5 6} Floor Holes	^{1 2 3} / _{4 5 6} Live Electrical Circuits	^{1 2 3} / _{4 5 6} Slips/Trips/Falls
^{1 2 3} / _{4 5 6} Vactor/Cusco			
^{1 2 3} / _{4 5 6} Drilling In Soil	^{1 2 3} / _{4 5 6} Hot Work	^{1 2 3} / _{4 5 6} Manlifts/Highlifts	^{1 2 3} / _{4 5 6} Soil Excavation
^{1 2 3} / _{4 5 6} Vehicle Traffic			
^{1 2 3} / _{4 5 6} Drum Handling	^{1 2 3} / _{4 5 6} Hotsy	^{1 2 3} / _{4 5 6} Noise	^{1 2 3} / _{4 5 6} Tank Excavation ^{1 2 3} / _{4 5 6} Waterblaster



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^{1 2 3}/_{4 5 6} Elevated Work Area ^{1 2 3}/_{4 5 6} Ladders ^{1 2 3}/_{4 5 6} Overhead Utilities ^{1 2 3}/_{4 5 6} Trenching

^{1 2 3}/_{4 5 6} Work On/Near Water

^{1 2 3}/_{4 5 6} Excavation/Trench ^{1 2 3}/_{4 5 6} Lifting ^{1 2 3}/_{4 5 6} Pneumatic Tools ^{1 2 3}/_{4 5 6} Uncontrolled Work Area

PERSONAL PROTECTIVE/SAFETY EQUIPMENT

(Review requirements with Health & Safety) (Line opening; minimum level C)

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> SCBA | <input type="checkbox"/> Supplied Air Resp. | <input type="checkbox"/> SAR w/Egress Bottle | <input type="checkbox"/> Air Purifying Respirator/Cartridge:
Cartridge Use Time: |
| <input type="checkbox"/> Protective Coverall
Type: | <input type="checkbox"/> Outer Gloves
Type: | <input type="checkbox"/> Inner Gloves
Type: | <input type="checkbox"/> Fully Encapsulating Suit
Type: |
| <input type="checkbox"/> Barrier Cream | <input type="checkbox"/> Evacuation Plans | <input type="checkbox"/> GFCI Required | <input type="checkbox"/> Nomex Coveralls |
| <input type="checkbox"/> Bounding/Grounding | <input type="checkbox"/> Explosion Proof Equip | <input type="checkbox"/> Hard Hats | <input type="checkbox"/> Non-Sparking Tools |
| <input type="checkbox"/> Chemical Goggles | <input type="checkbox"/> Eye Wash | <input type="checkbox"/> Harness/Lanyard | <input type="checkbox"/> Over-Boots - Type: |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Face Shield | <input type="checkbox"/> Hearing Protection | <input type="checkbox"/> PFD's |
| <input type="checkbox"/> Cylinders Secured | <input type="checkbox"/> Flashback Prev. Device | <input type="checkbox"/> Hearing Prot; Double | <input type="checkbox"/> Reflective Vests |
| <input type="checkbox"/> Eliminate Ignition Source | <input type="checkbox"/> Flash Suit | <input type="checkbox"/> MSDS's Reviewed | <input type="checkbox"/> Safety Glasses |

EQUIPMENT INSPECTIONS – Foreman must initial to verify equipment has been inspected and is safe to use/operate.

- | | | |
|--|------------------------------|------------------------|
| _____ D/D Pump (pressure relief valve) | _____ Hoses/Hose Connections | _____ Shower/Eyewash |
| _____ Fall Protection (harness, lanyard) | _____ Ladder(s) | _____ Vector Butterfly |
| _____ Anchor Points Support >5000 lbs | _____ Retrieval Device | _____ Wire Rope/Sling |
| _____ Fire Extinguisher(s) | _____ SAR/SCBA | _____ Forklift |
| _____ Scaffold | _____ Other: | _____ Other: |

LINE/EQUIPMENT OPENING PREPARATION

(Line opening portion is required for breaking process chemical or waste chemical lines, pumps, or associated valves)

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Locked Out (verified) | <input type="checkbox"/> Line/Equip Drained | <input type="checkbox"/> Bleeder/Vent Open/Pressure Released | <input type="checkbox"/> Line/Equip Steamed |
| <input type="checkbox"/> Line/Equip Flushed with: | <input type="checkbox"/> Water | <input type="checkbox"/> Other Media: | |
| Line/Equip Purged/Inerted with: | <input type="checkbox"/> N ₂ | <input type="checkbox"/> CO ₂ | <input type="checkbox"/> Other media: |

HOT WORK

ATTENTION: The Fire Safety Supervisor or appointee shall inspect the work area and confirm that precautions have been taken to prevent fire prior to approving the hot work permit. Local Fire Department notification may be required for hot work or fire system de-activation.

RESTRICTIONS: DO NOT perform hot work if any the following conditions exist- CONTACT HEALTH & SAFETY:

- | | | |
|---|---|--|
| <input type="checkbox"/> Oxygen level exceeds 22% | <input type="checkbox"/> Lower explosive limit exceeds 0% | <input type="checkbox"/> Organic vapor levels exceed 10ppm |
| <input type="checkbox"/> If fire hazards cannot be moved or guarded from the hot work | | |

WORK ON WALLS OR CEILINGS:

- Ensure heat transfer through conductive material is prevented.
- Ensure that material is noncombustible and without combustible covering (i.e. insulation, etc).
- Combustibles moved away from opposite side of wall (May require an additional fire watch on the blind side of the wall if all potential hazards cannot be eliminated.)

PRECAUTIONS:

- Sprinklers must be in service if present.
- Cutting/welding and all other equipment must be in good repair.
- Shut down ducts or conveyor systems that may convey sparks to distant combustibles.
- Combustible Gas Meter/LEL required for the duration of the process.



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- General/Local ventilation must be adequate to provide control of smoke, fumes or toxic vapors.
- Flammable liquids/combustible materials within 35 feet must be moved or protected with covers, guards, or metal shields if not removable.
- No open-container work (sampling, pumping, or consolidating of flammable/combustible liquids) within 50 feet.
- Use fire blankets to secure all openings, cracks, and holes where sparks may migrate to potential fire hazards.
- Atmospheric monitoring conducted. (Document in Air Monitoring section)
- Evaluate any product pipelines in the area for potential fire hazards.
- Remove all paint coatings and residual contamination from the surface and clean down to the bare metal or similar.
- Combustible floor wetted down, covered with damp sand, or shielded.
- Signs and barriers posted (if publicly accessible).
- Welding curtains used where applicable
- Type ABC fire extinguisher required Number: Size:

FIRE WATCH:

- Required (Present for duration of work and for 30 minutes after the operation)
- Supplied with fire extinguisher/hose
- Trained in use of equipment and alarms

CONTACT HEALTH & SAFETY FOR APPROVAL PRIOR TO PERFORMING HOT WORK ON ENCLOSED EQUIPMENT/SYSTEMS

- Containers must be cleaned of all combustibles/flammables.
- Containers/product lines must be drained and purged of vapors with water and/or inert gas.

LOCKOUT/TAGOUT

DIAGRAM OF SYSTEM (OPTIONAL)

DESCRIPTION OF WORK TO BE PERFORMED:

METHOD TO VERIFY ISOLATION:

LOCKBOX EQUIPMENT TO BE USED:

- YES NO

(All isolating devices, blinds, locks, etc., must be identified and have a tag attached and listed on this form.)

HAZARDOUS ENERGY SOURCES PRESENT:

- | | |
|--|--|
| <input type="checkbox"/> Mechanical Energy (i.e. moving parts) | <input type="checkbox"/> Pneumatic Energy (i.e. air or nitrogen driven) |
| <input type="checkbox"/> Electrical Energy (i.e. plugged in or battery) | <input type="checkbox"/> Thermal Energy (i.e. steam or frost) |
| <input type="checkbox"/> Chemical Reaction Energy (i.e. exothermic or endothermic) | <input type="checkbox"/> Hydraulic Energy (i.e. water, oil, or other fluids) |
| <input type="checkbox"/> Residual or stored energy may be present | <input type="checkbox"/> Potential energy may be present |
| <input type="checkbox"/> Material is conductive and may retain a charge | <input type="checkbox"/> System may retain pressure |
| <input type="checkbox"/> Explosion hazard | <input type="checkbox"/> Gravity flow hazard may exist |



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ADDITIONAL COMMENTS:

PERMIT AUTHORIZATION

AFFECTED PERSONNEL/CLEAN HARBORS CREW

PRINT NAME	SIGN	PRINT NAME	SIGN

HAZARDOUS WORK AUTHORIZATION TO PROCEED:

SUPERVISOR'S SIGNATURE:

LINE OPENING AUTHORIZATION TO PROCEED:

SUPERVISOR'S SIGNATURE:

HOT WORK AUTHORIZATION TO PROCEED:

SUPERVISOR'S SIGNATURE:

LO/TO AUTHORIZATION TO PROCEED:

SUPERVISOR'S SIGNATURE:

SUPERVISOR'S COMMENTS/MINUTES OF SAFETY MEETING:

HEALTH & SAFETY COMMENTS:

SUPERVISOR (PRINT & SIGN):

DATE:

HEALTH & SAFETY (PRINT & SIGN):

DATE:



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PERMIT TERMINATION

Haz. Work Termination	Line Opening Termination	Hot Work Termination	LO/TO Termination
<input type="checkbox"/> Decontamination of personnel and equipment is complete. <input type="checkbox"/> All waste is labeled and staged for proper disposal. <input type="checkbox"/> All postings/notifications removed. <input type="checkbox"/> Work completed and accepted.	<input type="checkbox"/> Work completed and accepted.	<input type="checkbox"/> The work area and all adjacent areas to which sparks and heat may have spread (including floors above and below and on opposite sides of walls) were inspected 30 minutes after the work was completed and were found fire safe. <input type="checkbox"/> All fire systems are re-activated. <input type="checkbox"/> Work completed and accepted.	<input type="checkbox"/> All Lock-out and Tag-out Devices have been removed. <input type="checkbox"/> Verified that equipment is back to normal operating conditions. <input type="checkbox"/> All affected personnel notified that system is back in service. <input type="checkbox"/> Work completed and accepted. <input type="checkbox"/> Client signature obtained for release to restore energy.
DATE:	DATE:	DATE:	DATE:
TIME:	TIME:	TIME:	TIME:
SIGNATURE:	SIGNATURE:	SIGNATURE:	SIGNATURE:
CLIENT CONTACT (PRINT/SIGN) (IF AVAILABLE):		DATE:	TIME:
IN THE EVENT OF AN EMERGENCY EVACUATION, ALL PERMITS ARE CANCELLED.			

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APPENDIX 4: Alternative Hot Work Permit (Form CHI 227)

CHI 227 Obtain from WB Mason HOT WORK PERMIT p 1 of 2																															
<p align="center">BEFORE INITIATING HOT WORK, CAN THIS JOB BE AVOIDED? IS THERE A SAFER WAY?</p> <p>The Authorized Supervisor or appointee shall inspect the work area and confirm that the precautions have been taken to prevent fire prior to approving the hot work permit. FM Global notification is required for hot work that requires de-activation of a fire system. (Documented Deactivation Permit No. Required)</p>																															
<p align="center">RESTRICTIONS: DO NOT perform hot work if any of the following conditions exist -</p> <p align="center">CONTACT HEALTH & SAFETY</p> <p>→ Oxygen level exceeds 22% → Lower explosive level exceeds 0% → Organic vapor levels exceed 10ppm → If fire hazards cannot be removed or guarded</p>																															
<p align="center">PART 1</p> <table border="0"> <tr> <td style="width: 50%; vertical-align: top;"> <p align="center">INSTRUCTIONS</p> <p>1. Authorized Supervisor/Person: A. Verify precautions listed at right (or do not proceed with work) B. Complete and retain Part 1 (In Control Room) C. Issue Part 2 to person doing job</p> <p>Hot work being completed by: <input type="checkbox"/> EMPLOYEE <input type="checkbox"/> CONTRACTOR</p> <table border="1"> <tr> <td>Date Permit Issued</td> <td>Job Number</td> </tr> <tr> <td>Permit Expires</td> <td>Time (AM/PM)</td> </tr> <tr> <td colspan="2">Location</td> </tr> <tr> <td colspan="2">Nature of Job</td> </tr> <tr> <td colspan="2">Name of persons involved with this job</td> </tr> <tr> <td>Printed Name</td> <td>Signed Name</td> </tr> <tr> <td> </td> <td> </td> </tr> </table> </td> <td style="width: 50%; vertical-align: top;"> <p align="center">REQUIRED PRECAUTIONS CHECKLIST</p> <p><input type="checkbox"/> Available sprinklers, hose streams and extinguishers are in service/operable.</p> <p><input type="checkbox"/> Hot work equipment in good repair.</p> <p align="center">Requirements within 35 ft. (11m) of work</p> <p><input type="checkbox"/> Flammable liquids, dust, lint and oily deposits removed.</p> <p><input type="checkbox"/> Shut down ducts or conveyors that may convey sparks.</p> <p><input type="checkbox"/> Flammables must be protected by covers, guards or shields.</p> <p><input type="checkbox"/> No open-container work (Sampling, pumping, etc.) within 50 feet.</p> <p><input type="checkbox"/> Use fire blankets to secure all openings, cracks and holes where sparks may migrate to potential fire hazards.</p> <p><input type="checkbox"/> General/Local ventilation must be adequate to provide control of smoke, fumes and toxic vapors.</p> <p><input type="checkbox"/> Remove all paint coatings and residual contamination from the surface and clean down to bare metal or similar.</p> <p><input type="checkbox"/> Combustible floors wetted down, covered with damp sand or shielded.</p> <p align="center">Contact Health & Safety for approval prior to performing hot work on enclosed equipment/systems</p> <p><input type="checkbox"/> Enclosed equipment cleaned of all combustibles.</p> <p><input type="checkbox"/> Containers/Product lines purged of flammable liquids/vapors.</p> <p><input type="checkbox"/> Pressurized vessels, piping and equip. removed, isolated and vented.</p> <p><input type="checkbox"/> Evaluate any product pipelines in area for potential fire hazards.</p> <p><input type="checkbox"/> Signs and barriers posted (if publicly accessible).</p> <p><input type="checkbox"/> Welding curtains used where applicable.</p> <p><input type="checkbox"/> Combustible Gas Meter/LEL required for duration of process.</p> <p><input type="checkbox"/> Atmospheric monitoring conducted and documented.</p> <p>Type ABC Fire Extinguisher Required: Number _____ Size _____</p> <p>FIRE WATCH: _____</p> <p><input type="checkbox"/> Fire watch is required during and 30 minutes after work (including breaks).</p> <p><input type="checkbox"/> Supplied with suitable fire extinguisher or small charged hose.</p> <p><input type="checkbox"/> Trained in use of equipment and alarms.</p> <p><input type="checkbox"/> An additional Fire watch may be required in adjoining areas, both above and below.</p> <p><input type="checkbox"/> Monitor Hot Work area for 3 hours after job is completed.</p> </td> </tr> </table>		<p align="center">INSTRUCTIONS</p> <p>1. Authorized Supervisor/Person: A. Verify precautions listed at right (or do not proceed with work) B. Complete and retain Part 1 (In Control Room) C. Issue Part 2 to person doing job</p> <p>Hot work being completed by: <input type="checkbox"/> EMPLOYEE <input type="checkbox"/> CONTRACTOR</p> <table border="1"> <tr> <td>Date Permit Issued</td> <td>Job Number</td> </tr> <tr> <td>Permit Expires</td> <td>Time (AM/PM)</td> </tr> <tr> <td colspan="2">Location</td> </tr> <tr> <td colspan="2">Nature of Job</td> </tr> <tr> <td colspan="2">Name of persons involved with this job</td> </tr> <tr> <td>Printed Name</td> <td>Signed Name</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Date Permit Issued	Job Number	Permit Expires	Time (AM/PM)	Location		Nature of Job		Name of persons involved with this job		Printed Name	Signed Name																	<p align="center">REQUIRED PRECAUTIONS CHECKLIST</p> <p><input type="checkbox"/> Available sprinklers, hose streams and extinguishers are in service/operable.</p> <p><input type="checkbox"/> Hot work equipment in good repair.</p> <p align="center">Requirements within 35 ft. (11m) of work</p> <p><input type="checkbox"/> Flammable liquids, dust, lint and oily deposits removed.</p> <p><input type="checkbox"/> Shut down ducts or conveyors that may convey sparks.</p> <p><input type="checkbox"/> Flammables must be protected by covers, guards or shields.</p> <p><input type="checkbox"/> No open-container work (Sampling, pumping, etc.) within 50 feet.</p> <p><input type="checkbox"/> Use fire blankets to secure all openings, cracks and holes where sparks may migrate to potential fire hazards.</p> <p><input type="checkbox"/> General/Local ventilation must be adequate to provide control of smoke, fumes and toxic vapors.</p> <p><input type="checkbox"/> Remove all paint coatings and residual contamination from the surface and clean down to bare metal or similar.</p> <p><input type="checkbox"/> Combustible floors wetted down, covered with damp sand or shielded.</p> <p align="center">Contact Health & Safety for approval prior to performing hot work on enclosed equipment/systems</p> <p><input type="checkbox"/> Enclosed equipment cleaned of all combustibles.</p> <p><input type="checkbox"/> Containers/Product lines purged of flammable liquids/vapors.</p> <p><input type="checkbox"/> Pressurized vessels, piping and equip. removed, isolated and vented.</p> <p><input type="checkbox"/> Evaluate any product pipelines in area for potential fire hazards.</p> <p><input type="checkbox"/> Signs and barriers posted (if publicly accessible).</p> <p><input type="checkbox"/> Welding curtains used where applicable.</p> <p><input type="checkbox"/> Combustible Gas Meter/LEL required for duration of process.</p> <p><input type="checkbox"/> Atmospheric monitoring conducted and documented.</p> <p>Type ABC Fire Extinguisher Required: Number _____ Size _____</p> <p>FIRE WATCH: _____</p> <p><input type="checkbox"/> Fire watch is required during and 30 minutes after work (including breaks).</p> <p><input type="checkbox"/> Supplied with suitable fire extinguisher or small charged hose.</p> <p><input type="checkbox"/> Trained in use of equipment and alarms.</p> <p><input type="checkbox"/> An additional Fire watch may be required in adjoining areas, both above and below.</p> <p><input type="checkbox"/> Monitor Hot Work area for 3 hours after job is completed.</p>
<p align="center">INSTRUCTIONS</p> <p>1. Authorized Supervisor/Person: A. Verify precautions listed at right (or do not proceed with work) B. Complete and retain Part 1 (In Control Room) C. Issue Part 2 to person doing job</p> <p>Hot work being completed by: <input type="checkbox"/> EMPLOYEE <input type="checkbox"/> CONTRACTOR</p> <table border="1"> <tr> <td>Date Permit Issued</td> <td>Job Number</td> </tr> <tr> <td>Permit Expires</td> <td>Time (AM/PM)</td> </tr> <tr> <td colspan="2">Location</td> </tr> <tr> <td colspan="2">Nature of Job</td> </tr> <tr> <td colspan="2">Name of persons involved with this job</td> </tr> <tr> <td>Printed Name</td> <td>Signed Name</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Date Permit Issued	Job Number	Permit Expires	Time (AM/PM)	Location		Nature of Job		Name of persons involved with this job		Printed Name	Signed Name																	<p align="center">REQUIRED PRECAUTIONS CHECKLIST</p> <p><input type="checkbox"/> Available sprinklers, hose streams and extinguishers are in service/operable.</p> <p><input type="checkbox"/> Hot work equipment in good repair.</p> <p align="center">Requirements within 35 ft. (11m) of work</p> <p><input type="checkbox"/> Flammable liquids, dust, lint and oily deposits removed.</p> <p><input type="checkbox"/> Shut down ducts or conveyors that may convey sparks.</p> <p><input type="checkbox"/> Flammables must be protected by covers, guards or shields.</p> <p><input type="checkbox"/> No open-container work (Sampling, pumping, etc.) within 50 feet.</p> <p><input type="checkbox"/> Use fire blankets to secure all openings, cracks and holes where sparks may migrate to potential fire hazards.</p> <p><input type="checkbox"/> General/Local ventilation must be adequate to provide control of smoke, fumes and toxic vapors.</p> <p><input type="checkbox"/> Remove all paint coatings and residual contamination from the surface and clean down to bare metal or similar.</p> <p><input type="checkbox"/> Combustible floors wetted down, covered with damp sand or shielded.</p> <p align="center">Contact Health & Safety for approval prior to performing hot work on enclosed equipment/systems</p> <p><input type="checkbox"/> Enclosed equipment cleaned of all combustibles.</p> <p><input type="checkbox"/> Containers/Product lines purged of flammable liquids/vapors.</p> <p><input type="checkbox"/> Pressurized vessels, piping and equip. removed, isolated and vented.</p> <p><input type="checkbox"/> Evaluate any product pipelines in area for potential fire hazards.</p> <p><input type="checkbox"/> Signs and barriers posted (if publicly accessible).</p> <p><input type="checkbox"/> Welding curtains used where applicable.</p> <p><input type="checkbox"/> Combustible Gas Meter/LEL required for duration of process.</p> <p><input type="checkbox"/> Atmospheric monitoring conducted and documented.</p> <p>Type ABC Fire Extinguisher Required: Number _____ Size _____</p> <p>FIRE WATCH: _____</p> <p><input type="checkbox"/> Fire watch is required during and 30 minutes after work (including breaks).</p> <p><input type="checkbox"/> Supplied with suitable fire extinguisher or small charged hose.</p> <p><input type="checkbox"/> Trained in use of equipment and alarms.</p> <p><input type="checkbox"/> An additional Fire watch may be required in adjoining areas, both above and below.</p> <p><input type="checkbox"/> Monitor Hot Work area for 3 hours after job is completed.</p>		
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Printed Name	Signed Name																														
<p align="center">PERMIT AUTHORIZATION</p> <p>I verify the above location has been examined, the precautions checked on the Required Precautions checklist have been taken to prevent fire, and permission is authorized for this work</p> <p>SIGNED (Authorized Supervisor/Person) DATE/TIME _____</p>																															
<p>Supervisors Comments:</p>																															
<p align="center">PERMIT TERMINATION</p> <p><input type="checkbox"/> The work area and all adjacent areas to which sparks and heat may spread (including floors above and below and on opposite sides of walls) were inspected 30 minutes after work was completed and were found safe.</p> <p><input type="checkbox"/> All fire systems were re-activated</p> <p><input type="checkbox"/> Work is completed and accepted</p> <p>SIGNED (Authorized Supervisor/Person) DATE/TIME _____</p>	<p align="center">FM Global Fire System Deactivation Permit No.</p> <p align="center">_____</p> <p align="center">  </p> <p align="center">PERMIT NO.: 08-001</p>																														

Exhibit F-8

ADEQ Interoffice Memo Safety-Kleen Dry Well
Installation 2-9-93

ARIZONA DEPARTMENT OF ENVIRONMENT QUALITY
INTER-OFFICE MEMORANDUM

DW93:0130

File No. 07-007347-09

DATE: February 9, 1993

TO: Lon Stewart
Hazardous Waste Permits Unit

THRU: Bill Engstrom, Supervisor *WSE*
Landfill APP/Dry Well Unit

FROM: Chiou-Lian Chen *WSE for Chiou*
Landfill APP/Dry Well Unit

RE: Safety Kleen
Dry Well Installation



Enclosed please find a copy of the dry well file for the referenced facility.

Based on our discussion on February 5, 1993, it is our understanding that the installation of the dry well with respect to the aquifer protection from potential waste spills would be best reviewed by your program. The facility is a permitted TSD facility which is exempt from the Aquifer Protection Permit requirement pursuant to AAC R18-9-105.1.

The facility has proposed an installation of Envibro drainage system-Maxwell which is currently considered a best available demonstrated control technology (BADCT) to ensure the greatest degree of discharge reduction for dry well operations. The additional information regarding this technology is attached for your review.

We have completed the registration requirements for the dry well.
If I can be of further assistance on the above matter, please call me at 207-4573.

CLC:d-37/dw#3

Enclosures

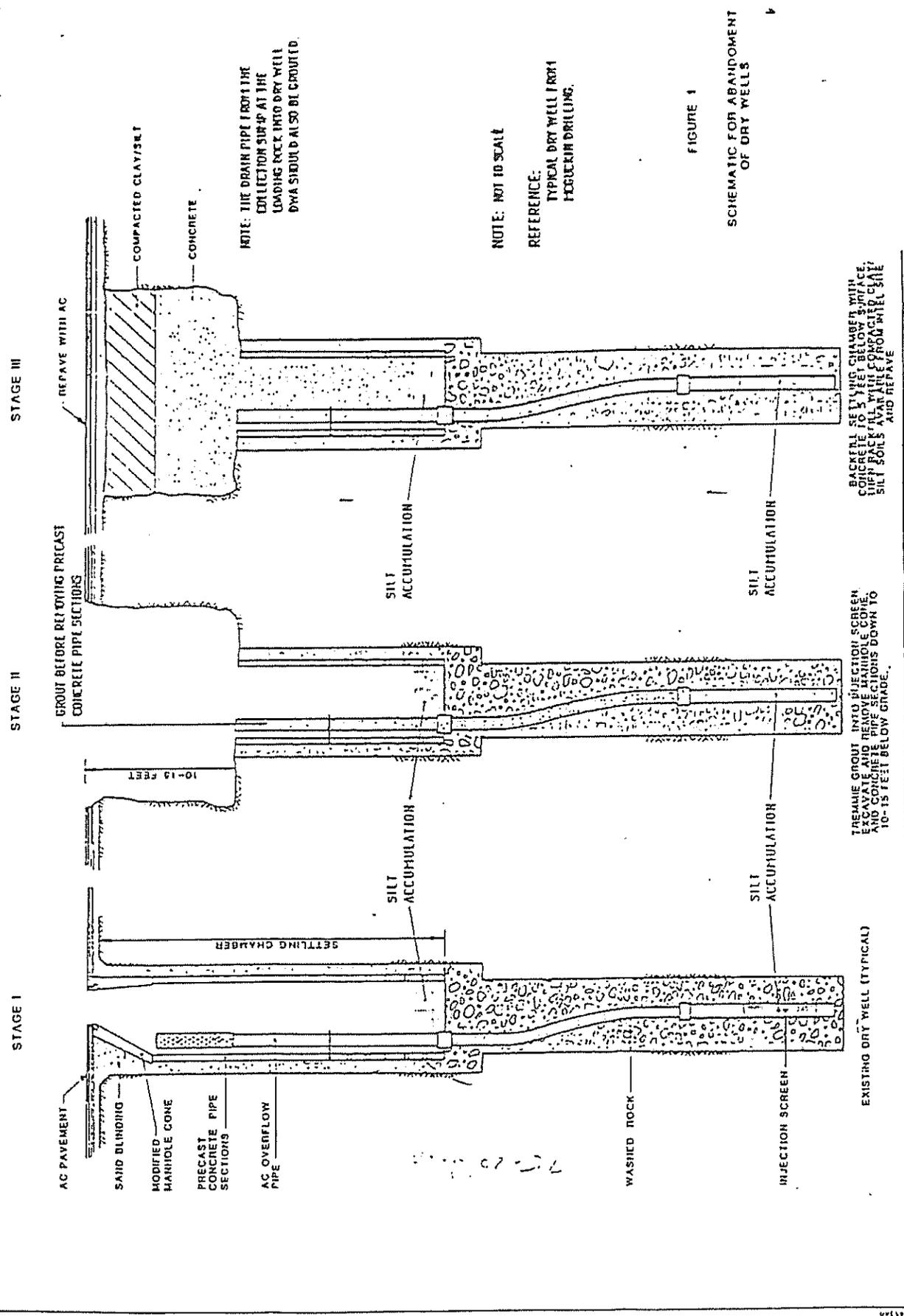
ADES Dry Well Requirements
(from ADES A.P.P Sections)

CONSTRUCTION AND LOCATION CRITERIA

During construction of dry wells at your facility, you are to adhere to the following criteria. All dry wells must:

1. Be set back at least 100 feet from any surrounding water production wells, underground storage tanks or fuel loading areas.
2. Not be constructed at any area where hazardous or toxic materials are stored or handled.
3. Not to be located at any area where an accidental spill of a hazardous or toxic liquid would drain into a dry well.
4. Not to be located at loading docks where hazardous substances are handled.
5. Not penetrate any saturated zones.
6. Be completed at least 10 feet above any saturated zones.
7. Dispose of storm water run-off only.

A drilling log for each well must be submitted to the Department within 30 days of completion.



NOTE: THE DRAIN PIPE FROM THE COLLECTION SUMP AT THE LOADING RACK INTO DRY WELL DWA SHOULD ALSO BE GROUTED.

NOTE: NOT TO SCALE

REFERENCE: TYPICAL DRY WELL FROM HOBASCO DRILLING.

FIGURE 1

SCHEMATIC FOR ABANDONMENT OF DRY WELLS

BACKFILL SETTLING CHAMBER WITH CONCRETE TO 5 FEET BELOW GRADE; SILT SOILS AVAILABLE FROM THE SILE AND REPAVE

TREMIE GROUT INTO INJECTION SCREEN, EXCAVATE AND REPAVE MANHOLE CONE, AND CONCRETE PIPE SECTIONS DOWN TO 10-15 FEET BELOW GRADE.

EXISTING DRY WELL (TYPICAL)

WHAT IS A DRYWELL?

Under Arizona law, a drywell is defined as a bored, drilled or driven shaft or hole whose depth is greater than its width. A drywell is designed specifically for the disposal of storm water.

WHY DO WE NEED DRYWELLS?

Arizona has seen rapid urban development over the past 20 years. Because of this growth, drywells play an increasingly important role in water management.

In the Phoenix and Tucson areas, where terrain is relatively flat, heavy storms of short duration can overload the water storage system. The use of storm water sewers has proven to be a costly and somewhat ineffective method of runoff collection and disposal, especially in low-density, widespread development.

During the early to mid-1970s, intensifying storm water runoff and severe flooding problems became a major concern. As a result, local ordinances were passed that require on-site retention and disposal of storm water runoff. The need for a low-cost, effective, on-site storm water disposal system prompted many municipalities to adopt the drywell as one solution to the retention problem.

HOW DOES A DRYWELL WORK?

Drywells use a filtration and sediment separation system that includes an upper settling chamber with an injection pipe and a lower rock fill section.

As water drains into the drywell, the settling chamber slowly fills with water. That allows sediments to settle out and become trapped

in the bottom of the chamber. The water then drains to an overflow (injection) pipe and is released to the bottom of the drywell.

HOW DO DRYWELLS BECOME A PROBLEM?

If improperly located, built and installed, drywells can pose a threat to groundwater quality.

Inefficient designs may bypass subsurface soils that absorb impurities, resulting in reduced natural soil filtration.

Drywells installed where hazardous substances have been improperly handled or stored have been a major source of contamination. The Arizona Department of Environmental Quality considers this a serious problem, and fines of up to \$25,000 can be assessed on illegal discharges.

HOW CAN DRYWELLS BE DESIGNED TO PROTECT THE ENVIRONMENT?

The engineering, business and environmental community continues to develop new technology aimed at improving the quality of storm water entering a drywell.

The Multistage Filtering/absorption system for gravity fed filtration/absorption system for storm water runoff. The MFI system removes dirt and silt, as well as most oils and other chemicals, through a charcoal filter system which removes organics. This system does not work well when highly concentrated fuels or solvents are present.

A second design, the Fyabim system, prevents seepage of a fuel or solvent spill into the drywell. The system uses imberber beads, tiny polymer beads which absorb organic material up to 27 times their size. Imberber beads act like

a sponge, absorbing petroleum hydrocarbons, solvents and other organic materials, but not water.

A third design uses a waste overflow outlet, designed primarily for oil and fuel separation. One advantage of the system is the continuous flow of discharged water through the outlet, separating fuel and water. The major drawback is that dissolved contaminants may enter through the outlet. This system is only effective at a specific gravity of .85 or less and is not efficient for mixed waste with other specific gravities.

WHAT DOES ARIZONA LAW REQUIRE FROM DRYWELL OWNERS?

Under the Environmental Quality Act (EQAA) of 1986, the Arizona Department of Environmental Quality is required to set and enforce standards for the design, operation, performance, construction, inspection and closure of drywells. Under the EQAA, drywells are classified as discharge facilities, meaning they can contribute to contamination of groundwater. For that reason, they may be subject to a further Protection Permit regulations.

WHAT ARE THE RULES REGARDING DRYWELLS?

The Arizona Department of Environmental Quality has not set developmental rules regarding drywell construction, operation and maintenance. In the interim, ADEQ requires the following:

1. Dispose of storm water runoff only.
2. Have a setback of at least 100 feet from any surrounding water production wells, under ground storage tanks or fuel loading areas.

HOW DO I REGISTER A DRYWELL?

Arizona law requires that all new, existing or abandoned drywells be registered with the Arizona Department of Environmental Quality. Proposed drywells should be registered during the design phase. Drywells must be registered within 30 days of beginning operation.

Registration forms are available from the Plan Review and Permits Section at (602) 207-4686.

A registration form must be accompanied by a registration fee of \$10 and the drilling log for each drywell. Checks should be made payable to the Arizona Department of Environmental Quality.

In addition, a drywell in an area where hazardous substances are stored, used or treated and where shallow groundwater is present also may require an aquifer protection permit.

Typically, such permits are issued for drywells at gas stations and other industrial facilities.

Arizona law does not apply to a drywell used in conjunction with golf course maintenance.

DO I NEED A LICENSE TO INSTALL A DRYWELL?

The Arizona Department of Environmental Quality plans to develop a testing and licensing program for drywell installers. Under this program, all construction will be supervised by the license holder.

Under current law, a drywell installer must notify the owner of the registration requirements.

HOW DO I CLOSE DOWN A DRYWELL?

Before abandonment, the owner must contact the Plan Review and Permits Section for registration and closure requirements. Closure

of old drywells must be subject to the same storm water runoff that follows the Arizona Department of Environmental Quality's Dry Well Abandonment Checklist.

Closure of drywells in loading docks and areas where hazardous substances have been used, stored, loaded or treated may be subject to Aquifer Protection Permit requirements, depending on the date of well construction.

RULE DEVELOPMENT

The Arizona Department of Environmental Quality has not yet developed rules for drywells. Please contact ADPQ's Rule Development section for the latest information.

If you have questions about drywells, please contact:

Plan Review and Permits Section
Arizona Department of
Environmental Quality
3303 N. Central Avenue
Phoenix, Arizona 85012
(602) 207-4686
(800) 234-5677



Plan Review and Permits Section

The Arizona Department of Environmental Quality is a public agency. It is subject to the provisions of the Arizona Freedom of Information Act. For more information, please contact the Public Information Officer at (602) 207-4686.

Arizona Department of
Environmental Quality
3303 N. Central Avenue
Phoenix, Arizona 85012
(602) 207-4686
(800) 234-5677





ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
3033 N. CENTRAL AVENUE
PHOENIX, AZ 85012

recei

Number: 006018 - CMC
Date: January 22, 1993

Received From: BARRIE GROEN - TOM DENNY ARCHITECTURE

Dollars: \$20.00

For: GF Drywell

How Paid: Check # 2141

By: CMC

**INSTRUCTIONS FOR COMPLETING
DRY WELL REGISTRATION FORM**



1. I.A. - Provide a name by which the facility may be referred to in all correspondence between involved entities. The location address should be a street address or descriptive in relation to major streets, e.g., 1/4 mile east of Major Street on Minor Road.

If different from owner, the contact person should be a person of responsibility with which the Department can deal during and after the registration process. More than one person may be provided.

2. I.B. - Indicate the owner of the facility whenever possible. In any case, supply the party responsible for having the well(s) drilled.

3. I.C. - Give the location of the facility (not each dry well) in the township, range format. Break the section down to a 2.5 acre parcel if possible (1/4, 1/4, 1/4, 1/4). This information may also be obtained from County Recorder or Assessor's Offices.

4. I.D. - Check all general categories which best describe the nature of the activity conducted at the facility. Provide the applicable SIC (Standard Industrial Classification) code number. The SIC number can be obtained from a Standard Industrial Classification Manual.

5. I.E. - Indicate the type of chemicals, liquids, or solvents that are used, stored, or produced for businesses that apply.

6. I.F. - Obtain the most recent water table depth available. Give source of the data whether direct well measurement, driller's information, or an agency such as the Department of Water Resources (DWR) (542-1581). DWR is probably the best source in most cases. If the measurement is of a perched water table, so indicate. Include the date of the measurement when possible.

7. I.G. - Include water supply wells as described. If necessary you may contact ADWR at 542-1581.

8. I.H. - Include a site plan of the facility as described.

9. I.I. - Indicate the drilling firm which drilled, or is intended to drill the dry well(s). If more than one firm is used, list all firms.

**DRY WELL REGISTRATION
INSTRUCTIONS cont'd**

10. II. COLUMN B - If you have a special numbering system for the dry wells at the facility, list them here. The wells should be designated as such on the site plan.
11. II. COLUMN C - Indicate the status of each well. Active wells are those which are completed, and are ready to receive stormwater runoff. Newly completed wells which have been capped should be considered "UNDER CONSTRUCTION". "TEMPORARILY ABANDONED" wells would more appropriately apply to existing dry wells which have been temporarily taken out of service for some reason. "PERMANENTLY ABANDONED" means a well that has been destroyed by excavation or by backfilling with grout or other substances.
12. II. COLUMN D - Place either the actual depth drilled or the proposed depth (if filing this form prior to drilling) in this column.
13. II. COLUMN E - Place the actual or expected completion date for each well in this column.
14. II. COLUMN F - For each dry well, check appropriate area from which stormwater would drain into the dry well.
15. II. COLUMN G - If other liquids, such as air conditioning condensate, commonly drain into a drywell, please describe in this column. Also indicate liquids stored in such a manner that they might reach the dry well if spilled.
16. Sign and date the form in the space provided; include a check or money order for \$10.00 for each dry well payable to the Arizona Department of Environmental Quality and mail or deliver the form to:

Arizona Department of
Environmental Quality
3033 N. Central Avenue
Accounts Receivable
P.O. Box 488
Phoenix, AZ 85001-0488

Please send the Drilling Log to the driller(s) listed on page 1 of this form. The dry well driller shall complete the form, and shall provide copies to the dry well owner to be attached to the registration form at the above address within 30 days of completion of the drywell.

17. Any questions concerning this form may be directed to the above address or to (602) 207-4686.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
DRY WELL REGISTRATION

Registration Number(s)

07-007347-09
thru 007348

Date: 1/21/93 By: DEP2

I. Facility Information

A. Facility/Project Name SAFETY-KLEEN
Location Address 6625 W. FRY RD.
CHANDLER, AZ Zip Code 85226
Contact Person at SAFETY-KLEEN Title MANAGER
Dry Well Location Telephone Number (602) 966-2224

B. Owner Developer SAFETY-KLEEN
Mailing Address 4401 E. UNIVERSITY
PHOENIX, AZ 85034
Telephone Number (602) 966-2224

C. Physical Location Township T1S, Range R4E
Section 33, SE1/4, SE1/4, NW1/4, ___1/4

- D. Nature of Business
- (00) Residential
 - (01) Schools, Churches & Recreational Facilities
 - (02) Offices & Retail
 - (03) Warehouse
 - (04) Manufacturing
 - (05) Industrial/Agriculture Processing
 - (06) Mining/Milling
 - (07) Chemical & Fuel Storage
 - (08) Vehicular Service
 - (09) Other



If any of (03)-(09) item is checked, please describe in more detail about the nature of activity conducted at the site. Provide the applicable SIC (standard industrial classification) code number.

7389

If any of (04)-(09) item is checked, Is the dry well(s) draining area where hazardous chemicals are stored, used, or handled?
Yes () No ()

Are there any floor drains that are connected to the drywell(s)?

Yes () No (X)

If no, where are they drained to? CITY SANITARY SEWER

E. List any amount of liquids, solvents, or other chemicals that are produced, used, or stored at this facility

13,000 gal NEW & WASTE SOLVENTS

F. Depth to Groundwater 120' Date of Measurement 1982
Source of Data ARIZ. DEPT. OF WATER RESOURCES

(Give well locations if applicable)

G. Location of any water supply wells within 100 feet of the property boundary NONE

H. Include site plan and vicinity map showing:

1. location of the drywells
2. delineation of the drainage areas showing arrow direction

I. Drilling Firm MCGUCKIN DRILLING CO
Address 1509 E. ELWOOD ST.
PHOENIX, AZ. ZipCode 85040

J. The registration fee enclosed. Yes () No ()
If no, please explain _____

K. NOTE: FULL FILTERING, INSPECTION & TESTING SYSTEMS.

II. DESCRIPTION OF INDIVIDUAL DRY WELLS

Column A	Column B	Column C				Column D	Column E	Column F										Column G	
Well Number	Dry Well Number according to your own system, if applicable	Well Operation Status Place "X" in one column for each well				Total Depth of hole drilled for well in feet for proposed)	Date well was completed (or expected completion date)	Description of Areas Drained by the Dry Well; Place "X" in all subcolumns which apply to the areas described										Describe Fluids Other Than Storm Water which are commonly received by the dry well.	
		ACTIVE	TEMPORARILY ABANDONED	PERMANENTLY ABANDONED	UNDER CONSTRUCTION	PROPOSED ONLY			ROOF TOPS	STREETS	LOADING DOCKS	LANDSCAPED AREAS	CHEMICAL STORAGE	VEHICULAR SERVICING	LIVESTOCK CONFINEMENT	AGRICULTURAL AREAS	GOLF COURSE	OTHER (EXPLAIN)	
Well # 1	1741					X					X								NONE
Well # 2	1742					X					X								NONE
Well # 3																			
Well # 4																			
Well # 5																			
Well # 6																			
Well # 7																			
Well # 8																			
Well # 9																			
Well # 10																			

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.

Name and official title of owner/owner's authorized representative, address & phone number Signature

Date Signed

3.330

WELL 334(2)

WELL WORK REG SEE ATTACH.

506 EAST ELWOOD STREET
TUCSON, ARIZONA 85040
302/268-0785
FAX #602/268-0820
AZ. LIC. A #070465. B-04 #047067



LOG No. _____

JOB No. 93-4-29

DRILLING LOG

PROJECT SAFETY KLEEN		LOCATION SEC FRYE & BECK				CHANDLER	
CONTRACTOR COHEN CONTRACTING	HOLE	1	2	3	4	5	6
		WELL TYPE	1V	1V			
ADDRESS 4725 N. SCOTTSDALE RD., #101 SCOTTSDALE, AZ 85251	DATE	4-27-94	4-27-94				
	CREW	AQ	JS				
CITY ZIP	EQUIP #	R-4	R-4				
	CUT/FILL						
SOIL DESCRIPTION	CLAY	0-35	0-35				

TOTAL DEPTH		35'	35'				
CEMENTATION	MODERATE						
	HARD						
	VERY HARD						
	CROWD						
	REFUSAL						
SOIL MOISTURE	# HRS. HARD ROCK						
	# CARBIDE TEETH						
	DRY						
	MOIST						
	GROUNDWATER						

COMMENTS _____

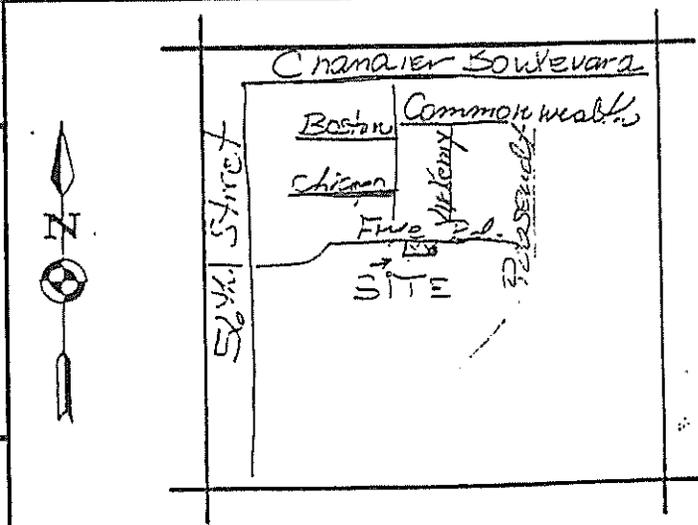
FIELD CHANGES

ADD/DEDUCT DEPTH

HARD ROCK @ TIME & MATERIALS

APPROVED BY _____

_____ TITLE _____ DATE _____



I ATTEST THE ABOVE INFORMATION IS CORRECT.

Rob Schneider 7/25/94
COMPLETED BY DATE

Exhibit F-9

Routine Industrial Hygiene Sampling



To: Corporate IH File

From: Chris Bachman

Date: 4/22/05

Re: Routine Branch IH sampling event

On January 11th, 13th and January 18th, 2005 Safety-Kleen was provided with professional IH monitoring services through AIG Insurance. The objective of the surveys was to monitor (1) CSRs for solvent exposure during parts washer services, unvented gun cleaners, dry cleaning services and (2) monitor Material Handlers for solvent and noise exposure during dump/fill operations.

All results were below 50% of the applicable OSHA and ACGIH values except for the Short Term (STEL) sample for Toluene (67% of OSHA Ceiling) during the unvented gun cleaner service and the ACGIH 80-db average for Noise (88.0 db). Results will not effect the current branch PPE hazard assessments (9/2004) for servicing unvented gun cleaners, parts washers and dump/fill operations (while using pneumatic gun).

Sound Level Measurements for Dumping and Filling Operation January 18, 2005

Location	Sound Level (dBA)*
Moving drums with forklift onto rack	87.5
Drums banging on floor	91.4 – 98.3
Two drums banging together	92.4
Metal lids thrown into drums	103.5
Unscrewing nut on drum with pneumatic drill	103 – 105.8
Using pneumatic drills	95.3 – 102.2
Drum rolling in washer without spray	82
Drum rolling in washer with solvent spray	95
Scraping labels off of drums	78 to 81

Bolded results indicate sound level readings above the OSHA action level and/or PEL

**Noise Monitoring Results for Dumping and Filling Operation
January 18, 2005**

Employee/ Location	Time (hh:mm) On/Off	Dose ^a , % 80-db Threshold	Lavg ^b , dBA 80-db Threshold	Dose ^a , % 90-db Threshold	Lavg ^b , dBA 90-db Threshold	ACGIH Dose ^a , % 80-db Threshold	ACGIH Lavg ^b , dBA 80-db Threshold
Material Handler	3:31 (9:46 – 1:18)	22.08	85.1	11.61	80.4	86.75	88.0
			OSHA AL= 85 dBA		OSHA PEL= 90 dBA		ACGIH TLV [®] = 85 dBA

Bolded results indicate above the OSHA action level / ACGIH TLV

Field Service Short-Term (STEL) Sampling Solvent Results (1/13/05)

Employee	Time (min)* (Start/Stop)	Sample No.	Analyte	Result (ppm)	OSHA PEL Ceiling/STEL (ppm)	ACGIH TLV [®] Ceiling/STEL (ppm)
CSR - <i>Servicing unvented gun cleaner.</i>	10 (9:24 –9:35)	13-3T	Acetone	46	NE	750
		13-4M	Toluene	200	300 C	NE
			Methanol	21	NE	250

Bolded results indicate above the OSHA action level / Ceiling Limit

Time-Weighted Average Sampling (1/11/05)

Employee	Sample No.	Time (min)* (Start/Stop)	Analyte	Result (ppm)	OSHA PEL (ppm)	ACGIH TLV [®] (ppm)
CSR <i>Servicing Parts Cleaner that uses 150 Gold</i>	A-1	286 (8:57 – 3:41)	Total Hydrocarbons	≤ 2.4	500	100
			(as Stoddard solvent) ^a	0.13	100	25
			Tetrachloroethylene	< 0.09	350	350
			1,1,1- Trichloroethane			

Short-Term (STEL) Sampling Solvent Results (1/11/05)

Employee	Sample No.	Time (min)* (Start/Stop)	Analyte	Result (ppm)	OSHA PEL Ceiling/STEL (ppm)	ACGIH TLV® Ceiling/STEL (ppm)
CSR- <i>Servicing Model 81 Agitating Parts Cleaner that uses 150 Gold.</i>	S-1	32 (10:05 – 10:37)	Total Hydrocarbons (as Stoddard solvent) ^a Tetrachloroethylene	2.4 < 0.1	NE 200 C	NE 100
CSR <i>Servicing Parts Cleaner that uses 150 Gold.</i>	S-2	23 (11:09 – 11:32)	Total Hydrocarbons (as Stoddard solvent) ^a Tetrachloroethylene	≤ 2.4 < 0.2	NE 200 C	NE 100
CSR- <i>Removing 2 sealed perc containers from dry cleaning store</i>	S-3	10 (1:43 – 1:53)	Tetrachloroethylene 1,1,1-Trichloroethane	< 0.4 < 0.5	200 C NE	100 450
CSR- <i>Removing 2 perc containers from dry cleaning store. One container not sealed properly.</i>	S-4	13 (2:40 – 2:53)	Tetrachloroethylene 1,1,1-Trichloroethane	3.7 < 0.4	200 C NE	100 450

Table IV: Dumping and Filling Time-Weighted Average Sampling (1/18/05)

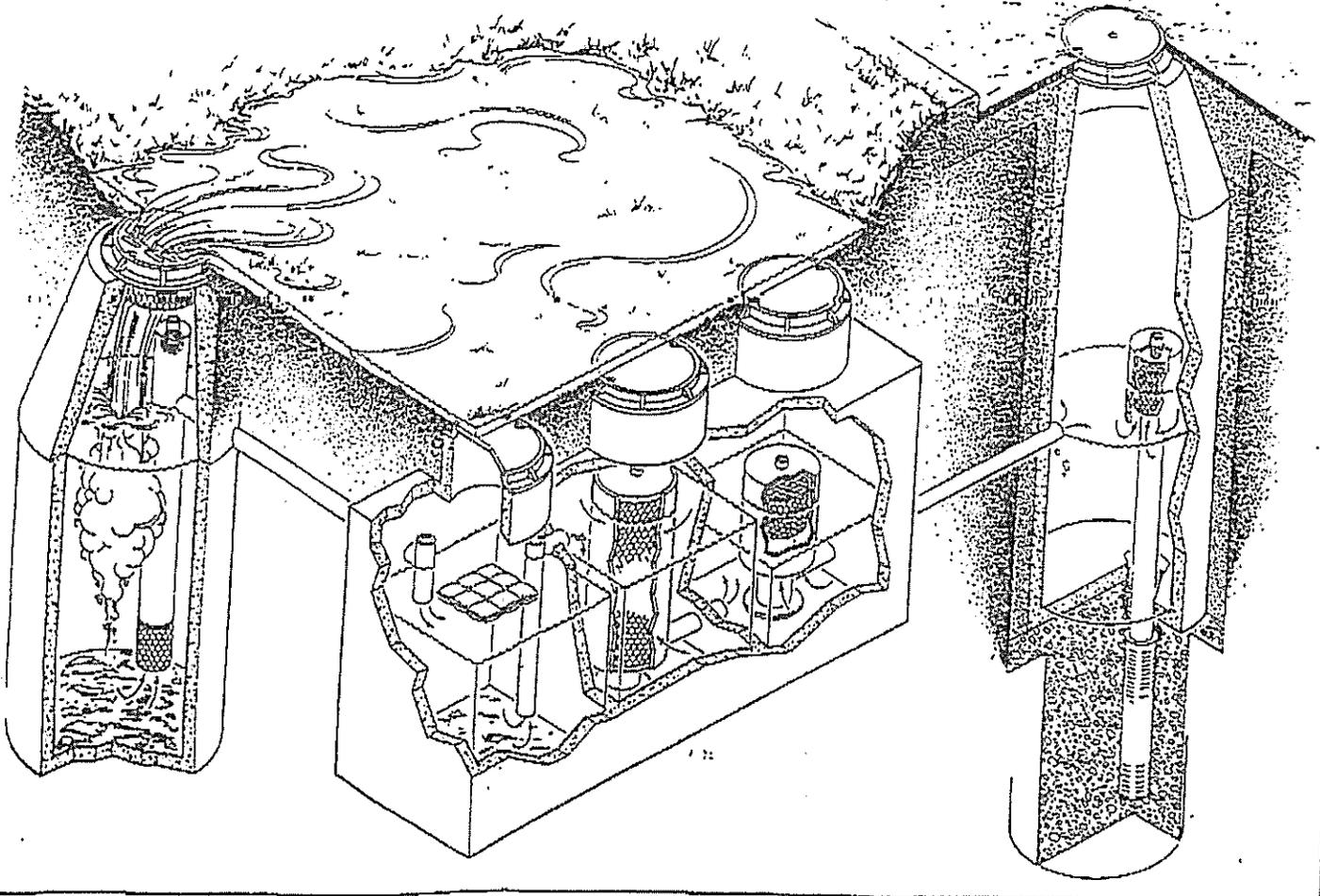
Employee	Time (min)* (Start/Stop)	Sample No.	Analyte	Result (ppm)	OSHA PEL (ppm)	ACGIH TLV® (ppm)
George Huggins <i>Dumped about fifteen 30-gallon drums of 150 solvent and nine 16-gallon drums of 105 solvent; cleaned a filter and worked with a mechanic.</i>	175 (9:38 – 12:34)	18-1	Total Hydrocarbons (as Stoddard solvent) ^a	1.7	500	100
			Tetrachloroethylene	0.20	100	25

Exhibit F-10

Envibro Drainage System Data Sheet

2 PAGES ONLY

Exhibit F-10 Envibro System Data Sheet



Envibro® Systems as manufactured and installed by McGuckin Drilling, Inc., are specifically designed to process and dispose of surface water runoff from typical service stations, restricted industrial areas or other special drainage applications. The Envibro® System provides a superior level of treatment than can be achieved with holding tanks, interceptors, or "sorber" systems.

APPLICATIONS

Envibro Systems are effective for a wide range of organic materials including:

- Transportation fluids like gasoline, No. 1, 2, and 3 fuel oils, jet fuels, and diesel fuels.
 - Chlorinated solvents such as carbon tetrachloride, methyl chloroform, trichlorobenzene, and PCB's.
 - Aromatic solvents such as benzene, toluene, xylene, styrene, ethyl benzene, cumene, and methyl naphthalene.
- Many polar compounds including methylisobutyl ketone, tetrahydrofuran, and ethyl acetate.

FUNCTION

Incoming runoff is first received from a typical retention basin where the velocity of inflow is reduced and large solids are deposited. As water builds up in the basin, runoff spills over into a large collector chamber with up to 1,000 gallons effective capacity. Trash, leaves and floating debris are retained in an easily accessible 6" deep debris basket at the inlet grate. Oils and other petroleum products are retained in this chamber utilizing the American Petroleum Institute General Standards governing the separation of petroleum from water by gravity differentials. Sludge or heavy solids settle to the bottom of the chamber for easy removal.

The second step in the Envibro Drainage Process begins in the collector chamber as influent is directed through a screened overflow pipe to a stationary tank. A flow regulator in the tank's first compartment slows internal velocity to effectively separate any residual fluids and solids. Floating hydrophobic (repels water) absorbents literally "wick" petrochemical and organic products from the water.

The standard Envibro System provides over 1,000 square inches of filter surface area. Larger capacities are available for demanding drainage requirements. A service opening above the tank's compartment permits periodic removal of retained liquids or fines.

Final processing is achieved in the third compartment through a unique PureFlo® II Drain Field utilizing hydrophobic absorbent Imbibers™. Because the Imbibers will not even partially absorb water or brine solutions, the Envibro® System has control capabilities unequaled by any of the commonly available "sorberent" products or oil/water separators.

Under normal operations, water passes freely through the drain field. However, when contacted by an active organic liquid, the Imbibers instantly begin to absorb the liquid and expand. The Imbiber Field has approximately 30% void space available for fluid flow. Upon contact by an organic liquid, the Imbibers will swell up to 2700%, rapidly filling the void space causing the drain to function as a valve to prevent further flow.

The drain field will not imbibe solids, high viscosity oils, low molecular weight alcohols and oxidizers. A full list of imbibed liquids is available upon request.

Processed water is finally discharged into a MaxWell® constructed to provide controlled flow and to allow for inspection. The MaxWell's inspection chamber is non-perforated and has been sealed to prevent seepage. The new FloFast® II Drainage Screen is slotted with over 320 slots per foot to provide over 600 square inches of open area to insure continuous flow to the surrounding soil. In addition, the drainage backfill material is a fine-graded washed rock sized to best complement soil conditions and enhance natural soil absorption.

Envibro® Systems will prevent the flow of organic liquids under a broad range of conditions. No chemical or external mechanical actions are necessary. The physical swelling of the Imbibers in the PureFlo® II Drain is sufficient to stop flow. Such a simple reliable system will eliminate the risk of spills in the drainage area by eliminating mechanical or "sorberent" systems which can fail in the open position.

MAINTENANCE

Under normal operating conditions, the Envibro® System requires limited maintenance. The filter assembly and PureFlo® II Drain are easily accessible and can be cleansed by removing them from the tank and simply hosing them down to remove fine debris. We recommend this cleaning procedure following heavy rainfalls or high-loading of the system with foreign trash and debris. Should a spill occur, replacement of activated Imbibers is normally required. For normal operation the Imbibers can be expected to have a long life.

For your convenience, McGuckin Drilling, Inc. offers a complete maintenance program and service maintenance agreements. Please call us for additional information on this valuable service.

MAR 25 1991

™ Trademark, Dow Chemical Corp.

The Southwest's Drainage Specialists . . .

OUR SERVICES

DRAINAGE SYSTEM

- Commercial
- Residential
- Industrial
- Institutional

SITE DRAINAGE

- Drywells
- Pump Systems
- Underground Storage
- Retention Basins
- Storm Drains
- Site Re-Development

TECHNICAL SUPPORT

- Design Review
- Percolation Testing
- Drywell Registration
- Maintenance Programs
- Soil Information

ENVIRONMENTAL

- Drainage Remediation
- Recovery Wells
- Recharge Systems
- OSHA Certified

GENERAL DRILLING

- 24" dia. to 12' dia.
- to 180' deep



Exhibit F-11

Monthly Inspection Log – Rainwater System
and Vadose Zone Vapor Monitoring



Rainwater Run-on/off System
and Vadose Zone Vapor
Monitoring System

Form Code: 178

Example

Compliance Header	
Inspector Name	
Area of Inspection	
Inspection Date and Time	
CAZ Rainwater Run-on/Run-off System and Vadose Zone Vapor Monitoring System Inspection Instructions	
<p>Note condition of inspection item. If item does not apply to an area, mark N/A. All unsatisfactory findings must be explained. Include any repairs, changes, corrective actions required or completed.</p>	
CAZ Rainwater Run-on/Run-off System and Vadose Zone Vapor Monitoring System Inspection Items	
<p>Load/Unload Area Sump - Inspection Attribute (e.g., free of corrosion, free of cracks, free of debris)</p> <p>Retention Basin - Inspection Attribute (e.g., free of cracks, free of debris)</p> <p>Basin Fence and Gate - Inspection Attribute (e.g., in good condition, gate locked)</p> <p>Basin Rain Gauge - Inspection Attribute (e.g., present and accounted for)</p>	
<p>Envibro Treatment Units and Drywells - Inspection Attribute (e.g. maintenance has been performed, on the frequency specified in, and as required by Permit Section F-4c annual cleaning)</p>	
<p>Vadose Zone Vapor Monitoring Probes - Inspection Attribute (e.g., maintenance and calibration has been performed on the frequency specified in, and as required by Permit Appendix E "Vadose Zone Monitoring</p>	

Well Design": system tested monthly, sensors replaced yearly, remote stat. battery replaced yearly

Compliance Footer

Inspector Signature

Attach Photo

Inspection Overall Assessment

Exhibit F-12

Example Stormwater Removal Inspection Form

Stormwater Inspection Form
Safety-Kleen Chandler

Inspector's Name -Printed _____ -Signature _____

Date of Rainfall _____ Time of Rainfall (first noted) _____

Duration of Rain fall _____ Rainfall Gauge Type _____

Height of rainwater in gauge _____ inches

Surface area of lot: _____ sq. ft.

Volume of rainwater collected 58,650 sq. ft. x _____ inches/12 x 7.48 gallons/cu. ft. =
_____ Gallons

Estimated gallons of water discharged to drywell (includes evaporation loss) =
_____ Gallons

If water was not discharged to drywell where did it go: _____

Have all waste areas of the site been inspected for possible spills? Yes No

Presence of floating and / or suspended material? Yes No

Presence of oil and / or grease? Yes No

Presence of stains or discoloration? Yes No

Any other signs of potential pollutants? Yes No

Record pH of sample using pH paper _____

If yes above, describe and explain possible pollutants: _____

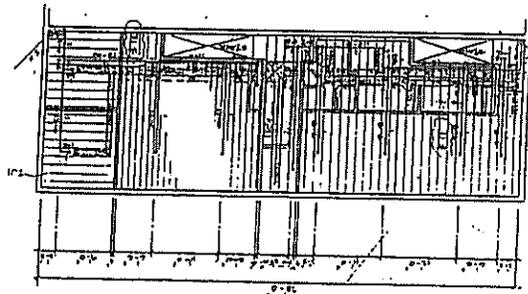
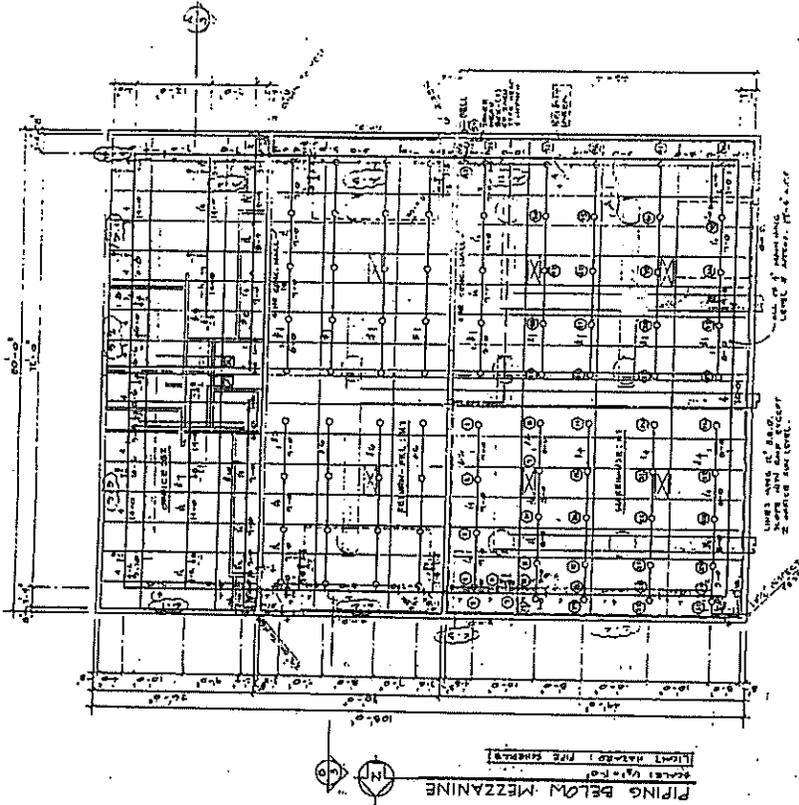
Exhibit F-13

Fire Line Site Plan

Exhibit F-14

As-Built Fire Protection Plan

Exhibit F-14
As Built Fire protection plan



PIPING BELOW MEZZANINE
LIGHT HAZARD FIRE SERVICE

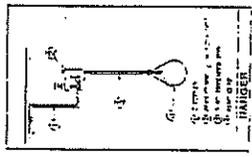
PIPING PLAN
SCALE: 1/8" = 1'-0"

" AS-BUILT "

NO.	DATE	REVISION
1		AS-BUILT

- DESIGN NOTES:
1. EXISTING AND PROPOSED WORK SHOWN IN AREA 113.
 2. ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH THE 2001 IBC AND LOCAL ORDINANCES.
 3. ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH THE 2001 IBC AND LOCAL ORDINANCES.
 4. ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH THE 2001 IBC AND LOCAL ORDINANCES.
 5. ALL PIPING TO BE INSTALLED IN ACCORDANCE WITH THE 2001 IBC AND LOCAL ORDINANCES.

CALCULATION DATA	
AREA	113
LOAD	150 PSF
WIND	150 PSF
SEISMIC	0.15
SYSTEM DEMAND	150 PSF
PIPE SIZE	1/2" NPS
VALVE SIZE	1/2" NPS
PIPE WALL THICKNESS	0.106 IN
VALVE WALL THICKNESS	0.106 IN
PIPE WEIGHT	1.10 LB/FT
VALVE WEIGHT	1.10 LB/FT
PIPE STRENGTH	150 PSF
VALVE STRENGTH	150 PSF
PIPE DEFLECTION	0.106 IN
VALVE DEFLECTION	0.106 IN



A WAREHOUSE & OFFICE
SAFETY-KLEEN CORP.
CHANDLER, ARIZONA

Liberty
Fire Prevention
2310 W. SHAGBILT
PHOENIX, ARIZONA 85028
OFFICE: 937-2388

NO.	DATE	REVISION
1		AS-BUILT

NO.	DATE	REVISION
1		AS-BUILT

FP2
PAGE 3

Exhibit F-15

Vertical Tank Grounding Plan and Details S

RECEIVED

JUN 17 2002

ADEQ-HAZARDOUS
WASTE PERMITS

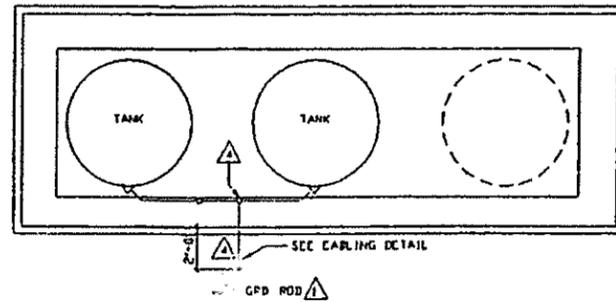


RECEIVED

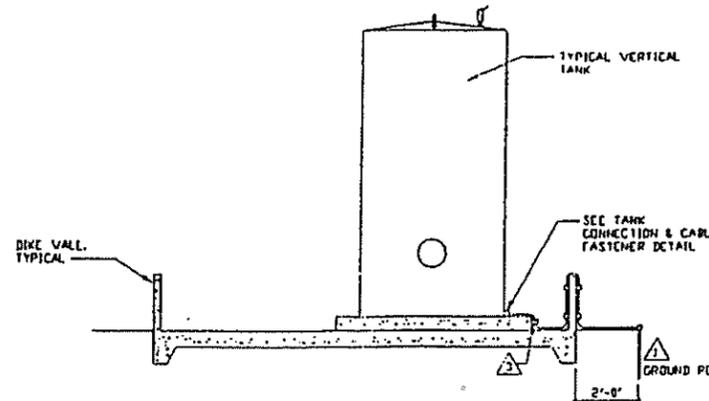
JAN 10 2003

ADEQ-HAZARDOUS
WASTE PERMITS

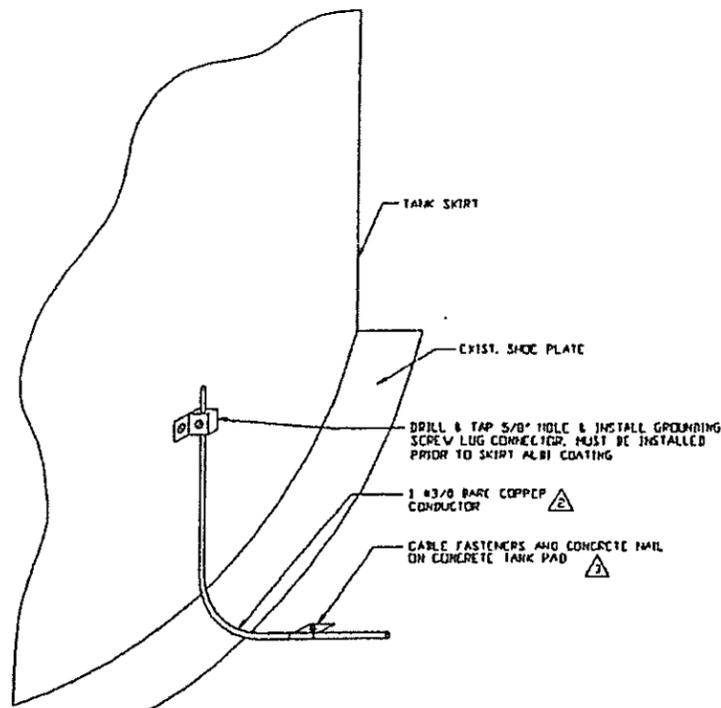
*Certification Is For
"As Installed" Only,
Not For Design*



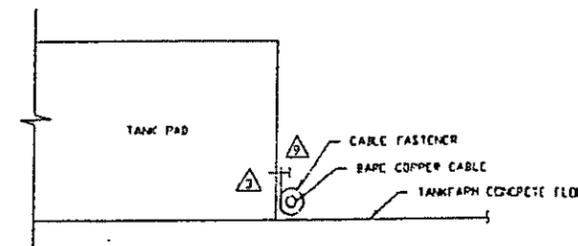
MULTIPLE TANK GROUNDING DETAIL
SCALE: NONE



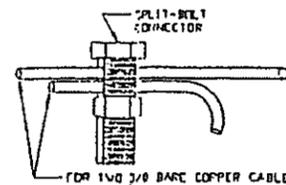
TANK GROUNDING CABLING DETAIL
SCALE: NONE



F & D BOTTOM TANK CONNECTION & CABLE FASTENER DETAIL
SCALE: NONE



CABLE FASTENING DETAIL (TYP)
SCALE: NONE



GROUNDING LUG CONNECTOR DETAIL
SCALE: NONE

GENERAL NOTES

1. INSTALL 5/8" x 8" LONG COPPER GROUND POD 2'-0" AWAY FROM DIKE WALL.
2. RUN #3/8 BARE COPPER GROUND CONDUCTOR FROM TANKS TO GROUND POD. PROVIDE LUG CONNECTORS AS REQUIRED.
3. CABLE FASTENERS, USE 1/2" CONC. NAILS TO FASTEN TO CONCRETE TANK PADS 18" O.C.
4. INSTALL GROUNDING LUG CONNECTOR TO CONNECT MULTIPLE TANK GROUNDING WIRES AS REQUIRED. SEE GROUNDING LUG CONNECTOR DETAIL - THIS SHEET.
5. ALL MATERIALS SHALL BE EITHER BRONZE, BRASS, OR COPPER.
6. THIS IS A CLASS I DIV 1 OR 2 AREA. INSTALL IN ACCORDANCE WITH NEC 50 ART. 500 & 515, AND PER LOCAL CODES.
7. THESE DETAILS ARE FOR ELECTRICAL, STATIC AND LIGHTNING PROTECTION. ELEC. CONTRACTOR TO CONSULT ENGINEER OF ANY SITE SPECIFIC CONDITIONS WHICH MAY HAVE DETRIMENTAL AFFECTS UPON THE EFFECTIVENESS OF THIS DESIGN.
8. NO PENETRATIONS OF ANY KIND ARE ALLOWED IN THE TANKFARM CONCRETE FLOOR.
9. ROUTE ALL GROUND CABLE AT BASE OF TANK PADS AS SHOWN ON DETAIL.

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN CORP. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. HAS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN CORP. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

PROJECT
05
SHEET NO.
E-9

TITLE
VERTICAL TANK GROUNDING
PLAN & DETAILS

S SAFETY-KLEEN CORP.

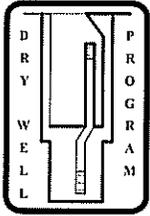
777 215 TINKER ROAD TULSA, OKLAHOMA 74122 PHONE 700-197-8440

NO.	DESCRIPTION	BY	CHK	APPR	DATE	SCALE	BY	CHK	APPR.	DATE
A	ISSUED FOR BIDS.	AD			09/29/92	NONE				9/29/92
						SERVICE CENTER LOCATION	SC-DWG NUMBER		REV. NO	
						CHANDLER, AZ.	714201-01106400		A	

Exhibit F-16

ADEQ Annual Dry Wells Inspection Checklist

Arizona Department of Environmental Quality



ANNUAL DRY WELLS INSPECTION CHECKLIST

ADEQ encourages facility owners or operators to use this list as guidance for performing annual inspections for dry well (s) located in industrial areas where hazardous substances are used, stored, loaded, or treated.

This check list is developed to help industrial operators monitor and inspect dry wells located within drainage areas where hazardous substances are used, stored, loaded, or treated to ensure that there is no evidence of unauthorized discharge. Dry wells in such areas are subject to Aquifer Protection Permit (APP) requirements. Therefore, it is recommended that owners or operators maintain these records. These records should also be made available for review if requested during site inspections by ADEQ personnel. This inspection record should be kept at the facility for a minimum of three years.

PROPERTY NAME Safety-Kleen Systems, Inc.

PROPERTY ADDRESS 6625 West Frye Rd.

PROPERTY CONTACT _____ BGM _____ PHONE 480-940-7202

DATE OF INSPECTION _____ INSPECTED BY _____

PLEASE CHECK ALL THAT APPLY

GENERAL

A. DOES THE SITE DRAIN TO:

- | | Yes | No |
|---|----------|----------|
| 1. Street or gutter via pavement? | _____ | <u>X</u> |
| 2. A storm drain catch basin that empties into a municipal storm drain? | _____ | <u>X</u> |
| 3. An on-site stormwater retention basin and/or dry well? | <u>X</u> | _____ |

B. IF THERE IS A RETENTION BASIN AT THE SITE:

- | | | |
|--|----------|----------|
| 1. Does stormwater drain within 36 hours after a rainfall event? Upon receipt of testing results | <u>X</u> | _____ |
| 2. Do liquids other than stormwater enter the retention basin or dry well? | _____ | <u>X</u> |

C. ARE THERE SPECIAL DRAINAGE FEATURES THAT DISCHARGE INTO THE DRY WELL SUCH AS:

- | | | |
|---|----------|----------|
| 1. Floor drains? | _____ | <u>X</u> |
| 2. Truck docks or loading areas? | <u>X</u> | _____ |
| 3. Vehicle service or maintenance areas? | _____ | _____ |
| 4. Vehicle or equipment washing facilities? | _____ | <u>X</u> |
| 5. Fueling areas? | _____ | _____ |
| 6. Other areas where hazardous substances are used, stored, loaded or treated? Please describe. | _____ | _____ |

Site

Please include detailed descriptions of the items listed below that pertain to the facility. If possible, attach a site plan or sketch map showing the retention area, dry well(s), and the storm water drainage directions.

A. MEASURES USED TO KEEP HAZARDOUS SUBSTANCES OUT OF THE DRAINAGE AREA:

	Yes	No
1. Isolation?	<u>X</u>	___
2. Berming?	<u>X</u>	___
3. Covering?	<u>X</u>	___
4. Other? Please describe <u>All hazardous products are in DOT shipping containers, area is inspected each operating day for signs of leaks. All hazardous waste is stored inside a tank, or covered building or temporarily in a covered truck while preparing to be loaded or offloaded. Tanker offloading areas are bermed and containers are placed in rows with aisle space to allow inspection.</u>		

B. ARE THERE INDICATIONS OF HAZARDOUS SUBSTANCES IN THE DRAINAGE AREA, SUCH AS:

	Yes	No
1. Substance residue on pavement or soil?	___	___
2. Staining or etching of pavement or soil?	___	___
3. Heavy oil or grease build-up on pavement or soil?	___	___

C. WATER FROM HAZARDOUS SUBSTANCE AREA DRAINS TO:

	Yes	No
1. Treatment facility?(List Type)	___	<u>X</u>
2. Interceptor?(List Type) <u>All rainwater enters a basin in SW corner of site for testing</u>	<u>X</u>	___
3. Lined surface Impoundment? <u>prior to discharge</u>	<u>X</u>	___
4. Underground holding tank?	___	<u>X</u>
5. Sanitary Sewer?	___	<u>X</u>
6. Other? Please describe <u>There are 3 dry sumps located in the tank farm, loading dock and tanker loading/offloading areas that are deadend dry sumps. The rain water from these areas is only pumped over if found visually clean. A 4th sump is in the SE corner of the site, which flows to the retention pond in the SW corner of the site.</u>		

PLEASE DUPLICATE THIS SECTION AS NEEDED AND ANSWER THE QUESTIONS FOR EACH DRY WELL LOCATED IN A RETENTION BASIN AND/OR PAVED AREA.

DRY WELLS

A. PAVEMENT DRY WELLS: N/A

1. Depth of chamber _____ ft?
2. Depth to top of debris _____ ft?
3. Indication of oil or substance residue on the grate inlet? Yes No

4. Is there a drainage screen or shielding device? _____
5. If so, is screen and/or shield clogged? Please describe. _____
6. Is there a petrochemical sponge or other absorbent in the dry well chamber? Please describe. _____
7. If so, what is the condition of the absorbent? Please describe. _____

B. RETENTION BASIN DRY WELLS: Southern Well

1. Depth of chamber _____ ft?
2. Depth to top of debris _____ ft?
3. If the retention basin bottom is natural dirt or decomposed rock, is the grated inlet raised above the bottom of the basin at least three inches? Yes No

4. Indication of oil or substance residue on the grate inlet? _____
5. Is there a drainage screen or shielding device? _____
6. If so, is screen and/or shield clogged? Please describe. _____
7. Is there a petrochemical sponge or other absorbent in the dry well chamber? Please describe. _____
Drywell uses an Envibro petroleum absorbing filter system
8. If so, what is the condition of the absorbent? Please describe. _____

OTHER ON-SITE CONTAMINATION AS EVIDENCED BY:

Please describe _____

8/27/96

PLEASE DUPLICATE THIS SECTION AS NEEDED AND ANSWER THE QUESTIONS FOR EACH DRY WELL LOCATED IN A RETENTION BASIN AND/OR PAVED AREA.

DRY WELLS

A. PAVEMENT DRY WELLS: N/A

1. Depth of chamber _____ ft?
2. Depth to top of debris _____ ft?
3. Indication of oil or substance residue on the grate inlet? Yes No
4. Is there a drainage screen or shielding device? _____
5. If so, is screen and/or shield clogged? Please describe. _____
6. _____
Is there a petrochemical sponge or other absorbent in the dry well chamber? Please describe.
7. _____
If so, what is the condition of the absorbent? Please describe.

B. RETENTION BASIN DRY WELLS: Northern Well

1. Depth of chamber _____ ft?
2. Depth to top of debris _____ ft?
3. If the retention basin bottom is natural dirt or decomposed rock, is the grated inlet raised above the bottom of the basin at least three inches? Yes No
4. Indication of oil or substance residue on the grate inlet? _____
5. Is there a drainage screen or shielding device? _____
6. If so, is screen and/or shield clogged? Please describe. _____
7. _____
Is there a petrochemical sponge or other absorbent in the dry well chamber? Please describe.
8. _____
Drywell uses an Envibro petroleum absorbing filter system
If so, what is the condition of the absorbent? Please describe.

OTHER ON-SITE CONTAMINATION AS EVIDENCED BY:

Please describe _____

8/27/96

Exhibit F-17

**City of Chandler
Use Permit #Z90-067**

Exhibit F-17

City of Chandler Use Permit

NOTICE OF COUNCIL ACTION

CITY OF CHANDLER, ARIZONA

APPLICANT: SAFETY-KLEEN
John Caliendo, Manager
Safety-Kleen Corp.
4401 E. University
Phoenix, AZ 85034

CASE: 290-067

MEETING DATE: 5/14/92

APPROVAL	<input checked="" type="checkbox"/>	REZONING	<input type="checkbox"/>
DISAPPROVAL	<input type="checkbox"/>	VARIANCE	<input type="checkbox"/>
CONTINUANCE	<input type="checkbox"/>	USE PERMIT	<input checked="" type="checkbox"/> bulk storage and handling of cleaning solvents
TABLE	<input type="checkbox"/>	SUBDIVISION	<input type="checkbox"/>

COUNCIL ACTION IS SUBJECT TO THE FOLLOWING CONDITIONS:

1. Development shall be in substantial conformance with Exhibit A, Site Plan; Exhibit B, Floor Plans; Exhibit C, Elevations; and Exhibit D, Landscape Plan.
2. Use Permit approval shall not constitute Final Site Plan approval by City Staff.
3. Approval by the City Engineer and the Director of Development & Community Services of all details required by Code or condition.
4. Final approval of the Hazardous Waste Storage Facility Permit by the Arizona Department of Environmental Quality and required Air Emissions Permit approval from the Maricopa County Department of Health, Bureau of Air Pollution Control for current and future proposed expanded facilities.
5. Submittal, within 60 days of Use Permit approval, of water quality parameters and recordkeeping procedures acceptable to the City of Chandler Public Works Department. The water quality parameters shall establish definitive criteria which will be followed in the determination of when storm water needs to be hauled off the site versus its being released into the designed filtration/absorption system. Recordkeeping procedures shall track the disposal of all storm water.
6. Failure to comply with these conditions, upon standard notice issued by the City of Chandler will constitute revocation of the Use Permit without further action.
7. That the portion of the plan for the future tanks be brought to City Council before installation.

Item # 18

MEMO NO. WD3-086, REV 1

DATE: March 9, 1993

TO: AL PFAHL, ASSISTANT PUBLIC WORKS DIRECTOR/
ENGINEERING

FROM: STEVEN A. BUSHEY, WATER OPERATIONS SUPERINTENDENT *SAB*

SUBJECT: SAFETY-KLEEN, STORM WATER QUALITY PARAMETERS

Willam "Eddie" Young, Project Manager, Safety-Kleen, has agreed to the following procedures and parameters when storm water discharges are required.

- 1) Storm water collected in the retention pond will be sampled and analyzed for volatile organic compounds utilizing EPA method 601 and 602, modified to include mineral spirits. The reporting limits shall be in accordance with Maximum Contaminate levels (MCLs) established by the most current Federal Primary Drinking Water standards and the Aquifer Protection Program standards.
- 2) Storm water to be tested for metals, primarily lead and cadmium. Methods used to be those approved by the USEPA for drinking water quality analysis or the most recent edition of Standard Methods for the Examination of Water and Wastewater. These tests to be performed on one rain event per year unless there is substantial cause to believe that there has been an increase in the metals content. Substantial cause includes, but is not limited to, a major spill or fire on the property.
- 3) Safety-Kleen will not be allowed to release storm water into the dry well when the storm water analyzed is above the most current USEPA drinking water primary or secondary maximum contaminant levels or action levels for those chemicals analyzed.
- 4) The sampling of storm water will be performed prior to treatment by the Envibro System.

I believe with the above parameters and the procedures proposed in the draft Commercial Operations Hazardous Materials Monitoring administrative regulation that the City's groundwater supply is amply protected.



February 15, 1993

City of Chandler Public Works
249 E. Chicago St.
Chandler, Arizona 85225

AT: Carroll Reynolds
Assistant Director of Public Works

RE: Proposed Discharge Standards to Dry Well
Safety-Kleen Service Center
6625 Frye Road
AZD981969504

Dear Mr. Reynolds:

The following has been prepared in response to your letter dated 12-23-92 and our subsequent conversation on 2-3-93 regarding the discharge parameters for the dry well to be installed at the new Safety-Kleen Service Center in Chandler. I would like to first address your comments regarding the need for a NPDES permit and Aquifer Protection Permit. Safety-Kleen has submitted a group permit NPDES application to Washington D.C. for approval. It is my understanding Arizona will participate in the group approval process. A determination will be made if either or both permits are required. I contacted the Aquifer Protection section of DEQ and it is my understanding from Mr. Lon Stewart of DEQ, that our Part B permit will require modification to show the dry well and discharge practices. Reporting may be necessary to the state.

In your letter dated 12-23-92, Safety-Kleen understands that the city had accepted the parameters dated July 13, 1992 by Bob Wachsmuth of Safety-Kleen; however a level of total organic carbon (TOC) would need to be established by the city and Safety-Kleen. The parameter given in that letter parallel the pre-treatment standards by the City of Phoenix. Since the primary issue related to the dry well regards potential increase in hydrocarbons to the aquifer, Safety-Kleen proposes to perform EPA Testing Method 8240, 8015 (modified for Mineral Spirits) and metals. The EPA 8240 analyzes for volatile organic inclusive of both aromatic and chlorinated hydrocarbon compounds. I have attached an example of the 8240 test methodology analyte list. The modified 8015 methodology would test for the presence of mineral spirits which is the primary solvent handled in bulk at the site. The primary metals would be tested for lead (less than .5 mg/l) and cadmium (less than .1 mg/l).

Allan A. Manteuffel Technical Center

P.O. Box 92050
Elk Grove Village, IL
60009-2050

12555 W. Old Higgins Rd.
Elk Grove Village, IL 60007
Telephone: 312/694-2700
Fax: 312/694-2733

A background level should be determined to establish the discharge level. Safety-Kleen proposes that this baseline be determined from current analytical testing data from the closest municipal water well. This information should be available at the city laboratory. This information can be augmented by analyzing samples from the well using the fore mentioned methodology if necessary. For compounds listed as non-detectible in laboratory testing, the Federal Drinking Water Standards shall prevail in determining discharge limits. By the examination of existing data and utilization of existing drinking water standards, an adequate discharge standard for the dry well at the subject facility can be established.

Safety-Kleen proposes the following as means, frequency and record keeping practices for the discharge to the dry well system.

1. A rain gauge will be installed at the facility. The quantity of stormwater will be established mathematically using the gauge reading multiplied by the surfaced parking and transportation area. The volume of water and the date of the rainfall occurrence will be recorded.

2. Water samples will be taken from the retention pond using a 30" long coliwasa or glass tube by a person trained in collecting laboratory samples, placed in an approved container obtained from the laboratory and transported on ice to the testing laboratory. Samples will be taken within 24 hours of the occurrence during weekdays and within 48 hours on weekends. Safety-Kleen would have the prescribed tests performed on a 48 hour basis. The results will be forwarded to the City of Chandler Public Works Department and the State of Arizona DEQ requesting discharge instructions. A basic form shall be developed showing location of the facility, the date of rainfall, the time, the estimated quantity, the date of sampling, any rainfall subsequent to testing, the name and signature of person preparing the report. Attached is a sample of the proposed form. This form will be sent to the governing agency with the analytical results from the collected rainwater.

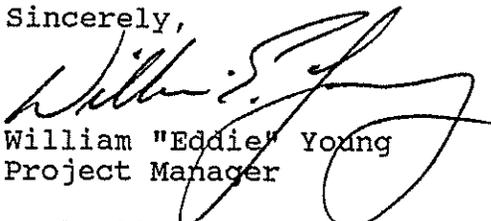
Should the results of the testing meet the discharge criteria, Safety-Kleen may begin processing the water through the Envibro System into the dry well. If the water exceeds any of the predetermined action levels, Safety-Kleen will seek approval to discharge to the sanitary sewer or transported to a waste water treatment facility and properly classified and designated.

3. Record retention of the rainfall discharge forms, filed reports and manner of disposition shall be maintained on site for a period of two years and in corporate files for the life of the facility.

Safety-Kleen requests that the described plan is acceptable to both the city and state. If both the city and state accept the concept approach for aquifer protection and means of establishing a background report are acceptable, I would request that the city release the authorization to begin construction and restrict the issuance of final certificate of occupancy until the background study is complete. After review of this material, Safety-Kleen would appreciate a meeting during the week of 2/15 with both agencies to discuss the viability of this proposal and establish lead agency for the monitoring of rainwater discharge to the dry well. The contact at Arizona DEQ is Lon Stewart at (602) 207-4168.

Please do not hesitate to contact me at (800) 769-5845 if you have any questions. I look forward to working with you on this matter.

Sincerely,



William "Eddie" Young
Project Manager

encl: 8240 waste solvent profile

cc: Arizona Dept. of Environmental Quality
RCRA Permits - Lon Stewart
303 N. Central
Phoenix, Arizona 85012

Al Pfahl - City of Chandler
Steve Bushey - City of Chandler

G.Casbourne
D.Dowling
J.Bard
S.Ricarte
D.Dowling
M.Griffin
J.Caliendo 7-142-01
A.Lunt

624 prints 601 & 602
 methods will be 2008

**Discharge Parameters to Drywall
 CHANDLER, AZ
 Volatile Halocarbons and Aromatics in Water
 EPA Methods 601 and 602^a**

Chemical Name	Detection Level ug/L	Well Discharge Parameter ug/L
Chloromethane	0.5	THM's 100 ppb*
Bromomethane	0.5	THM's 100 ppb*
Chloroform	0.5	THM's 100 ppb*
Bromodichloromethane	0.5	THM's 100 ppb*
Bromoform	0.5	THM's 100 ppb*
Trichlorofluoromethane	0.5	THM's 100 ppb*
Vinyl chloride	1.0	2
Chloroethane	0.2	10
Methylene chloride	0.5	5
1,1-Dichloroethylene	0.5	7
1,2-Dichloroethylene	0.5	7
1,2-Dichloroethane	0.5	5
1,1,1-Trichloroethane	0.5	200
Carbon tetrachloride	0.5	5
1,2-Dichloropropane	0.5	5
cis-1,3-Dichloropropene	0.5	100
Trichloroethane	0.5	5
Dischlorodifluoromethane	0.5	100
1,1,2-Trichloroethane	0.5	5
trans-1,3-Dichloropropane	0.5	100
2-Chloroethylvinyl ether	1.0	100
Tetrachloroethane	0.5	5
1,1,2,2-Tetrachloroethane	0.5	5
Chlorobenzene	0.5	100
1,2-Dichlorobenzene	0.5	100
1,3-Dichlorobenzene	0.5	100
1,4-Dichlorobenzene	0.5	100
Benzene	0.5	5
Toulene	0.5	1000
Ethylbenzene	0.5	700
Xylenes, total	0.5	10,000

^aFederal Register, Vol. 49, October 26, 1984

*Total Trihalomethanes not to exceed 100 ppb

$600 = .05 \text{ mg} = 50 \text{ ug}$

$600 = .016 \text{ mg} = 16 \text{ ug}$

Exhibit F-18

City of Chandler Occupancy Permit



CERTIFICATE OF OCCUPANCY AND FIRE CHECK LIST

CLASS I CITY OF CHANDLER TENANT OCCUPANCY

Permit No. _____ Street Address _____
 92-0037 6625 W. Frye Rd.
 Owner/Developer Safety-Kleen Corp
 Business Name dba: SAFETY KLEEN

Building Type I III IV V
Occupancy A B E H I R

Occupancy Approval _____ Building Inspector: J. Spink Date: 10-26-93

This building or portion thereof complies with the requirements of the 1992 UBC for the group and division of occupancy recorded and the use for which the proposed occupancy is classified.

NOTICE:
THIS CARD IS PUBLIC PROPERTY AND MAY NOT BE CHANGED OR DESTROYED
 Under Ordinance No. 237, penalty for removal or defacing is \$300.00 fine and/or jail for ninety days (Retain Certificate of Occupancy with permanent record. For commercial or industrial Buildings, Certificate of Occupancy will be posted in conspicuous place.)

EXHIBIT G
CONTINGENCY PLAN

- G-1 Contingency Plan**
- G-2 Emergency Contact List**
- G-3 Safety-Kleen Product Safety Data Sheets**
- G-4 Office-Warehouse Emergency Evacuation Plan**
- G-5 Site Emergency Evacuation Plan**

Exhibit G-1

Contingency Plan

CONTINGENCY PLAN

Abstract

PURPOSE: This plan describes the proper action to be taken by employees during an emergency.

RESPONSIBILITIES: The emergency coordinator or alternate is responsible for implementing the plan during an emergency.

EMERGENCY COORDINATOR: The Branch General Manager is the emergency coordinator. The alternate emergency coordinator is also a trained employee designated by the Branch General Manager. See Exhibit G-2 (“Emergency Information Sheet”) for person so designated.

EMERGENCY NOTIFICATIONS:¹

Chandler Police Department	(480) 899-9740 or 911
Chandler Fire Department	(480) 899-9712 or 911
Chandler Regional Hospital	(480) 963-4561
Qualified Emergency Responder (24-Hours) ²	(800) 468-1760
Arizona Department of Environmental Quality	(602) 771-2300 or (800) 234-5677
Arizona Department of Public Safety	(602) 223-2000
Arizona Department of Transportation	(602) 255-7744
National Response Center	(800) 424-8802

¹ See Exhibit G-2 “Emergency Contact List” for a more detailed listing.

² Safety-Kleen Systems maintains a contract with a primary emergency response contractor (currently Clean Harbors-subject to change). The initial notification for emergency response is to the Safety-Kleen Qualified Emergency Responder phone number that is monitored by Clean Harbors Emergency Response Center, which takes the initial call and makes the appropriate internal notifications. Clean Harbors has a Field Service Group within a mile of the Chandler site that can be there quickly in case of an emergency where their assistance is required. Should all of the Clean Harbors teams be busy the operator has access to other vendors in the Phoenix Metropolitan area which will be contacted to provide emergency assistance during a release and/or cleanup, as needed.

CONTINGENCY PLAN

6625 W. Frye Rd. Chandler, AZ 85226

1. Purpose

The contingency plan describes the actions to be taken by each employee in the event of a spill, fire or other emergency. It includes the information necessary to address emergency situations efficiently and in such a manner as to prevent or minimize hazards to human health or the environment due to fire, explosion, or any other release of hazardous materials to the air, soil, surface water, or groundwater.

The Contingency Plan is to be carried out immediately whenever there is a release of hazardous waste or material that:

- a. Could threaten human health or the environment [40 CFR 264.51(b)],
- b. Is a spill which constitutes a release of a reportable quantity of a hazardous substance under Section 103 of the Comprehensive Emergency Response, Clean-up, and Liability Act (CERCLA) [40 CFR 302] or Section 311 of the Clean Water Act (CWA) [40 CFR 117], or as defined in Appendix A of 49 CFR section 172.101 ("Reportable Quantities") by DOT.

In the event of a fire or explosion the Contingency Plan is implemented upon notification of the Fire Department.

2. Emergency Coordinator Responsibilities

The emergency coordinator, or alternate coordinator, is responsible for implementing the Contingency Plan during an emergency; however, all employees must be familiar with the procedures in this plan and are responsible for proper implementation of the plan should the emergency coordinator or his alternate be unavailable. The Branch General Manager is typically the emergency coordinator; the coordinator designates the alternate coordinator.

The emergency coordinator, and alternate, must be familiar with all aspects of this Contingency Plan, the operations and activities at the facility, the location of all records within the facility and the facility layout. In addition, these coordinators have the authority to commit the resources necessary to carry out the Contingency Plan. Their home addresses and telephone numbers, as well as the office telephone number, are listed in Exhibit G-2. At least one employee will be at the facility or on call to respond to an emergency situation at all times.

2.1 Responsibilities During An Emergency

Whenever there is an imminent or actual emergency situation, the emergency coordinator (or alternate emergency coordinator when the emergency coordinator is not available) will immediately:

- a. Activate the internal facility communication system to notify all facility personnel;
- b. Notify Safety-Kleen's Qualified Emergency Responder using the 24-hour telephone number 800/468-1760, and
- c. Notify appropriate state or local agencies with designated response roles, if necessary.

Whenever there is a release, fire, or explosion, the emergency coordinator (or alternate) must immediately try to identify the character, exact source, amount, and extent of any contamination. Because of the limited number of materials being handled at the facility, he or she may do this by observation or by review of facility records. If necessary, outside laboratories may be contacted to perform chemical analysis.

Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous run-off).

The emergency coordinator and alternates have been adequately trained to respond to an emergency. They have references such as various staff members at the corporate office and the Safety Data Sheets to help them make decisions during an emergency. Safety Data Sheets corresponding to the Safety-Kleen Systems' solvent supplied for each of the permitted core streams are found in Exhibit G-3. Please note these SDS are subject to change and update as required. The current documents will be available via Safety-Kleen's website (www.safety-kleen.com) or via the company's internal website.

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

Staff responsibilities include:

- a. Shut down any operating equipment and in their area
- b. Close any containers they are working on if safe to do so.
- c. Pass on any communications.
- d. Evacuate the affected area, assist any injured personnel to evacuate and rendezvous at the meeting point.
- e. Provide First Aid if needed.

- f. Administrative staff or other office staff will collect the visitor log and take it to the meeting point.
- g. Control non-authorized personnel from entering the evacuation zone.
- h. Standby to provide information if needed to the emergency responders.
- i. Provide other support as requested by the emergency coordinator including spill runoff control.

Post Emergency Responsibilities

Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other materials that result from a release, fire, or explosion at the facility.

2.2 Remedial Action Responsibilities

If the environment has been contaminated or there is a potential for contamination as a result of a fire, explosion, or spill, the emergency coordinator must contact the Safety-Kleen's Environmental Compliance Department. Either the emergency coordinator or the Environmental Compliance Department shall report the incident. Appropriate remedial actions will be implemented to address contamination resulting from an emergency situation. The treatment, storage and/or disposal of any recovered waste, contaminated soil or surface water that results from an emergency situation must be arranged by Safety-Kleen and carried out as expeditiously as possible.

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

- a. No substance that may be incompatible with the released material is brought on site 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. Exhibit F-4 Example Equipment List provides a list of equipment to be on hand and Exhibit F-3 Emergency Equipment Plan indicates the locations the basic emergency equipment is located.

2.3 Reporting Responsibilities

If the emergency coordinator determines that the facility has had a fire, explosion, and / or release that could threaten human health or the environment, 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 emergency coordinator will be available to help appropriate officials decide whether local areas should be evacuated.

- b. The coordinator must immediately notify the Safety-Kleen Environment, Compliance Department. The Safety-Kleen Environment, Compliance Department, or the coordinator will report the incident to the ADEQ as soon as is reasonable. The report will include:
 - (i) Name and telephone number of notifier;
 - (ii) Name and address of facility;
 - (iii) Time and type of incident (e.g., release, fire);
 - (iv) Name and quantity of material(s) involved, to the extent known;
 - (v) The extent of injuries, if any; and
 - (vi) The possible hazards to human health, or the environment outside the facility.

- c. The emergency coordinator or the Safety-Kleen Environment, Compliance Department shall also report the above information to the National Response Center if the RQ has been exceeded.

- d. The emergency coordinator, or alternate, must document the time, date, and details of any incident that requires the implementation of the contingency plan. Within 15 days of the incident, Safety-Kleen will submit a written report on the incident to the ADEQ. The report must include:
 - (i) Name, address, and telephone number of the owner or operator;
 - (ii) Name, address, and telephone number of the facility;
 - (iii) Date, time, and type of incident (e.g., Fire, explosion);
 - (iv) Name and quantity of material(s) involved;
 - (v) The extent of injuries, if any;
 - (vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
 - (vii) Estimated quantity and disposition of recovered material that results from the incident.

The Branch Manager must note on the Facility Operations Record that an incident requiring implementation of the Contingency Plan occurred including the time, date and details of the incident.

2.4 Chain of Command

Based on the emergency response procedures described above, the chain of command during an emergency is as follows:

- e. The person who discovers/causes the spill reports to the Emergency Coordinator or alternate.

- a. The Emergency Coordinator contacts the Safety-Kleen Environmental Compliance Department.

- b. Safety-Kleen's Environmental Compliance Department or the coordinator reports to ADEQ.

2.5 Government Agencies and Local Authorities to be Notified

During an emergency, the following government agencies and local authorities may be contacted:

Agency or Authority*	Rationale
Police Department	Notify if there is imminent danger to human health
Fire Department	Notify if there is a fire, uncontrolled spill, or other imminent danger
Hospital	Notify if there are any injuries
ADEQ	Report releases, explosions, and fires
Qualified Emergency Responder	Call to assist with remedial action after a release
National Response Center	Report releases, explosions, or fires that could threaten outside the facility

*Phone numbers may be found in Exhibit G-2 – Emergency Information for Service Center

Arrangements have been made to familiarize the police department, fire department and local emergency response teams with the layout of the facility, the properties of hazardous materials handled and associated hazards, locations where facility personnel normally work, entrances to and roads inside the facility, and possible evacuation routes. Arrangements have been made to familiarize the local hospital with the types of injuries or illnesses that could result from fires, explosions, or releases at the facility. Memorandums of Agreement with Emergency Agencies are located in Exhibit F-5.

3 Emergency Response Procedures

The initial response to any fire, explosion, or hazardous material release will be to protect human health and safety, and then the environment. Identification, containment, treatment, and disposal assessment will be the secondary response.

Response actions to be taken in specific emergency situations are described in the sections that follow. Employees must assess the possible hazards to human health or the environment resulting from a release or fire by visually inspecting the area, reviewing Safety Data Sheets for the material released, and estimating the extent of the release and identifying the material to which it was released (e.g., soil, waste and/or air). Hazards must be assessed to make relevant decisions as to the appropriate personal protective equipment necessary to respond to an emergency.

The following general procedures will be used for a rapid and safe response and control of all situations (minor emergencies shall address the following as appropriate).

Response actions to be taken in specific emergency situations are described in section 3.1 “Minor Spills”, section 3.2 “Major Spills”, and section 3.3 “Fire And / Or Explosions” which follow and the “Safety Data Sheets” obtained online at Safety-Kleen.com.

- a. Discontinue Work Activity and Report Incident - if an employee discovers a spill or release, the employee will immediately report it (by phone, voice, etc.) to the emergency coordinator (EC) all material handling activities in the area shall be halted. The EC will contact the appropriate emergency response teams and agencies as described above, 2.1.1 “Immediate Notifications.”
- b. Medical Rescue and Treatment – if anyone is injured they will be removed, and emergency medical treatment will be administered by qualified personnel.
- c. Building / Area Evacuation and Isolation - the area will be cleared of all personnel not actively involved in the release, or fire, pursuant to section 4 “Evacuation Plan”.
- d. Incident Identification and Hazard Assessment - the character, source, and extent of the release, fire, or explosion will be identified and the hazards to human health and the environment will be assessed as described in section 2.1.2 “Identification” and section 2.1.3 “Assessment.”
- e. Incident Mitigation, Confinement, and Containment - the general guidelines are:
 - Wear personal protective equipment according to the type of hazard involved as required in Exhibit F-6, PPE Matrix.
 - Take all measure to prevent the occurrence, recurrence, or spread of fires, explosions, or releases as described in section 2.1.3..
- f. Incident Mitigation “All Clear” Signal - the EC will determine when the emergency has passed and give the “all clear” signal when personnel are no longer endangered. Post emergency clean up shall be implemented as described in section 2.2 “Remedial Action Responsibilities” and section 3.4 “Post Mitigation Clean Up Procedures.”

3.1 Minor Spills

A minor spill is one which (whether on or off pavement, within or outside of secondary containment) can be cleaned up without the aid of outside assistance. Following the instructions of the appropriate “Safety Data Sheet”, and any instructions from Safety-Kleen Environmental Compliance Department or Health and Safety Department the worker will enter the area wearing appropriate personal protective equipment and containerize the liquid, and return it to storage. Should the spill occur outside containment, different actions must be taken depending on whether the spill occurs on a paved or unpaved area:

- a. Paved Area - if the material spills on a paved area, it must be collected with absorbent material. The absorbents will be collected, containerized, and transported to a permitted hazardous waste management facility for treatment/disposal.
- b. Unpaved Area - if the solvent spills on an unpaved area, the free solvent must be collected with absorbent material. The absorbent material and any contaminated soil will be collected in a container and transported to a permitted hazardous waste management facility for treatment/disposal.

The contaminated area will be excavated until no visible sign of the spill remains. A sample of the clean appearing soil will be taken and tested by an independent lab for the presence of the key constituents or regulated compounds in the spilled material. If the material meets the requirements for implementing this Contingency Plan, the Post Mitigation procedures as described in section 3.4 of this plan will be taken.

If a spill occurs while moving or delivering containers outside of the warehouse, the response actions described in 3.1.a and 3.1.b, above, must be followed. However, should the spill occur in containment, the following actions will take place:

- c. Return and Fill Containment - if a spill should occur while pouring spent parts washer solvent into a drum washer unit or filling containers with solvent product at the return and fill station, and it is contained in the secondary containment, the material may be pumped back into the Drum Washer and residues cleaned up with absorbent that can go in the Branch Debris drum.

If solvent is spilled in a non-explosion rated area or is flowing, ensure that all sources of ignition are removed (switches are not operated, motors are not operated, use proper bonding and grounding, etc.)

- d. Warehouse Containment - spills inside the warehouse will be prevented from contaminating the environment by the concrete floor and the secondary containment. In the event of a spill indoors, the doors should be opened to improve the ventilation in the confined area. There are no manually opening windows in the warehouse, only permanently opened louvers high up on the walls, and non-opening skylight windows.

Spilled or leaked waste contained in the sump in the container storage area will be removed using an intrinsically safe pump or cleaned up with absorbents. A compatible detergent / degreaser can be used as needed to remove residues. The sump is a blind sump with no associated piping. The removal of any liquid in the sump must take place immediately.

- e. Tank Containment - if a spill to the containment dike occurs, the spilled material must be completely removed in a timely manner. Should water be present when

a spill occurs, all of the liquid must be treated as hazardous waste and it must be pumped with an intrinsically safe pump to the spent parts washer solvent tank, containers, a portable tank, or tank truck.

Cleanups are completed only when the workers have cleaned themselves and the emergency equipment with soap and water, or other suitable solvent as needed. All minor spills must be reported to the Safety-Kleen Environmental Compliance Department.

3.2 Major Spills

Any spill which cannot be completely remediated using the methods described in section 3.1 is a major spill. A major spill is usually the result of a vehicular accident, tank overfilling, equipment failure or a fire. Spilled material that escapes collection can contaminate soil, surface water, ground water, sanitary sewer systems and storm sewer systems. Emergency response to this type of spill should be as follows:

- a. Assist any injured people.
- b. Stop the flow of material, if possible, by turning off pumps, closing valves, righting tipped containers, or using absorbents, diking or spill booms.
- c. Retain, contain, or slow the flow of the material if it can not be stopped. (i.e., Use Earth / sand / sandbags or other inert material.)
- d. If material escapes containment efforts immediately:
 - Call the local Fire Department,
 - Report to the emergency coordinator (or alternate), and
 - Report to Safety-Kleen Environment, Health, and Safety Department.
 - Contact the Safety-Kleen Qualified Emergency Responder for assistance in the cleanup if needed.
- e. Immediately recover, to the extent possible, the spilled material to reduce property and environmental damage. Spilled or leaked waste will be removed / recovered immediately by using either absorbent material, or pump, containerized, and handled as hazardous waste:
 - Use standard industrial absorbent or absorbent booms or pads (depending on the size of the spill and/or the wet/dry vacuum or appropriate portable pump as needed).
 - If the spill is of such magnitude that absorbent will not be adequate, then an intrinsically safe pump or vacuum truck will be used to remove the liquids.
 - Material which cannot be contained using the storage facilities on site may be contained in tanker trucks or other approved containers as necessary.

Spills must be controlled and remediated to the fullest extent possible. However, personnel must not take health or safety risks; if there is any doubt as to whether a particular action is unsafe, it must be avoided. The flow of a released material may be stopped by turning off pumps, closing valves, righting tipped containers, or taking other appropriate actions. If the flow cannot be stopped, a berm should be formed by shoveling dirt or sorbent material around the free liquid to hold it in one place or at least direct it to the area where it will do the least amount of damage (e.g. secondary containment area in the warehouse or the tanker truck loading/unloading area).

The emergency coordinator or alternate shall report any incident as soon as possible to the Safety-Kleen Environment, Health, and Safety Department and, if needed, Safety-Kleen Qualified Emergency Responder using the 24-hour telephone number: 800-468-1760. The Safety-Kleen Environment, Health, and Safety Department, emergency coordinator or alternate may also be required to report the incident to:

- National Response Center if the threat extends outside the facility,
- ADEQ, and
- Arizona Department of Public Safety (DPS) Duty Officer.

The person reporting the spill will be prepared to provide the following information:

- Reporting person's name,
- Reporting person's position,
- Reporting person's company name,
- Company address,
- Company telephone number,
- A description of the material spilled,
- The amount of material spilled,
- The status of the response effort,
- Anticipated effects on and off site, and any assistance needed.

Contaminated material resulting from remedial actions for major spills, will usually be disposed of (see section 3.4 "Post Mitigation Cleanup Plan") at a properly permitted treatment or disposal facility.

Every spill must be recorded in the electronic Incident Management System. Spill reports and other appropriate information are reviewed with branch personnel to prevent similar spills from occurring in the future.

The Safety-Kleen Environmental, Health and Safety Department will notify ADEQ within 24 hours of detection of any release of wastes to the environment.

3.3 Fire Control Procedures

Note: If a fire or explosion causes a release of hazardous substances, section 3.1, “Minor Spills” and section 3.2 “Major Spills” will also be followed, as applicable.

It is Safety-Kleen’s policy that employees respond only to incipient fires; that is, those that can be immediately extinguished with a fire extinguisher. Any fire that cannot be immediately controlled, or which has the potential to become uncontrollable warrants implementation of the evacuation plan and the proper authorities will be contacted.

If a small fire occurs, personnel must act quickly with the fire extinguisher to put out the fire before it spreads, where possible, without undue threat to personnel safety. If it cannot be extinguished immediately, evacuate the facility and call the fire department. Potential guidelines for response authorities to consider during a fire are discussed below.

Spent Parts Washer Solvent (PW S) (Petroleum Naphtha) - PWS may be stored on the property in steel containers, typically 15 to 55 gallon, or in the 12,000 gallon tank in the tank farm (a second tank holds product petroleum naphtha). Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds. Fire extinguishing media include carbon dioxide, regular foam, dry chemical, water spray, or water fog. Vapors of petroleum naphtha exposed to a spark or open flame can flash at temperatures over 148° F. Bulked materials exhibit lower flashpoints due to contaminants. A petroleum naphtha fire can best be extinguished with foam. If foam is not available, sweeping the fire with water fog can cool it, directing the water spray to push the flames into a confined area, if possible. The flame should not be extinguished until the flow of the solvent has been stopped. Then attention should be directed immediately to extinguishing the flame. Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies. Firefighting control for PWS would cover Tank Bottom Sediments and Dumpster Sludge.

Immersion Cleaner – Immersion Cleaner is stored on site in containers, typically 15 gallon steel drums. Decomposition and combustion materials may be toxic. Burning may produce nitrogen oxides, acid halides, carbon monoxide, and unidentified organic compounds. Fire extinguishing media include carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog. If able to do so, fire crews should cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Paint wastes and Gun Cleaner Waste – These waste streams are stored in steel containers typically from 5 gallon to 55 gallon in size. Decomposition and combustion

materials may be toxic. Burning may produce phosgene, chlorides, chloroacetylenes, formaldehyde, peracetic acid, carbon monoxide and unidentified organic compounds. Fire Extinguishing Media includes carbon dioxide, alcohol-resistant foam, dry chemical, or water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Dry Cleaning Perchloroethylene Wastes - are generally not flammable, but can produce toxic substances, such as hydrogen chloride and carbon monoxide when exposed to very high temperatures (about 1200^o F). Fire extinguishing media includes carbon dioxide, regular foam, dry chemical, water fog or water spray. Positive-pressure self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies. While the potential for Perchloroethylene Waste reaching a decomposition temperature is minimal, Safety-Kleen personnel and local authorities must be aware of the proper response procedures, should a fire affect the container storage area, Examples of potential response procedures are described below:

- a) Isolate the hazard area and deny entry to unauthorized personnel.
- b) Stay upwind; keep out of low areas.
- c) Ventilate closed spaces before entering them.
- d) Wear personal protective clothing
- e) Evacuate a 1,000-foot radius area endangered by the gas.

A fire in the container storage area can best be extinguished by foam, water fog, or water spray (mist). It should be noted that the CSA is equipped with fire doors and automated fire extinguishing system designed activate should a fire occur within the room.

If a fire in or near the paint waste shelter occurs, a dry chemical, carbon dioxide or foam will best extinguish the fire. It is suggested that the Fire Department responders the shelter and containers with water until well after the fire has been extinguished.

Dry Cleaning Naphtha Wastes - are closely related to petroleum naphtha parts washer solvent, thus emergency procedures will be the same.

Used Antifreeze - The SDS for this material as a product states that the product is non-combustible and indicated no incompatibilities with other wastes at Safety-Kleen. However, if involved with a fire, toxic gases may be produced. PPE is required when handling this material. Antifreeze may be stored in the above ground storage tank.

A fire in the container storage area or Return and Fill can best be extinguished by foam, water fog, or water spray (mist). It should be noted that the warehouse is equipped with fire doors and automated fire extinguishing system designed activate should a fire occur within the room.

A fire in the Bulk Storage Tank Farm or the Tanker Loading Offloading area next to it can best be extinguished with carbon dioxide, regular foam, dry chemical, water spray, or water fog. Permitted Waste Streams –Bulked PWS (area also has a tank antifreeze and, adjacent to it, product PWS).

A small fire can be assessed by Safety-Kleen personnel and, if deemed safe to do so, may be extinguished using a fire extinguisher. All pumps and valves should be shut off, if possible. Vehicles can be pulled clear of the area if safe to do so.

If the situation warrants, the fire department will be called in, Safety-Kleen personnel will follow the evacuation plan and await the fire department's arrival. Safety-Kleen personnel will provide details on inventory and information assistance as needed.

If a fire in or near the tank farm occurs, regular foam, water fog and water spray will best extinguish the fire. It is suggested that the fire department responders cool any tanks, trucks, pipelines and containers with water to insure the fire does not spread.

Other fire response procedures are described below:

- a) Isolate the hazard area and deny entry to unauthorized personnel.
- b) Stay upwind; keep out of low areas.
- c) Ventilate closed spaces before entering them.
- d) Wear personal protective clothing
- e) Evacuate a 1,000-foot radius area endangered by the gas.

Trucks are loaded and unloaded in the concrete paved lot, typically away from any of the buildings. During this process palletized containers are either being loaded on to a truck, typically with a forklift, or containers are being offloaded from the truck and placed on pallets for storage or bulking. A fire could occur from an overheated engine, a spark or a chemical reaction. A fire during a container loading/offloading process can best be extinguished by ABC Dry Chemical, foam, water fog, or water spray.

Permitted Waste Streams – All containerized permitted waste streams could potentially be involved such as PWS, Paint Waste, DC Perchloroethylene Waste, DC Naphtha Waste and Immersion Cleaner. In addition, a variety of nonhazardous wastes and 10-Day transfer waste could be involved.

A small fire can be assessed by Safety-Kleen personnel and if deemed safe to do so, may be extinguished using a fire extinguisher. If possible, other containers or vehicles not involved with the fire can be moved away from the problem containers.

If the situation warrants, the fire department will be called in, Safety-Kleen personnel will follow the evacuation plan and await the fire department's arrival. Safety-Kleen personnel will provide details on inventory and information assistance as needed.

Other fire response procedures are described below:

- a) Isolate the hazard area and deny entry to unauthorized personnel.
- b) Stay upwind; keep out of low areas.
- c) Ventilate closed spaces before entering them.
- d) Wear personal protective clothing
- e) Evacuate a 1,000-foot radius area endangered by the gas.

Fire control water will accumulate in containment area of the particular storage area. These waters will be collected from the trenches and containment areas typically using pumps and tankers. Samples of the water will be taken and may be tested to determine hazards if insufficient information is available from the materials involved.

3.4 Post Mitigation Cleanup Plan

After the fire, explosion, release, or spill has been effectively mitigated, the effected areas shall be marked off (using rope, ribbon, barrier tape, or other means), signs shall be placed in obvious locations which should read "This Storage Area Is Closed", and the area shall be cleaned up (containerized, decontaminated, sampled, disposed) and inspected as required:

- a. **Containerization**
Immediately after an emergency, the emergency coordinator will make arrangements for the proper handling, treatment, and disposal of all recovered waste, contaminated soil, or other contaminated materials. Clean up operations will be conducted by placing all containment/ clean up materials, recovered spilled liquid wastes, and contaminated in DOT specification containers. Immediately, each container will be sealed, labeled, and placed in a safe location (i.e., warehouse) for removal for disposal.
- b. **Area and Equipment Decontamination, Sampling, and Analytical Testing (DSAT)**
Prior to decontamination, sampling, and testing, or after if the Director approves of such, the Permittee will provide the Director with a plan that gives:
 - Those areas of the facility to be decontaminated / sampled;
 - Equipment to be used to decontaminate / sample specific areas;
 - Organization (e.g. contractor(s)) to perform decontamination / sampling; and
 - Specific equipment / procedures to be used.

The Emergency coordinator will confirm, by submitting a DSAT Final Report to the director, that the clean up has been accomplished by the procedures in the submitted DSAT Plan

- c. **Post Emergency Inspection of Area and Equipment**
After an emergency event, the exact location and evaluation / inspection results will be recorded in the operating records. Containers, floor coatings, walls, stripping and other items potentially affected by a fire or explosion will be inspected. All emergency equipment listed in Exhibit F-4 ("Emergency Equipment List") will be inspected to determine if adequate quantities are clean, uncontaminated, in working order, and available. Clean ups are complete only when workers have cleaned themselves and the emergency equipment with soap and water. After clean up, the Director will be notified, and after approval of the clean up / inspection report, operations may resume (see section 2.3 "Reporting Requirements").

4 Evacuation Plan

Clearly marked exits exist in the warehouse and office area. Employees are trained to be aware of all potential escape routes. The site evacuation plan is shown in Exhibit G-4. Notice of evacuation will be made via the intercom system or by word of mouth. An evacuation is necessary when a release, fire, and/or explosion has occurred or has the potential to occur, or has the potential to generate irritating vapors, toxic vapors, or deplete oxygen. In addition, a release, fire, or explosion which has the potential to injure personnel through physical contact or by damaging structures will necessitate evacuation.

All guests and visitors are required to sign in at the main office entry way. If an evacuation of the site is required, the guest book will be used to determine if there are any unaccounted for guests or visitors. The administrative staff (or other office personnel) will typically collect the book on the way out the door. The Emergency Coordinator (or acting alternate) will take a head count at the meeting area.

When an uncontrolled fire or release has occurred, all personnel are to be evacuated from the area and assemble at the northwest corner of the intersection of Beck and Frye Road (as designated on Exhibit G-5, "rendezvous point"), to assure that all personnel are accounted for and out of the hazardous area. At the time of evacuation to a safe area, the fire department must be notified immediately.

5 Arrangement with Emergency Response Contractors

The number to access a Qualified Emergency Responder is identified on the Emergency Information sheet (Exhibit G-2). This contractor will provide emergency assistance during a release and/or cleanup.

6 Pollution Incident History

There are no records of a pollution incident having occurred at the facility.

7 Implementation Schedule

Any discrepancies or deficiencies found during the routine inspection must be corrected expeditiously to insure that the problem does not lead to an environmental or human health hazard. The Branch General Manager has the overall responsibility to ensure that repairs determined necessary during a routine inspection are implemented. Where a hazard is imminent or an accident has already occurred, remedial action must be taken immediately. The Branch General Manager will consult with the corporate environmental and engineering staffs to design an implementation schedule for remedial action.

8 POST-EMERGENCY EQUIPMENT MAINTENANCE

Following its use, non-disposable personal protective and response equipment owned by Safety-Kleen will be decontaminated with a soap and water solution and thoroughly rinsed. The emergency coordinator will visually inspect Safety-Kleen's response equipment after decontamination for residual contamination, damage, excessive wear, and proper operation. If equipment shows signs of residual contamination, the emergency coordinator may request that the equipment be decontaminated again. If these procedures fail to decontaminate the particular item, the decision may be made to dispose of the item using the facility's standard handling, storing, and disposing procedures. If an emergency equipment item is damaged and cannot be repaired, the emergency coordinator will instruct the post-emergency maintenance personnel not to decontaminate the item and to dispose of the item using the proper procedures. The emergency coordinator will order replacement equipment for any disposed equipment and make arrangements to repair any inoperable equipment as soon as practicable.

9 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, and any revisions, are provided to local authorities and organizations listed on the Emergency Information sheet (Exhibit G-2) and they may be called upon to provide emergency services. In addition, this plan and all revisions to the plan are made readily available to employees working at the facility.

In addition, this plan and all revisions to the plan are made readily available to employees working at the facility and will be posted on a bulletin board. Safety Data Sheets are maintained on the internet as earlier described and are readily available In

addition, a copy of the Hazardous Waste Storage Permit containing this contingency plan is located in the branch manager's office.

The plan is reviewed and updated, if necessary, whenever:

- The facility license is modified to allow new process wastes to be stored or treated, or applicable regulations are revised.
- The list or location of emergency equipment changes.
- The facility changes in its design, construction, operation maintenance, or other circumstances in a way that:
 - Increases the potential for fires, explosions, or releases of hazardous constituents, or
 - Changes in the response necessary in an emergency.
- The names, addresses, or phone numbers of emergency coordinators change.
- The employee assigned to each emergency task changes.
- The plan fails when implemented in an emergency.

Modifications to the Contingency Plan will be submitted to the Arizona Department of Environmental Quality in accordance with 40 CFR 270.42.

Exhibit G-2

Emergency Contact List

EMERGENCY CONTACT LIST

SAFETY-KLEEN SYSTEMS, INC.
6625 W. Frye Road
Chandler, AZ 85226

PRIMARY EMERGENCY COORDINATOR

Andy Welch, Branch General Manager
3676 E Alfalfa Dr.
Gilbert, AZ 85298

Home: (480)840-3202
Cell: (480) 294-5473
Office: (480) 940-7202

ALTERNATE EMERGENCY COORDINATOR

John Bachman, Customer Service Manager
4302 E. Encinas Avenue
Gilbert, AZ 85204

Home: (480) 773-6505
Cell: (480) 226-3433
Office: (480) 940-7202

EMERGENCY NOTIFICATION PHONE NUMBERS

National Response Center 24-hour Emergency Number

(800) 424-8802

Arizona Department of Environmental Quality (8am – 5pm)
ADEQ 24-hr Emergency Number

(602) 771-2300
(800) 234-5677

EMERGENCY TEAM TO BE NOTIFIED

Chandler Police Department

(480) 782-4130/ 911

Chandler Fire Department

(602) 253-1191/ 911

Chandler Regional Medical Center

(480) 963-4561/ 911

Safety-Kleen Qualified Emergency Response

(800) 468-1760

Arizona Department of Public Safety

(602) 223-2212

BRANCH TELEPHONE PAGING SYSTEMS

Facility Paging System

#6

Exhibit G-3

Safety-Kleen Product Material Safety Data
Sheets

Exhibit G-3 3.1 to 3.12

Safety-Kleen Safety Data Sheets

G-3.1 Safety-Kleen Premium Solvent (150)

G-3.2 Safety-Kleen PD 680, Type II Solvent

G-3.3 Safety-Kleen Mil-PRF-680, Type II

G-3.4 Safety-Kleen Immersion Cleaner and Cold Parts Cleaner G-3.5 Safety-Kleen Refined Perchloroethylene

G-3.6 Safety-Kleen Heavy Duty Lacquer Thinner

G-3.7 Safety-Kleen Multi-Use Lacquer Thinner

G-3.8 Safety-Kleen Heavy Duty 550 Cleaning Solvent

G-3.9 Safety-Kleen Premium Lacquer Thinner

G-3.10 Safety-Kleen Ultra Kleen Spray Equipment Solution

G-3.11 Safety-Kleen Clear Choice Cleaning Solvent

G-3.12 Safety-Kleen ArmaKleen 4 in 1 Concentrate



Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

Product Code

None.

Synonyms

Safety-Kleen Premium Gold Solvent; Safety-Kleen Continued Use Product Solvent (CUP); High Flash Degreasing Solvent; Parts Washer Solvent; Petroleum Distillates; Petroleum Naphtha; Naphtha, Solvent; Mineral Spirits

Recommended Use

Cleaning and degreasing metal parts. If this product is used in combination with other products, refer to the Safety Data Sheets for those products.

Restrictions on Use

None known.

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

September 2, 2014

Supersedes Issue Date

November 8, 2012

Original Issue Date

January 26, 1995

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 4

Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system)

Aspiration Hazard, Category 1

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER!

Hazard Statement(s)

Combustible liquid

May cause drowsiness and dizziness

May be fatal if swallowed and enters airways

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Precautionary Statement(s)

Prevention

Keep away from flames and hot surfaces. - No smoking. Wear protective gloves and eye/face protection. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area.

Response

In case of fire: Use Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, dry chemical, water spray, or water fog for extinction. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
64742-47-8	Distillates (petroleum), hydrotreated light	100

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Call a poison control center or doctor immediately for treatment advice.

Most Important Symptoms/Effects

Acute

Central nervous system depression

Delayed

Central nervous system damage

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, regular dry chemical, water spray, water fog.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Combustible liquid and vapor. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Run-off to sewer may create a fire hazard. Heated containers may rupture or be thrown into the air. Empty containers may retain product residue including flammable/explosive vapors. Product may be sensitive to static discharge, which could result in fire or explosion.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic - Burning may produce carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Measures

Keep away from sources of ignition - No smoking. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment. See **Section 8 – Exposure Controls/Personal Protection**. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8 – Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15 – Regulatory Information**.

* * * Section 7 - Handling and Storage * * *

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. When transferring product, trucks and tank cars should be grounded and bonded. Do not breathe vapor or mist.

Use in a well-ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Keep container tightly closed.

Keep cool. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous. Store in a well-ventilated place. See **Section 14 – Transportation Information** for Packing Group information.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Incompatibilities

Strong oxidizing materials.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Distillates (petroleum), hydrotreated light (64742-47-8)

ACGIH: 100 ppm TWA (related to Stoddard solvent)

OSHA Final: 500 ppm TWA; 2900 mg/m³ TWA (related to Stoddard solvent)

OSHA Vacated: 100 ppm TWA; 525 mg/m³ TWA (related to Stoddard solvent)

NIOSH: 350 mg/m³ TWA (related to Stoddard solvent)

1800 mg/m³ Ceiling (15 min, related to Stoddard solvent)

Appropriate Engineering Controls

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

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact with products where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Respiratory Protection

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear, colorless to pale yellow Mild hydrocarbon odor	pH: Not applicable
Boiling Point: 350°F (177°C) (initial)	Odor Threshold: 30 ppm (based on Stoddard Solvent)
Solubility (H2O): Insoluble.	Melting Point: -45°F (-43°C) (maximum)
Density: 6.4 to 6.7 LB/US gal (770 to 800 g/l)	Specific Gravity: 0.77 to 0.82 at 60°F (15.6°C) (water = 1)
Evaporation Rate: <0.1 (butyl acetate = 1)	Octanol/H2O Coeff.: Not available
LFL: 0.7 VOL% (minimum)	Auto Ignition Temperature: 480°F (249°C) (minimum)
UFL: 5 VOL% (maximum)	Flash Point: 148°F (64°C) (minimum)
Vapor Pressure: 0.2 mm Hg at 68°F (20°C); 0.6 mm Hg at 100°F (37°C) 0.012 psia @ 100°F	Viscosity: Not available
	Vapor Density: 5 (air = 1) (approximately)

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalis, oxidizing agents, reducing agents, or reactive halogens.

Hazardous Decomposition Products

None under normal temperatures and pressures. See also Section 5: Hazardous Combustion Products.

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Distillates (petroleum), hydrotreated light (64742-47-8)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Information on Likely Routes of Exposure

Inhalation

May cause irritation, nausea, loss of appetite, headache, drowsiness, dizziness, disorientation, tremors, lung damage (from aspiration), convulsions, and coma.

Ingestion

May cause headache, drowsiness, dizziness, loss of coordination, and aspiration hazard.

Skin Contact

May cause irritation of the skin.

Eye Contact

No information on significant adverse effects.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Immediate Effects

Central nervous system depression, lung damage (from aspiration), respiratory tract irritation, skin irritation.

Delayed Effects

Central nervous system damage, respiratory system damage.

Irritation/Corrosivity

Respiratory tract irritation, skin irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

No carcinogenicity data available for this product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Teratogenicity

No information available for the product.

Reproductive Effects

No epidemiological data is available for this product.

Specific Target Organ Effects - Single Exposure

Central nervous system.

Specific Target Organ Effects - Repeated Exposure

Central nervous system.

Aspiration Hazard

Lung aspiration hazard if swallowed.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, kidneys, and eye and/or skin disorders may have increased susceptibility to the effects of exposure.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

According to the California Code of Regulations, a toxicity to aquatic life, specifically fish, is determined using an acute 96 hour bioassay. A material is non-hazardous if the LC_{50} is >500 mg/L. This product passed the bioassay and is considered non-hazardous.

Persistence and Degradability

This material is believed not to biodegrade.

Bioaccumulation Potential

This material is believed not to bioaccumulate.

Mobility in Soil

Expected to have high mobility in soil.

Other Adverse Effects

No additional information is available.

* * * Section 13 - Disposal Considerations * * *

Disposal Methods

Not regulated. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

128: Reference . *North American Emergency Response Guide Book*

Transportation Regulations

DOT Non-Bulk Packages (less than or equal to 119 gallons)

Not regulated.

Shipping Name: Cleaning compounds (Petroleum naphtha)(Not US DOT regulated)

Bulk Packages

Shipping Name: Combustible liquid, n.o.s. (petroleum naphtha)

UN/NA #: NA1993 **Hazard Class:** Combustible liquid **Packing Group:** III

Required Placards: Class 3, NA 1993

TDG Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

100 WT%; 6.4 to 6.7 LB/US gal; 770 to 800 g/l

As per 40 CFR Part 51.100(s).

VOC Vapor Pressure: <1.0 mmHg @ 20°C

Product may or may not be considered photochemically reactive (100% by weight).

Consult your state or local air district regulations for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

SARA Section 313

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA Inventory

All the components of this substance are listed on or are exempt from the TSCA inventory listing.

Safety Data Sheet

Material Name: SAFETY-KLEEN PREMIUM SOLVENT (VIRGIN AND RECYCLED)

SDS ID: GHS 82658

Component Analysis

Component	CAS #	TSCA
Distillates (petroleum), hydrotreated light	64742-47-8	Yes

U.S. State Regulations

This product may contain a detectable amount of benzene CAS 71-43-2, p-dichlorobenzene CAS 106-46-7, ethylbenzene CAS 100-41-4, and naphthalene CAS 91-20-3. WARNING: These chemicals are known to the State of California to cause cancer.

This product may contain a detectable amount of benzene CAS 71-43-2 and toluene CAS 108-88-3. WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

Canadian Regulations

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Component Analysis

Component	CAS #	CAN
Distillates (petroleum), hydrotreated light	64742-47-8	DSL

Canadian WHMIS Information

B3 D2B

* * * Section 16 - Other Information * * *

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3. 7/17/15: Update to Section 9 Vapor Pressure.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82658



Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II SOLVENT

SDS ID: GHS 82889

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN MIL-PD-680, TYPE II SOLVENT

Product Code

6638

Synonyms

Parts Washer Solvent; High Flash Degreasing Solvent; Petroleum Distillates; Petroleum Naphtha; Naphtha, Solvent; Mineral Spirits

Recommended Use

Cleaning and degreasing metal parts and cleaning printing equipment. This product meets Federal Commercial Item Description A-A-59601A for Dry Cleaning and Degreasing Solvent, PD680, Type II. If this product is used in combination with other products, refer to the Safety Data Sheets for those products.

Restrictions on Use

None known.

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

September 2, 2014

Supersedes Issue Date

August 21, 2013

Original Issue Date

May 9, 2002

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 4
Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system)
Aspiration Hazard, Category 1

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER!

Hazard Statement(s)

Combustible Liquid
May cause drowsiness and dizziness
May be fatal if swallowed and enters airways

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Precautionary Statement(s)

Prevention

Keep away from flames and hot surfaces. - No smoking. Wear protective gloves and eye/face protection. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area.

Response

In case of fire: Use Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, dry chemical, water spray, or water fog for extinction. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
64742-47-8	Distillates (petroleum), hydrotreated light	100

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Call a poison control center or doctor immediately for treatment advice.

Most Important Symptoms/Effects

Acute

Central nervous system depression

Delayed

Central nervous system damage

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, regular dry chemical, water spray, water fog.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Combustible liquid and vapor. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Run-off to sewer may create a fire hazard. Heated containers may rupture or be thrown into the air. Empty containers may retain product residue including flammable/explosive vapors. Product may be sensitive to static discharge, which could result in fire or explosion.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic - Burning may produce carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Measures

Keep away from sources of ignition - No smoking. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment. See **Section 8: Exposure Controls/Personal Protection**. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8: Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15: Regulatory Information**.

* * * Section 7 - Handling and Storage * * *

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. When transferring product, trucks and tank cars should be grounded and bonded. Do not breathe vapor or mist.

Use in a well-ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using these products.

Conditions for Safe Storage, Including Any Incompatibilities

Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Keep container tightly closed.

Keep cool. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous. Store in a well-ventilated place. See **Section 14: Transportation Information** for Packing Group information.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Incompatibilities

Strong oxidizing materials.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Distillates (petroleum), hydrotreated light (64742-47-8)

ACGIH: 100 ppm TWA (related to Stoddard solvent)

OSHA Final: 500 ppm TWA; 2900 mg/m³ TWA (related to Stoddard solvent)

OSHA Vacated: 100 ppm TWA; 525 mg/m³ TWA (related to Stoddard solvent)

NIOSH: 350 mg/m³ TWA (related to Stoddard solvent)

1800 mg/m³ Ceiling (15 min, related to Stoddard solvent)

Appropriate Engineering Controls

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

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact with products where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Respiratory Protection

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear, colorless to pale yellow Mild hydrocarbon odor	pH: Not applicable
Boiling Point: 350°F (177°C) (initial)	Odor Threshold: 30 ppm (based on Stoddard Solvent)
Solubility (H2O): Insoluble.	Melting Point: -45°F (-43°C)(maximum)
Density: 6.4 – 6.7 LB/US gal (770-800 g/l)	Specific Gravity: 0.77 to 0.82 at 60°F (15.6°C) (water = 1)
Evaporation Rate: <0.1 (butyl acetate = 1)	Octanol/H2O Coeff.: Not available
LFL: 0.7 VOL% (minimum)	Auto Ignition Temperature: 480°F (249°C) (minimum)
UFL: 5 VOL% (maximum)	Flash Point: 148°F (61°C) (minimum)
Vapor Pressure: 0.2 mm Hg at 68°F (20°C); 0.6 mm Hg at 100°F	Viscosity: Not available
	Vapor Density: 5 (air = 1) (approximately)

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

Hazardous Decomposition Products

None under normal temperatures and pressures. See also **Section 5: Hazardous Combustion Products.**

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Distillates (petroleum), hydrotreated light (64742-47-8)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Information on Likely Routes of Exposure

Inhalation

May cause irritation, nausea, loss of appetite, headache, drowsiness, dizziness, disorientation, tremors, lung damage (from aspiration), convulsions, and coma.

Ingestion

May cause headache, drowsiness, dizziness, loss of coordination, and aspiration hazard.

Skin Contact

May cause irritation of the skin.

Eye Contact

No information on significant adverse effects.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Immediate Effects

Central nervous system depression, lung damage (from aspiration), respiratory tract irritation, skin irritation.

Delayed Effects

Central nervous system damage, respiratory system damage.

Irritation/Corrosivity

Respiratory tract irritation, skin irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

No carcinogenicity data available for this product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Teratogenicity

No information available for the product.

Reproductive Effects

No epidemiological data is available for this product.

Specific Target Organ Effects - Single Exposure

Central nervous system.

Specific Target Organ Effects - Repeated Exposure

Central nervous system.

Aspiration Hazard

Lung aspiration hazard if swallowed.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, kidneys, and eye and/or skin disorders may have increased susceptibility to the effects of exposure.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

According to the California Code of Regulations, a toxicity to aquatic life, specifically fish, is determined using an acute 96 hour bioassay. A material is non-hazardous if the LC₅₀ is >500 mg/L. This product passed the bioassay and is considered non-hazardous.

Persistence and Degradability

This material is believed not to biodegrade.

Bioaccumulation Potential

This material is believed not to bioaccumulate.

Mobility in Soil

Expected to have high mobility in soil.

Other Adverse Effects

No additional information is available.

* * * Section 13 - Disposal Considerations * * *

Disposal Methods

Not regulated. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

128: Reference . *North American Emergency Response Guide Book*

Transportation Regulations

DOT Non-Bulk Packages (less than or equal to 119 gallons)

Not regulated.

Shipping Name: Cleaning compounds (Petroleum naphtha)(Not US DOT regulated)

Bulk Packages

Shipping Name: Combustible liquid, n.o.s. (Contains: petroleum naphtha)

UN/NA #: NA1993 **Hazard Class:** Combustible liquid **Packing Group:** III

Required Placards: Class 3, NA 1993

TDG Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

100 WT%; 6.4 to 6.7 LB/US gal; 770 to 800 g/l

As per 40 CFR Part 51.100(s).

VOC Vapor Pressure: <1.0 mmHg @ 20°C

Product may or may not be considered photochemically reactive (100% by weight).

Consult your state or local air district regulations for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

SARA Section 313

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA Inventory

All the components of this substance are listed on or are exempt from the TSCA inventory listing.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PD-680-TYPE II

SDS ID: GHS 82889

Component Analysis

Component	CAS #	TSCA
Distillates (petroleum), hydrotreated light	64742-47-8	Yes

U.S. State Regulations

This product may contain a detectable amount of benzene CAS 71-43-2, p-dichlorobenzene CAS 106-46-7, ethylbenzene CAS 100-41-4, and naphthalene CAS 91-20-3. WARNING: These chemicals are known to the State of California to cause cancer.

This product may contain a detectable amount of benzene CAS 71-43-2 and toluene CAS 108-88-3. WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

Canadian Regulations

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Component Analysis

Component	CAS #	CAN
Distillates (petroleum), hydrotreated light	64742-47-8	DSL

Canadian WHMIS Information

B3 D2B

* * * Section 16 - Other Information * * *

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82658

**Safety Data Sheet**

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

***** Section 1 - Identification *******Product Identifier**

SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

Product Code

14426

Synonyms

Parts Washer Solvent; High Flash Degreasing Solvent; Petroleum Distillates; Petroleum Naphtha; Naphtha Solvent; Mineral Spirits

Recommended Use

Cleaning and degreasing metal parts. Product is qualified under U.S. Military Detail Specification MIL-PRF-680 as a high flash point degreasing solvent. In addition, this solvent meets the specifications for an ASTM D235 Type IIC mineral spirits. If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

Restrictions on Use

None known.

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

September 2, 2014

Supersedes Issue Date

February 3, 2014

Original Issue Date

January 23, 2002

***** Section 2 - Hazard(s) Identification *******Classification in Accordance with 29 CFR 1910.1200.**

Flammable Liquids, Category 4

Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system)

Aspiration Hazard, Category 1

GHS LABEL ELEMENTS**Symbol(s)****Signal Word**

DANGER!

Hazard Statement(s)

Combustible liquid

May cause drowsiness and dizziness

May be fatal if swallowed and enters airways

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

Precautionary Statement(s)

Prevention

Keep away from flames and hot surfaces. - No smoking. Wear protective gloves and eye/face protection. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area.

Response

In case of fire: Use Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, dry chemical, water spray, or water fog for extinction. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
*	Varies	100

*Product will contain one of the following components at 100 WT%: Alkanes (68551-17-7); Naphtha (petroleum), hydrotreated heavy (64742-48-9)

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Call a poison control center or doctor immediately for treatment advice.

Most Important Symptoms/Effects

Acute

Central nervous system depression

Delayed

Central nervous system damage

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869 for additional information.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Class B/C or Class A/B/C fire extinguisher, carbon dioxide, regular foam, regular dry chemical, water spray, water fog

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Combustible liquid and vapor. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Run-off to sewer may create a fire hazard. Heated containers may rupture or be thrown into the air. Empty containers may retain product residue including flammable/explosive vapors. Product may be sensitive to static discharge, which could result in fire or explosion.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Measures

Keep away from sources of ignition - No smoking. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 1 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment. See Section 8: Exposure Controls/Personal Protection. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in Section 8: Exposure Controls/Personal Protection. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see Section 15: Regulatory Information.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. When transferring product, trucks and tank cars should be grounded and bonded. Do not breathe vapor or mist. Use in a well-ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed. Keep cool. Store in a well-ventilated place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See Section 14: Transportation Information for Packing Group information.

Incompatibilities

Strong oxidizing materials.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

ACGIH: 100 ppm TWA (related to Stoddard solvent)

OSHA Final: 500 ppm TWA; 2900 mg/m³ TWA (related to Stoddard solvent)

OSHA Vacated: 100 ppm TWA; 525 mg/m³ TWA (related to Stoddard solvent)

NIOSH: 350 mg/m³ TWA (related to Stoddard solvent)

1800 mg/m³ Ceiling (15 min, related to Stoddard solvent)

Appropriate Engineering Controls

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

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact with products where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits or other protective clothing.

Respiratory Protection

Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear, colorless and odorless.	pH: Not applicable.
Boiling Point: 350° to 408°F (177° - 209°C)	Odor Threshold: 30 ppm (based on Stoddard Solvent)
Solubility (H2O): Insoluble.	Melting Point: -45°F (-43°C) (maximum)
Density: 6.4 LB/US gal (770 g/l)	Specific Gravity: 0.77 at 60°F (15.6°C) (water = 1)
Evaporation Rate: less than 0.1 (butyl acetate = 1)	Octanol/H2O Coeff.: Not available.
LFL: 0.7 VOL% (approximately)	Auto Ignition Temperature: 480°F (249°C) (approximately)
UFL: 5 VOL% (approximately)	Flash Point: 148°F (64°C) (minimum)
Vapor Pressure: 0.2 mmHg @ 68°F (28°C) 0.6 mmHg @ 100°F (38°C)	Viscosity: Not available
	Vapor Density: 5 (air = 1) (approximately)

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition. Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalis, oxidizing agents, reducing agents, or halogens.

Hazardous Decomposition Products

None under normal temperatures and pressures. See also **Section 5: Hazardous Combustion Products.**

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Information on Likely Routes of Exposure

Inhalation

May cause irritation, nausea, loss of appetite, headache, drowsiness, dizziness, disorientation, tremors, lung damage (from aspiration), convulsions, and coma.

Ingestion

May cause headache, drowsiness, dizziness, loss of coordination, and aspiration hazard.

Skin Contact

May cause irritation of the skin.

Eye Contact

No information on significant adverse effects.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

Immediate Effects

Central nervous system depression, lung damage (from aspiration), respiratory tract irritation, skin irritation

Delayed Effects

Central nervous system damage, respiratory system damage

Irritation/Corrosivity

Respiratory tract irritation, skin irritation

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

No carcinogenicity data available for this product.

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Teratogenicity

No information available for the product.

Reproductive Effects

No epidemiological data is available for this product.

Specific Target Organ Effects - Single Exposure

Central nervous system.

Specific Target Organ Effects - Repeated Exposure

Central nervous system.

Aspiration Hazard

Lung aspiration hazard if swallowed.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, kidneys, and eye and/or skin disorders may have increased susceptibility to the effects of exposure.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

According to the California Code of Regulations, toxicity to aquatic life, specifically fish, is determined using an acute 96 hour bioassay. A material is non-hazardous if the LC_{50} is >500 mg/L. This product passed the bioassay and is considered non-hazardous.

Persistence and Degradability

This material is believed not to biodegrade.

Bioaccumulation Potential

This material is believed not to bioaccumulate.

Mobility in Soil

Expected to have high mobility in soil.

Other Adverse Effects

No additional information is available.

* * * Section 13 - Disposal Considerations * * *

Disposal Methods

Not regulated. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

128: Reference . *North American Emergency Response Guide Book*

Transportation Regulations

DOT Non-Bulk Packages (less than or equal to 119 gallons)

Not regulated.

Shipping Name: Cleaning compounds (Petroleum naphtha)(Not US DOT regulated)

Bulk Packages

Shipping Name: Combustible liquid, n.o.s. (petroleum naphtha)

UN/NA #: NA1993 **Hazard Class:** Combustible liquid **Packing Group:** III

Required Placards: Class 3, NA 1993

TDG Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

100 WT%; 6.4 LB/US gal; 770 g/l as per 40 CFR Part 51.100(s).

VOC Vapor Pressure: <1.0 mm Hg @ 20°C

Product may or may not be considered photochemically reactive (100% by weight).

Consult your state or local air district regulations for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

SARA Section 313

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA Inventory

All the components of this substance are listed on or are exempt from the TSCA inventory listing.

Safety Data Sheet

Material Name: SAFETY-KLEEN MIL-PRF-680, TYPE II SOLVENT

SDS ID: GHS 82884

Component Analysis

Component	CAS #	TSCA
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Yes
Alkanes	68551-17-7	Yes

U.S. State Regulations

This product may contain a detectable amount of benzene CAS 71-43-2, p-dichlorobenzene CAS 106-46-7, ethylbenzene CAS 100-41-4, and naphthalene CAS 91-20-3. WARNING: These chemicals are known to the State of California to cause cancer.

This product may contain a detectable amount of benzene CAS 71-43-2 and toluene CAS 108-88-3. WARNING: These chemicals are known to the State of California to cause birth defects or other reproductive harm.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Naphtha (petroleum), hydrotreated heavy	64742-48-9	DSL
Alkanes	68551-17-7	DSL

Canadian WHMIS Information

B3 D2B

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82884

Safety Data Sheet**Material Name: SAFETY-KLEEN IMMERSION AND COLD PARTS CLEANER SOLVENT******* Section 1 - Identification *******Product Identifier**

SAFETY-KLEEN IMMERSION AND COLD PARTS CLEANER SOLVENT

Product Code

50, 699, 6861

Synonyms

None

Recommended Use

For cleaning carburetors and metal parts. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use**Manufacturer Information**Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

September 2, 2014

Supersedes Issue Date

April 4, 2014

Original Issue Date

December 1, 1989

***** Section 2 - Hazard(s) Identification *******Classification in Accordance with 29 CFR 1910.1200.**

Flammable Liquids, Category 4
Acute Toxicity (Inhalation), Category 2
Skin Corrosion / Irritation, Category 1
Eye Damage / Irritation, Category 1
Skin sensitization - Category 1
Carcinogenicity, Category 2
Toxic to Reproduction, Category 1B
Specific Target Organ Toxicity - Single Exposure, Category 1 (blood, eyes, liver, nervous system, and respiratory system)
Specific Target Organ Toxicity - Single Exposure, Category 3 (respiratory tract irritation)
Specific Target Organ Toxicity - Repeated Exposure, Category 1 (adrenal gland, blood, bone marrow, digestive system, eyes, kidneys, liver, nervous system, respiratory system, spleen, and testes)
Aspiration Hazard, Category 1
Hazardous to the Aquatic Environment - Acute Hazard, Category 1
Hazardous to the Aquatic Environment - Chronic Hazard, Category 1

GHS LABEL ELEMENTS**Symbol(s)**

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Signal Word

DANGER!

Hazard Statement(s)

Combustible Liquid

Fatal if inhaled

Causes severe skin burns and eye damage

May cause allergic skin reaction

Suspected of causing cancer

May damage fertility or the unborn child

Causes damage to blood, eyes, liver, nervous system, and respiratory system.

May cause respiratory irritation

Causes damage to adrenal gland, blood, bone marrow, digestive system, eyes, kidneys, liver, nervous system, respiratory system, spleen, and testes through prolonged or repeated exposure.

May be fatal if swallowed and enters airways

Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Keep away from flames and hot surfaces. - No smoking. Do not breathe gas, fumes, vapor, or spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Wash thoroughly after handling. Wear protective gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Response

In case of fire: Use carbon dioxide, alcohol resistant foam, dry chemical, water spray, or water fog for extinction. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Rinse mouth. Immediately call a POISON CENTER or doctor/physician. Call 1-800-468-1760 for additional information.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

* * * Section 3 - Composition / Information on Ingredients * * *		
CAS	Component	Percent
64742-94-5	Solvent naphtha (petroleum), heavy arom.	30-60
872-50-4	1-Methyl-2-pyrrolidone	10-30
34590-94-8	Dipropylene glycol monomethyl ether	7-13
112-80-1	Oleic acid	5-10
141-43-5	Ethanolamine	3-7
91-20-3	Naphthalene	3-6

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Rinse mouth. Immediately call a POISON CENTER or doctor/physician. Call 1-800-468-1760 for additional information.

Most Important Symptoms/Effects

Acute

Fatal if inhaled, eye damage, skin damage, blood system disorders, liver damage, nervous system damage, respiratory system damage, respiratory tract irritation, skin sensitizer, aspiration hazard.

Delayed

Adrenal gland effects, blood disorders, bone marrow effects, digestive system effects, eye damage, kidney damage, liver damage, nervous system damage, respiratory system damage, spleen damage, testes damage, cancer, reproductive effects, skin sensitizer.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Combustible liquid. Vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Run-off to sewer may create a fire hazard. Heated containers may rupture or be thrown into the air. Empty containers may retain product residue including flammable/explosive vapors. Product may be sensitive to static discharge, which could result in fire or explosion.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce nitrogen oxides, acid halides, carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Fire Fighting Measures

Keep away from sources of ignition - No smoking. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8: Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15: Regulatory Information**.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. When transferring product, trucks and tank cars should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **Section 14: Transportation Information** for Packing Group information.

Incompatibilities

Strong oxidizing materials.

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Dipropylene glycol monomethyl ether (34590-94-8)

ACGIH: 100 ppm TWA
150 ppm STEL
Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final: 100 ppm TWA; 600 mg/m³ TWA
prevent or reduce skin absorption

OSHA Vacated: 100 ppm TWA; 600 mg/m³ TWA
150 ppm STEL; 900 mg/m³ STEL
Prevent or reduce skin absorption

NIOSH: 100 ppm TWA; 600 mg/m³ TWA
150 ppm STEL; 900 mg/m³ STEL
Potential for dermal absorption

Ethanolamine (141-43-5)

ACGIH: 3 ppm TWA
6 ppm STEL

OSHA Final: 3 ppm TWA; 6 mg/m³ TWA

OSHA Vacated: 3 ppm TWA; 8 mg/m³ TWA
6 ppm STEL; 15 mg/m³ STEL

NIOSH: 3 ppm TWA; 8 mg/m³ TWA
6 ppm STEL; 15 mg/m³ STEL

Naphthalene (91-20-3)

ACGIH: 10 ppm TWA
15 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final: 10 ppm TWA; 50 mg/m³ TWA

OSHA Vacated: 10 ppm TWA; 50 mg/m³ TWA
15 ppm STEL; 75 mg/m³ STEL

NIOSH: 10 ppm TWA; 50 mg/m³ TWA
15 ppm STEL; 75 mg/m³ STEL

Appropriate Engineering Controls

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

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Skin Protection

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH-certified, full-faced, air-purifying respiratory protective equipment with organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear and brown. Characteristic	pH: 11
Boiling Point: 340°F (171°C) (initial)	Odor Threshold: Not available.
Solubility (H2O): Complete.	Melting Point: < 10°F (-12°C)
Density: 7.9 LB/US gal (950 g/l)	Specific Gravity: 0.95 (water = 1)
Evaporation Rate: 1 (butyl acetate = 1)	Octanol/H2O Coeff.: Not available.
LFL: 0.8 VOL% (approximately)	Auto Ignition Temperature: 829°F (443°C) (approximately)
UFL: 7 VOL% (approximately)	Flash Point: >140°F (60°C)
Vapor Pressure: <0.4 mmHg at 68°F (20°C)	Viscosity: Not available
Decomposition Temperature: Not available	Vapor Density: Not available

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalis, oxidizing agents, reactive halogens, or reactive metals. Oleic acid can react with perchlorates or perchloric acid to form explosive products.

Hazardous Decomposition Products

None under normal temperatures and pressures.

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Solvent naphtha (petroleum), heavy arom. (64742-94-5)

Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2 mL/kg; Inhalation LC50 Rat >590 mg/m³ 4 h

1-Methyl-2-pyrrolidone (872-50-4)

Inhalation LC50 Rat 3.1 mg/L 4 h; Oral LD50 Rat 3598 mg/kg; Dermal LD50 Rabbit 8 g/kg

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Dipropylene glycol monomethyl ether (34590-94-8)

Oral LD50 Rat 5230 mg/kg; Dermal LD50 Rabbit 9500 mg/kg

Ethanolamine (141-43-5)

Oral LD50 Rat 1720 mg/kg; Dermal LD50 Rabbit 1 mL/kg

Naphthalene (91-20-3)

Dermal LD50 Rabbit >20 g/kg; Inhalation LC50 Rat >340 mg/m³ 1 h

Information on Likely Routes of Exposure

Inhalation

Fatal if inhaled. May cause respiratory tract irritation.

Ingestion

May be fatal if swallowed and enters airways.

Skin Contact

Causes severe skin burns and eye damage May cause an allergic skin reaction.

Eye Contact

Causes serious eye damage.

Immediate Effects

Fatal if inhaled, eye damage, skin damage, blood system disorders, liver damage, nervous system damage, respiratory system damage, respiratory tract irritation, skin sensitizer, aspiration hazard.

Delayed Effects

Adrenal gland effects, blood disorders, bone marrow effects, digestive system effects, eye damage, kidney damage, liver damage, nervous system damage, respiratory system damage, spleen damage, testes damage, reproductive effects, cancer, skin sensitizer.

Irritation/Corrosivity

Causes skin, eye and respiratory irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

May cause an allergic skin reaction.

Carcinogenicity

Component Carcinogenicity

Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

OSHA: Present (select carcinogen)

NTP: Reasonably Anticipated To Be A Human Carcinogen (Suspect Carcinogen)

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Germ Cell Mutagenicity

No information available for the product.

Teratogenicity

No information available for the product.

Reproductive Effects

Available data characterizes this substance as a reproductive hazard.

Specific Target Organ Effects - Single Exposure

Blood, eye, liver, nervous system, respiratory system.

Specific Target Organ Effects - Repeated Exposure

Adrenal glands, blood, bone marrow, digestive system, eye, kidneys, liver, nervous system, respiratory system, spleen, testes.

Aspiration Hazard

Yes

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Medical Conditions Aggravated by Exposure

Individuals with pre-existing liver, kidney, respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

*** Section 12 - Ecological Information ***

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Solvent naphtha (petroleum), heavy arom. (64742-94-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	19 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	2.34 mg/L	
96 Hr LC50 Lepomis macrochirus	1740 mg/L [static]	
96 Hr LC50 Pimephales promelas	45 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	41 mg/L	
72 Hr EC50 Skeletonema costatum	2.5 mg/L	
48 Hr EC50 Daphnia magna	0.95 mg/L	

1-Methyl-2-pyrrolidone (872-50-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	832 mg/L [static]	
96 Hr LC50 Leuciscus idus	4000 mg/L [static]	
96 Hr LC50 Pimephales promelas	1072 mg/L [static]	
96 Hr LC50 Poecilia reticulata	1400 mg/L [static]	
72 Hr EC50 Desmodesmus subspicatus	>500 mg/L	
48 Hr EC50 Daphnia magna	4897 mg/L	

Dipropylene glycol monomethyl ether (34590-94-8)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	>10000 mg/L [static]	
48 Hr LC50 Daphnia magna	1919 mg/L	

Oleic acid (112-80-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	205 mg/L [static]	

Ethanolamine (141-43-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	227 mg/L [flow-through]	
96 Hr LC50 Brachydanio rerio	3684 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	300 - 1000 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	114 - 196 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	>200 mg/L [flow-through]	
72 Hr EC50 Desmodesmus subspicatus	15 mg/L	
48 Hr EC50 Daphnia magna	65 mg/L	

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Naphthalene (91-20-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	5.74 - 6.44 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	1.6 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	0.91 - 2.82 mg/L [static]	
96 Hr LC50 Pimephales promelas	1.99 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	31.0265 mg/L [static]	
72 Hr EC50 Skeletonema costatum	0.4 mg/L	
48 Hr LC50 Daphnia magna	2.16 mg/L	
48 Hr EC50 Daphnia magna	1.96 mg/L [Flow through]	
48 Hr EC50 Daphnia magna	1.09 - 3.4 mg/L [Static]	

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

Not regulated. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers.

The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

153: Reference. *North American Emergency Response Guide Book*

Transportation Regulations

DOT Shipping Name: Corrosive liquid, basic, organic, n.o.s. (monoethanolamine)

UN/NA #: UN3267 **Hazard Class:** 8 **Packing Group:** III

Required Label(s): CORROSIVE

TDG Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (monoethanolamine)

UN/NA #: UN3267 **Hazard Class:** 8 **Packing Group:** III

Required Label(s): CORROSIVE

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

100 WT%; 7.9 LB/US gal; 950 g/l

As per U.S EPA 40 CFR 51.100(s)

VOC Vapor Pressure <1.0 mmHg @ 20°C

CONTAINS: Photochemically Reactive solvent 60% by volume

Consult your state or local air district regulations for location specific information.

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in Section 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Fire Hazard

Acute Health: Yes Chronic Health: Yes Pressure: No Reactive: No

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

1-Methyl-2-pyrrolidone (872-50-4) 1.0 % de minimis concentration

Naphthalene (91-20-3) 0.1 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Naphthalene (91-20-3) 100 lb final RQ; 45.4 kg final RQ

TSCA Inventory

All the components of this substance are listed on or are exempt from the TSCA inventory listing.

Component Analysis

Component	CAS #	TSCA
Solvent naphtha (petroleum), heavy arom.	64742-94-5	Yes
1-Methyl-2-pyrrolidone	872-50-4	Yes
Dipropylene glycol monomethyl ether	34590-94-8	Yes
Oleic acid	112-80-1	Yes
Ethanolamine	141-43-5	Yes
Naphthalene	91-20-3	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
1-Methyl-2-pyrrolidone	872-50-4	No	Yes	No	Yes	Yes
Dipropylene glycol monomethyl ether	34590-94-8	Yes	Yes	Yes	Yes	Yes
Oleic acid	112-80-1	No	No	No	No	Yes
Ethanolamine	141-43-5	Yes	Yes	Yes	Yes	Yes
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes

Safety Data Sheet

Material Name: SAFETY-KLEEN IMMERSION CLEANER AND COLD PARTS CLEANER SOLVENT SDS ID: 82411

Canadian Regulations

Component Analysis

Component	CAS#	CAN
Solvent naphtha (petroleum), heavy arom.	64742-94-5	DSL
1-Methyl-2-pyrrolidone	872-50-4	DSL
Dipropylene glycol monomethyl ether	34590-94-8	DSL
Oleic acid	112-80-1	DSL
Ethanolamine	141-43-5	DSL
Naphthalene	91-20-3	DSL

Canadian WHMIS Information

B3 D2A E.

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Dipropylene glycol monomethyl ether (34590-94-8)	1 %
Oleic acid (112-80-1)	1 %
Ethanolamine (141-43-5)	1 %
Naphthalene (91-20-3)	1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82411



Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

***** Section 1 - Identification *****

Product Identifier

SAFETY-KLEEN REFINED PERCHLOROETHYLENE

Product Code

1021737, 1024737

Synonyms

Tetrachloroethylene; Tetrachloroethene; Perchloroethene; 1,1,2,2-Tetrachloroethylene

Recommended Use

Cleaning agent. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA.

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080

Phone: 1-800-669-5740
www.safety-kleen.com

Emergency # 1-800-468-1760

Issue Date

April 20, 2015

Supersedes Issue Date

December 17, 2012

Original Issue Date

August 1982

***** Section 2 - Hazard(s) Identification *****

Classification in Accordance with 29 CFR 1910.1200.

- Skin Corrosion / Irritation, Category 2
- Serious Eye Damage/Eye Irritation, Category 2B
- Germ Cell Mutagenicity, Category 1B
- Carcinogenicity, Category 1B
- Toxic to Reproduction, Category 2
- Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system, liver, respiratory system)
- Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system)
- Specific Target Organ Toxicity - Repeated Exposure, Category 1 (liver, nervous system, respiratory system)
- Specific Target Organ Toxicity - Repeated Exposure, Category 2 (kidneys)

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER!

Hazard Statement(s)

- Causes skin irritation
- Causes eye irritation
- May cause genetic defects
- May cause cancer

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Suspected of damaging fertility or the unborn child
Causes damage to central nervous system, liver, and respiratory system
May cause drowsiness and dizziness
Causes damage to liver, nervous system, and respiratory system through prolonged or repeated exposure
May cause damage to kidneys through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Do not eat, drink, or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Avoid release to the environment.

Response

IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage.

Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose in accordance with all applicable local regulations.

Hazard(s) Not Otherwise Classified

No additional information is available.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
127-18-4	Ethene,tetrachloro-	96-99.5
64742-89-8	Solvent naphtha (petroleum), light aliphatic	0.5-4

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

IF SWALLOWED: Get medical attention.

Most Important Symptoms/Effects

Acute

Causes skin irritation, eye irritation, central nervous system damage, liver damage, and respiratory system damage. May cause central nervous system depression.

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Delayed

Causes liver damage, nervous system damage, and respiratory system damage. May cause mutagenic effects, cancer, reproductive effects, and kidney damage.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively. Do not administer Adrenaline (epinephrine) or similar drugs following product overexposure. Increased sensitivity of the heart to such drugs may be caused by overexposure to product. Administration of gastric lavage and/or activated charcoal slurry, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

This material will not burn. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous.

Hazardous Combustion Products

Product itself does not burn, but may decompose upon heating to produce phosgene, halogenated compounds, hydrogen chloride gas, carbon monoxide, and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Vapors will spread along the ground and collect in low or confined areas.

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Clean Up

Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, spark proof tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product.

Also see Section 15, Regulatory Information.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use clean tools. Do not breathe vapor or mist. Use in a well ventilated area. Do not get in eyes, on skin or clothing. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Avoid release to the environment.

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous.

See Section 14 for Packing Group information.

Incompatibilities

Avoid acids, alkalis, oxidizing agents, reactive metals.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Ethene,tetrachloro- (127-18-4)

ACGIH: 25 ppm TWA
100 ppm STEL

OSHA Final: 100 ppm TWA
200 ppm Ceiling

OSHA Vacated: 25 ppm TWA; 170 mg/m3 TWA

Appropriate Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment

Eyes/Face Protection

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

Skin Protection

Where skin contact is likely, wear laminate or equivalent protective gloves; use of natural rubber (latex) or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant face shield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance/Odor : Clear, colorless liquid
slightly sweet odor

Boiling Point: 250°F (121°C)

Solubility (H₂O): Insoluble

Density: 13.5 LB/US gal (1620 g/l)

Evaporation Rate: 2.8 (butyl acetate = 1)

Auto Ignition Temperature: Not applicable

Flash Point: Not applicable

Viscosity: Not available

Freezing Point: -2°F (-19°C)

pH: Not applicable

Odor Threshold: 50 ppm

Melting Point: -2°F (-19°C)

Specific Gravity: 1.62 (water = 1)

Octanol/H₂O Coeff.: 2.53-2.88 @ 68°F (20°C)

Molecular Weight: 165.8

LFL: Not applicable

UFL: Not applicable

Vapor Pressure: 14 mm Hg at 68°F (20°C)

Vapor Density: 5.2 (air = 1)

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Other Property Information

No additional information is available.

*** Section 10 - Stability & Reactivity ***

Chemical Stability

Stable under normal temperatures and pressures. Avoid heat, sparks or flame when not in use.

Possibility of Hazardous Reactions

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Conditions To Avoid

Avoid heat, sparks or flame when not in use.

Incompatible Materials

Avoid acids, alkalies, oxidizing agents, or reactive metals.

Hazardous Decomposition Products

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

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Ethene,tetrachloro- (127-18-4)

Oral LD50 Rat 2629 mg/kg; Dermal LD50 Mouse 2800 mg/kg; Inhalation LC50 Rat 27.8 mg/L 4 h

Solvent naphtha (petroleum), light aliphatic (64742-89-8)

Dermal LD50 Rabbit 3000 mg/kg; Oral LD50 Mouse 5000 mg/kg

Information on Likely Routes of Exposure

Inhalation

High concentrations of vapor or mist may be harmful if inhaled., High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs)., Inhalation of mist may cause irritation, nausea, vomiting, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, disorientation, mood swings, loss of coordination, lung congestion, kidney damage, liver damage., Prolonged or repeated exposure may cause irritation, nausea, stomach pain, loss of appetite, headache, drowsiness, dizziness, disorientation, sleep disturbances, pain in extremities, loss of coordination, blurred vision, hormonal disorders, internal bleeding, heart damage, liver damage, birth defects, brain damage, tumors, cancer.

Ingestion

May be harmful if swallowed, May cause throat irritation, nausea, vomiting, central nervous system effects as noted under INHALATION (BREATHING), unconsciousness, coma, and death.

Skin Contact

Causes skin irritation, Not likely to be absorbed in harmful amounts., Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

Eye Contact

Causes eye irritation, Symptoms may include itching, burning, redness, tearing., Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis).

Immediate Effects

Causes skin irritation, eye irritation, central nervous system damage, liver damage, respiratory system damage., May cause central nervous system depression.

Delayed Effects

Causes liver damage, nervous system damage, respiratory system damage., May cause mutagenic effects, cancer, reproductive effects, kidney damage.

Irritation/Corrosivity

Causes skin and eye irritation

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Respiratory Sensitization

Based on best current information, there is no known human sensitization associated with this product.

Skin Sensitization

Based on best current information, there is no known human sensitization associated with this product.

Carcinogenicity

Component Carcinogenicity

Ethene,tetrachloro- (127-18-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

NIOSH: potential occupational carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Suspect Carcinogen)

IARC: Monograph 106 [2014]; Monograph 63 [1995]; Supplement 7 [1987] (Group 2A (probably carcinogenic to humans))

Germ Cell Mutagenicity

Perchloroethylene has demonstrated experimental effects of mutagenicity.

Teratogenicity

Perchloroethylene has demonstrated experimental effects of teratogenicity.

Reproductive Effects

Perchloroethylene and methyl chloroform have demonstrated animal effects of reproductive toxicity.

Also see **SECTION 15: CALIFORNIA**.

Specific Target Organ Effects - Single Exposure

central nervous system, liver, respiratory system

Specific Target Organ Effects - Repeated Exposure

liver, nervous system, respiratory system, kidneys

Medical Conditions Aggravated by Exposure

Individuals with pre-existing cardiovascular, liver, kidney, respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Other Toxicological Information

No additional information is available.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Ethene,tetrachloro- (127-18-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	12.4 - 14.4 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	8.6 - 13.5 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	11.0 - 15.0 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	4.73 - 5.27 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	>500 mg/L	
48 Hr EC50 Daphnia magna	6.1 - 9.0 mg/L [Static]	

Solvent naphtha (petroleum), light aliphatic (64742-89-8)

Duration/Test/Species	Concentration/Conditions	Notes
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

U210 Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

160 Reference. *North American Emergency Response Guidebook*.

DOT Shipping Name: Tetrachloroethylene

UN/NA #: UN1897 Hazard Class: 6.1 Packing Group: III

Additional Information: Marine Pollutant

TDG Shipping Name: Tetrachloroethylene

UN/NA #: UN1897 Hazard Class: 6.1 Packing Group: III

Additional Info.: Marine Pollutant

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS #	
Ethene,tetrachloro-	127-18-4	DOT regulated marine pollutant

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

0 WT%; 0 LB/US gal; 0 g/l as per 40 CFR Part 51.100(s)

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Ethene,tetrachloro- (127-18-4) 0.1 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Ethene,tetrachloro- (127-18-4) 100 lb final RQ; 45.4 kg final RQ

TSCA Inventory

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Ethene,tetrachloro-	127-18-4	Yes
Solvent naphtha (petroleum), light aliphatic	64742-89-8	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Ethene,tetrachloro-	127-18-4	Yes	Yes	Yes	Yes	Yes

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE CALIFORNIA.

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS #	
Ethene,tetrachloro-	127-18-4	DOT regulated marine pollutant

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Ethene,tetrachloro-	127-18-4	DSL
Solvent naphtha (petroleum), light aliphatic	64742-89-8	DSL

Canadian WHMIS Information

D2A, D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Ethene,tetrachloro- (127-18-4) 1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Safety Data Sheet

Material Name: SAFETY-KLEEN REFINED PERCHLOROETHYLENE

SDS ID: 82335

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82335



Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

Product Code

5820, 5825, 6782

Synonyms

Not applicable.

Recommended Use

For cleaning coating equipment (e.g., paint spray guns). If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA.

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

November 1, 2014

Supersedes Issue Date

October 18, 2013

Original Issue Date

July 20, 1989

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 2
Acute Toxicity (Inhalation), Category 2
Acute Toxicity (Oral), Category 4
Skin Corrosion / Irritation, Category 2
Eye Damage / Irritation, Category 1
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1B
Toxic to Reproduction, Category 2
Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system, respiratory system, liver, and heart);
Single Exposure, Category 2 (kidneys); Single Exposure, Category 3 (respiratory system and central nervous system)
Specific Target Organ Toxicity Repeated Exposure, Category 1 (central nervous system, nervous system, nervous system,
liver, respiratory system, and heart); Repeated Exposure, Category 2 (blood, kidneys, and lungs)
Aspiration Hazard, Category 1
Hazardous to the Aquatic Environment - Acute Hazard, Category 3; Chronic Hazard, Category 3

GHS LABEL ELEMENTS

Symbol(s)



Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Signal Word

DANGER!

Hazard Statement(s)

Highly flammable liquid and vapor

Fatal if inhaled

Harmful if swallowed

Causes skin irritation, serious eye damage, and damage to central nervous system, liver, respiratory system, and heart

May cause genetic defects, cancer, damage to kidneys, drowsiness and dizziness, and respiratory irritation.

Suspected of damaging fertility or the unborn child.

Causes damage to central nervous system, liver, respiratory system, and heart through prolonged or repeated exposure.

May cause damage to blood, kidneys, and lungs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Harmful to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Wear respiratory protection. Do not eat, drink or smoke when using this product. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment.

Response

In case of fire: Use carbon dioxide, regular foam, regular dry chemical, and water spray for extinction. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment may be needed, see first aid section of Safety Data Sheet. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
63231-51-6	Aromatic hydrocarbons	30-75
*MIXTURE	Ketones	0-60
**MIXTURE	Aliphatic hydrocarbons	0-60
***MIXTURE	Acetates	0-17
763-69-9	Ethyl 3-ethoxypropanoate	0-17
68475-56-9	Alcohols, C1-3	0-12
****MIXTURE	Other alcohols	0-10
*****MIXTURE	Chlorinated solvents	0-1

Component Information/Information on Non-Hazardous Components

*Mixture of 67-64-1, 78-93-3, 108-10-1, 110-43-0, 107-87-9

**Mixture of 64741-89-5, 8030-6

***Mixture of 123-86-4, 110-19-0, 108-21-4, 108-65-6, 141-78-6

****Mixture of 71-36-3, 75-65-0

*****Mixture of 75-09-2, 127-18-4, 71-55-6

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Rinse mouth.

Most Important Symptoms/Effects

Acute

Harmful if swallowed, fatal if inhaled, eye burns, skin irritation, central nervous system damage, respiratory system damage, liver damage, heart damage, respiratory tract irritation, central nervous system depression, kidney damage, lung damage (from aspiration).

Delayed

Mutagenic effects, cancer, reproductive effects, central nervous system damage, nervous system damage, kidney damage, liver damage, blood damage, respiratory system damage, heart damage, lung damage.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, or water spray.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. Vapors may form explosive mixture with air. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Fire may produce irritating, poisonous and/or corrosive fumes. Runoff may create fire or explosion hazard. Empty product containers may retain product residue and can be dangerous. Containers may rupture or explode.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce phosgene, chlorides, chloroacetylenes, formaldehyde, peracetic acid, carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Keep storage containers cool with water spray. Move container from fire area if it can be done without risk. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Stay away from the ends of tanks. Do not scatter spilled material with high-pressure water streams. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8, Exposure Controls/Personal Protection. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in Section 8, Exposure Control/Personal Protection. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see Section 15, Regulatory Information.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring large quantities of product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product. Wash thoroughly after handling.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Conditions for Safe Storage, Including Any Incompatibilities

Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Keep container tightly closed. Keep cool. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous. Store containers in a cool, dry place. Store in a well-ventilated place. See Section 14

Transportation Information for Packing Group information.

Incompatibilities

Combustible materials, strong acids, strong oxidizing materials, alkalies, reducing agents, reactive halogens, reactive metals.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

*Mixture (107-87-9)

ACGIH: 150 ppm STEL
OSHA Final: 200 ppm TWA; 700 mg/m³ TWA
OSHA Vacated: 200 ppm TWA; 700 mg/m³ TWA
250 ppm STEL; 875 mg/m³ STEL
NIOSH: 150 ppm TWA; 530 mg/m³ TWA

*Mixture (108-10-1)

ACGIH: 20 ppm TWA
75 ppm STEL
OSHA Final: 100 ppm TWA; 410 mg/m³ TWA
OSHA Vacated: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL
NIOSH: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

*Mixture (110-43-0)

ACGIH: 50 ppm TWA
OSHA Final: 100 ppm TWA; 465 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 465 mg/m³ TWA
NIOSH: 100 ppm TWA; 465 mg/m³ TWA

*Mixture (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL
OSHA Final: 1000 ppm TWA; 2400 mg/m³ TWA
OSHA Vacated: 750 ppm TWA; 1800 mg/m³ TWA
2400 mg/m³ STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL
NIOSH: 250 ppm TWA; 590 mg/m³ TWA

*Mixture (78-93-3)

ACGIH: 200 ppm TWA
300 ppm STEL
OSHA Final: 200 ppm TWA; 590 mg/m³ TWA
OSHA Vacated: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL
NIOSH: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

**Mixture (8030-30-6)

OSHA Final: 100 ppm TWA; 400 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 400 mg/m³ TWA
NIOSH: 100 ppm TWA; 400 mg/m³ TWA

***Mixture (141-78-6)

ACGIH: 400 ppm TWA
OSHA Final: 400 ppm TWA; 1400 mg/m³ TWA
OSHA Vacated: 400 ppm TWA; 1400 mg/m³ TWA
NIOSH: 400 ppm TWA; 1400 mg/m³ TWA

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

***Mixture (108-21-4)

ACGIH: 100 ppm TWA
200 ppm STEL
OSHA Final: 250 ppm TWA; 950 mg/m³ TWA
OSHA Vacated: 250 ppm TWA; 950 mg/m³ TWA
310 ppm STEL; 1185 mg/m³ STEL

***Mixture (110-19-0)

ACGIH: 150 ppm TWA
OSHA Final: 150 ppm TWA; 700 mg/m³ TWA
OSHA Vacated: 150 ppm TWA; 700 mg/m³ TWA
NIOSH: 150 ppm TWA; 700 mg/m³ TWA

***Mixture (123-86-4)

ACGIH: 150 ppm TWA
200 ppm STEL
OSHA Final: 150 ppm TWA; 710 mg/m³ TWA
OSHA Vacated: 150 ppm TWA; 710 mg/m³ TWA
200 ppm STEL; 950 mg/m³ STEL
NIOSH: 150 ppm TWA; 710 mg/m³ TWA
200 ppm STEL; 950 mg/m³ STEL

****Mixture (71-36-3)

ACGIH: 20 ppm TWA
OSHA Final: 100 ppm TWA; 300 mg/m³ TWA
OSHA Vacated: 50 ppm Ceiling; 150 mg/m³ Ceiling
Prevent or reduce skin absorption
NIOSH: 50 ppm Ceiling; 150 mg/m³ Ceiling
Potential for dermal absorption

****Mixture (75-65-0)

ACGIH: 100 ppm TWA
OSHA Final: 100 ppm TWA; 300 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 300 mg/m³ TWA
150 ppm STEL; 450 mg/m³ STEL
NIOSH: 100 ppm TWA; 300 mg/m³ TWA
150 ppm STEL; 450 mg/m³ STEL

*****Mixture (127-18-4)

ACGIH: 25 ppm TWA
100 ppm STEL
OSHA Final: 100 ppm TWA
200 ppm Ceiling
OSHA Vacated: 25 ppm TWA; 170 mg/m³ TWA

*****Mixture (71-55-6)

ACGIH: 350 ppm TWA
450 ppm STEL
OSHA Final: 350 ppm TWA; 1900 mg/m³ TWA
OSHA Vacated: 350 ppm TWA; 1900 mg/m³ TWA
450 ppm STEL; 2450 mg/m³ STEL
NIOSH: 350 ppm Ceiling (15 min); 1900 mg/m³ Ceiling (15 min)

*****Mixture (75-09-2)

ACGIH: 50 ppm TWA
OSHA Final: 125 ppm STEL (See 29 CFR 1910.1052, 15 min); 12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA (See 29 CFR 1910.1052)
25 ppm TWA
125 ppm STEL (see 29 CFR 1910.1052)
OSHA Vacated: 500 ppm TWA
2000 ppm STEL (5 min in any 3 h)
1000 ppm Ceiling

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Appropriate Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Use explosion proof equipment. Ensure compliance with applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment.

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Eye protection: Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber (latex), polyvinyl chloride (PVC), neoprene or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH air-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of methanol or methylene chloride may exceed applicable exposure limits. Otherwise, use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear and colorless, solvent odor	pH: Not applicable
Boiling Point: 133 to 342°F (56 to 172°C)	Odor Threshold: Not available.
Solubility (H2O): Slight.	Melting Point: Not available.
Density: 6.9 LB/US gal (830 g/L) (approximately)	Specific Gravity: 0.83 (water = 1) (approximately)
Evaporation Rate: 3.7 (butyl acetate = 1) (based on a similar product)	Octanol/H2O Coeff.: Not available.
LFL: 1 VOL% (approximately)	Auto Ignition Temperature: 800°F (427°C)
UFL: 13 VOL% (approximately)	Flash Point: less than 70°F (21°C) Tag Closed Cup
Vapor Pressure: 86 mm Hg at 68°F (20°C) 205 mmHg at 100°F (38°C)	Viscosity: Not available
	Vapor Density: 2.2 to 3.9 (air = 1) (approximately)

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalies, oxidizing agents, reducing agents, reactive halogens, or reactive metals.

Hazardous Decomposition Products

Burning may produce phosgene, chlorides, formaldehyde, acetic acid, carbon monoxide, and unidentified organic compounds., See also Section 5, Hazardous Combustion Products.

* * * Section 11 - Toxicological Information * * *

Toxicity Data and Information

Component Analysis - LD50/LC50

*Mixture (107-87-9)	Oral LD50 Rat 1600 mg/kg
*Mixture (108-10-1)	Dermal LD50 Rabbit >16000 mg/kg; Inhalation LC50 Rat 8.2 mg/L 4 h; Oral LD50 Rat 2080 mg/kg
**Mixture (64741-89-5)	Dermal LD50 Rabbit >5 g/kg; Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg
*Mixture (67-64-1)	Inhalation LC50 Rat 50100 mg/m3 8 h
*Mixture (78-93-3)	Inhalation LC50 Rat 23500 mg/m3 8 h
***Mixture (141-78-6)	Dermal LD50 Rabbit >20 mL/kg; Inhalation LC50 Mouse 1500 ppm 4 h; Oral LD50 Rat 5620 mg/kg
***Mixture (108-21-4)	Dermal LD50 Rabbit >20 mL/kg; Inhalation LC50 Rat 50600 mg/m3 8 h; Oral LD50 Rat 3000 mg/kg
***Mixture (108-65-6)	Dermal LD50 Rabbit >5 g/kg; Oral LD50 Rat 8532 mg/kg
***Mixture (110-19-0)	Dermal LD50 Rabbit >17400 mg/kg; Oral LD50 Rat 13400 mg/kg
Ethyl 3-ethoxypropanoate (763-69-9)	Oral LD50 Rat 3200 mg/kg
***Mixture (123-86-4)	Dermal LD50 Rabbit >17600 mg/kg; Inhalation LC50 Rat 390 ppm 4 h
****Mixture (71-36-3)	Dermal LD50 Rabbit 3400 mg/kg; Inhalation LC50 Rat 8000 ppm 4 h; Oral LD50 Rat 790 mg/kg
****Mixture (75-65-0)	Dermal LD50 Rabbit >2 g/kg; Inhalation LC50 Rat >10000 ppm 4 h; Oral LD50 Rat 2733 mg/kg
****Mixture (127-18-4)	Dermal LD50 Mouse 2800 mg/kg; Inhalation LC50 Rat 4000 ppm 4 h; Oral LD50 Rat 2629 mg/kg
****Mixture (71-55-6)	Dermal LD50 Rabbit >15800 mg/kg; Inhalation LC50 Rat 18000 ppm 4 h; Oral LD50 Rat >2000 mg/kg
****Mixture (75-09-2)	Oral LD50 Rat 1410 mg/kg

Information on Likely Routes of Exposure

Inhalation

Fatal if inhaled. May cause irritation, nausea, and central nervous system effects.

Ingestion

Aspiration hazard. Harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea.

Skin Contact

Causes skin irritation.

Eye Contact

Causes serious eye damage.

Immediate Effects

Fatal if inhaled, harmful if swallowed, eye burns, skin irritation, respiratory tract irritation, aspiration hazard, central nervous system damage, central nervous system depression, respiratory system damage, liver damage, heart damage, kidney damage, lung damage (from aspiration)

Delayed Effects

Mutagenic effects, cancer, reproductive effects, central nervous system damage, nervous system damage, kidney damage, liver damage, respiratory system damage, heart damage, blood damage, lung damage

Irritation/Corrosivity

Eye burns, skin irritation, respiratory tract irritation

Respiratory Sensitization

No information available for the product.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Skin Sensitization

No information available for the product.

Carcinogenicity

Component Carcinogenicity

*Mixture (108-10-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans))

*Mixture (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

****Mixture (75-65-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

*****Mixture (127-18-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

NIOSH: potential occupational carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Suspect Carcinogen)

IARC: Monograph 106 [in preparation]; Monograph 63 [1995]; Supplement 7 [1987] (Group 2A (probably carcinogenic to humans))

*****Mixture (71-55-6)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 20 [1979] (Group 3 (not classifiable))

*****Mixture (75-09-2)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: 125 ppm STEL (See 29 CFR 1910.1052, 15 min); 12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA (See 29 CFR 1910.1052) (specifically regulated carcinogen)

Present (select carcinogen)

NIOSH: potential occupational carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Suspect Carcinogen)

IARC: Monograph 71 [1999]; Supplement 7 [1987] (Group 2B (possibly carcinogenic to humans))

Germ Cell Mutagenicity

May cause genetic defects

Teratogenicity

No information available for the product.

Reproductive Effects

Available data characterizes this substance as a reproductive hazard.

Specific Target Organ Effects - Single Exposure

Central nervous system, respiratory system, heart, liver, kidneys

Specific Target Organ Effects - Repeated Exposure

Central nervous system, nervous system, kidneys, liver, respiratory system, heart, blood, lungs

Aspiration Hazard

This material is an aspiration hazard.

Medical Conditions Aggravated by Exposure

Blood disorders, central nervous system disorders, eye disorders, hearing or inner ear disorders, kidney disorders, liver disorders, nervous system disorders, respiratory disorders, skin disorders, heart disorders, systemic disorders

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

*** Section 12 - Ecological Information ***

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

***Mixture (107-87-9)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1190 - 1290 mg/L [flow-through]	

***Mixture (108-10-1)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	496 - 514 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	400 mg/L	
48 Hr EC50 Daphnia magna	170 mg/L	

***Mixture (110-43-0)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	126 - 137 mg/L [flow-through]	

****Mixture (64741-89-5)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	
48 Hr EC50 Daphnia magna	>1000 mg/L	

***Mixture (67-64-1)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

***Mixture (78-93-3)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	3130 - 3320 mg/L [flow-through]	
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L [Static]	

****Mixture (8030-30-6)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	9.2 mg/L [static]	
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	

*****Mixture (141-78-6)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	220 - 250 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	484 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	352 - 500 mg/L [semi-static]	
48 Hr EC50 Daphnia magna	560 mg/L [Static]	

*****Mixture (108-65-6)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	161 mg/L [static]	
48 Hr EC50 Daphnia magna	>500 mg/L	

Ethyl 3-ethoxypropanoate (763-69-9)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	62 mg/L [static]	
48 Hr EC50 Daphnia magna	970 mg/L	

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

*****Mixture (123-86-4)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	100 mg/L [static]	
96 Hr LC50 Pimephales promelas	17 - 19 mg/L [flow-through]	
72 Hr EC50 Desmodesmus subspicatus	674.7 mg/L	

******Mixture (71-36-3)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1730 - 1910 mg/L [static]	
96 Hr LC50 Pimephales promelas	1740 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	100000 - 500000 µg/L [static]	
96 Hr LC50 Pimephales promelas	1910000 µg/L [static]	
96 Hr EC50 Desmodesmus subspicatus	>500 mg/L	
72 Hr EC50 Desmodesmus subspicatus	>500 mg/L	
48 Hr EC50 Daphnia magna	1983 mg/L	
48 Hr EC50 Daphnia magna	1897 - 2072 mg/L [Static]	

******Mixture (75-65-0)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	6130 - 6700 mg/L [flow-through]	
72 Hr EC50 Desmodesmus subspicatus	>1000 mg/L	
48 Hr EC50 Daphnia magna	933 mg/L	
48 Hr EC50 Daphnia magna	4607 - 6577 mg/L [Static]	

*******Mixture (127-18-4)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	12.4 - 14.4 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	8.6 - 13.5 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	11.0 - 15.0 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	4.73 - 5.27 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	>500 mg/L	
48 Hr EC50 Daphnia magna	6.1 - 9.0 mg/L [Static]	

*******Mixture (71-55-6)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	35.2 - 50.7 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	57 - 90 mg/L [static]	juvenile
96 Hr LC50 Cyprinus carpio	56 mg/L [flow-through]	
96 Hr LC50 Poecilia reticulata	52.9 mg/L [flow-through]	
96 Hr LC50 Poecilia reticulata	69.7 mg/L [static]	
96 Hr LC50 Pimephales promelas	91 - 126 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	46 - 59 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>500 mg/L	
48 Hr LC50 Daphnia magna	>530 mg/L	
48 Hr EC50 Daphnia magna	2384 mg/L	
48 Hr EC50 Daphnia magna	9.7 - 12.8 mg/L [Static]	

*******Mixture (75-09-2)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	140.8 - 277.8 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	262 - 855 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	193 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	193 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	>500 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	>500 mg/L	
48 Hr EC50 Daphnia magna	1532 - 1847 mg/L [Static]	
48 Hr EC50 Daphnia magna	190 mg/L	

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

D001, D018, D035, D039. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product. Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

128 Reference *North American Emergency Response Guidebook*

International Transportation Regulations

DOT Shipping Name: Paint related material
UN/NA #: UN1263 Hazard Class: 3 Packing Group: II
Required Label(s): FLAMMABLE LIQUID

TDG Shipping Name: Paint related material
UN/NA #: UN1263 Hazard Class: 3 Packing Group: II
Required Label(s): FLAMMABLE LIQUID

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

Up to 100 WT %; 6.9 lb/US gal (830 g/l)
As per 40 CFR Part 51.100(s)
VOC VP = 86 mm Hg @ 20°C (approx.)
Photochemically Reactive (up to 100% by volume)
Consult your state or local air district for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

*Mixture (108-10-1)	1.0 % de minimis concentration
****Mixture (71-36-3)	1.0 % de minimis concentration
****Mixture (75-65-0)	1.0 % de minimis concentration
*****Mixture (127-18-4)	0.1 % de minimis concentration
*****Mixture (71-55-6)	1.0 % de minimis concentration
*****Mixture (75-09-2)	0.1 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

*Mixture (108-10-1)	5000 lb final RQ; 2270 kg final RQ
*Mixture (67-64-1)	5000 lb final RQ; 2270 kg final RQ
*Mixture (78-93-3)	5000 lb final RQ; 2270 kg final RQ
***Mixture (141-78-6)	5000 lb final RQ; 2270 kg final RQ
***Mixture (110-19-0)	5000 lb final RQ; 2270 kg final RQ
***Mixture (123-86-4)	5000 lb final RQ; 2270 kg final RQ
****Mixture (71-36-3)	5000 lb final RQ; 2270 kg final RQ
*****Mixture (127-18-4)	100 lb final RQ; 45.4 kg final RQ
*****Mixture (71-55-6)	1000 lb final RQ; 454 kg final RQ
*****Mixture (75-09-2)	1000 lb final RQ; 454 kg final RQ

TSCA Inventory

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Aromatic hydrocarbons	63231-51-6	No
*Mixture	107-87-9	Yes
*Mixture	108-10-1	Yes
*Mixture	110-43-0	Yes
**Mixture	64741-89-5	Yes
*Mixture	67-64-1	Yes
*Mixture	78-93-3	Yes
**Mixture	8030-30-6	Yes
***Mixture	141-78-6	Yes
***Mixture	108-21-4	Yes
***Mixture	108-65-6	Yes
***Mixture	110-19-0	Yes
Ethyl 3-ethoxypropanoate	763-69-9	Yes
***Mixture	123-86-4	Yes
Alcohols, C1-3	68475-56-9	Yes
****Mixture	71-36-3	Yes
****Mixture	75-65-0	Yes
*****Mixture	127-18-4	Yes
*****Mixture	71-55-6	Yes
*****Mixture	75-09-2	Yes

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
*Mixture	107-87-9	Yes	Yes	Yes	Yes	Yes
*Mixture	108-10-1	Yes	Yes	Yes	Yes	Yes
*Mixture	110-43-0	Yes	Yes	Yes	Yes	Yes
**Mixture	64741-89-5	No	Yes	No	No	No
*Mixture	67-64-1	Yes	Yes	Yes	Yes	Yes
*Mixture	78-93-3	Yes	Yes	Yes	Yes	Yes
**Mixture	8030-30-6	Yes	Yes	Yes	Yes	Yes
***Mixture	141-78-6	Yes	Yes	Yes	Yes	Yes
***Mixture	108-21-4	Yes	Yes	Yes	Yes	Yes
***Mixture	110-19-0	Yes	Yes	Yes	Yes	Yes
***Mixture	123-86-4	Yes	Yes	Yes	Yes	Yes
****Mixture	71-36-3	Yes	Yes	Yes	Yes	Yes
****Mixture	75-65-0	Yes	Yes	Yes	Yes	Yes
*****Mixture	127-18-4	Yes	Yes	Yes	Yes	Yes
*****Mixture	71-55-6	Yes	Yes	Yes	Yes	Yes
*****Mixture	75-09-2	Yes	Yes	Yes	Yes	Yes

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Aromatic hydrocarbons	63231-51-6	No
*Mixture	107-87-9	DSL
*Mixture	108-10-1	DSL
*Mixture	110-43-0	DSL
**Mixture	64741-89-5	DSL
*Mixture	67-64-1	DSL
*Mixture	78-93-3	DSL
**Mixture	8030-30-6	DSL
***Mixture	141-78-6	DSL
***Mixture	108-21-4	DSL
***Mixture	108-65-6	DSL
***Mixture	110-19-0	DSL
Ethyl 3-ethoxypropanoate	763-69-9	DSL
***Mixture	123-86-4	DSL
Alcohols, CI-3	68475-56-9	NSL
****Mixture	71-36-3	DSL
****Mixture	75-65-0	DSL
*****Mixture	127-18-4	DSL
*****Mixture	71-55-6	DSL
*****Mixture	75-09-2	DSL

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER

SDS ID: 82343

Canadian WHMIS Information

B2, D1B, D2A, D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

*Mixture (107-87-9)	1 %
*Mixture (108-10-1)	1 %
*Mixture (110-43-0)	1 %
*Mixture (67-64-1)	1 %
*Mixture (78-93-3)	1 %
***Mixture (141-78-6)	1 %
***Mixture (108-21-4)	1 %
***Mixture (110-19-0)	1 %
***Mixture (123-86-4)	1 %
****Mixture (71-36-3)	1 %
****Mixture (75-65-0)	1 %
*****Mixture (127-18-4)	1 %
*****Mixture (71-55-6)	0.1 %
*****Mixture (75-09-2)	0.1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82343



Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN MULTI-USE LACQUER THINNER

Product Code

6801, 16801

Synonyms

Not applicable.

Recommended Use

For cleaning coating equipment (e.g., paint guns); Lacquer thinner. If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

November 1, 2014

Supersedes Issue Date

October 6, 2012

Original Issue Date

July 29, 1989

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 2

Acute Toxicity (Oral), Category 4

Skin Corrosion / Irritation, Category 2

Eye Damage / Irritation, Category 2A

Germ Cell Mutagenicity, Category 1B

Carcinogenicity, Category 1A

Toxic to Reproduction, Category 1A

Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system, kidneys, liver, respiratory system, systemic toxicity, and retina); Category 3 (central nervous system and respiratory tract)

Specific Target Organ Toxicity - Repeated Exposure, Category 1 (central nervous system, kidneys, liver, peripheral nervous system, retina, and respiratory system); Category 2 (blood)

Aspiration Hazard, Category 1

GHS LABEL ELEMENTS

Symbol(s)



Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Signal Word

DANGER!

Hazard Statement(s)

Highly flammable liquid and vapor

Harmful if swallowed

Causes skin irritation, serious eye irritation, and damage to central nervous system, kidneys, liver, respiratory system, systemic toxicity, and retina

May cause genetic defects, cancer, drowsiness and dizziness, respiratory irritation, and may damage fertility or the unborn child

Causes damage to central nervous system, kidneys, liver, peripheral nervous system, retina, and respiratory system through prolonged or repeated exposure

May cause damage to blood through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Precautionary Statement(s)

Prevention

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Do not breathe vapor or mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.

Response

In case of fire, use carbon dioxide, alcohol-resistant foam, dry chemical, or water spray. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Specific treatment may be needed, see first aid section of Safety Data Sheet. If skin irritation occurs, get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
108-88-3	Toluene	0-50*
67-64-1	Acetone	10-30
64742-89-8	Solvent naphtha (petroleum), light aliphatic	0-35
67-63-0	Isopropyl alcohol	2-15*
78-93-3	Methyl ethyl ketone	5-10
763-69-9	Ethyl 3-ethoxypropanoate	0-10*
110-19-0	Isobutyl acetate	0-10*
108-10-1	Methyl isobutyl ketone	2-5
67-56-1	Methyl alcohol	0-5*
1330-20-7	Xylenes (o-, m-, p- isomers)	0-5*
64-17-5	Ethyl alcohol	0-1

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Call 1-800-468-1760 for additional information.

Most Important Symptoms/Effects

Acute

Harmful if swallowed, skin irritation, eye irritation, central nervous system damage, central nervous system depression, kidney damage, liver damage, respiratory system damage, respiratory tract irritation, systemic toxicity, retina damage, aspiration hazard

Delayed

Mutagenic effects, cancer, reproductive effects, central nervous system damage, kidney damage, liver damage, peripheral nervous system damage, retina damage, respiratory system damage, blood disorders

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, alcohol-resistant foam, dry chemical, or water spray.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor Avoid friction, static electricity and sparks. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Empty containers may contain product residue. Product may be sensitive to static discharge, which could result in fire or explosion. Run-off to sewer may create a fire hazard.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic., Burning may produce phosgene, chlorides, chloroacetylenes, formaldehyde, peracetic acid, carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in Section 8: Exposure Controls/Personal Protection. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see Section 15: Regulatory Information.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

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

Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed when not in use and during transport. Store containers below 120°F (49°C) Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury or death. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORTATION INFORMATION for Packing Group information.

Incompatibilities

Strong acids, strong oxidizing materials, alkalis, reducing agents, reactive halogens, reactive metals

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Toluene (108-88-3)

ACGIH:	20 ppm TWA
OSHA Final:	200 ppm TWA 300 ppm Ceiling
OSHA Vacated:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
NIOSH:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Acetone (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL

OSHA Final: 1000 ppm TWA; 2400 mg/m³ TWA

OSHA Vacated: 750 ppm TWA; 1800 mg/m³ TWA
2400 mg/m³ STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL

NIOSH: 250 ppm TWA; 590 mg/m³ TWA

Isopropyl alcohol (67-63-0)

ACGIH: 200 ppm TWA
400 ppm STEL

OSHA Final: 400 ppm TWA; 980 mg/m³ TWA

OSHA Vacated: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL

NIOSH: 400 ppm TWA; 980 mg/m³ TWA
500 ppm STEL; 1225 mg/m³ STEL

Methyl ethyl ketone (78-93-3)

ACGIH: 200 ppm TWA
300 ppm STEL

OSHA Final: 200 ppm TWA; 590 mg/m³ TWA

OSHA Vacated: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

NIOSH: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

Isobutyl acetate (110-19-0)

ACGIH: 150 ppm TWA

OSHA Final: 150 ppm TWA; 700 mg/m³ TWA

OSHA Vacated: 150 ppm TWA; 700 mg/m³ TWA

NIOSH: 150 ppm TWA; 700 mg/m³ TWA

Methyl isobutyl ketone (108-10-1)

ACGIH: 20 ppm TWA
75 ppm STEL

OSHA Final: 100 ppm TWA; 410 mg/m³ TWA

OSHA Vacated: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

NIOSH: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA
150 ppm STEL

OSHA Final: 100 ppm TWA; 435 mg/m³ TWA

OSHA Vacated: 100 ppm TWA; 435 mg/m³ TWA
150 ppm STEL; 655 mg/m³ STEL

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Methyl alcohol (67-56-1)

ACGIH: 200 ppm TWA
250 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final: 200 ppm TWA; 260 mg/m³ TWA
OSHA Vacated: 200 ppm TWA; 260 mg/m³ TWA
250 ppm STEL; 325 mg/m³ STEL

Prevent or reduce skin absorption

NIOSH: 200 ppm TWA; 260 mg/m³ TWA
250 ppm STEL; 325 mg/m³ STEL
Potential for dermal absorption

Ethyl alcohol (64-17-5)

ACGIH: 1000 ppm STEL
OSHA Final: 1000 ppm TWA; 1900 mg/m³ TWA
OSHA Vacated: 1000 ppm TWA; 1900 mg/m³ TWA
NIOSH: 1000 ppm TWA; 1900 mg/m³ TWA

Appropriate Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Use explosion proof equipment. Ensure compliance with applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Eye protection: Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear chemical impervious gloves; use of natural rubber (latex), polyvinyl chloride (PVC), neoprene, or equivalent is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH air-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of methanol may exceed applicable exposure limits. Otherwise, use NIOSH-certified P- or R-series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear and colorless, solvent odor	pH: Not applicable
Boiling Point: 56-172°C (133-342°F)	Melting Point: Not available.
Solubility (H2O): Slight.	Specific Gravity: 0.84 (water = 1)
Density: 7 LB/US gal (840 g/L)	Octanol/H2O Coeff.: Log Pow = 2.73 (Based on toluene)
Evaporation Rate: Not available.	Molecular Weight: Not available.
Odor Threshold: Not available.	Auto Ignition Temperature: 711°F (377°C) minimum (approximately)
LFL: 1 VOL% minimum (approximately)	Flash Point: Less than 20°F (-7°C) Tag Closed Cup
UFL: 36 VOL% maximum (approximately)	
Vapor Pressure: Vapor Pressure = 400 mm Hg @ 20°C	

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions To Avoid

Avoid heat, sparks, or flame. Avoid contact with incompatible materials.

Incompatible Materials

Avoid acids, alkalis, oxidizing agents, reducing agents, reactive halogens, or reactive metals.

Hazardous Decomposition Products

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

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Acetone (67-64-1)

Inhalation LC50 Rat 50100 mg/m3 8 h

Solvent naphtha (petroleum), light aliphatic (64742-89-8)

Oral LD50 Mouse 5000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg

Isopropyl alcohol (67-63-0)

Oral LD50 Rat 4396 mg/kg; Dermal LD50 Rabbit 12800 mg/kg; Inhalation LC50 Rat 16000 ppm 8 h

Methyl ethyl ketone (78-93-3)

Inhalation LC50 Rat 23500 mg/m3 8 h

Ethyl 3-ethoxypropanoate (763-69-9)

Oral LD50 Rat 3200 mg/kg

Isobutyl acetate (110-19-0)

Dermal LD50 Rabbit >17400 mg/kg; Oral LD50 Rat 13400 mg/kg

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Methyl isobutyl ketone (108-10-1)

Inhalation LC50 Rat 8.2 mg/L 4 h; Dermal LD50 Rabbit >16000 mg/kg; Oral LD50 Rat 2080 mg/kg

Xylenes (o-, m-, p- isomers) (1330-20-7)

Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg

Methyl alcohol (67-56-1)

Oral LD50 Rat 5628 mg/kg; Inhalation LC50 Rat 83.2 mg/L 4 h

Ethyl alcohol (64-17-5)

Inhalation LC50 Rat 124.7 mg/L 4 h

Information on Likely Routes of Exposure

Inhalation

May cause respiratory tract irritation.

Ingestion

Aspiration hazard. Harmful if swallowed .

Skin Contact

Causes skin irritation

Eye Contact

Causes serious eye irritation

Immediate Effects

Harmful if swallowed, skin irritation, eye irritation, central nervous system damage, central nervous system depression, kidney damage, liver damage, respiratory system damage, respiratory tract irritation, systemic toxicity, retina damage, aspiration hazard.

Delayed Effects

Mutagenic effects, cancer, reproductive effects, central nervous system damage, kidney damage, liver damage, peripheral nervous system damage, retina damage, respiratory system damage, blood disorders.

Irritation/Corrosivity

Eye irritation, skin irritation, respiratory tract irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

Component Carcinogenicity

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Isopropyl alcohol (67-63-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977] (Group 3 (not classifiable))

Methyl isobutyl ketone (108-10-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans))

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Ethyl alcohol (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))

Germ Cell Mutagenicity

Possible mutagen

Teratogenicity

No information available for the product.

Reproductive Effects

Available data characterizes this substance as a reproductive hazard.

Specific Target Organ Effects - Single Exposure

Central nervous system, kidneys, liver, respiratory system, systemic toxicity, retina

Specific Target Organ Effects - Repeated Exposure

Central nervous system, kidneys, liver, peripheral nervous system, retina, respiratory system, blood

Aspiration Hazard

This material is an aspiration hazard.

Medical Conditions Aggravated by Exposure

Blood disorders, central nervous system disorders, eye disorders, kidney disorders, liver disorders, respiratory disorders, skin disorders, peripheral nervous system disorders, systemic disorders

* * * Section 12 - Ecological Information * * *

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Toluene (108-88-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	15.22 - 19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.89 - 7.81 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	14.1 - 17.16 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi-static]	
96 Hr LC50 Lepomis macrochirus	11.0 - 15.0 mg/L [static]	
96 Hr LC50 Oryzias latipes	54 mg/L [static]	
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi-static]	
96 Hr LC50 Poecilia reticulata	50.87 - 70.34 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	
48 Hr EC50 Daphnia magna	11.5 mg/L	

Acetone (67-64-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Solvent naphtha (petroleum), light aliphatic (64742-89-8)		
Duration/Test/Species	Concentration/Conditions	Notes
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	
Isopropyl alcohol (67-63-0)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	9640 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	11130 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	>1400000 µg/L	
96 Hr EC50 Desmodemus subspicatus	>1000 mg/L	
72 Hr EC50 Desmodemus subspicatus	>1000 mg/L	
48 Hr EC50 Daphnia magna	13299 mg/L	
Methyl ethyl ketone (78-93-3)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	3130 - 3320 mg/L [flow-through]	
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L [Static]	
Ethyl 3-ethoxypropanoate (763-69-9)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	62 mg/L [static]	
48 Hr EC50 Daphnia magna	970 mg/L	
Methyl isobutyl ketone (108-10-1)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	496 - 514 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	400 mg/L	
48 Hr EC50 Daphnia magna	170 mg/L	
Xylenes (o-, m-, p- isomers) (1330-20-7)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	13.4 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	2.661 - 4.093 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	13.5 - 17.3 mg/L	
96 Hr LC50 Lepomis macrochirus	13.1 - 16.5 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	19 mg/L	
96 Hr LC50 Lepomis macrochirus	7.711 - 9.591 mg/L [static]	
96 Hr LC50 Pimephales promelas	23.53 - 29.97 mg/L [static]	
96 Hr LC50 Cyprinus carpio	780 mg/L [semi-static]	
96 Hr LC50 Cyprinus carpio	>780 mg/L	
96 Hr LC50 Poecilia reticulata	30.26 - 40.75 mg/L [static]	
48 Hr EC50 water flea	3.82 mg/L	
48 Hr LC50 Gammarus lacustris	0.6 mg/L	
Methyl alcohol (67-56-1)		
Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	28200 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	>100 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	19500 - 20700 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	18 - 20 mL/L [static]	
96 Hr LC50 Lepomis macrochirus	13500 - 17600 mg/L [flow-through]	

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

Ethyl alcohol (64-17-5)

Duration/Test/Species

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Pimephales promelas

96 Hr LC50 Pimephales promelas

48 Hr LC50 Daphnia magna

48 Hr EC50 Daphnia magna

Concentration/Conditions

12.0 - 16.0 mL/L [static]

>100 mg/L [static]

13400 - 15100 mg/L [flow-through]

9268 - 14221 mg/L

2 mg/L [Static]

Notes

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

USEPA Waste Code D001, D035 Based on available data, this information applies to the product as supplied to the user.

Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

International Transportation Regulations

DOT Shipping Name: Paint related material

UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): FLAMMABLE LIQUID

TDG Shipping Name: PAINT RELATED MATERIAL

UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): FLAMMABLE LIQUID

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

70 to 85 WT%; 5 to 6 LB/US gal (590 to 720 g/l)

As per 40 CFR Part 51.100(s).

Contains photochemically reactive solvent.

VOC Vapor Pressure = 400 mm Hg @ 20°C

Consult your state or local air district for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Toluene (108-88-3)	1.0 % de minimis concentration
Isopropyl alcohol (67-63-0)	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
Methyl isobutyl ketone (108-10-1)	1.0 % de minimis concentration
Xylenes (o-, m-, p- isomers) (1330-20-7)	1.0 % de minimis concentration
Methyl alcohol (67-56-1)	1.0 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Toluene (108-88-3)	1000 lb final RQ; 454 kg final RQ
Acetone (67-64-1)	5000 lb final RQ; 2270 kg final RQ
Methyl ethyl ketone (78-93-3)	5000 lb final RQ; 2270 kg final RQ
Isobutyl acetate (110-19-0)	5000 lb final RQ; 2270 kg final RQ
Methyl isobutyl ketone (108-10-1)	5000 lb final RQ; 2270 kg final RQ
Xylenes (o-, m-, p- isomers) (1330-20-7)	100 lb final RQ; 45.4 kg final RQ
Methyl alcohol (67-56-1)	5000 lb final RQ; 2270 kg final RQ

TSCA Inventory

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Toluene	108-88-3	Yes
Acetone	67-64-1	Yes
Solvent naphtha (petroleum), light aliphatic	64742-89-8	Yes
Isopropyl alcohol	67-63-0	Yes
Methyl ethyl ketone	78-93-3	Yes
Ethyl 3-ethoxypropanoate	763-69-9	Yes
Isobutyl acetate	110-19-0	Yes
Methyl isobutyl ketone	108-10-1	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes
Methyl alcohol	67-56-1	Yes
Ethyl alcohol	64-17-5	Yes

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes
Isopropyl alcohol	67-63-0	Yes	Yes	Yes	Yes	Yes
Methyl ethyl ketone	78-93-3	Yes	Yes	Yes	Yes	Yes
Isobutyl acetate	110-19-0	Yes	Yes	Yes	Yes	Yes
Methyl isobutyl ketone	108-10-1	Yes	Yes	Yes	Yes	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes
Methyl alcohol	67-56-1	Yes	Yes	Yes	Yes	Yes
Ethyl alcohol	64-17-5	Yes	Yes	Yes	Yes	Yes

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Toluene	108-88-3	DSL
Acetone	67-64-1	DSL
Solvent naphtha (petroleum), light aliphatic	64742-89-8	DSL
Isopropyl alcohol	67-63-0	DSL
Methyl ethyl ketone	78-93-3	DSL
Ethyl 3-ethoxypropanoate	763-69-9	DSL
Isobutyl acetate	110-19-0	DSL
Methyl isobutyl ketone	108-10-1	DSL
Xylenes (o-, m-, p- isomers)	1330-20-7	DSL
Methyl alcohol	67-56-1	DSL
Ethyl alcohol	64-17-5	DSL

Canadian WHMIS Information

B2, D1A, D2A, D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Toluene (108-88-3)	1 %
Acetone (67-64-1)	1 %
Isopropyl alcohol (67-63-0)	1 %
Methyl ethyl ketone (78-93-3)	1 %
Isobutyl acetate (110-19-0)	1 %
Methyl isobutyl ketone (108-10-1)	1 %
Methyl alcohol (67-56-1)	1 %
Ethyl alcohol (64-17-5)	0.1 %

Safety Data Sheet

Material Name: SAFETY-KLEEN MULTI-USE LACQUER THINNER

SDS ID: 82410

* * * Section 16 - Other Information * * *

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82410



Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

Product Code

6864, 585821, 585826

Synonyms

Not applicable.

Recommended Use

For cleaning coating equipment (e.g., paint spray guns). If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

November 1, 2014

Supersedes Issue Date

December 13, 2013

Original Issue Date

August 2, 2005

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 2
Acute Toxicity (Oral), Category 4
Acute Toxicity (Inhalation), Category 3
Skin Corrosion / Irritation, Category 2
Eye Damage / Irritation, Category 1
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1B
Toxic to Reproduction, Category 2
Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system); Single Exposure, Category 2 (respiratory system and liver); Single Exposure, Category 3 (central nervous system and respiratory tract irritation); Repeated Exposure, Category 1 (central nervous system, kidneys, liver, and ears); Repeated Exposure, Category 2 (blood and respiratory system)
Hazardous to the aquatic environment - acute hazard, Category 3
Aspiration Hazard, Category 1

GHS LABEL ELEMENTS

Symbol(s)



Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

Signal Word

DANGER!

Hazard Statement(s)

Highly flammable liquid and vapor

Harmful if swallowed

Toxic if inhaled

Causes skin irritation, eye damage, and damage to central nervous system

May cause genetic defects, cancer, drowsiness and dizziness, respiratory irritation and damage to respiratory system and liver

Suspected of damaging fertility or the unborn child

Causes damage to central nervous system, kidneys, liver, and ears through prolonged or repeated exposure

May cause damage to blood and respiratory system through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Harmful to aquatic life

Precautionary Statement(s)

Prevention

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid release to the environment.

Response

In case of fire: Use water spray, carbon dioxide, dry chemical, and alcohol resistant foam for extinction. IF exposed or concerned: Get medical advice/attention. Specific treatment may be needed, see first aid section of Safety Data Sheet. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician. Specific treatment may be needed, see first aid section of Safety Data Sheet. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Specific treatment may be needed, see first aid section of Safety Data Sheet. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth.

Storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
63231-51-6	Aromatic Hydrocarbons	15-80
67-64-1	Acetone	40-80
*MIXTURE	Ketones	3-35
***MIXTURE	Acetates	0-30
**MIXTURE	Aliphatic hydrocarbons	0-25
68475-56-9	Alcohols, C1-3	0-20
****MIXTURE	Other Alcohols	0-10
763-69-9	Ethyl 3-ethoxypropanoate	0-5

Component Information/Information on Non-Hazardous Components

*Mixture of 78-93-3, 108-10-1, 110-43-0, 107-87-9

**Mixture of 64741-89-5, 8030-30-6

***Mixture of 123-86-4, 110-19-0, 108-21-4, 108-65-6, 141-78-6

****Mixture of 71-36-3, 75-65-0

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: Aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Call a poison control center or doctor immediately for treatment advice.

Most Important Symptoms/Effects

Acute

Aspiration hazard, toxic if inhaled, harmful if swallowed, central nervous system damage, eye damage, skin irritation, liver damage, respiratory system damage, respiratory tract irritation, central nervous system depression.

Delayed

Mutagenic effects, cancer, reproductive effects, central nervous system damage, kidney damage, liver damage, ear damage, blood damage, respiratory system damage.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

IF exposed: Call a POISON CENTER or doctor/physician. Treat symptomatically and supportively.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, dry chemical or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Product may be sensitive to static discharge, which could result in fire or explosion. Highly flammable liquid and vapor.

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Vapors may form explosive mixture with air. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Fire may produce irritating, poisonous and/or corrosive fumes. Runoff may create fire or explosion hazard. Empty product containers may retain product residue and can be dangerous. Containers may rupture or explode.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce formaldehyde, peracetic acid, carbon monoxide, and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Keep storage containers cool with water spray. Move container from fire area if it can be done without risk. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Do not scatter spilled material with high-pressure water streams. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8, Exposure Controls/Personal protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15, Regulatory information**.

* * * Section 7 - Handling and Storage * * *

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Keep container tightly closed. Keep cool. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous. Store in a well-ventilated place. See **Section 14, Transportation Information** for Packing Group information.

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

Incompatibilities

Combustible materials, strong oxidizing materials, strong acids, alkalies, reducing agents, reactive halogens, reactive metals.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Acetone (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL

OSHA Final: 1000 ppm TWA; 2400 mg/m³ TWA

OSHA Vacated: 750 ppm TWA; 1800 mg/m³ TWA
2400 mg/m³ STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL

NIOSH: 250 ppm TWA; 590 mg/m³ TWA

*Mixture (108-10-1)

ACGIH: 20 ppm TWA
75 ppm STEL

OSHA Final: 100 ppm TWA; 410 mg/m³ TWA

OSHA Vacated: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

NIOSH: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

*Mixture (110-43-0)

ACGIH: 50 ppm TWA

OSHA Final: 100 ppm TWA; 465 mg/m³ TWA

OSHA Vacated: 100 ppm TWA; 465 mg/m³ TWA

NIOSH: 100 ppm TWA; 465 mg/m³ TWA

*Mixture (107-87-9)

ACGIH: 150 ppm STEL

OSHA Final: 200 ppm TWA; 700 mg/m³ TWA

OSHA Vacated: 200 ppm TWA; 700 mg/m³ TWA
250 ppm STEL; 875 mg/m³ STEL

NIOSH: 150 ppm TWA; 530 mg/m³ TWA

*Mixture (78-93-3)

ACGIH: 200 ppm TWA
300 ppm STEL

OSHA Final: 200 ppm TWA; 590 mg/m³ TWA

OSHA Vacated: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

NIOSH: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

**Mixture (8030-30-6)

OSHA Final: 100 ppm TWA; 400 mg/m³ TWA

OSHA Vacated: 100 ppm TWA; 400 mg/m³ TWA

NIOSH: 100 ppm TWA; 400 mg/m³ TWA

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

*****Mixture (110-19-0)**

ACGIH: 150 ppm TWA
OSHA Final: 150 ppm TWA; 700 mg/m³ TWA
OSHA Vacated: 150 ppm TWA; 700 mg/m³ TWA
NIOSH: 150 ppm TWA; 700 mg/m³ TWA

*****Mixture (108-21-4)**

ACGIH: 100 ppm TWA
200 ppm STEL
OSHA Final: 250 ppm TWA; 950 mg/m³ TWA
OSHA Vacated: 250 ppm TWA; 950 mg/m³ TWA
310 ppm STEL; 1185 mg/m³ STEL

*****Mixture (123-86-4)**

ACGIH: 150 ppm TWA
200 ppm STEL
OSHA Final: 150 ppm TWA; 710 mg/m³ TWA
OSHA Vacated: 150 ppm TWA; 710 mg/m³ TWA
200 ppm STEL; 950 mg/m³ STEL
NIOSH: 150 ppm TWA; 710 mg/m³ TWA
200 ppm STEL; 950 mg/m³ STEL

*****Mixture (141-78-6)**

ACGIH: 400 ppm TWA
OSHA Final: 400 ppm TWA; 1400 mg/m³ TWA
OSHA Vacated: 400 ppm TWA; 1400 mg/m³ TWA
NIOSH: 400 ppm TWA; 1400 mg/m³ TWA

******Mixture (75-65-0)**

ACGIH: 100 ppm TWA
OSHA Final: 100 ppm TWA; 300 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 300 mg/m³ TWA
150 ppm STEL; 450 mg/m³ STEL
NIOSH: 100 ppm TWA; 300 mg/m³ TWA
150 ppm STEL; 450 mg/m³ STEL

******Mixture (71-36-3)**

ACGIH: 20 ppm TWA
OSHA Final: 100 ppm TWA; 300 mg/m³ TWA
OSHA Vacated: 50 ppm Ceiling; 150 mg/m³ Ceiling
Prevent or reduce skin absorption
NIOSH: 50 ppm Ceiling; 150 mg/m³ Ceiling
Potential for dermal absorption

Appropriate Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Use explosion proof equipment. Ensure compliance with applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

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Eyes/Face Protection

Eye protection: Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear polyvinyl alcohol (PVA), laminate or equivalent protective gloves; use of natural rubber (latex), polyvinyl chloride (PVC), neoprene or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Respiratory Protection

Use NIOSH-certified, full-face respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentrations of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear and colorless, solvent odor	pH: Not applicable.
Boiling Point: 133°F (56.2°C) initial (approximately)	Odor Threshold: Not available.
Solubility (H2O): Slight	Melting Point: Not available.
Density: 6.8 lb/US gal (820 g/L) (approximately)	Specific Gravity: 0.82 (water =1) (approximately)
Evaporation Rate: Not available.	Octanol/H2O Coeff.: Not available.
LFL: 1 VOL % (approximately)	Auto Ignition Temperature: 800°F (427°C) (approximately)
UFL: 13 VOL% (approximately)	Flash Point: 0°F (-18°C) (minimum, based on Acetone)
Vapor Pressure: 108 mmHg @ 68°F (20°C) (approximately)	Vapor Density: >1 (air = 1)

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, flames, and other sources of ignition Avoid contact with incompatible materials.

Incompatible Materials

Avoid combustible materials, acids, alkalis, oxidizing agent, reactive halogens, and reactive metals.

Hazardous Decomposition Products

Burning may produce formaldehyde, peracetic acid, carbon monoxide, and unidentified organic compounds. See also Section 5, Hazardous Combustion Products.

*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Acetone (67-64-1)	Inhalation LC50 Rat 50100 mg/m3 8 h
*Mixture (108-10-1)	Dermal LD50 Rabbit >16000 mg/kg; Inhalation LC50 Rat 8.2 mg/L 4 h; Oral LD50 Rat 2080 mg/kg
*Mixture (107-87-9)	Oral LD50 Rat 1600 mg/kg

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Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

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*Mixture (78-93-3)	Inhalation LC50 Rat 23500 mg/m ³ 8 h
**Mixture (64741-89-5)	Dermal LD50 Rabbit >5 g/kg; Inhalation LC50 Rat 2.18 mg/L 4 h; Oral LD50 Rat >5000 mg/kg
***Mixture (108-65-6)	Dermal LD50 Rabbit >5 g/kg; Oral LD50 Rat 8532 mg/kg
***Mixture (110-19-0)	Dermal LD50 Rabbit >17400 mg/kg; Oral LD50 Rat 13400 mg/kg
***Mixture (108-21-4)	Dermal LD50 Rabbit >20 mL/kg; Inhalation LC50 Rat 50600 mg/m ³ 8 h; Oral LD50 Rat 3000 mg/kg
***Mixture (123-86-4)	Dermal LD50 Rabbit >17600 mg/kg; Inhalation LC50 Rat 390 ppm 4 h
***Mixture (141-78-6)	Dermal LD50 Rabbit >20 mL/kg; Inhalation LC50 Mouse 1500 ppm 4 h; Oral LD50 Rat 5620 mg/kg
****Mixture (75-65-0)	Dermal LD50 Rabbit >2 g/kg; Inhalation LC50 Rat >10000 ppm 4 h; Oral LD50 Rat 2733 mg/kg
****Mixture (71-36-3)	Dermal LD50 Rabbit 3400 mg/kg; Inhalation LC50 Rat 8000 ppm 4 h; Oral LD50 Rat 790 mg/kg
Ethyl 3-ethoxypropanoate (763-69-9)	Oral LD50 Rat 3200 mg/kg

Information on Likely Routes of Exposure

Inhalation

Toxic if inhaled. May cause irritation, nausea, vomiting, headache, dizziness, loss of coordination and central nervous system effects.

Ingestion

Aspiration hazard. Harmful if swallowed. May cause throat irritation, nausea, vomiting and diarrhea.

Skin Contact

Causes skin irritation.

Eye Contact

Causes serious eye damage.

Immediate Effects

Harmful if swallowed, toxic if inhaled, aspiration hazard, eye damage, skin irritation, central nervous system damage, liver damage, respiratory system damage, central nervous system depression, respiratory tract irritation.

Delayed Effects

Mutagenic effects, cancer, reproductive effects, central nervous system damage, kidney damage, liver damage, ear damage, blood disorders, respiratory system damage.

Irritation/Corrosivity

Eye damage, skin irritation, respiratory tract irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

May cause cancer.

Component Carcinogenicity

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

*Mixture (108-10-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans))

****Mixture (75-65-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Germ Cell Mutagenicity

May cause genetic defects.

Teratogenicity

No information available for the product.

Reproductive Effects

Available data characterizes this substance as a reproductive hazard.

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SDS ID: GHS 82509

Specific Target Organ Effects - Single Exposure

Central nervous system, respiratory system, liver, central nervous system depression.

Specific Target Organ Effects - Repeated Exposure

Central nervous system, kidneys, liver, ears, blood, respiratory system.

Aspiration Hazard

Lung aspiration hazard if swallowed.

Medical Conditions Aggravated by Exposure

Blood disorders, central nervous system disorders, kidney disorders, liver disorders, nervous system disorders, respiratory disorders, skin disorders, eye disorders

***** Section 12 - Ecological Information *****

Ecotoxicity

Harmful to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Acetone (67-64-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

*Mixture (108-10-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	496 - 514 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	400 mg/L	
48 Hr EC50 Daphnia magna	170 mg/L	

*Mixture (110-43-0)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	126 - 137 mg/L [flow-through]	

*Mixture (107-87-9)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1190 - 1290 mg/L [flow-through]	

*Mixture (78-93-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	3130 - 3320 mg/L [flow-through]	
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L [Static]	

**Mixture (64741-89-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	
48 Hr EC50 Daphnia magna	>1000 mg/L	

**Mixture (8030-30-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	9.2 mg/L [static]	
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	

***Mixture (108-65-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	161 mg/L [static]	
48 Hr EC50 Daphnia magna	>500 mg/L	

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*****Mixture (123-86-4)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	100 mg/L [static]	
96 Hr LC50 Pimephales promelas	17 - 19 mg/L [flow-through]	
72 Hr EC50 Desmodemus subspicatus	674.7 mg/L	

*****Mixture (141-78-6)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	220 - 250 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	484 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	352 - 500 mg/L [semi-static]	
48 Hr EC50 Daphnia magna	560 mg/L [Static]	

******Mixture (75-65-0)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	6130 - 6700 mg/L [flow-through]	
72 Hr EC50 Desmodemus subspicatus	>1000 mg/L	
48 Hr EC50 Daphnia magna	933 mg/L	
48 Hr EC50 Daphnia magna	4607 - 6577 mg/L [Static]	

******Mixture (71-36-3)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1730 - 1910 mg/L [static]	
96 Hr LC50 Pimephales promelas	1740 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	100000 - 500000 µg/L [static]	
96 Hr LC50 Pimephales promelas	1910000 µg/L [static]	
96 Hr EC50 Desmodemus subspicatus	>500 mg/L	
72 Hr EC50 Desmodemus subspicatus	>500 mg/L	
48 Hr EC50 Daphnia magna	1983 mg/L	
48 Hr EC50 Daphnia magna	1897 - 2072 mg/L [Static]	

Ethyl 3-ethoxypropanoate (763-69-9)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	62 mg/L [static]	
48 Hr EC50 Daphnia magna	970 mg/L	

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

***** Section 13 - Disposal Considerations *****

Disposal Methods

USEPA Waste Code D001. Based on available this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product. Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

***** Section 14 - Transport Information *****

Emergency Response Guide Number

128 Reference *North American Emergency Response Guidebook*

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

International Transportation Regulations

DOT Shipping Name: Paint related material
UN/NA #: UN1263 Hazard Class: 3 Packing Group: II
Required Label(s): FLAMMABLE LIQUID

TDG Shipping Name: Paint related material
UN/NA #: UN1263 Hazard Class: 3 Packing Group: II
Required Label(s): FLAMMABLE LIQUID

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

Up to 60 WT%; 4 LB/US gallon; 500g/l (maximum)
As per 40 CFR Part 51.100(s).
Photochemically reactive (up to 60% by volume)
VOC VP = 108 mmHg @ 68°F (20°C) (approx.)
Consult your state or local air district regulations for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

*Mixture (108-10-1) 1.0 % de minimis concentration
***Mixture (75-65-0) 1.0 % de minimis concentration
***Mixture (71-36-3) 1.0 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Acetone (67-64-1) 5000 lb final RQ; 2270 kg final RQ
*Mixture (108-10-1) 5000 lb final RQ; 2270 kg final RQ
*Mixture (78-93-3) 5000 lb final RQ; 2270 kg final RQ
***Mixture (110-19-0) 5000 lb final RQ; 2270 kg final RQ
***Mixture (123-86-4) 5000 lb final RQ; 2270 kg final RQ
***Mixture (141-78-6) 5000 lb final RQ; 2270 kg final RQ
***Mixture (71-36-3) 5000 lb final RQ; 2270 kg final RQ

TSCA Inventory

All the components of these products are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Aromatic Hydrocarbons	63231-51-6	No
Acetone	67-64-1	Yes

Safety Data Sheet

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*Mixture	108-10-1	Yes
*Mixture	110-43-0	Yes
*Mixture	107-87-9	Yes
*Mixture	78-93-3	Yes
**Mixture	64741-89-5	Yes
**Mixture	8030-30-6	Yes
***Mixture	108-65-6	Yes
***Mixture	110-19-0	Yes
***Mixture	108-21-4	Yes
***Mixture	123-86-4	Yes
***Mixture	141-78-6	Yes
Alcohols, C1-3	68475-56-9	Yes
****Mixture	75-65-0	Yes
****Mixture	71-36-3	Yes
Ethyl 3-ethoxypropanoate	763-69-9	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes
*Mixture	108-10-1	Yes	Yes	Yes	Yes	Yes
*Mixture	110-43-0	Yes	Yes	Yes	Yes	Yes
*Mixture	107-87-9	Yes	Yes	Yes	Yes	Yes
*Mixture	78-93-3	Yes	Yes	Yes	Yes	Yes
**Mixture	64741-89-5	No	Yes	No	No	No
**Mixture	8030-30-6	Yes	Yes	Yes	Yes	Yes
***Mixture	110-19-0	Yes	Yes	Yes	Yes	Yes
***Mixture	108-21-4	Yes	Yes	Yes	Yes	Yes
***Mixture	123-86-4	Yes	Yes	Yes	Yes	Yes
***Mixture	141-78-6	Yes	Yes	Yes	Yes	Yes
****Mixture	75-65-0	Yes	Yes	Yes	Yes	Yes
****Mixture	71-36-3	Yes	Yes	Yes	Yes	Yes

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
*Mixture	63231-51-6	No
Acetone	67-64-1	DSL
*Mixture	108-10-1	DSL
*Mixture	110-43-0	DSL
*Mixture	107-87-9	DSL
*Mixture	78-93-3	DSL
**Mixture	64741-89-5	DSL
**Mixture	8030-30-6	DSL
***Mixture	108-65-6	DSL
***Mixture	110-19-0	DSL
***Mixture	108-21-4	DSL

Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY 550 CLEANING SOLVENT

SDS ID: GHS 82509

***Mixture	123-86-4	DSL
***Mixture	141-78-6	DSL
Alcohols, C1-3	68475-56-9	NSL
****Mixture	75-65-0	DSL
****Mixture	71-36-3	DSL
Ethyl 3-ethoxypropanoate	763-69-9	DSL

Canadian WHMIS Information

B2, D1B, D2A, D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Acetone (67-64-1)	1 %
*Mixture (108-10-1)	1 %
*Mixture (110-43-0)	1 %
*Mixture (107-87-9)	1 %
*Mixture (78-93-3)	1 %
***Mixture (110-19-0)	1 %
***Mixture (108-21-4)	1 %
***Mixture (123-86-4)	1 %
***Mixture (141-78-6)	1 %
****Mixture (75-65-0)	1 %
****Mixture (71-36-3)	1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82509



Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

*** Section 1 - Chemical Product and Company Identification ***

Product Code: 6770

Product Use: Lacquer thinner. If these products are used in combination with other products, refer to the Material Safety Data Sheet for those products.

Synonyms: Not available

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080

Phone: 1-800-669-5740

Emergency # 1-800-468-1760
www.safety-kleen.com

Issue Date

January 9, 2014

Supersedes Issue Date

January 6, 2011

Original Issue Date

December 4, 2008

PREPARED BY: Product MSDS Coordinator APPROVED BY: MSDS Task Force

*** Section 2 - Hazardous Identification ***

EMERGENCY OVERVIEW

Appearance

Clear, colorless liquid, solvent odor.

Signal Word

DANGER!

Physical Hazards

Extremely flammable liquid and vapor. Vapor may cause flash fire.

Health Hazards

May be harmful if inhaled or swallowed.

May be harmful if absorbed through skin.

Swallowing methanol may cause blindness and death.

May irritate the respiratory tract (nose, throat, and lungs), and skin.

Contains material which can cause eye, liver, kidney and central nervous system damage.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)

High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

Eyes

May cause irritation. High concentrations of vapor or mist may cause blurred vision or other eye damage

Skin

May cause irritation, drying, cracking, redness, itching, and/or swelling (dermatitis). Toluene and methanol may be absorbed through the skin and cause harm as noted under **INHALATION (BREATHING)**.

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Ingestion (Swallowing)

This product may be harmful or fatal if swallowed. Swallowing methanol may cause blindness. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**.

Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing cardiovascular, liver, kidney, respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Chronic

Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**.

Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis). Prolonged or repeated inhalation or ingestion may cause toxic eye, liver, kidney, or central nervous system damage. Prolonged or repeated inhalation or ingestion exposure may have reproductive toxicity, mutagenicity, and/or teratogenicity effects.

Cancer Information

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

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
108-88-3	Toluene	41-86*
67-64-1	Acetone	1-33*
67-56-1	Methyl alcohol	2-47*

*Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.

*** Section 4 - First Aid Measures ***

Inhalation (Breathing)

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

Eyes

If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Skin

Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists. Wash contaminated clothing before reuse. Discard any shoes or clothing items that cannot be decontaminated.

Ingestion (Swallowing)

Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Notes to Physicians

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

*** Section 5 - Fire Fighting Measures ***

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce oxides of carbon and unidentified organic compounds.

Conditions of Flammability

Heat, sparks, or flame.

Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Protective Equipment For Firefighting

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Equipment/Instructions

Keep storage containers cool with water spray.

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Fire and Explosion Hazards

Vapor explosion hazard indoors, outdoors, or in sewers. Vapor may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire or explosion hazard. Heated containers may rupture, explode, or be thrown into the air. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

*** Section 6 - Accidental Release Measures ***

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal. There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION**.

*** Section 7 - Handling and Storage ***

Handling Procedures

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

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Shipping and Storing

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORTATION INFORMATION for Packing Group information.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

Component Exposure Limits

Toluene (108-88-3)

ACGIH: 20 ppm TWA
OSHA Final: 200 ppm TWA
300 ppm Ceiling
OSHA Vacated: 100 ppm TWA; 375 mg/m³ TWA
150 ppm STEL; 560 mg/m³ STEL
NIOSH: 100 ppm TWA; 375 mg/m³ TWA
150 ppm STEL; 560 mg/m³ STEL

Acetone (67-64-1)

ACGIH: 500 ppm TWA
750 ppm STEL
OSHA Final: 1000 ppm TWA; 2400 mg/m³ TWA
OSHA Vacated: 750 ppm TWA; 1800 mg/m³ TWA
2400 mg/m³ STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL
NIOSH: 250 ppm TWA; 590 mg/m³ TWA

Methyl alcohol (67-56-1)

ACGIH: 200 ppm TWA
250 ppm STEL
Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final: 200 ppm TWA; 260 mg/m³ TWA
OSHA Vacated: 200 ppm TWA; 260 mg/m³ TWA
250 ppm STEL; 325 mg/m³ STEL
Prevent or reduce skin absorption
NIOSH: 200 ppm TWA; 260 mg/m³ TWA
250 ppm STEL; 325 mg/m³ STEL
Potential for dermal absorption

Engineering Controls

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

Personal Protective Equipment: Respiratory

Use NIOSH-certified, air-supplied respirators (self-contained breathing apparatus or air-line) respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Personal Protective Equipment: Eyes/Face

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

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Personal Protective Equipment: Skin

Wear chemical resistant (impervious) gloves.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Personal Protective Equipment: Personal Hygiene

Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse.

Discard affected clothing, shoes, and/or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with this product.

Other Personal Protective Equipment

Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear and colorless. Solvent odor	pH: Not applicable
Boiling Point: 133 to 232°F (56 to 111°C)	Melting Point: -137°F (-94°C) (maximum)
Solubility (H2O): Not available	Specific Gravity: 0.847 (water = 1)
Density: 7.1 LB/US gal (847 g/l)	Octanol/H2O Coeff.: Log Pow = 2.7
Evaporation Rate: 6 (butyl acetate = 1) (maximum)	Molecular Weight: 92.1 (toluene), 58.1 (acetone), 32.0 (methanol)
Odor Threshold: 10 ppm (minimum)	Auto Ignition Temperature: 725°F (385°C) (minimum)
LFL: 1.2 VOL%	Flash Point: -4°F (20°C)
UFL: 36.0 VOL%	Vapor Pressure: 68 mm Hg at 68°F (20°C) (approximately) VOC vapor pressure < 45 mm Hg at 68°F (20°C)
Vapor Density: 3.14 (air = 1)	Flammability Class: Flammable
Freezing Point: -137°F (-94°C) (maximum)	

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability

Stable under normal temperatures and pressures.

Incompatibility

Avoid acids, alkalies, oxidizing agents, reactive halogens, or reactive metals.

Reactivity

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

Hazardous Decomposition Products

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

Conditions To Avoid

Avoid heat, sparks, or flame.

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

*** Section 11 - Toxicological Information ***

Toxicity Data

Component Analysis - LD50/LC50

Toluene (108-88-3)

Dermal LD50 Rabbit 8390 mg/kg; Inhalation LC50 Rat 12.5 mg/L 4 h; Oral LD50 Rat 636 mg/kg

Acetone (67-64-1)

Inhalation LC50 Rat 50100 mg/m³ 8 h

Methyl alcohol (67-56-1)

Inhalation LC50 Rat 83.2 mg/L 4 h; Oral LD50 Rat 5628 mg/kg

Acute Effects

High concentrations of vapor or mist may be harmful if inhaled., High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs), cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects., Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death., May cause eye irritation., High concentrations of vapor or mist may cause blurred vision or other eye damage., May cause skin irritation, drying, cracking, redness, itching, and/or swelling (dermatitis). Toluene and methanol may be absorbed through the skin and cause harm as noted for inhalation., May be harmful or fatal if swallowed. Swallowing methanol may cause blindness., May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under inhalation., Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Repeated Dose Effects

Prolonged or repeated inhalation may cause toxic effects., Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis)., Prolonged or repeated inhalation or ingestion may cause toxic eye, liver, kidney, or central nervous system damage., Prolonged or repeated inhalation or ingestion exposure may have reproductive toxicity, mutagenicity, and/or teratogenicity effects.

Methanol has demonstrated human effects of mutagenicity., Acetone has demonstrated experimental effects of mutagenicity.

Toluene has demonstrated human effects of teratogenicity.

Toluene and methanol have demonstrated animal effects of reproductive toxicity.

Based on best current information, there is no known human sensitization associated with this product.

Component Carcinogenicity

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Target Organ Effects

Contains material which can cause eye, liver, kidney, reproductive and central nervous system damage.

Sensitization

Based on best current information, there is no known human sensitization associated with this product.

Mutagenicity

Methanol has demonstrated human effects of mutagenicity.

Acetone has demonstrated experimental effects of mutagenicity.

Based on best current information, the other components listed in **SECTION 3** are not mutagens.

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Reproductive Toxicity

Toluene and methanol have demonstrated animal effects of reproductive toxicity.
Based on best current information, the other components listed in SECTION 3 are not a teratogens.

Teratogenicity

Toluene has demonstrated human effects of teratogenicity.
Based on best current information, the other components listed in SECTION 3 are not teratogens.

Toxicologically Synergistic Products

Based on best current information, there are no known toxicologically synergistic products associated with this product.

*** Section 12 - Ecological Information ***

Ecotoxicity

May be harmful to fish.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Toluene (108-88-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	15.22 - 19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.89 - 7.81 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	14.1 - 17.16 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi-static]	
96 Hr LC50 Lepomis macrochirus	11.0 - 15.0 mg/L [static]	
96 Hr LC50 Oryzias latipes	54 mg/L [static]	
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi-static]	
96 Hr LC50 Poecilia reticulata	50.87 - 70.34 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	
48 Hr EC50 Daphnia magna	11.5 mg/L	

Acetone (67-64-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

Methyl alcohol (67-56-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	28200 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	>100 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	19500 - 20700 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	18 - 20 mL/L [static]	
96 Hr LC50 Lepomis macrochirus	13500 - 17600 mg/L [flow-through]	

Persistence/Degradability

No information available for the product.

Bioaccumulation/Accumulation

No information available for the product.

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

Mobility in Environmental Media

No information available for the product.

Other Adverse Effects

No information available for the product.

*** Section 13 - Disposal Considerations ***

Disposal Instructions

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transportation Information ***

Emergency Response Guide Number

127

Reference *North American Emergency Response Guidebook*

DOT **Shipping Name:** Paint related material

UN/NA #: UN1263 Hazard Class: 3 Packing Group: II

TDG **Shipping Name:** Paint Related Material

UN/NA #: UN1263 Hazard Class: 3 Packing Group: II

IATA Information

No Classification Assigned.

IMDG Information

No Classification Assigned.

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

77-99 WT%; 5.5-7.0 LB/US gal; 652-839 g/L; As per 40 CFR Part 51.100(s)

Contains photochemically reactive solvent.

SARA Sections 311/312

This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Fire Hazard

SARA 302/304

Component Analysis

This product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Toluene (108-88-3) 1.0 % de minimis concentration

Methyl alcohol (67-56-1) 1.0 % de minimis concentration

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Toluene (108-88-3)	1000 lb final RQ; 454 kg final RQ
Acetone (67-64-1)	5000 lb final RQ; 2270 kg final RQ
Methyl alcohol (67-56-1)	5000 lb final RQ; 2270 kg final RQ

TSCA

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Toluene	108-88-3	Yes
Acetone	67-64-1	Yes
Methyl alcohol	67-56-1	Yes

State Regulations

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

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes
Methyl alcohol	67-56-1	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Toluene	108-88-3	DSL
Acetone	67-64-1	DSL
Methyl alcohol	67-56-1	DSL

Canadian WHMIS Information

B2, D2A, D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Toluene (108-88-3)	1 %
Acetone (67-64-1)	1 %
Methyl alcohol (67-56-1)	1 %

Canadian Environmental Protection Act (CEPA)

All the components of this product are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

Material Safety Data Sheet

Material Name: PREMIUM LACQUER THINNER

ID: 82688

*** Section 16 - Other Information ***

Label/Other Information

Not available.

Revision Information

Regulatory update. Revised format (Sections 2 and 3 switched). Section 1 (Address changed, Revision dates), Section 5 (Fire fields), Section 8 (Added exposure limits), Section 11 (Toxicology fields), Section 12 (Component Ecotoxicity), Section 16 (Revision).

Disclaimer

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

End of Sheet 82688



Safety Data Sheet

Material Name: SAFETY-KLEEN ULTRA KLEEN SPRAY EQUIPMENT SOLUTION

SDS ID: 820016

*** Section 1 - Identification ***

Product Identifier

SAFETY-KLEEN ULTRA KLEEN SPRAY EQUIPMENT SOLUTION

Product Code

5110, 5111, 5112, 5113, 6827

Synonyms

None

Recommended Use

For cleaning coating equipment (e.g., spray guns); lacquer thinner. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA

Manufacturer Information

Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080

Phone: 1-800-669-5740
www.safety-kleen.com

Emergency # 1-800-468-1760

Issue Date

February 2, 2015

Supersedes Issue Date

March 5, 2014

Original Issue Date

January 26, 2012

*** Section 2 - Hazard(s) Identification ***

Classification in Accordance with 29 CFR 1910.1200.

Flammable Liquids, Category 2
Acute Toxicity (Inhalation), Category 3
Acute Toxicity (Oral), Category 4
Acute Toxicity (Dermal), Category 4
Skin Corrosion / Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 1
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1B
Toxic to Reproduction, Category 1A
Toxic to reproduction, Effects on or via lactation
Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system, nervous system, kidneys, respiratory system, body, and eyes)
Specific Target Organ Toxicity - Single Exposure, Category 2 (liver)
Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system and respiratory tract)
Specific Target Organ Toxicity - Repeated Exposure, Category 1 (central nervous system, kidneys, nervous system, respiratory system, liver, and eyes)
Specific Target Organ Toxicity - Repeated Exposure, Category 2 (blood and spleen)
Aspiration Hazard, Category 1
Hazardous to the aquatic environment - acute hazard, Category 2
Hazardous to the aquatic environment - chronic hazard, Category 3

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GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER!

Hazard Statement(s)

Highly flammable liquid and vapor
Toxic if inhaled
Harmful if swallowed or in contact with skin
Causes severe skin burns and eye damage
May cause genetic defects, cancer, and cause harm to breast-fed children
May damage fertility or the unborn child
Causes damage to central nervous system, nervous system, kidneys, respiratory system, body, and eyes
May cause damage to liver, respiratory irritation, and drowsiness and dizziness
Causes damage to central nervous system, kidneys, nervous system, respiratory system, liver, and eyes through prolonged or repeated exposure
May cause damage to blood and spleen through prolonged or repeated exposure
May be fatal if swallowed and enters airways
Toxic to aquatic life
Harmful to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Do not eat, drink, or smoke when using this product. Avoid contact during pregnancy/while nursing. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

Response

In case of fire: Use carbon dioxide, alcohol resistant foam, regular dry chemical, water spray, and water fog for extinction. IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth.

Storage

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

Safety Data Sheet

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*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
108-88-3	Toluene	15-65
67-64-1	Acetone	10-55
*MIXTURE	Acetate	0-40
64741-42-0	Naphtha, petroleum, full-range straight-run	0-20
**MIXTURE	Alcohols	0-20
***MIXTURE	Ketones	0-15
63231-51-6	Aromatic Hydrocarbons	0-15
1330-20-7	Xylenes (o-, m-, p- isomers)	0-25
64742-47-8	Petroleum distillates, hydrotreated light	0-20
64741-89-5	C5 to C8 Aliphatic hydrocarbons	0-20
8030-30-6	C9-C13 Medium Boiling Hydrocarbons	0-20
Not Available	C14-C20 High Boiling Aliphatic Hydrocarbons	0-20
999-97-3	Hexamethyldisilazane	0-20
100-41-4	Ethyl benzene	0-5
763-69-9	Ethyl 3-ethoxypropanoate	0-1

Component Information/Information on Non-Hazardous Components

*Mixture of 123-86-4, 110-19-0, 108-21-4, 108-65-6, 141-78-6, 109-60-4

**Mixture of 67-23-0, 64-17-5, 71-36-3, 67-56-1, 71-23-8

***Mixture of 78-93-3, 108-10-1

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

Aspiration hazard. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting. Rinse mouth.

Most Important Symptoms/Effects

Acute

Toxic if inhaled., Harmful if swallowed., Harmful in contact with skin., Causes skin burns, eye damage, lung damage (from aspiration), central nervous system damage, nervous system damage, kidney damage, respiratory system damage, and systemic toxicity damage., May cause liver damage, respiratory tract irritation, and central nervous system depression.

Delayed

Causes central nervous system damage, kidney damage, nervous system damage, respiratory system damage, liver damage, and eye damage., May cause mutagenic effects, cancer, reproductive effects, blood damage, and spleen damage.

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Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively. Increased sensitivity of the heart to Adrenaline (epinephrine) may be caused by overexposure to product. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

* * * Section 5 - Fire-Fighting Measures * * *

Suitable Extinguishing Media

Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. Product may be sensitive to static discharge, which could result in fire or explosion. Vapors may form explosive mixture with air. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Fire may produce irritating, poisonous and/or corrosive fumes. Runoff may create fire or explosion hazard. Empty product containers may retain product residue and can be dangerous. Containers may rupture or explode.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce carbon dioxide, carbon monoxide, and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Keep storage containers cool with water spray. Move container from fire area if it can be done without risk. Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. Stay away from the ends of tanks. Do not scatter spilled material with high-pressure water streams. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile). Stay upwind and keep out of low areas. Dike for later disposal.

NFPA Ratings: Health: 3 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **Section 15: Regulatory Information.**

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*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Do not eat, drink, or smoke when using this product. Avoid contact with eyes, skin, clothing, and shoes. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Keep container tightly closed. Keep cool. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Empty product containers may retain product residue and can be dangerous. Store in a well-ventilated place.

Incompatibilities

Combustible materials, oxidizing materials, reducing agents, acids, alkalis, metals, halogens, metal salts, amines, bases.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Toluene (108-88-3)

ACGIH:	20 ppm TWA
OSHA Final:	200 ppm TWA 300 ppm Ceiling
OSHA Vacated:	100 ppm TWA; 375 mg/m ³ TWA 150 ppm STEL; 560 mg/m ³ STEL
NIOSH:	100 ppm TWA; 375 mg/m ³ TWA 150 ppm STEL; 560 mg/m ³ STEL

Acetone (67-64-1)

ACGIH:	500 ppm TWA 750 ppm STEL
OSHA Final:	1000 ppm TWA; 2400 mg/m ³ TWA
OSHA Vacated:	750 ppm TWA; 1800 mg/m ³ TWA 2400 mg/m ³ STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL
NIOSH:	250 ppm TWA; 590 mg/m ³ TWA

*Mixture (109-60-4)

ACGIH:	200 ppm TWA 250 ppm STEL
OSHA Final:	200 ppm TWA; 840 mg/m ³ TWA
OSHA Vacated:	200 ppm TWA; 840 mg/m ³ TWA 250 ppm STEL; 1050 mg/m ³ STEL
NIOSH:	200 ppm TWA; 840 mg/m ³ TWA 250 ppm STEL; 1050 mg/m ³ STEL

*Mixture (110-19-0)

ACGIH:	150 ppm TWA
OSHA Final:	150 ppm TWA; 700 mg/m ³ TWA
OSHA Vacated:	150 ppm TWA; 700 mg/m ³ TWA
NIOSH:	150 ppm TWA; 700 mg/m ³ TWA

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***Mixture (123-86-4)**

ACGIH: 150 ppm TWA

200 ppm STEL

OSHA Final: 150 ppm TWA; 710 mg/m3 TWA

OSHA Vacated: 150 ppm TWA; 710 mg/m3 TWA

200 ppm STEL; 950 mg/m3 STEL

NIOSH: 150 ppm TWA; 710 mg/m3 TWA

200 ppm STEL; 950 mg/m3 STEL

***Mixture (141-78-6)**

ACGIH: 400 ppm TWA

OSHA Final: 400 ppm TWA; 1400 mg/m3 TWA

OSHA Vacated: 400 ppm TWA; 1400 mg/m3 TWA

NIOSH: 400 ppm TWA; 1400 mg/m3 TWA

***Mixture (108-21-4)**

ACGIH: 100 ppm TWA

200 ppm STEL

OSHA Final: 250 ppm TWA; 950 mg/m3 TWA

OSHA Vacated: 250 ppm TWA; 950 mg/m3 TWA

310 ppm STEL; 1185 mg/m3 STEL

****Mixture (64-17-5)**

ACGIH: 1000 ppm STEL

OSHA Final: 1000 ppm TWA; 1900 mg/m3 TWA

OSHA Vacated: 1000 ppm TWA; 1900 mg/m3 TWA

NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

****Mixture (67-56-1)**

ACGIH: 200 ppm TWA

250 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final: 200 ppm TWA; 260 mg/m3 TWA

OSHA Vacated: 200 ppm TWA; 260 mg/m3 TWA

250 ppm STEL; 325 mg/m3 STEL

Prevent or reduce skin absorption

NIOSH: 200 ppm TWA; 260 mg/m3 TWA

250 ppm STEL; 325 mg/m3 STEL

Potential for dermal absorption

****Mixture (67-63-0)**

ACGIH: 200 ppm TWA

400 ppm STEL

OSHA Final: 400 ppm TWA; 980 mg/m3 TWA

OSHA Vacated: 400 ppm TWA; 980 mg/m3 TWA

500 ppm STEL; 1225 mg/m3 STEL

NIOSH: 400 ppm TWA; 980 mg/m3 TWA

500 ppm STEL; 1225 mg/m3 STEL

****Mixture (71-23-8)**

ACGIH: 100 ppm TWA

OSHA Final: 200 ppm TWA; 500 mg/m3 TWA

OSHA Vacated: 200 ppm TWA; 500 mg/m3 TWA

250 ppm STEL; 625 mg/m3 STEL

NIOSH: 200 ppm TWA; 500 mg/m3 TWA

250 ppm STEL; 625 mg/m3 STEL

Potential for dermal absorption

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**Mixture (71-36-3)

ACGIH: 20 ppm TWA
OSHA Final: 100 ppm TWA; 300 mg/m³ TWA
OSHA Vacated: 50 ppm Ceiling; 150 mg/m³ Ceiling
Prevent or reduce skin absorption
NIOSH: 50 ppm Ceiling; 150 mg/m³ Ceiling
Potential for dermal absorption

***Mixture (108-10-1)

ACGIH: 20 ppm TWA
75 ppm STEL
OSHA Final: 100 ppm TWA; 410 mg/m³ TWA
OSHA Vacated: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL
NIOSH: 50 ppm TWA; 205 mg/m³ TWA
75 ppm STEL; 300 mg/m³ STEL

***Mixture (78-93-3)

ACGIH: 200 ppm TWA
300 ppm STEL
OSHA Final: 200 ppm TWA; 590 mg/m³ TWA
OSHA Vacated: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL
NIOSH: 200 ppm TWA; 590 mg/m³ TWA
300 ppm STEL; 885 mg/m³ STEL

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA
150 ppm STEL
OSHA Final: 100 ppm TWA; 435 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 435 mg/m³ TWA
150 ppm STEL; 655 mg/m³ STEL

C9-C13 Medium Boiling Hydrocarbons (8030-30-6)

OSHA Final: 100 ppm TWA; 400 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 400 mg/m³ TWA
NIOSH: 100 ppm TWA; 400 mg/m³ TWA

Ethyl benzene (100-41-4)

ACGIH: 20 ppm TWA
OSHA Final: 100 ppm TWA; 435 mg/m³ TWA
OSHA Vacated: 100 ppm TWA; 435 mg/m³ TWA
125 ppm STEL; 545 mg/m³ STEL
NIOSH: 100 ppm TWA; 435 mg/m³ TWA
125 ppm STEL; 545 mg/m³ STEL

Appropriate Engineering Controls

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

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, Gloves, and Lab coat or apron.

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Eyes/Face Protection

Safety glasses with side shields should be worn at a minimum. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear gloves impervious to product; use of natural rubber (latex) or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

Respiratory Protection

Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Liquid, clear, colorless to pale yellow, moderate odor.	pH: Not available
Odor: Mild odor	Odor Threshold: Not available
Boiling Point: 110 °C (Toluene)	Melting Point: Not available
Solubility (H₂O): Slightly soluble.	Specific Gravity: Not available
Density: Not available	Octanol/H₂O Coeff.: Not available.
Evaporation Rate: Not available	Auto Ignition Temperature: Not available
LFL: Not available	Flash Point: <20°F (-7°C)(Tag Closed Cup)
UFL: Not available	Viscosity: Not available
Vapor Pressure: Not available	Flammability Class: Flammable
Vapor Density: Not available	Flammability (solid, gas): Not applicable

Other Property Information

No information is available.

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize under normal temperature and pressure conditions.

Conditions To Avoid

Avoid heat, sparks, or flame and incompatible materials. Avoid contact with incompatible materials.

Incompatible Materials

Avoid combustible materials, oxidizing materials, reducing agents, acids, alkalis, metals, halogens, metal salts, amines, and bases.

Hazardous Decomposition Products

Burning may produce carbon dioxide, carbon monoxide, and unidentified organic compounds.

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*** Section 11 - Toxicological Information ***

Toxicity Data and Information

Component Analysis - LD50/LC50

Toluene (108-88-3) Dermal LD50 Rabbit 12000 mg/kg; Inhalation LC50 Rat 12.5 mg/L 4 h; Oral LD50 Rat 2600 mg/kg

Acetone (67-64-1) Oral LD50 Rat 5800 mg/kg; Inhalation LC50 Rat 50100 mg/m³ 8 h

***Mixture (108-65-6)** Dermal LD50 Rabbit >5 g/kg; Oral LD50 Rat 8532 mg/kg

***Mixture (109-60-4)** Dermal LD50 Rabbit >20 mL/kg; Oral LD50 Rat 8700 mg/kg

***Mixture (110-19-0)** Dermal LD50 Rabbit >17400 mg/kg; Oral LD50 Rat 15400 mg/kg

***Mixture (123-86-4)** Oral LD50 Rat 10768 mg/kg; Dermal LD50 Rabbit >17600 mg/kg; Inhalation LC50 Rat 390 ppm 4 h

***Mixture (141-78-6)** Oral LD50 Rat 5620 mg/kg; Dermal LD50 Rabbit >18000 mg/kg; Inhalation LC50 Mouse 1500 ppm 4 h

***Mixture (108-21-4)** Dermal LD50 Rabbit >20 mL/kg; Inhalation LC50 Rat 50600 mg/m³ 8 h; Oral LD50 Rat 3000 mg/kg

****Mixture (64-17-5)** Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Naphtha, petroleum, full-range straight-run (64741-42-0)
Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat >5.04 mg/L 4 h; Oral LD50 Rat >7000 mg/kg

****Mixture (67-56-1)** Inhalation LC50 Rat 22500 ppm 8 h; Oral LD50 Rat 6200 mg/kg

****Mixture (67-63-0)** Dermal LD50 Rabbit 4059 mg/kg; Inhalation LC50 Rat 72600 mg/m³ 4 h; Oral LD50 Rat 1870 mg/kg

****Mixture (71-23-8)** Oral LD50 Rat 1870 mg/kg; Dermal LD50 Rabbit 4049 mg/kg; Inhalation LC50 Rat >13548 ppm 4 h

****Mixture (71-36-3)** Dermal LD50 Rabbit 3402 mg/kg; Inhalation LC50 Rat >8000 ppm 4 h; Oral LD50 Rat 700 mg/kg

*****Mixture (108-10-1)** Dermal LD50 Rabbit 3000 mg/kg; Inhalation LC50 Rat 8.2 mg/L 4 h; Oral LD50 Rat 2080 mg/kg

*****Mixture (78-93-3)** Dermal LD50 Rabbit 5000 mg/kg; Inhalation LC50 Rat 11700 ppm 4 h; Oral LD50 Rat 2483 mg/kg

Xylenes (o-, m-, p- isomers) (1330-20-7) Dermal LD50 Rabbit >4350 mg/kg; Inhalation LC50 Rat 29.08 mg/L 4 h; Oral LD50 Rat 3500 mg/kg

C5 to C8 Aliphatic hydrocarbons (64741-89-5) Oral LD50 Rat >15 g/kg; Dermal LD50 Rabbit >5 g/kg; Inhalation LC50 Rat 2.18 mg/L 4 h

Petroleum distillates, hydrotreated light (64742-47-8) Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat >5000 mg/kg

C9-C13 Medium Boiling Hydrocarbons (8030-30-6) Oral LD50 Rat >5 g/kg

Hexamethyldisilazane (999-97-3) Oral LD50 Rat 850 mg/kg; Dermal LD50 Rabbit 540 mg/kg; Inhalation LC50 Rat 8700 mg/m³ 4 h

Ethyl benzene (100-41-4) Dermal LD50 Rabbit 15400 mg/kg; Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg

Ethyl 3-ethoxypropanoate (763-69-9) Oral LD50 Rat 5 g/kg

Information on Likely Routes of Exposure

Inhalation

Toxic if inhaled., May cause irritation, nausea, headache, dizziness, drowsiness, disorientation, loss of coordination, central nervous system effects, central nervous system damage, nervous system damage, kidney damage, respiratory system damage, mutagenic effects, cancer, reproductive effects, liver damage, blood damage, and spleen damage.

Ingestion

Aspiration hazard., Harmful if swallowed., May cause irritation, nausea, vomiting, central nervous system depression, central nervous system damage, nervous system damage, kidney damage, systemic toxicity damage, liver damage, blood damage, spleen damage, and lung damage (from aspiration).

Skin Contact

May be harmful in contact with skin. Causes skin burns.

Eye Contact

Causes serious eye damage.

Immediate Effects

Toxic if inhaled., Harmful if swallowed., Harmful in contact with skin., Causes skin burns, eye damage, lung damage (from aspiration), central nervous system damage, nervous system damage, kidney damage, respiratory system damage, and systemic toxicity damage., May cause liver damage, respiratory tract irritation, and central nervous system depression.

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Delayed Effects

Causes central nervous system damage, kidney damage, nervous system damage, respiratory system damage, liver damage, and ear damage., May cause mutagenic effects, cancer, reproductive effects, blood damage, and spleen damage.

Irritation/Corrosivity

Causes skin burns and eye damage. May cause respiratory tract irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

May cause cancer.

Component Carcinogenicity

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

**Mixture (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))

**Mixture (67-63-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977] (Group 3 (not classifiable))

**Mixture (71-23-8)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

***Mixture (108-10-1)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 101 [2012] (Group 2B (possibly carcinogenic to humans))

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Ethyl benzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

OSHA: Present (select carcinogen)

IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Germ Cell Mutagenicity

May cause genetic defects.

Teratogenicity

Reproductive Effects

May damage fertility or the unborn child. May cause harm to breast-fed children.

Specific Target Organ Effects - Single Exposure

Central nervous system, kidneys, respiratory system, systemic toxicity, liver, eyes.

Specific Target Organ Effects - Repeated Exposure

Central nervous system, kidneys, nervous system, respiratory system, liver, blood, spleen, eyes.

Aspiration Hazard

This material is an aspiration hazard.

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Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, liver, kidney, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

***** Section 12 - Ecological Information *****

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Toluene (108-88-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	15.22 - 19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.89 - 7.81 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	14.1 - 17.16 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi-static]	
96 Hr LC50 Lepomis macrochirus	11.0 - 15.0 mg/L [static]	
96 Hr LC50 Oryzias latipes	54 mg/L [static]	
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi-static]	
96 Hr LC50 Poecilia reticulata	50.87 - 70.34 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	
48 Hr EC50 Daphnia magna	11.5 mg/L	

Acetone (67-64-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

*Mixture (108-65-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	161 mg/L [static]	
48 Hr EC50 Daphnia magna	>500 mg/L	

*Mixture (109-60-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	56 - 64 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	56 - 64 mg/L [static]	

*Mixture (123-86-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	100 mg/L [static]	
96 Hr LC50 Pimephales promelas	17 - 19 mg/L [flow-through]	
72 Hr EC50 Desmodemus subspicatus	674.7 mg/L	

*Mixture (141-78-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	220 - 250 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	484 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	352 - 500 mg/L [semi-static]	
48 Hr EC50 Daphnia magna	560 mg/L [Static]	

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

****Mixture (64-17-5)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	12.0 - 16.0 mL/L [static]	
96 Hr LC50 Pimephales promelas	>100 mg/L [static]	
96 Hr LC50 Pimephales promelas	13400 - 15100 mg/L [flow-through]	
48 Hr LC50 Daphnia magna	9268 - 14221 mg/L	
48 Hr EC50 Daphnia magna	2 mg/L [Static]	

C9 to C13 aliphatic hydrocarbons (64741-41-9)

Duration/Test/Species	Concentration/Conditions	Notes
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	

Naphtha, petroleum, full-range straight-run (64741-42-0)

Duration/Test/Species	Concentration/Conditions	Notes
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	
48 Hr LC50 Mysidopsis bahia	2 mg/L	

****Mixture (67-56-1)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	28200 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	>100 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	19500 - 20700 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	18 - 20 mL/L [static]	
96 Hr LC50 Lepomis macrochirus	13500 - 17600 mg/L [flow-through]	

****Mixture (67-63-0)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	9640 mg/L [flow-through]	
96 Hr LC50 Pimephales promelas	11130 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	>1400000 µg/L	
96 Hr EC50 Desmodesmus subspicatus	>1000 mg/L	
72 Hr EC50 Desmodesmus subspicatus	>1000 mg/L	
48 Hr EC50 Daphnia magna	13299 mg/L	

****Mixture (71-23-8)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	4480 mg/L [flow-through]	
48 Hr EC50 Daphnia magna	3642 mg/L	
48 Hr EC50 Daphnia magna	3339 - 3977 mg/L [Static]	

****Mixture (71-36-3)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	1730 - 1910 mg/L [static]	
96 Hr LC50 Pimephales promelas	1740 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	100000 - 500000 µg/L [static]	
96 Hr LC50 Pimephales promelas	1910000 µg/L [static]	
96 Hr EC50 Desmodesmus subspicatus	>500 mg/L	
72 Hr EC50 Desmodesmus subspicatus	>500 mg/L	
48 Hr EC50 Daphnia magna	1983 mg/L	
48 Hr EC50 Daphnia magna	1897 - 2072 mg/L [Static]	

*****Mixture (108-10-1)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	496 - 514 mg/L [flow-through]	
96 Hr EC50 Pseudokirchneriella subcapitata	400 mg/L	
48 Hr EC50 Daphnia magna	170 mg/L	

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

*****Mixture (78-93-3)**

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	3130 - 3320 mg/L [flow-through]	
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L [Static]	

Xylenes (o-, m-, p- isomers) (1330-20-7)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	13.4 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	2.661 - 4.093 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	13.5 - 17.3 mg/L	
96 Hr LC50 Lepomis macrochirus	13.1 - 16.5 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	19 mg/L	
96 Hr LC50 Lepomis macrochirus	7.711 - 9.591 mg/L [static]	
96 Hr LC50 Pimephales promelas	23.53 - 29.97 mg/L [static]	
96 Hr LC50 Cyprinus carpio	780 mg/L [semi-static]	
96 Hr LC50 Cyprinus carpio	>780 mg/L	
96 Hr LC50 Poecilia reticulata	30.26 - 40.75 mg/L [static]	
48 Hr EC50 water flea	3.82 mg/L	
48 Hr LC50 Gammarus lacustris	0.6 mg/L	

C5 to C8 Aliphatic hydrocarbons (64741-89-5)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	>5000 mg/L	
48 Hr EC50 Daphnia magna	>1000 mg/L	

Petroleum distillates, hydrotreated light (64742-47-8)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	45 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	2.2 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	2.4 mg/L [static]	

C9-C13 Medium Boiling Hydrocarbons (8030-30-6)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Lepomis macrochirus	9.2 mg/L [static]	
72 Hr EC50 Pseudokirchneriella subcapitata	4700 mg/L	

Hexamethyldisilazane (999-97-3)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Pimephales promelas	167 mg/L [static]	
48 Hr EC50 Daphnia magna	186 mg/L	

Ethyl benzene (100-41-4)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	11.0 - 18.0 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	4.2 mg/L [semi-static]	
96 Hr LC50 Pimephales promelas	7.55 - 11 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	32 mg/L [static]	
96 Hr LC50 Pimephales promelas	9.1 - 15.6 mg/L [static]	
96 Hr LC50 Poecilia reticulata	9.6 mg/L [static]	
72 Hr EC50 Pseudokirchneriella subcapitata	4.6 mg/L	
96 Hr EC50 Pseudokirchneriella subcapitata	>438 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	2.6 - 11.3 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	1.7 - 7.6 mg/L [static]	
48 Hr EC50 Daphnia magna	1.8 - 2.4 mg/L	

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

Ethyl 3-ethoxypropanoate (763-69-9)

Duration/Test/Species

96 Hr LC50 Pimephales promelas

48 Hr EC50 Daphnia magna

Concentration/Conditions

62 mg/L [static]

970 mg/L

Notes

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

If discarded, this product is considered a RCRA ignitable waste, D001. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product. Dispose in accordance with federal, state, provincial, and local regulations.

*** Section 14 - Transport Information ***

Emergency Response Guide Number

128

Reference *North American Emergency Response Guidebook*

Transportation Regulations

DOT Shipping Name: Paint related material

UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): 3

TDG Shipping Name: Paint related material

UN/NA #: UN1263 **Hazard Class:** 3 **Packing Group:** II

Required Label(s): 3

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

70-85 WT%; 5-6 LB/US gallon; 590-720 g/L

As per 40 CFR Part 51.100(s)

Contains photochemically reactive solvent

VOC VP = 400 mm Hg@20°C

Consult your state or local air district for location specific information.

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

SARA 311/312 Hazardous Categories

This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

SARA Section 313

Component Analysis

This product contains a "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Toluene (108-88-3)	1.0 % de minimis concentration
**Mixture (67-56-1)	1.0 % de minimis concentration
**Mixture (67-63-0)	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
**Mixture (71-36-3)	1.0 % de minimis concentration
***Mixture (108-10-1)	1.0 % de minimis concentration
Xylenes (o-, m-, p- isomers) (1330-20-7)	1.0 % de minimis concentration
Ethyl benzene (100-41-4)	0.1 % de minimis concentration

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Toluene (108-88-3)	1000 lb final RQ; 454 kg final RQ
Acetone (67-64-1)	5000 lb final RQ; 2270 kg final RQ
*Mixture (110-19-0)	5000 lb final RQ; 2270 kg final RQ
*Mixture (123-86-4)	5000 lb final RQ; 2270 kg final RQ
*Mixture (141-78-6)	5000 lb final RQ; 2270 kg final RQ
**Mixture (67-56-1)	5000 lb final RQ; 2270 kg final RQ
**Mixture (71-36-3)	5000 lb final RQ; 2270 kg final RQ
***Mixture (108-10-1)	5000 lb final RQ; 2270 kg final RQ
***Mixture (78-93-3)	5000 lb final RQ; 2270 kg final RQ
Xylenes (o-, m-, p- isomers) (1330-20-7)	100 lb final RQ; 45.4 kg final RQ
Ethyl benzene (100-41-4)	1000 lb final RQ; 454 kg final RQ

TSCA Inventory

All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

Component Analysis

Component	CAS #	TSCA
Toluene	108-88-3	Yes
Acetone	67-64-1	Yes
*Mixture	108-65-6	Yes
*Mixture	109-60-4	Yes
*Mixture	110-19-0	Yes
*Mixture	123-86-4	Yes
*Mixture	141-78-6	Yes
*Mixture	108-21-4	Yes
Acetone	64-17-5	Yes
C9 to C13 aliphatic hydrocarbons	64741-41-9	Yes
Naphtha, petroleum, full-range straight-run	64741-42-0	Yes
**Mixture	67-56-1	Yes
**Mixture	67-63-0	Yes
**Mixture	71-23-8	Yes
**Mixture	71-36-3	Yes
Aromatic Hydrocarbons	63231-51-6	No
***Mixture	108-10-1	Yes
***Mixture	78-93-3	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes
C5 to C8 Aliphatic hydrocarbons	64741-89-5	Yes
Petroleum distillates, hydrotreated light	64742-47-8	Yes
C9-C13 Medium Boiling Hydrocarbons	8030-30-6	Yes
Hexamethyldisilazane	999-97-3	Yes
Ethyl benzene	100-41-4	Yes
Ethyl 3-ethoxypropanoate	763-69-9	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes
*Mixture	109-60-4	Yes	Yes	Yes	Yes	Yes
*Mixture	110-19-0	Yes	Yes	Yes	Yes	Yes
*Mixture	123-86-4	Yes	Yes	Yes	Yes	Yes
*Mixture	141-78-6	Yes	Yes	Yes	Yes	Yes
*Mixture	108-21-4	Yes	Yes	Yes	Yes	Yes
**Mixture	64-17-5	Yes	Yes	Yes	Yes	Yes
**Mixture	67-56-1	Yes	Yes	Yes	Yes	Yes
**Mixture	67-63-0	Yes	Yes	Yes	Yes	Yes
**Mixture	71-23-8	Yes	Yes	Yes	Yes	Yes
**Mixture	71-36-3	Yes	Yes	Yes	Yes	Yes
***Mixture	108-10-1	Yes	Yes	Yes	Yes	Yes
***Mixture	78-93-3	Yes	Yes	Yes	Yes	Yes
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes
C5 to C8 Aliphatic hydrocarbons	64741-89-5	No	Yes	No	No	No
C9-C13 Medium Boiling Hydrocarbons	8030-30-6	Yes	Yes	Yes	Yes	Yes
Hexamethyldisilazane	999-97-3	No	No	No	Yes	No
Ethyl benzene	100-41-4	Yes	Yes	Yes	Yes	Yes

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Toluene	108-88-3	DSL
Acetone	67-64-1	DSL
*Mixture	108-65-6	DSL
*Mixture	109-60-4	DSL
*Mixture	110-19-0	DSL
*Mixture	123-86-4	DSL
*Mixture	141-78-6	DSL
*Mixture	108-21-4	DSL
Acetone	64-17-5	DSL
C9 to C13 aliphatic hydrocarbons	64741-41-9	DSL
Naphtha, petroleum, full-range straight-run	64741-42-0	DSL
**Mixture	67-56-1	DSL
**Mixture	67-63-0	DSL
**Mixture	71-23-8	DSL
**Mixture	71-36-3	DSL
Aromatic Hydrocarbons	63231-51-6	No
***Mixture	108-10-1	DSL
***Mixture	78-93-3	DSL
Xylenes (o-, m-, p- isomers)	1330-20-7	DSL
C5 to C8 Aliphatic hydrocarbons	64741-89-5	DSL
Petroleum distillates, hydrotreated light	64742-47-8	DSL
C9-C13 Medium Boiling Hydrocarbons	8030-30-6	DSL
Hexamethyldisilazane	999-97-3	DSL
Ethyl benzene	100-41-4	DSL
Ethyl 3-ethoxypropanoate	763-69-9	DSL

Canadian WHMIS Information

B2, D1B, D2A, D2B.

Safety Data Sheet

Material Name: Ultra Kleen Spray Equipment Solution

SDS ID: 820016

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Toluene (108-88-3)	1 %
Acetone (67-64-1)	1 %
*Mixture (109-60-4)	1 %
*Mixture (110-19-0)	1 %
*Mixture (123-86-4)	1 %
*Mixture (141-78-6)	1 %
*Mixture (108-21-4)	1 %
**Mixture (64-17-5)	0.1 %
**Mixture (67-56-1)	1 %
**Mixture (67-63-0)	1 %
**Mixture (71-23-8)	1 %
**Mixture (71-36-3)	1 %
***Mixture (108-10-1)	1 %
***Mixture (78-93-3)	1 %
Ethyl benzene (100-41-4)	0.1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Updated: 2/2/2015

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 820016

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

***** Section 1 - Identification *******Product Identifier**

Safety-Kleen Clear Choice Cleaning Solvent

Product Code

5120, 5125

Synonyms

Acetone, 2-Propanone, Dimethyl Ketone.

Recommended Use

VOC exempt solvent used to clean coating equipment (e.g., paint spray guns). If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

Restrictions on Use

None known.

Manufacturer InformationSafety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 400
Richardson, TX 75080
www.safety-kleen.com

Phone: 1-800-669-5740

Emergency # 1-800-468-1760

Issue Date

January 5, 2015

Supersedes Issue Date

April 1, 2013

Original Issue Date

January 27, 1998

***** Section 2 - Hazard(s) Identification *******Classification in Accordance with 29 CFR 1910.1200.**

Flammable Liquids, Category 2

Eye Damage / Irritation, Category 2A

Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system and respiratory tract)

GHS LABEL ELEMENTS**Symbol(s)****Signal Word**

DANGER!

Hazard Statement(s)

Highly flammable liquid and vapor

Causes serious eye irritation

May cause drowsiness and dizziness and respiratory irritation

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

Precautionary Statement(s)

Prevention

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Avoid breathing vapor or mist. Use only outdoors or in a well-ventilated area.

Response

In case of fire, use carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog. IF exposed or concerned: Call a POISON CENTER or doctor/physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Storage

Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Disposal

Dispose of in accordance with all applicable federal, state and local regulations.

Hazard(s) Not Otherwise Classified

None known.

*** Section 3 - Composition / Information on Ingredients ***

CAS	Component	Percent
67-64-1	Acetone	100

*** Section 4 - First Aid Measures ***

Description of Necessary Measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms/Effects

Acute

Eye irritation, central nervous system depression, respiratory tract irritation.

Delayed

No information on significant adverse effects.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

*** Section 5 - Fire-Fighting Measures ***

Suitable Extinguishing Media

Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog.

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor Avoid friction, static electricity and sparks. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Empty containers may contain product residue. Runoff to sewer may cause a fire or explosion hazard.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic., Burning may produce carbon monoxide and unidentified organic compounds.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

NFPA Ratings: Health: 1 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **Section 8: Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION**.

*** Section 7 - Handling and Storage ***

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

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

Incompatibilities

Strong oxidizing materials.

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Acetone (67-64-1)

ACGIH: 500 ppm TWA

750 ppm STEL

OSHA Final: 1000 ppm TWA; 2400 mg/m3 TWA

OSHA Vacated: 750 ppm TWA; 1800 mg/m3 TWA

2400 mg/m3 STEL (The acetone STEL does not apply to the cellulose acetate fiber

industry. It is in effect for all other sectors); 1000 ppm STEL

NIOSH: 250 ppm TWA; 590 mg/m3 TWA

Appropriate Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Ensure compliance with applicable exposure limits.

Individual Protective Measures, such as Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat or apron.

Eyes/Face Protection

Eye protection: Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

Skin Protection

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. Wear protective gloves/clothing.

Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

*** Section 9 - Physical & Chemical Properties ***

Appearance/Odor : Clear and colorless, sweet odor

Boiling Point: 133 °F (56 °C)

Solubility (H₂O): Complete

Density: 6.6 lb/ US gal (790 g/L)

Evaporation Rate: 6 (butyl acetate = 1)

LFL: 2.5 Vol %

UFL: 13 Vol %

Vapor Pressure: 180 mm Hg at 68 °F (20 °C)

Decomposition Temperature: Not available

Other Property Information

No information is available.

pH: Not available

Odor Threshold: 20 ppm

Melting Point: Not available

Specific Gravity: 0.79 (water=1)

Octanol/H₂O Coeff.: Log Pow= -0.24

Auto Ignition Temperature: 869 °F (465 °C)

Flash Point: -4 °F (-20 °C)

Viscosity: Not available

Vapor Density: Not available

*** Section 10 - Stability & Reactivity ***

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize.

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

Conditions To Avoid

Avoid heat, sparks, or flame when not in use.

Incompatible Materials

Strong oxidizing materials

Hazardous Decomposition Products

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

* * * Section 11 - Toxicological Information * * *

Toxicity Data and Information

Component Analysis - LD50/LC50

Acetone (67-64-1)

Inhalation LC50 Rat 50100 mg/m3 8 h

Information on Likely Routes of Exposure

Inhalation

May cause respiratory tract irritation. May cause drowsiness and dizziness.

Ingestion

No information on significant adverse effects.

Skin Contact

No information on significant adverse effects.

Eye Contact

Causes serious eye irritation.

Immediate Effects

Eye irritation, central nervous system depression, respiratory tract irritation.

Delayed Effects

No information on significant adverse effects.

Irritation/Corrosivity

Eye irritation, respiratory tract irritation.

Respiratory Sensitization

No information available for the product.

Skin Sensitization

No information available for the product.

Carcinogenicity

Component Carcinogenicity

Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

Teratogenicity

Based on best current information, there is no known teratogenicity associated with this product.

Reproductive Effects

Based on best current information, there is no known reproductive toxicity associated with this product.

Specific Target Organ Effects - Single Exposure

Central nervous system, respiratory tract irritation

Specific Target Organ Effects - Repeated Exposure

No information on significant adverse effects.

Aspiration Hazard

No data available.

Medical Conditions Aggravated by Exposure

Blood disorders, respiratory disorders, central nervous system disorders, eye disorders

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

*** Section 12 - Ecological Information ***

Ecotoxicity

Toxic to aquatic life.

Component Analysis - Ecotoxicity - Aquatic Toxicity

Acetone (67-64-1)

Duration/Test/Species	Concentration/Conditions	Notes
96 Hr LC50 Oncorhynchus mykiss	4.74 - 6.33 mL/L	
96 Hr LC50 Pimephales promelas	6210 - 8120 mg/L [static]	
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L [Static]	
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

Persistence and Degradability

No information available for the product.

Bioaccumulation Potential

No information available for the product.

Mobility in Soil

No information available for the product.

Other Adverse Effects

No additional information is available.

*** Section 13 - Disposal Considerations ***

Disposal Methods

USEPA Waste Code D001, U002 Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product. Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal.

*** Section 14 - Transport Information ***

International Transportation Regulations

DOT Shipping Name: Acetone
UN/NA #: UN1090 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID
Additional Information: RQ = 5000lbs

TDG Shipping Name: Acetone
UN/NA #: UN1090 **Hazard Class:** 3 **Packing Group:** II
Required Label(s): FLAMMABLE LIQUID

*** Section 15 - Regulatory Information ***

Volatile Organic Compounds (As Regulated)

0 WT%; 0 LB/US gal; 0 g/L
As per 40 CFR Part 51.100(s)
Vapor Pressure: 180 mmHg @ 68°F (20°C)
Not Photochemically Reactive
Consult your state or local air district for location specific information.

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

Federal Regulations

SARA 302/304

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA 311/312 Hazardous Categories

Acute Health: Yes Chronic Health: No Fire: Yes Pressure: No Reactive: No

SARA Section 313

Component Analysis

This product does not contain any "toxic" chemical subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

CERCLA

Component Analysis

Based on the ingredient(s) listed in SECTION 3, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantities (RQ):

Acetone (67-64-1) 5000 lb final RQ; 2270 kg final RQ

TSCA Inventory

The component of this product is listed on the TSCA Inventory.

Component Analysis

Component	CAS #	TSCA
Acetone	67-64-1	Yes

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	MA	MN	NJ	PA	CA
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes

May contain trace amounts of benzene, (CAS 71-43-2). WARNING! This product contains a chemical known to the state of California to cause cancer and reproductive hazards.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Component Analysis

Component	CAS #	CAN
Acetone	67-64-1	DSL

Canadian WHMIS Information

B2 D2A D2B

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Acetone (67-64-1) 1 %

*** Section 16 - Other Information ***

Revision Information

Reformat to OSHA HazCom 29 CFR 1910.1200 adoption of GHS Revision 3.

Safety Data Sheet

Material Name: SAFETY-KLEEN CLEAR CHOICE CLEANING SOLVENT

SDS ID: 82730

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Disclaimer

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

End of Sheet 82730



ArmaKleen™ 4 in 1 Cleaner Concentrate

Safety Data Sheet # 820071

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
 Revision Date: 04/27/2015 Date of issue: 04/27/2015 Supersedes Date: 09/24/2013

Version: 1.0

safety-kleen



SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: ArmaKleen™ 4 in 1 Cleaner Concentrate

Intended Use of the Product

Concentrated cleaner. For professional use only. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Name, Address, and Telephone of the Responsible Party

Manufacturer

Church & Dwight
 The ArmaKleen™ Company
 469 North Harrison Street
 Princeton, NJ 08543 USA
 T (800) 332-5424

www.churchdwight.com

Supplier

Safety-Kleen Systems, Inc.
 2600 North Central Expressway, Suite 200
 Richardson, TX 75080 USA
 T (800) 669-5740

Emergency Telephone Number

Emergency Number : For Medical Emergency: 1-888-234-1828, For Chemical Emergency: 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Skin Corr. 1A H314

Eye Dam. 1 H318

Skin Sens. 1 H317

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

Precautionary Statements (GHS-US)

: P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P280 - Wear protective clothing, protective gloves, eye protection.

P301+P330+P331 – **IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor/physician.

P303+P361+P353+P363+P333+P313 - **IF ON SKIN (OR HAIR):** Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

P304+P340+P310 - **IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor.

P305+P351+P338 - **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

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CENTER/doctor/physician.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. Repeated exposure may cause skin dryness or cracking. Toxic to aquatic life with long lasting effects.

Unknown Acute Toxicity (GHS-US) 3 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral, Dermal)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)
Water	(CAS No) 7732-18-5	60 -100
Octanoic acid	(CAS No) 124-07-2	5 - 10
Alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	1 - 5
Alcohols, C6-10, ethoxylated propoxylated	(CAS No) 68987-81-5	1 - 5
Amines, tallow alkyl, ethoxylated	(CAS No) 61791-26-2	1 - 5
Sodium hydroxide	(CAS No) 1310-73-2	1 - 5
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	(CAS No) 68154-99-4	1 - 5
Disodium carbonate	(CAS No) 497-19-8	1 - 5
Succinic acid	(CAS No) 110-15-6	1 - 5
Acetic acid, hydroxyphosphono-	(CAS No) 23783-26-8	0.1 - 1

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200]. A range of concentration as prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor/physician.

Skin Contact: Remove contaminated clothing and shoes. Wash with plenty of soap and water. Seek medical advice if irritation develops or persists. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a POISON CENTER/doctor/physician.

Ingestion: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER/doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. Exposure may produce an allergic reaction.

Inhalation: May cause respiratory irritation.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Eye Contact: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: May cause abdominal discomfort and may irritate the alimentary mucose.

Chronic Symptoms: Repeated exposure may cause skin dryness or cracking.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive. Containers may rupture when exposed to excessive heat.

Reactivity: Hazardous reactions will not occur under normal conditions. May react vigorously with strong acids.

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Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides.

Reference to Other Sections

Refer to section 9 for flammability properties. Refer to section 16 for NFPA information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Spilled material may present a slipping hazard.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions Prevent entry to sewers and public waters. Contact competent authorities after a spill.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Keep in suitable, closed containers for disposal.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Container remains hazardous when empty. Continue to observe all precautions.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container tightly closed.

Incompatible Materials: Acids. Oxidizers. Reducing agents.

Specific End Use(s) Concentrated cleaner. For professional use only. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

Sodium hydroxide (1310-73-2)		
Mexico	OEL Ceiling (mg/m ³)	2 mg/m ³
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA IDLH	US IDLH (mg/m ³)	10 mg/m ³
CANADA	OEL Ceiling (mg/m ³)	2 mg/m ³

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Exposure Controls

Appropriate Engineering Controls: Not generally required. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Gloves. Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: As required: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Safety glasses with side shields, or goggles, are recommended.

Skin and Body Protection: Wash contaminated clothing before reuse.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber Clear
Odor	: Mild detergent
Odor Threshold	: Not available
pH	: 11.9
Evaporation Rate	: Not available
Melting Point	: 0 °C (32 °F)
Freezing Point	: Not available
Boiling Point	: 100 °C (212 °F)
Flash Point	: > 100 °C (212 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 1.055
Solubility	: Complete in water
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions. May react vigorously with strong acids.

Chemical Stability: The product is stable at normal handling and storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Acids. Oxidizers. Reducing agents.

Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. (pH: 11.9)

Serious Eye Damage/Irritation: Causes serious eye damage. (pH: 11.9)

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

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Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: May cause irritation to the digestive tract.

Chronic Symptoms: Repeated exposure may cause skin dryness or cracking.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Octanoic acid (124-07-2)	
LD50 Dermal Rabbit	> 2000 mg/kg
Amines, tallow alkyl, ethoxylated (61791-26-2)	
ATE US (oral)	500.00 mg/kg body weight
Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 Oral Rat	1400 mg/kg
LD50 Dermal Rat	> 2 g/kg
Disodium carbonate (497-19-8)	
LD50 Oral Rat	4090 mg/kg
LC50 Inhalation Rat	2300 mg/m ³ (Exposure time: 2 h)
Acetic acid, hydroxyphosphono- (23783-26-8)	
ATE US (oral)	500.00 mg/kg body weight
Succinic acid (110-15-6)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 1.284 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Toxic to aquatic life with long lasting effects.

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l
Octanoic acid (124-07-2)	
LC50 Fish 1	310 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])
LC50 Fish 2	110 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
Disodium carbonate (497-19-8)	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Persistence and Degradability Not established

Bioaccumulative Potential

Octanoic acid (124-07-2)	
Log POW	2.92
Disodium carbonate (497-19-8)	
BCF Fish 1	(no bioaccumulation)

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Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Container remains hazardous when empty. Continue to observe all precautions. This product, if discarded, would not be a hazardous waste by listing and is not expected to be a characteristic hazardous waste. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal and International Regulations

ArmaKleen™ 4 in 1 Cleaner Concentrate	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Water (7732-18-5)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sodium hydroxide (1310-73-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the Canadian IDL (Ingredient Disclosure List)	
Octanoic acid (124-07-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the Canadian IDL (Ingredient Disclosure List)	
Alcohols, C6-10, ethoxylated propoxylated (68987-81-5)	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Amines, tallow alkyl, ethoxylated (61791-26-2)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Alcohols, C9-11, ethoxylated (68439-46-3)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether (68154-99-4)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Disodium carbonate (497-19-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the Canadian IDL (Ingredient Disclosure List)	
Acetic acid, hydroxyphosphono- (23783-26-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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Succinic acid (110-15-6)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the Canadian IDL (Ingredient Disclosure List)	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

VOLATILE ORGANIC COMPOUNDS (AS REGULATED)

2.5% Solution	0.51 WT%; 0.044 LB/US gal; 5.25 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg Product does not contain photochemically reactive solvents
5.0% Solution	1.02 WT%; 0.088 LB/US gal; 10.5 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg VOC Vapor Pressure @38°C = 0.644 mmHg Product does not contain photochemically reactive solvents
10% Solution	2.04 WT%; 0.175 LB/US gal; 21g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg VOC Vapor Pressure @38°C = 0.734 mmHg Product does not contain photochemically reactive solvents
100% Concentrate	21.1 WT%; 1.76 LB/US gal; 210.92 g/L; As per 40 CFR Part 51.100(s) Product Vapor Pressure @20°C = 17.5 mmHg Product does not contain photochemically reactive solvents

US State Regulations

Sodium hydroxide (1310-73-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

ArmaKleen™ 4 in 1 Cleaner Concentrate	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
 	

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material

Octanoic acid (124-07-2)

Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material

Alcohols, C6-10, ethoxylated propoxylated (68987-81-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)	
--	--

ArmaKleen™ 4 in 1 Cleaner Concentrate

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

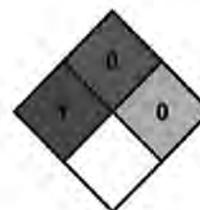
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Amines, tallow alkyl, ethoxylated (61791-26-2)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Alcohols, C9-11, ethoxylated (68439-46-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material
Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether (68154-99-4)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Disodium carbonate (497-19-8)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Acetic acid, hydroxyphosphono- (23783-26-8)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class E - Corrosive Material Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Succinic acid (110-15-6)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date	: 04/27/2015
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
NFPA Health Hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given. medical attention is given.
NFPA Fire Hazard	: 0 - Materials that will not burn.
NFPA Reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Party Responsible for the Preparation of This Document

Church & Dwight
500 Charles Ewing Blvd
Ewing Township, NJ 08628
T 1-800-332-5424

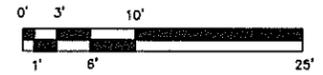
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Church&Dwight NA GHS SDS

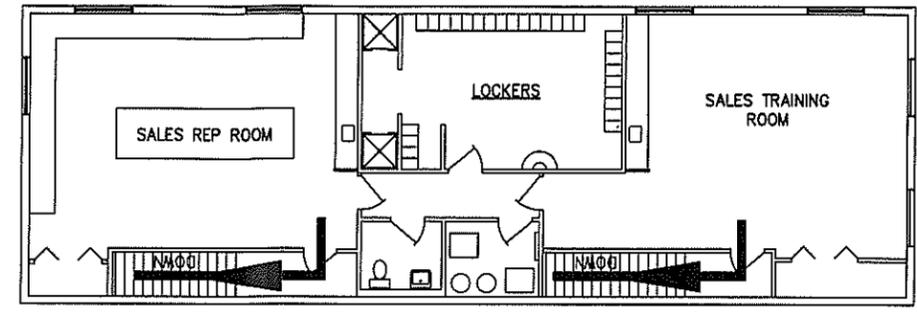
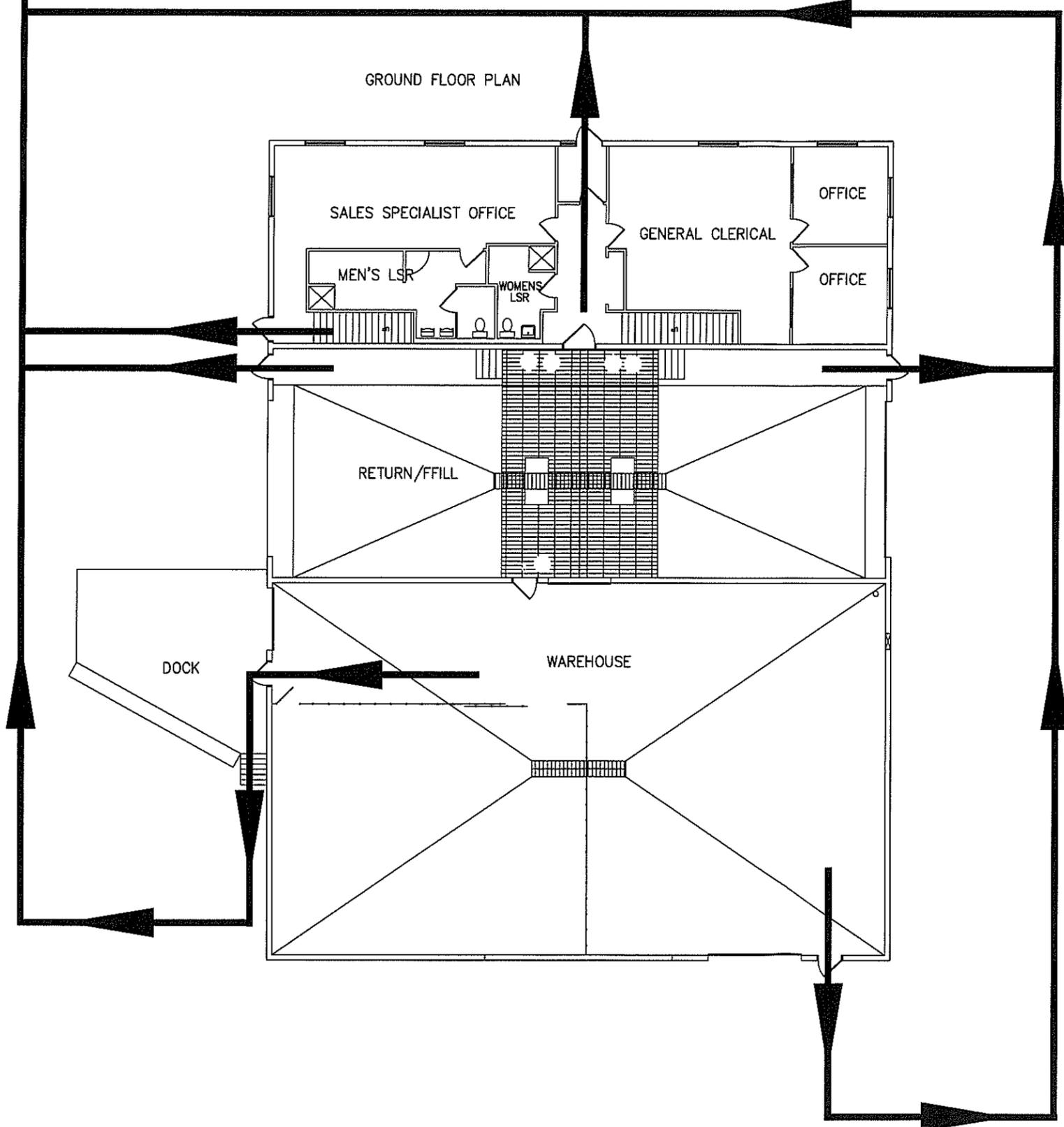
Exhibit G-4

Office / Warehouse Evacuation Plan

TO RENDEZVOUS POINT
AT CORNER OF FRYE RD.
AND BECK RD.



GROUND FLOOR PLAN



SECOND FLOOR PLAN

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN SYSTEMS, INC. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN SYSTEMS, INC. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

EXHIBIT G-4

TITLE
OFFICE WAREHOUSE EMERGENCY
EVACUATION PLAN

SAFETY-KLEEN SYSTEMS, INC.
2620 N. CENT. EXPRESSWAY STE 408 RICHMOND, TX 75080
PHONE 800-669-5744

NO.	DESCRIPTION	BY	CHK	APPR	DATE
REVISIONS					

ISSUED FOR PERMIT	JEK	NC	NC	072515	SCALE 1/8"=1'	BY JEK	CHKD NC	P.E. APPR NC	DP. APPR NC	DATE 7/25/15
SERVICE CENTER BRANCH AT CHANDLER, AZ									STD-BVG-REV NO. 7134-WB00-006	

Exhibit G-5

Site Emergency Evacuation Plan

EXHIBIT H

TRAINING INFORMATION

- H-1** **Outline of Training Plan**
- H-2** **Example Job Descriptions**
- H-3** **RCRA Training at Facility and SPARK Training**
- H-4** **Example Training Certification (sign-in form)**
- H-5** **Antifreeze Checklist**

Exhibit H-1

Training Plan Narrative

EXHIBIT H-1 - PERSONNEL TRAINING

ABSTRACT

Job Title	Prior to Starting Work	On The Job	Annually	When Regulations or Procedures Change
Branch General Manager	X	X	X	X
Branch Administrator		X	X	X
Sales/Service Representatives	X	X	X	X
Warehouse Employees	X	X	X	X

OUTLINE OF TRAINING PROGRAM

Purpose

The purpose of training is to familiarize employees with environmental regulations, records, and emergency procedures so they can perform their jobs in the safest and most efficient manner possible. The program is designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems. All employees receive basic training on Hazard Awareness and the facility Contingency Plan. The level of training an employee receives is dependent upon the employee's level of involvement in hazardous waste management.

Each employee is trained to operate and maintain the facility safely, and to understand hazards unique to the job assignment. This section contains information on Service Center personnel and trainers, job descriptions, training outlines and training record forms. All employees at the facility have had training that satisfies the requirements of 40 CFR 264.16. The regional environmental professional directly assists with the training of new Branch General Managers. The Branch General Manager, in turn, trains his employees. An employee may not work in an unsupervised position until he or she has received proper training as outlined in Exhibit H-3.

Organization Structure and Job Descriptions

Environmental compliance and training of facility employees is the responsibility of the Branch General Manager. The Safety-Kleen corporate office provides a training program to be executed annually. The training program is directed by personnel trained in hazardous waste management procedures and includes instruction on hazardous waste management for facility personnel that is in accordance with 40 CFR 264.16(a)(2). In accordance with 40 CFR 264.16(d)(1), example job descriptions for branch personnel are in Exhibit H-2. Job descriptions may change as business needs dictate. A list of employees, their job titles and job functions will be maintained at the facility.

Branch General Manager

The Branch General Manager (or Customer Service Manager in his absence) is ultimately responsible for the operations at the Service Center. The customer service managers, sales representatives, administrator, and Material Handler report to the Branch General Manager and he, in turn, must provide the training and materials necessary for the branch employees to execute their duties. With respect to environmental compliance, the Branch General Manager must:

- a. Keep the service center clean and orderly;
- b. Execute or designate an employee to execute the daily inspection, keep a written log and remediate any problems;
- c. Know the potential hazards of the material and waste handled on site;
- d. Identify potential spill and fire sources and be able to execute the contingency plan;
- e. Inform all employees of their environmental responsibilities;
- f. Act as emergency coordinator and notify the proper authorities during an emergency, remediate the situation to the best of his abilities, and submit necessary reports to the corporate office; and
- g. Maintain all environmental records (such as manifests, training records and spill reports) on file.

Corporate Compliance Department

Safety-Kleen's Corporate Compliance Department has personnel on staff that provides guidance to divisional and regional personnel for training, permitting, and other compliance issues for service centers in a given geographic area of the country.

Description of the Training Program

Employee training is accomplished using classroom, electronic (i.e. video, e-Learning), written, and on-the-job methods. The Training Department prepares a training program for employees and the Service Center personnel provide documentation that the program has been executed.

An employee is trained prior to starting, or as soon as he or she begins working (depending on his or her position) and annually thereafter. The EHS Department ensures that the Branch General Manager or his/her designate has received adequate training to train all branch personnel. Exhibit H-3 contains an example outline of the training program, which demonstrates that facility personnel are trained in hazardous waste management procedures.

Training of New Branch Managers

New Branch General Managers are trained before they begin their new positions. This training may occur on site, off site at a training branch, on-the-job, in off-site classroom training, electronic (i.e. video, e-Learning), written, and on-the-job methods. While being trained, a new Branch General Manager reviews all environmental records and learns the recordkeeping requirements. These records include manifests, personnel records, training records, facility inspection records, and spill reports.

The training culminates in additional training at the direction of an environmental professional. The training consists of an introduction to environmental law and a review of the Part B permit, including the Waste Analysis Plan, Preparedness and Prevention Plan, Contingency Plan, Training Plan, and Closure Plan. Additional time is spent reviewing past environmental compliance at the Branch General Manager's facility. Regulations unique to the state are discussed as well.

Training of New Branch Administrators

Branch administrators are trained in the proper record keeping procedures as soon as they begin working for Safety-Kleen. They are usually responsible for preparing the documentation, as well as checking it for accuracy and completeness and then process or file it as required. Additional training is overseen by the Branch Manager and is done within six months of starting if needed. It may include the items listed in the Example RCRA Training Plan Outline Exhibit H-3, and may include emergency response, shipping documents (including manifests), drum labels and other safety and environmental compliance issues.

Training of New Sales Representatives

New representatives are introduced to the Part B Permit which includes: Waste Analysis Plan, Preparedness and Prevention Plan, Contingency Plan, etc. A representative may also be trained as a designate for performing the facility inspection. Additional training is in the form of classroom, electronic (i.e. video, e-Learning), written, and on-the-job methods. The Contingency Plan must be reviewed before the representative formally begins the new position. All items listed in the Example Training Plan Outline Exhibit H-3, must be explained within six months of starting.

Training of New Material Handlers

A material handler is trained to maintain the Service Center and assist the other branch employees in their tasks. A material handler may also be trained as the designate for performing the daily inspection. Additional training may be in the form of videotape presentations, classroom, electronic (i.e. video, e-Learning), written, and on-the-job methods. The Contingency Plan must be reviewed with the Branch General Manager before the material handler formally begins his/her new position, and annually thereafter. The Material Handler must review the items listed in the Example Training Plan Outline Exhibit H-3 within six months of hire.

Annual Training

On an annual basis, employees are trained using a program prepared and updated annually by the Safety-Kleen regional and/or corporate compliance offices and health and safety department. The annual training includes updates on environmental regulations, an in-depth review of the Contingency Plan and a review of RCRA inspection criteria. Some of the topics may be broken up into monthly modules to more effectively allow the personnel to absorb the volume of information.

Service Center employees must annually review the items listed in the Example Training Plan Outline. This review may be in the form of slide/tape, videotapes and/or classroom presentation, and a review and discussion of the storage facility permit application. In addition, periodic memoranda on changes in environmental regulations are issued by the regional/corporate offices and must be read and discussed by branch personnel.

Training records

All employee regulatory training must be documented. Records of current employees will be kept at the facility until closure. Some training documentation may be maintained electronically. Records for employees transferring within the company will be sent to the employee's new facility. Training records for employees are kept for 3 years after termination of their employment.

Exhibit H-2



Example Job Descriptions



SAFETY-KLEEN SYSTEMS, INC.
JOB DESCRIPTION

BRANCH GENERAL MANAGER/SERVICE CENTER MANAGER

The Branch Manager has overall responsibility for the facility operations and maintenance, and directs sales activities within a defined geographic area. He or she is responsible for the proper operations and profitability of the Service Center. The Branch Manager typically also functions as the emergency coordinator.

Responsibilities:

- Collaborate with Sales Managers to enhance branch sales performance.
- Lead the facility employees to maximize revenues and client satisfaction.
- Manage administrative and warehouse team.
- Maximize branch profitability through sales volume, margin attainment, and cost controls.
- Branch adherence to operational guidelines.
- Conduct weekly branch meetings with Route Sales and Service professionals to drive branch performance and promote teamwork.
- Protect branch business through excellent customer service.
- Manage customer service and response time through Customer Retention Management system.
- Meet with customers to validate customer expectations are being met.
- Hire, train and develop all branch employees.
- Ensure branch Environmental, Health and Safety (EHS) Compliance.
- Ensure all training and compliance documentation is maintained.

Requirements:

- Required attendance to a continuous (2) two week long on-boarding and regulatory training course that will be held out of town. Expenses (Lodging, Food, Travel) to be paid by Safety-Kleen.
- High School diploma or GED required.
- Degree preferred.
- 7+ years of sales and operations management experience.
- Profit and Loss responsibility.
- Strong understanding of sales process.
- Lean/Six Sigma training and experience preferred.
- Working knowledge of DOT and fleet compliance.
- Experience in interviewing, hiring and effectively managing others.
- High level of computer proficiency.
- Issue resolution, negotiating and problem solving skills.
- Integrity, judgment and decision-making skills.
- Good written and oral communication skills.
- Time management, organization, and attention to detail.
- Valid Driver's License.
- Applicant must be able to successfully pass comprehensive security background screenings so as to service all SK customers who are federally regulated by TSA, DOD, DOJ, DHS, etc.

TYPICAL HAZARDOUS WASTE MANAGEMENT DUTIES

- Assures the proper completion and administration hazardous waste manifests and associated paperwork (i.e. land disposal restriction notices, operating log, waste analysis, and spill reporting)
- Assures the proper management, preparation and shipment of hazardous waste (including packaging, labeling, placarding of vehicles, and transfer and storage procedures)
- Maintains a current Emergency Response and Evacuation Plan
- Conducts safety training and maintains records of such training
- Implements and maintains branch environmental, health, and safety awareness
- Keeps environmental, health, and safety training records current
- Complies with Company and governmental regulations related to fleet operations
- Maintains facility cleanliness, organization, and appearance

BRANCH ADMINISTRATOR

A Branch Administrator is responsible for providing excellent customer service to internal and external customers, maintaining detailed and accurate company, branch, and customer files.

Responsibilities:

- Create proper shipping and billing documents daily, including manifests.
- Enter data into Safety-Kleen systems.
- Contact customers delinquent in payment and coordinate pick up of payments.
- Respond to customer inquiries and/or complaints.
- Enter sales leads into the Hand-Off Tool on a daily basis.
- Enter time of service Containerized Waste Service profiles into the Waste Approval Wizard software.
- Print and restock time of service in Sales and Service Representative's folders.
- Respond to customer call-ins and direct potential pulls and complaints to appropriate account owner.
- Other related support functions as directed by management.

Requirements:

- High school diploma or equivalent required
- 1+ years of work experience
- Strong computer skills
- Good organizational skills
- Customer service attitude
- Product knowledge
- Attention to detail
- Safety mindset
- Time management skills
- Sense of direction
- Integrity
- Reliable
- Problem solving abilities

TYPICAL HAZARDOUS WASTE MANAGEMENT DUTIES

- Manifest and associated paperwork preparation
- Waste Label preparation
- Maintenance of waste tracking (may be electronic or paper)
- May check container labels on hazardous waste containers stored in the facility's permitted storage areas or conduct or verify the facility inspection
- May be designated as an emergency response coordinator or alternate

BRANCH MATERIAL HANDLER/WAREHOUSE WORKER

A Material Handler is responsible for completing all assigned warehouse duties in a safe and responsible manner. You will work with all local, state, and federal rules and regulations; and follow all Safety-Kleen policies and procedures.

Responsibilities:

- Unload route truck containerized waste in evening and reconcile waste.
- Reload route trucks with supplies and equipment for next day's runs.
- Stock warehouse with materials after Distribution Center truck arrival.
- Prepare waste loads for shipment to Recycle Center/Distribution Center.
- Daily facility inspection.
- Empty and fill drums of solvent mineral spirits.
- Perform minor repairs on parts washers at warehouse.
- Assign job duties to Material Handlers and assure completion of the duties.
- Supervise third party bulk liquid transfers.
- Inventory count at warehouse.
- Manage inventory order and receiving process.

Requirements:

- Required attendance at on-boarding and regulatory training courses
- High school diploma or GED required
- 3+ years work experience required
- Attention to detail needed
- Ability to follow specific instructions
- Ability to work with minimal supervision at times
- Computer skills
- Forklift driving skills
- Basic math skills
- Pride in position – owns the warehouse and recognizes the importance of this role

TYPICAL HAZARDOUS WASTE MANAGEMENT DUTIES

- Prepares hazardous waste for shipment offsite
- Performs housekeeping and routine facility maintenance
- Prepares paperwork including manifests and land disposal restrictions
- May conduct and document facility inspections
- Cleanup of minor spills and report major spills of hazardous waste
- May be designated as an emergency response coordinator or alternate

BRANCH SALES AND SERVICE REPRESENTATIVES

A Sales and Service Driver is responsible for safely completing all assigned customer services, meeting customer needs and selling additional services in a defined route while complying with all local, state, and federal rules and regulations, in addition to all Safety-Kleen policies and procedures.

Responsibilities:

- Complete daily scheduled services, deliveries, and pickups in a timely manner.
- Complete all required documentation and labeling.
- Generate / collect leads from customers for new products and services.
- Sell additional products and services into existing accounts.
- Actively prospect for new accounts in assigned route.
- Primary account ownership in assigned route.
- Ensure customer satisfaction at time of service.
- Follow all local, state (provincial) and federal compliance regulations and rules.
- Safely operate vehicles in accordance with U.S. DOT, local, state (provincial) and federal requirements.
- Safely observe all corporate operating guidelines and procedures.
- Observe all company environmental health and safety operating guidelines.

Requirements:

- Required attendance at on-boarding and regulatory training courses
- High school diploma or equivalent required
- Ability to obtain and retain a CDL with HAZMAT endorsement
- Demonstrate a commitment to environmental compliance and safe work practices
- Sales aptitude
- Ability to develop customer loyalty
- Record of good judgment/ decision-making
- Good written and oral communication skills
- Ability to perform physical functions per job requirements
- Ability to work independently while managing time and productivity
- Integrity and reliability
- Attention to detail
- Basic computer literacy and math skills
- Problem solving abilities
- Applicant must be able to successfully pass comprehensive security background screenings so as to service all SK customers who are federally regulated by TSA, DOD, DOJ, DHS, etc.
- Applicants for employment in the U.S. must possess work authorization which does not require sponsorship by the employer for a visa

TYPICAL HAZARDOUS WASTE MANAGEMENT DUTIES

- Services machines containing hazardous waste at customer locations
- Remove, prepare for transportation, and transport hazardous waste to the facility
- Prepares paperwork including manifests and land disposal restrictions
- May conduct and document facility inspections
- Cleanup of minor spills and report major spills of hazardous waste
- May assist in the unloading of hazardous waste and the transfer of spent solvent into the bulk storage tank

BRANCH SALES PERSONNEL (MARKET SALES SPECIALISTS, TERRITORY ACCOUNT MANAGER)

The Outside Sales Representative is expected to meet or exceed sales objectives within an assigned geographic territory through prescribed sales techniques; develop existing customer relationships and cultivate new account opportunities. This position is known internally as a Market Sales Specialist.

Responsibilities:

- Identify profitable new opportunities from leads provided by branches/facilities, current customers, trade publications, state associations, internet/newspaper/journal articles, or cold-calling.
- Develop customer solutions and sell all applicable Safety-Kleen products and services according to the defined sales strategy/pricing tools.
- Prepare sales plans and forecasts; monitor and track sales plan to ensure sales quota is met or exceeded.
- Prepare and deliver customer quotes and identify new solutions for customers; provide technical and sales assistance to customers.
- Serve as interface between customers and company to ensure that customer needs are met and issues are promptly resolved.
- Keep abreast of products, market conditions and competitive activities.
- Maintain current database through the use of CRM tool while providing accurate sales reporting, as required.
- Ensures that all sales actions comply with all regulations and Safety-Kleen corporate policies/processes.
- Daily local travel is required. Limited overnight travel may be required (<15%) for customer visits, vendor visits, training.

Requirements:

- 3+ years of business-to-business (B2B) sales experience, preferably in the industrial, commercial, automotive, or environmental services markets
- Proven ability to prospect, negotiate and close deals
- Bachelor's Degree in Business Management or related field preferred, or equivalent additional experience required
- Prior experience using CRM software tools and reporting
- Strong time management and organizational skills to ensure focus on value-added sales activities
- Strong customer-orientation; prompt issue resolution/follow-through
- Strong computer skills (MS Applications: Word, Excel, PowerPoint)
- Required attendance at on-boarding and regulatory training courses
- Strong communication (written and oral) skills
- Valid driver's license is required

TYPICAL/OPTIONAL HAZARDOUS WASTE MANAGEMENT DUTIES

- Prepares hazardous waste for shipment offsite
- Performs housekeeping and routine facility maintenance
- Prepares paperwork including manifests and land disposal restrictions
- May conduct and document facility inspections
- Cleanup of minor spills and report major spills of hazardous waste
- May be designated as an emergency response coordinator or alternate

Exhibit H-3



Site RCRA and SPARK Training



TRAINING OUTLINE

RCRA TRAINING AT FACILITY

- I. INTRODUCTION: Major plans to be discussed
 - A. RCRA Contingency Plan and Preparedness and Prevention Plan
 - B. Spill Plan Control and Countermeasures Plan
 - C. Storm Water Pollution Prevention Plan

- II. What we do to keep from sounding the alarm
 - A. Storage and release prevention measures
 - i. Best Management Practices
 1. Housekeeping
 2. Drum storage drum areas clean and clear
 3. Debris picked up
 4. Aisle space
 5. Container security – lids and secured
 6. Waste not stacked over 2 tiers high
 - ii. Preventative maintenance
 1. Daily/weekly inspections
 2. Keeping containers closed-check container integrity at all times
 3. Spill Equipment
 4. Fire extinguishers
 5. PPE
 6. First aid kits
 7. Eye wash
 - iii. Security
 1. Keep unauthorized / untrained people out of the area
 2. Use the facility sign-in log
 3. Keep doors closed and locked
 4. Enforce the above

- III. What are the procedures if the above practices don't work and a spill occurs
 - A. Activation of the site Contingency Plan
 - i. Emergency response list
 - ii. Emergency coordinators role
 - iii. Response preparation
 - iv. Response actions
 1. Emergency shut-off switches
 2. Major/minor spills
 3. Fires
 4. Earthquakes
 5. Evacuation procedures
 - v. Notification requirements
 - B. Transportation Contingency Plan
 - i. Emergency response list
 - ii. Response preparation
 - iii. Response actions
 - iv. Notification requirements

- IV. Past Spills
- V. Potential Spills

SPARK

Safety, Products, and Regulatory Knowledge

Course Agenda

Week 1	Week 2
Monday <ul style="list-style-type: none">▪ Welcome & Orientation▪ Human resources▪ Customer Service/Value Overview▪ Health & Safety: <i>Compliance Intro, OSHA Overview, Hazard Recognition, Ergonomics, Container Handling</i>	Monday <ul style="list-style-type: none">▪ Oil & Vacuum Service Overview▪ Day in the Life Scenario – Oil & Vac▪ Spill Response
Tuesday <ul style="list-style-type: none">▪ Health & Safety Continued <i>Walking & Working Surfaces, Lockout/Tagout, Electrical Safety, Fire Prevention/Protection, Toxicology, Hazard Communications, PPE, Decontamination, Respiratory Protection, Hearing Protection, Medical Surveillance</i>	Tuesday <ul style="list-style-type: none">▪ Bringing It All Together:▪ Hands-On Parts Washers & Allied Products▪ Demonstrations, Q&A
Wednesday <ul style="list-style-type: none">▪ Transportation <i>Regulatory Requirements – DOT, Driver Qualification, Driver Wellness, Daily Log/Hours of Service, Load Securement, Pre & Post Trip Inspections, Vehicle Cone Program, Hazmat Definitions & Requirements, Hazard Classes, Hazmat Table, Shipping Papers, Markings and Labels, Packaging, Drum Inspection and Closure, Transportation Review</i>	Wednesday <ul style="list-style-type: none">▪ <u>Service Representatives</u> Selling Skills Training▪ <u>Sales Representatives</u> Smith Systems® 5Keys Driver Training® Part 2: Road Training
Thursday <ul style="list-style-type: none">▪ Transportation Continued: Smith Systems® 5Keys Driver Training® Part 1: Classroom Training▪ Parts Washers/Allied Products Overview	Thursday <ul style="list-style-type: none">▪ <u>Service Representatives</u> Smith Systems® 5Keys Driver Training® Part 2: Road Training▪ <u>Sales Representatives</u> Branch Technical Training (BTT)
Friday <ul style="list-style-type: none">▪ Day in the Life Scenario: Parts Washers▪ Containerized Waste Services (CWS) Overview	Friday <ul style="list-style-type: none">▪ Wrap-up, Review and Testing▪ Awards▪ Departure
Saturday <ul style="list-style-type: none">▪ Day in the Life Scenario: CWS & Salvage Pack	

Exhibit H-4

Example Training Certification (Sign-In Form)



**SAFETY-KLEEN SYSTEMS
TRAINING ATTENDANCE /CERTIFICATION SHEET**

Date: _____ Training Location: _____

Course Name: _____ SAP Event/Class Number: _____

Course Code: _____ Time: _____ to _____ Duration: _____

	PRINTED NAME	SIGNATURE	EMPLOYEE #	FACILITY (CITY, STATE)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				

I certify that the above listed employees have satisfactorily passed associated tests and, demonstrated satisfactory performance and comprehension of this training..

Trainer: _____
(Please Print Name)

Trainer's Signature: _____

Trainer's Location: _____

Trainer: _____
(Please Print Name)

Trainer's Signature: _____

Trainer's Location: _____

Exhibit H-5

Annual Antifreeze Review and Checklist

Antifreeze checklist

Used antifreeze, through contact with a car's cooling system, may contain traces of lead and benzene, making it a possible hazardous waste. However, used antifreeze generated from motor vehicles, motorized equipment, industrial/commercial processes and deicing activities, that is recycled and managed according to the best management practices outlined below, generally does not exhibit hazardous waste characteristics.

Chandler Service Center employees will evaluate used antifreeze at each customer site per the checklist below during the initial evaluation/pickup, and at all subsequent collections to ensure the used antifreeze does not exhibit hazardous waste characteristics. The Generator and SK Representative shall sign this form at the initial evaluation/pickup attesting that the used antifreeze collected has been managed according to the best management practices. A copy of this form will be left with the customer (if requested), and kept on file at the Chandler Service Center.

Used Antifreeze Best Management Practices

1. Containers of used antifreeze are stored in compatible containers that are in good condition; the container is labeled "Used Antifreeze".
2. Used Antifreeze is not mixed with any other waste or other material (e.g. solvents, cooling system flushes, used oil, motor oils).
3. Containers of used antifreeze used for collection, storage and transport are dedicated solely to the storage of antifreeze, to minimize the risk of cross-contamination.
4. Used antifreeze containers are kept closed, except when emptying or filling, to minimize the potential for spillage.
5. Used antifreeze containers must properly maintained so that they do not leak, rupture, or tip over when being opened, handled, and stored.
6. Spill of used antifreeze must be immediately cleaned up and appropriately managed.
7. Volumes of accumulated used antifreeze should be minimized by routinely recycling to reduce the potential for environmental harm. Used antifreeze shall not be stored longer than 12 months prior to recycling.
8. Proof of recycling must be maintained by the generator
9. Generators shall inform employees who handle or otherwise manage the used antifreeze of proper handling and spill response procedures.

A qualitative analysis is performed during every collection of used antifreeze; if necessary sampling and analysis may be performed.

Generator/Date

Safety-Kleen Representative/Date

EXHIBIT I

CLOSURE PLAN AND FINANCIAL ASSURANCE DOCUMENTS

- I-1 Closure Cost Estimate Worksheet**
- I-2 Closure Schedule**
- I-3 Indian Harbor Closure Insurance Certificate**
- I-4 Hazardous Waste Facility Certificate of Liability Insurance**
- I-5 Soil Sampling Map**

Exhibit I-1

Closure Cost Estimate Worksheet

Table 1. Closure Cost Estimate Worksheet, Safety-Kleen Branch Service Center, [Chandler, AZ]

Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal	Cost
1. INVENTORY REMOVAL					
<u>Assumptions</u>					
- Waste mineral spirits tank(s) is full			Capacity (gallons)		
- Tank One			12000		
- Tank Two (IF APPLICABLE)			0		
	Total Tank Capacity		12000		
- Return/Fill station is full					
- Maximum capacity of drum washers added to waste mineral spirits tank quantity			324		
- Container storage area(s) full					
- CSA 1			17160		
- CSA 2 (IF APPLICABLE)			0		
	Total CSA Capacity		17160		
<u>Subcontractor Costs</u>					
- Transfer tank contents to tankers					
Tank Capacity (total gallons)			12324		
Work Rate to Unload Tank Capacity (hours per gallon)			0.0003		
Total Hours to Unload			3.7		
Labor and equipment rate to unload (PPE Level D) and cost	Labor/equipment	\$175.95	3.7		\$651
- Transport waste mineral spirits to a TSD for treatment/disposal					
Number of tanker trailers required (6,000 gallons max each load)			3		
Cost per mile = \$5.64/mile					
Mileage = 300 miles (Number in second column is 300 miles x number trucks)	Transport = 300 miles each	\$5.64	900		\$5,076
Disposal/treatment cost (per gallon - Mean of low cost (\$0.45/gallon) and average cost (\$1.67/gallon) based on suitability for fuel and as requested by ADEQ	TSD @ \$1.06/gallon	\$1.06	12324		\$13,063
- Transfer drums from CSA(s) to trucks					
Labor/Equipment (PPE Level D)	Labor/equipment per drum	\$3.57	312		\$1,114
(Number in second column is number of drums determined from total CSA capacity)					
- Transport drums to TSD for Treatment/Disposal					
Total Number of Drums (Number is total of CSA drums and Flam Shed drums)			312		
Total Number of Trucks Required to Transport Drums (84 per truck max)			4		
Cost per mile = \$5.64/mile					
Mileage = 300 miles (Number in second column is 300 miles x number of trucks)	Transport trailer(s) x 300 miles	\$5.64	1200		\$6,768
Disposal/treatment cost (per drum - mean of low (\$90/drum) and average cost (\$179/drum) based on suitability for fuel and as requested by ADEQ)	TSD @ \$134/drum	\$134	312		\$41,808
	Activity 1. Subtotal				\$58,480
2. STORAGE TANK DECONTAMINATION					
<u>Assumptions:</u>					
- The tanks, piping and appurtenant equipment are decontaminated and remain in place					
- Rinsate sampling necessary because the tank will remain in place. Assumes 1 rinsate sample per tank.					
- Includes decontamination of the containment area					
- Assumes containment area to remain in place following decontamination					
- Assumes 1 rinsate sample required to leave containment in place					
- Assumes 8 soil samples required from beneath containment area					
- Tank Interior Square Footage (based on tank volume)			Square Footage		
- Tank 1			781		
- Tank 2 (IF APPLICABLE)			0		
	Total Tank Interior Square Footage		781		
- Tank Farm Containment Square Footage (includes floor and walls)			1595.49		
<u>Prime Contractor Costs</u>					
- Costs for oversight and engineers inspection included in Closure Certification Activity below					
- Collect Rinsate Sample(s) (1 per tank and 1 per containment)					
Work Rate for Sampling (hours per sample)			0.5000		
Number of Samples			2		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88	1.00		\$92
- Drilling for Soil Samples (2.5 in boring to 1 ft each)					
Work Rate for Drilling (hours per foot)			0.3050		
Number of Feet (subslab sample depth = 1 foot each)			8		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$146.29	2.44		\$357
- Collect 2 Soil Samples					
Work Rate for Sampling (hours per sample)			0.5000		
Number of Samples			8		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88	4.00		\$368
<u>Subcontractor Costs</u>					
- Decontaminate waste AST, piping and appurtenant equipment					
Work Rate to Pressure Wash (hours per square foot)			0.0405		
Area of Tanks to be decontaminated			781		
Labor and equipment for tank decon (PPE Level C)	Labor/equipment	\$97.23	32		\$3,074
- Decontaminate Tank Containment Area					
Work Rate to Pressure Wash 1 sq ft (hours per square foot)			0.0405		
Total Area of Containment (includes walls and floor)			1595		
Labor and equipment for CSA decon (PPE Level D)	Labor/equipment	\$65.77	65		\$4,250
<u>Laboratory Subcontractor Costs</u>					
- Analyze rinsate sample(s) from tank(s) and containment area for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	2		\$1,316
- Analyze soil sample(s) from containment area for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	8		\$5,264

Table 1. Closure Cost Estimate Worksheet, Safety-Kleen Branch Service Center, [Chandler, AZ]

Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal	Cost
3. DECONTAMINATE THE RETURN/FILL STATION					\$14,720
<u>Assumptions:</u>					
- Decontamination shall consist of washing with detergent/water solution and rinsing with high-pressure spray					
- Return/Fill structure and dock area will remain in place following decontamination					
- Drum washers to remain in place or sent offsite for reuse following decontamination					
- Rinsate sampling required from each drum washer to remain in place or sent offsite for reuse, and from containment					
- Assumes 4 soil samples required from beneath containment area					
- Square footage used for decontamination includes containment, dock and drum washer units					
Square Footage					
1000					
<u>Prime Contractor Costs</u>					
- Costs for oversight and engineers inspection included in Closure Certification Activity below					
- Collect Rinsate Samples (1 per drum washer plus containment)			0.5000		
Work Rate for Sampling (hours per sample)			3		
Number of Samples			1.50		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88			\$138
- Drilling for Soil Samples (2.5 in boring to 1 ft each)			0.3050		
Work Rate for Drilling (hours per foot)			4		
Number of Feet (subslab sample depth = 1 foot each)			1.22		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$146.29			\$178
- Collect Soil Samples			0.5000		
Work Rate for Sampling (per sample)			4		
Number of Samples			2.00		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88			\$184
<u>Subcontractor Costs</u>					
- Decontaminate waste AST, piping and appurtenant equipment			0.0405		
Work Rate to Pressure Wash (hours per square foot)			1000		
Area of Return/Fill to be decontaminated			41		
Labor and equipment for tank decon (PPE Level C)	Labor/equipment	\$97.23			\$3,938
<u>Laboratory Subcontractor Costs</u>					
- Analyze 1 rinsate sample per drum washer and containment for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	3		\$1,974
- Analyze soil sample(s) from containment area for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	4		\$2,632
Activity 3. Subtotal					\$9,044
4. DECONTAMINATE CONTAINER STORAGE AREA(S)					
<u>Assumptions:</u>					
- Decontamination shall consist of washing with a detergent water solution and rinsing with a high-pressure spray					
- CSA(s) to remain in-place following closure					
- Decontamination of CSA includes floor, curbing and containment trenches					
- Assumes 1 rinsate and 8 soil samples required for the CSA					
- CSA Containment Square Footage					
- CSA 1			3749		
- CSA 2 (IF APPLICABLE)			0		
	Total CSA Square Footage		3749		
<u>Prime Contractor Costs</u>					
- Costs for oversight and engineers inspection included in Closure Certification Activity below					
- Collect Rinsate Samples (1 per CSA)			0.5000		
Work Rate for Sampling (hours per sample)			1		
Number of Samples			0.50		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88			\$46
- Drilling for Soil Samples (2.5 in boring to 1 ft each)			0.3050		
Work Rate for Drilling (hours per foot)			8		
Number of Feet (subslab sample depth = 1 foot each x number of samples)			2.44		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$146.29			\$357
- Collect Soil Samples			0.5000		
Work Rate for Sampling (hours per sample)			8		
Number of Samples			4.00		
Labor and equipment per work hour (PPE Level D)	Labor/equipment	\$91.88			\$368
<u>Subcontractor Costs</u>					
- Decontaminate CSA(s)			0.0405		
Work Rate to Pressure Wash (hours per square foot)			3749		
Total Area of Permitted CSA(s) to be decontaminated			152		
Labor and equipment for CSA decon (PPE Level D)	Labor/equipment	\$65.77			\$9,986
<u>Laboratory Subcontractor Costs</u>					
- Analyze rinsate sample(s) from each CSA for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	1		\$658
- Analyze 2 soil sample(s) from each CSA for VOCs, SVOCs and RCRA metals	VOCs @ \$189/sample SVOCs @ \$359/sample 8 RCRA Metals @ \$110/sample Total per sample cost	\$658	8		\$5,254

Table 1. Closure Cost Estimate Worksheet, Safety-Kleen Branch Service Center, [Chandler, AZ]

Activity	Category	Hourly Rate or Unit Charge	Hours or Unit Estimate	Subtotal	Cost
Activity 4. Subtotal					\$16,679
5. CONTAINERIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES					
<u>Assumptions:</u>					
- Amount of decon wash water generated derived from previous closure experience. Quantity based on approximately 0.1-1 gal/ sq ft					
Unit Description	Square Footage	Number Gallons	Number Drums		
STORAGE TANK DECONTAMINATION	781	700	13		
DECONTAMINATE TANK CONTAINMENT	1,595	250	5		
DECONTAMINATE THE RETURN/FILL STATION	1,000	700	13		
DECONTAMINATE CONTAINER STORAGE AREA(S)	3,749	500	10		
PPE, CONSUMABLES, DEBRIS	NA	NA	5		
- Purchase 55-gallon drums to containerize wash water	Drums @ \$83 each	\$83	46		\$4,200
<u>Subcontractor Costs</u>					
- Transfer drums to trucks	Labor/Equipment (PPE Level D)	Labor/equipment per drum	\$3.57	46	\$164
- Transport drums to TSD for Treatment/Disposal	Total Number of Trucks Required to Transport Drums (84 per truck max)		1		
	Cost per mile = \$5.64/mile				
	Mileage = 300 miles (Number in second column is 300 miles x number trucks)	Transport trailer(s) x 300 miles	\$5.64	300	\$1,692
	Disposal/treatment cost (per drum - low cost based on lack of hazardous constituents)	TSD @ \$90/drum	\$90	41	\$3,690
	Disposal/treatment cost for PPE drums (assumed haz to landfill)	TSD @\$250/drum	\$250	5	\$1,250
Activity 5. Subtotal					\$10,996
6. CLOSURE CERTIFICATION					
<u>Assumptions:</u>					
- Cost Pro unit rate per unit to be closed is \$4,118					
- Unit rate includes engineer inspection and decontamination oversight of each unit					
<u>Prime Contractor Costs</u>					
- Oversee and certify closure per unit times number of units	Project Manager/Engineer	\$4,118	3		\$12,354
- Project Management and Coordination	20% of unit total above	\$12,354	20%		\$2,471
Activity 6. Subtotal					\$14,825
COST ESTIMATE ACTIVITIES SUMMARY					
1. INVENTORY REMOVAL					\$68,480
2. STORAGE TANK DECONTAMINATION					\$14,720
3. DECONTAMINATE THE RETURN/FILL STATION					\$9,044
4. DECONTAMINATE CONTAINER STORAGE AREA(S)					\$16,679
5. CONTAINERIZE, STAGE, TRANSPORT AND DISPOSE OF DECONTAMINATION WASTES					\$10,996
6. CLOSURE CERTIFICATION					\$14,825
SUBTOTAL CLOSURE COST ESTIMATE					\$134,743
ADD CONTINGENCY			20%		\$26,949
CLOSURE TOTAL					\$161,692
Add Inflation factors from 2010 to most recent					
2010			1.022		\$165,249
2011			1.012		\$167,232
2012			1.01		\$168,905
2013			1.021		\$172,452
2014			1.018		\$175,556
2015			1.014		\$178,013
TOTAL CLOSURE COST WITH INFLATION SINCE 2009 Cost Pro					\$178,013

Notes:

- Estimate assumes that waste management units are at permitted capacity at time of closure, which is the most expensive in the facility's operating life.
- All unit rates obtained from Cost Pro version 6.0, which is designed to be representative of 3rd party costs and includes the following:
 - Transportation @ \$5.64/mile and 300 mile trip
 - Disposal for bulk liquids \$0.45/gallon based on suitability of waste mineral spirits as fuel
 - Disposal for CSA liquids \$90/drum based on suitability of drummed waste streams as fuel
 - Disposal of decon wash water \$90/drum based on lack of hazardous constituents in waste (soapy water)
 - Subcontractor Decontamination Rate for tanks and return/fill based on PPE Level C
 - Subcontractor decontamination rates for tank containment, CSAs and Flam Shed (if applicable) based on PPE Level D
 - Prime Contractor Rates based on hourly rate for rinsate sampling, drilling and soil sample collection
 - Lab subcontractor rates for analysis of rinsate and soil samples (Assumes VOCs, SVOCs and metals)
 - Closure Certification Activity includes contractor oversight, PE integrity inspections and reporting/Certification
- Since Cost Pro has not been updated since 2009, inflation factors for subsequent years have already been included

Exhibit I-2

Closure Schedule

Activity	Calendar Days After Notification and/or Approval							Number of Days Following Completion of Clean Closure					
	0	30	60	90	120	150	180	210	240	270	0	30	60
1. Notification of Intent to Commence Closure													
2. Removal/Disposal of Final Waste Inventory													
3. Notification to Agency of Critical Closure Activities													
4. Storage Tank Decontamination													
5. Return/Fill Station Decontamination													
6. Drum Storage Area Decontamination													
7. Analytical Results Compilation and Evaluation													
8. Closure Progress Report Preparation and Submittal													
9. Remedial Action Plan/Closure Plan Addendum (if necessary)													
10. Closure Certification *													

Notes:  >>> Indicates that this activity continues until certification of "clean closure."

 Indicates an optional activity based on the closure analytical results.

* If no impacts are detected during the decontamination activities, closure certification will be submitted within 60 days of the completion of closure activities.

Closure Plan Table 2: Tentative Closure Completion Schedule, Safety-Kleen Systems, Inc. Service Center, Chandler, AZ

Exhibit I-3

Indian Harbor Closure Insurance Certificate



July 27, 2015

Mr. Anthony Leverock
Senior Environmental Engineer
Hazardous Waste Section
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, AZ 85008

RE:

Annual Inflation Increase
Safety-Kleen Systems, Inc.
Chandler AZD981969504

Dear Mr. Leverock:

Enclosed please find an original insurance certificate issued by Indian Harbor Insurance Company for the above-referenced Safety-Kleen facility. The policy under which the certificate is issued has been renewed, effective July 31, 2015.

The certificate has been amended, effective July 31, 2015, to reflect the annual inflation increase of the financial assurance. The increase was calculated by using information obtained on April 29, 2015 from the U.S. Department of Commerce, Bureau of Economic Analysis, Table 1.1.9 Implicit Price Deflators for Gross Domestic Product as indicated below:

2014 Annual GDP	<u>108.289</u>
2013 Annual GDP	106.733 = 1.014

Implicit Price Deflator for July 31, 2015 = 1.014 or 1.4%

If you have any questions, I may be reached at hodge.kathleen@cleanharbors.com or at 803-225-5459.

Sincerely,

Kathy Hodge
Manager, EHS Compliance Administration

CERTIFICATE OF INSURANCE FOR CLOSURE AND/OR POST-CLOSURE CARE

Name and Address of Insurer (herein called the "Insurer"):

Indian Harbor Insurance Company
Seaview House
70 Seaview Avenue
Stamford, CT 06902-6040

Name and Address of Insured (herein called the "Insured"):

Safety-Kleen Systems, Inc.
6625 W. Frye Road
Chandler, AZ 85226

FACILITIES COVERED:

Name: Safety-Kleen Systems, Inc.

Address: 6625 W. Frye Road
Chandler, AZ 85226

EPA ID Number: AZD 981 969 504

Amount insured for this site: \$142,185

Face Amount: \$142,185

Policy Number: PEC000951114

Effective Date: July 31, 2015

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for closure for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of "Arizona Administrative Code (AAC) R18-8-264.A [40 CFR 264.143(e), 264.145(e), 265.143(d), and 265.145(d)]." as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

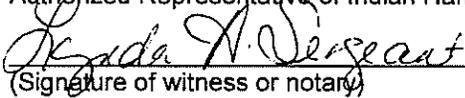
Whenever requested by the Director of the Arizona Department of Environmental Quality, the Insurer agrees to furnish to the Director a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in "AAC R18-8-264.A [40 CFR 264.151 (e)].", as such regulations were constituted on the date shown immediately below.



(Authorized signature for Insurer)

Mary Ann Susavidge, Vice President
Authorized Representative of Indian Harbor Insurance Company



(Signature of witness or notary)

7-20-15

(Date)

SEAL

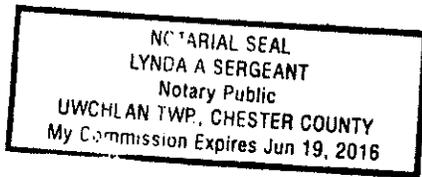


Exhibit I-4

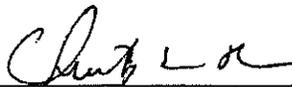
Hazardous Waste Liability Insurance

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. Indian Harbor Insurance Company, the Insurer of Seaview House, 70 Seaview Avenue, Stamford, CT 06902-6040, hereby certifies that it has issued liability insurance covering bodily injury and property damage to Safety-Kleen Systems, Inc, the Insured, of 42 Longwater Drive, Norwell, MA 02061 in connection with the Insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at EPA ID#SEE ATTACHED LIST, for sudden and nonsudden accidental occurrences. The limits of liability are \$1,000,000 each occurrence and \$2,000,000 annual aggregate, exclusive of legal defense costs. The coverage is provided under policy number PEC004203901 issued on November 1, 2014. The effective date of said policy is November 1, 2014.

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 obligation 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. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).
 - (c) Whenever requested by the Director of the Arizona Department of Environmental Quality (DEQ), the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.
 - (d) Cancellation of the insurance, whether by the Insurer, the Insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Director of the DEQ.
 - (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 Director of the DEQ.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation 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.



(Signature of Authorized Representative of Insurer)

Date:

10/28/14

Christopher Biddle, Vice President

Authorized Representative of Indian Harbor Insurance Company

c/o XL Insurance
 505 Eagleview Boulevard
 P.O. Box 636
 Exton, PA 19341-0636

SAFETY-KLEEN SYSTEMS, INC. LOCATIONS

STATE OF ARIZONA

6625 W. Fry Road Chandler, AZ 85226	AZD981969504	Sudden Accidental Occurrences
4401 E. University Drive Phoenix, AZ 85034	AZD089308803	Sudden Accidental Occurrences

ENDORSEMENT

This endorsement, effective 12:01 a.m., November 1, 2014 forms part of
Policy No. PEC004203901 issued to Clean Harbors, Inc.
by Indian Harbor Insurance Company.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

HAZARDOUS WASTE FACILITY LIABILITY ENDORSEMENT STATE OF ARIZONA

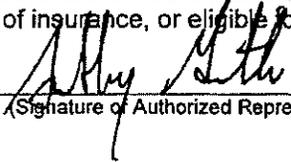
1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the Insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at EPA ID #AZD981969504, Safety-Kleen Systems, Inc., 6625 W. Frye Road, Chandler, AZ 85226 for sudden accidental occurrences.

The limits of liability are \$1,000,000 each occurrence and \$2,000,000 annual aggregate, exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):
 - (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.
 - (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. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in a financial test for liability coverage 40 CFR 264.147(f) or 265.147(f).
 - (c) Whenever requested by the Director of the Arizona Department of Environmental Quality (DEQ), the Insurer agrees to furnish to the Director a signed duplicate original of the policy and all endorsements.
 - (d) Cancellation of this endorsement, 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 Director of the DEQ.
 - (e) Any other termination of this endorsement 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 Director of the DEQ.

Attached to and forming part of policy No. PEC004203901 issued by Indian Harbor Insurance Company (name of Insurer), herein called the Insurer, of 505 Eagleview Blvd. Suite 100, Exton, PA 19341 (address of Insurer) to Clean Harbors, Inc. (name of insured) of 42 Longwater Drive, Norwell, MA 02061 (address of Insured) this 1st day of November 2014. The effective date of said policy is 1st day of November, 2014.

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 264.151(j) as such regulations were 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 the State of Arizona.



(Signature of Authorized Representative of Insurer)

Date: 10/29/14

Anthony Gentile, Vice President

Authorized Representative of Indian Harbor Insurance Company

All other terms and conditions remain the same.

Exhibit I-5

Soil Sampling Map

EXHIBIT J

[NOT USED]

EXHIBIT K

[NOT USED]

EXHIBIT L

[NOT USED]

EXHIBIT M

[NOT USED]

EXHIBIT N

SUBPART BB INFORMATION

N-1	Not Used
N-2	Valve List of Subpart BB Tags
N-3	Heavy Liquid Determination (For Safety-Kleen Solvent)
N-4	Example Leak Detection and Repair Record
N-5	Example Inspection – Tank Sys BB Equipment
N-6	Piping Schematic

Exhibit N-2

Valve List of Subpart BB Tags

Exhibit N-2 Valve List Subpart BB Tags

Valve List				
Individual Valve Number	Valve Size	Valve Type	Hazardous Waste Management Unit	Location
1	1 ½ "	Ball	Waste Tank System	Refer to Site Plan and Piping Schematic
2	2"	Gate	Waste Tank System	Refer to Site Plan and Piping Schematic
3	1 ½ "	Ball	Waste Tank System	Refer to Site Plan and Piping Schematic
6	2"	Gate	Waste Tank System	Refer to Site Plan and Piping Schematic
7	1 ½ "	Ball	Waste Tank System	Refer to Site Plan and Piping Schematic
8	1 ½ "	Ball	Waste Tank System	Refer to Site Plan and Piping Schematic
11	2"	Gate	Waste Tank System	Refer to Site Plan and Piping Schematic
12	2"	Gate	Waste Tank System	Refer to Site Plan and Piping Schematic
13	2"	Check	Waste Tank System	Refer to Site Plan and Piping Schematic
20	3"	Emergency	Waste Tank System	Refer to Site Plan and Piping Schematic
21	3"	Ball	Waste Tank System	Refer to Site Plan and Piping Schematic
22	3"	Check	Waste Tank System	Refer to Site Plan and Piping Schematic
23	3"	Gate	Waste Tank System	Refer to Site Plan and Piping Schematic

Flange List				
Individual Flange Number	Flange Size	Flange Type	Hazardous Waste Management Unit	Location
27	3"	Plug	Waste Tank System	Refer to Site Plan and Piping Schematic
28	3"	Plug	Waste Tank System	Refer to Site Plan and Piping Schematic
29	3"	Flange	Waste Tank System	Refer to Site Plan and Piping Schematic
35	3"	Plug	Waste Tank System	Refer to Site Plan and Piping Schematic
36	3"	Plug	Waste Tank System	Refer to Site Plan and Piping Schematic

Pump List			
Individual Valve Number	Pump Description	Hazardous Waste Management Unit	Location
4	Recirculation	Waste Tank System	Refer to Site Plan and Piping Schematic
5	Used Solvent	Waste Tank System	Refer to Site Plan and Piping Schematic
9	Recirculation	Waste Tank System	Refer to Site Plan and Piping Schematic

OTHER NON-WELDED CONNECTIONS, UNIONS, COUPLINGS, CAPS AND DEVICES LIST			
Individual Valve Number	Pump Description	Hazardous Waste Management Unit	Location
10	Basket Strainer	Waste Tank System	Refer to Site Plan and Piping Schematic
14	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
15	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
16	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
17	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
18	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
19	Union	Waste Tank System	Refer to Site Plan and Piping Schematic
26	Manhole Cover	Waste Tank System	Refer to Site Plan and Piping Schematic
30	3" Union	Waste Tank System	Refer to Site Plan and Piping Schematic
31	3" Union	Waste Tank System	Refer to Site Plan and Piping Schematic
32	2" Union	Waste Tank System	Refer to Site Plan and Piping Schematic
33	2" Union	Waste Tank System	Refer to Site Plan and Piping Schematic
34	2" Elbow	Waste Tank System	Refer to Site Plan and Piping Schematic

Exhibit N-3

Heavy Liquid Determination
(for Safety-Kleen Solvent)

WASTE SOLVENT – HEAVY LIQUID DETERMINATION

&

VAPOR PRESSURE INFORMATION

Heavy Liquid Determination:

In the annual Recharacterization for waste solvent, a total of three constituents are identified: Benzene (D018), Perchloroethylene (D039), and TCE (D040). The total concentration for these three constituents is 855.2 ppm or mg/l (see attached detailed table from annual Recharacterization (Attachment No. 1). The conversion from ppm or mg/l to percent shows that these three constituents make of 0.085%, which is less than 20%. Therefore, the waste solvent is a heavy liquid not a light liquid.

To further explain the vapor pressure of the waste solvent, Safety-Kleen did a study to determine the waste solvent vapor pressure at different temperatures. The vapor pressures were determined at ASTM D2789: Vapor Pressure – Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The isoteniscope data indicates the vapor pressure at 100 degree Fahrenheit (assuming this to be the high temperature in San Antonio TX branch) to be 0.03281 psi, which is below the maximum organic vapor pressure (11.1 psi) for these tanks under 40 CFR 264.1084(b)(1)(i). In addition, this study also obtained data for temperature up to 375 degrees Fahrenheit, and the vapor pressure at this temperature was 9.7 psi, which is still lower than 11.1 psi. We are enclosing a copy of the actual laboratory results for this study (see Attachment No. 2).

Vapor Pressure Determination:

In reference to the vapor pressure of the waste spent solvent, to further explain this issue, Safety-Kleen did a study to determine the waste solvent vapor at different temperatures. The vapor pressures were determined by ASTM D2789: Vapor Pressure – Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. The isoteniscope data indicates the vapor pressure at 100 degree Fahrenheit (assuming this to be the high temperature in San Antonio TX branch) to be 0.03281 psi, which is below the maximum organic vapor pressure (11.1 psi) for these tanks under 40 CFR 264.1084(b)(1)(i). In addition, this study also obtained data for temperature up to 375 degrees Fahrenheit, and the vapor pressure at this temperature was 9.7 psi, which is still lower than 11.1 psi. We are enclosing a copy of the actual laboratory results for this study (see Attachment No. 2).

We are also attaching a copy of a Safety-Kleen memorandum dated August 2, 2000 in which detailed information is provided about the vapor pressure determination for the waste spent solvent. This memorandum contains actual test data from a representative set of samples that were used for the vapor pressure determination (see Attachment No. 3).

As clarification, the August 2, 2000 memorandum lists the vapor pressure for all samples as measured by isoteniscope. Data from five samples were excluded because these samples had high concentrations of water. The vapor pressure of waste @ 68 degrees Fahrenheit is 2.330kPa (17.5 mm Hg). An attempt was made to calculate the partial pressure due to water, and subtract that from measure total vapor pressure to

give the VOC-only vapor pressure. However, the calculated vapor pressure was greater than the measured total vapor pressure. As explained in the memorandum, the error is due to inaccuracy of water determination in a three-phase system (mineral spirits, water, and solids), which is difficult to sample accurately. In other words, the calculated VOC partial pressure was the difference between two large numbers, one of which had a probable error on the order of magnitude of the resultant difference.

ATTACHMENT No. 1

Waste Parts Washer Solvent - 105

ANALYSIS METALS		90 UCL for the 50 th Percentile		Waste Code		SITE		YEAR		2009203		2011431		2015033		2015436		2015441		2015462		2016049		2017367		2017645		2018176		2025720									
						Reg	Limit	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000						
AS	ND	ND	5	D004	DENTON, TX	<5.00	<5.00	GERING, NE	2000	<5.00	FARGO, ND	<5.00	ALBUQUERQUE, NM	2000	<5.00	OMAHA, NE	2000	<5.00	SIoux FALLS, SD	2000	<5.00	EDWARDSVILLE, IL	2000	<5.00	GRAND ISLAND, NE	2000	<5.00	WICHITA, KS	2000	<5.00	GARDEN CITY, GA	2000	<5.00						
BA	0.768	ND	100	D005		<0.500	70.3			1.32		<0.500		24.3		<0.500					<0.500		<0.500		1.87		0.706		<0.500		<0.500		<0.500		<0.500		<0.500		
CD	ND	ND	1	D006		<0.500	F 3.04			<0.500		<0.500		<0.500		<0.500					<0.500		<0.500		0.627		<0.500		<0.500		0.646		<0.500		<0.500		<0.500		
CR	ND	ND	5	D007		<0.500	F 5.22			<0.500		<0.500		<0.500		<0.500					<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		
PB	ND	ND	5	D008		<4.00	F 31.4			<4.00		<4.00		<4.00		<4.00					<4.00		<4.00		<4.00		F 25.9		<4.00		F 7.45		<4.00		<4.00		0.53		
HG	ND	ND	0.2	D009		<0.10	<0.10			<0.10		<0.10		<0.10		<0.10					<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		<0.10		
SE	ND	ND	1	D010		<0.45	<0.45			<0.45		<0.45		<0.45		<0.45					<0.45		<0.45		<0.45		<0.45		<0.45		<0.45		<0.45		<0.45		<0.45		
AG	ND	ND	5	D011		<0.500	<0.500			<0.500		<0.500		<0.500		<0.500					<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		<0.500		
VOA																																							
1,1-DCE	ND	ND	0.7	D029		<4.0	<4.0			<4.0		<4.0		<4.0		<4.0				<4.0		<4.0		<4.0		<4.0		<4.0		<4.0		<4.0		<4.0		<4.0		<4.0	
1,2-DCE	ND	ND	0.5	D028		<2.0	<2.0			<2.0		<2.0		<2.0		<2.0				<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
PDCB	2.5	ND	7.5	D027		<5.0	F 10.4			<5.0		<5.0		0.74		<5.0				<5.0		<5.0		<5.0		6.4		F 9.8		<5.0		<5.0		<5.0		<5.0		<5.0	
BENZ	1.8	ND	0.5	D018		F 9.9	F 2.2			F 3.7		F 2.4		0.28		F 2.4				F 2.4		F 2.2		F 2.2		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
CCL4	ND	ND	0.5	D019		<2.0	<2.0			<2.0		<2.0		<2.0		<2.0				<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
MCB	ND	ND	100	D021		<2.0	<2.0			<2.0		<2.0		<2.0		<2.0				<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
CHCL3	ND	ND	6	D022		<2.0	<2.0			<2.0		<2.0		<2.0		<2.0				<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
MEK	2.2	ND	200	D035		6.7	<5.0			6.2		5.4		F 97.4		5.4				F 97.4		6.1		6.1		11.9		<5.0		5		5		77.5		77.5			
PERC	838	ND	0.7	D039		F 877	F 2430			F 2410		F 46000		F 40.6		F 40.6				F 40.6		F 917		F 917		F 532		F 820		F 430		F 430		F 430		F 430		F 430	
TCE	15.4	ND	0.5	D040		F 117	F 78.5			F 59		F 54.2		F 0.71		F 0.71				F 0.71		F 45.8		F 45.8		F 19		F 9.5		F 34.1		F 34.1		F 34.1		F 34.1			
VC	ND	ND	0.2	D043		<0.60	<0.60			<1.5		<1.5		<1.5		<1.5				<1.5		<1.5		<1.5		<1.5		<1.5		<1.5		<1.5		<1.5		<1.5		<1.5	
BNA																																							
2,4,5-TCP	ND	ND	400	D041		<5.0	<5.0			<5.0		<5.0		<5.0		<5.0				<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0	
2,4,6-TCP	ND	ND	2	D042		<2.0	<2.0			<2.0		<2.0		<2.0		<2.0				<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0		<2.0	
2,4-DNT	ND	ND	0.13	D030		<0.13	<0.13			<0.13		<0.13		<0.13		<0.13				<0.13		<0.13		<0.13		<0.13		<0.13		<0.13		<0.13		<0.13		<0.13		<0.13	
2-MP	ND	ND	200	D023		<5.0	13.5			<5.0		<5.0		<5.0		<5.0				<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0	
3+4-MP	ND	ND	400	D024/25		<5.0	14.5			<5.0		<5.0		<5.0		<5.0				<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0	
HCB	ND	ND	0.13	D032		<0.0050	<0.0050			<0.0050		<0.0050		<0.0050		<0.0050				<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050		<0.0050	
HCBDB	ND	ND	0.5	D033		<0.020	<0.020			<0.020		<0.020		<0.020		<0.020				<0.020		<0.020		<0.020		<0.020		<0.020		<0.020		<0.020		<0.020		<0.020		<0.020	
HCE	ND	ND	3	D034		<0.20	<0.20			<0.20		<0.20		<0.20		<0.20				<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20		<0.20	
NTB	ND	ND	2	D036		<0.40	<0.40			<0.40		<0.40		<0.40		<0.40				<0.40		<0.40		<0.40		<0.40		<0.40		<0.40		<0.40		<0.40		<0.40		<0.40	
PCP	ND	ND	100	D037		<5.0	<5.0			<5.0		<5.0		<5.0		<5.0				<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0	
PYR	ND	ND	5	D038		<1.0	<1.0			<1.0		<1.0		<1.0		<1.0				<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	
MISC																																							
FP	144	ND	140	D001		146	146			F 136		142		F 130		F 137				F 137		145		143		F 139		F 137		145		143		F 112		F 112			
pH	7.1	ND	2-12.5	D002		6.1	6.1			10.16		7.4		7.4		6.1				6.1		7.2		8.51		7.0		7.2		7.2		9.11		9.11		9.11			
SpG		ND	0.793			0.793	0.793			0.797		0.910		0.790		0.788				0.790		0.802		0.784		0.840		0.773		0.802		0.814		0.814		0.814			

Waste Parts Washer Solvent - 105

84 SAMPLES		2035230	2037675	2039386	2039389	2042560	2044434	2045076	2046600	2046607	2046613	2049653
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
90 UCL for the 50 th Percentile	Waste Code	LONGVIEW, TX	SYRACUSE, NY	PINEVILLE, LA	SALIDA, CA	INONE GIVEN, IL	SIoux FALLS, SD	AMITYVILLE, NY	ASHLAND, KY	ASHLAND, KY	ASHLAND, KY	LEXINGTON, KY
ND	D004	5	5	5	5	5	5	5	5	5	5	5
Reg Limit	SITE	Reg Limit	SITE	Reg Limit	SITE	Reg Limit	SITE	Reg Limit	SITE	Reg Limit	SITE	Reg Limit
0.768	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
ND	D005	4.61	1.4	2.31	2.31	1.29	2.55	<5.00	7.78	1.54	<5.00	2.36
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	F 10.4	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	F 7.7	F 9.2	<4.00	<4.00
ND	D009	<0.100	<0.10	<0.10	<0.10	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.40	<4.0	<4.0	<4.0	<0.80	<4.0	<4.0	<4.0	<0.80	<0.80	<0.80
ND	D028	<0.20	<2.0	<2.0	<2.0	<0.40	<2.0	<2.0	<2.0	<0.40	<0.40	<0.40
2.5	D027	0.99	<5.0	<5.0	<5.0	1.4	6.5	<5.0	<5.0	3.1	1.2	5.3
1.8	D018	F 3.8	F 2.3	F 6.6	F 13.8	F 4.2	F 20.9	F 2	F 12.4	<0.40	F 106	<0.40
ND	D019	<0.20	<2.0	<2.0	<2.0	<0.40	<2.0	<2.0	<2.0	<0.40	<0.40	<0.40
ND	D021	<0.20	<2.0	<2.0	<2.0	<0.40	<2.0	<2.0	<2.0	F 1.1	<0.40	<0.40
ND	D022	<0.20	<2.0	<2.0	<2.0	<0.40	<2.0	<2.0	<2.0	<0.40	<0.40	<0.40
2.2	D035	<0.50	<5.0	78	<5.0	6.3	12.4	<5.0	<5.0	<1.0	9	<1.0
838	D039	F 735	F 1780	F 836	F 284	F 916	F 38700	F 1310	F 365	F 23100	F 5150	F 1120
15.4	D040	F 17.8	F 16.8	F 85.9	<2.0	F 51.3	F 5.7	F 23.4	<2.0	F 5.2	F 7320	F 14.8
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	6.89	<5.0	<5.0	25.2	<5.0	8.74	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<5.0	5.29	<5.0	<5.0	22.6	<5.0	6.48	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	0.1377	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	2.0882	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
144	D001	152	F 130	141	151	152	F 128	148	F 135	152	F 125	F 138
7.1	D002	6.93	6.85	5.46	7.44	6.94	7.17	6.25	7.7	7.82	7.69	6.9
		0.852	0.796	0.810	0.810	0.768	0.824	0.794	0.824	0.874	0.836	0.792

Waste Parts Water Solvent - 105

84 SAMPLES

90 UCL for the Waste Code		2050529	2050719	2051064	2052339	2053035	2054245	2054691	2056648	2057701	2058154	2058274	
50 th Percentile		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
SITE Reg Limit	Waste Code	LACKAWANNA, NY	COLUMBUS, GA	FARMINGTON, NM	MACON, GA	LEXINGTON, KY	GREER, SC	MORROW, GA	ASHLAND, KY	LONGVIEW, TX	OMAHA, NE	GERING, NE	GRAND ISLAND, NE
ND	D004	<5.00	<5.00	<5.00	<0.905	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
0.768	D005	2.23	10.5	<0.500	17.438	<0.500	0.853	1.56	8.06	0.927	1.03	0.941	1.21
ND	D006	<0.500	<0.500	<0.500	0.181	<0.500	<0.500	0.587	0.52	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	0.325	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	<4.00	<4.00	<4.00	<0.724	<4.00	F 11.4	F 9.16	F 19	F 8.32	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	0.011	<0.10	<0.100	<0.10	<0.10	<0.10	<0.100	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.723	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.0905	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.40	<0.40	<0.80	<0.242	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D028	<0.20	<0.20	<0.40	<0.214	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2.5	D027	6.1	0.6	<1.0	<0.256	5	0.6	0.63	3.5	0.62	0.62	2.6	4.9
1.8	D018	0.23	<0.20	F 0.86	<0.214	F 76.3	F 98.2	<0.20	<0.20	F 4.6	F 4.4	F 4.4	0.48
ND	D019	<0.20	<0.20	<0.40	<0.214	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D021	<0.20	<0.20	<0.40	<0.214	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D022	<0.20	<0.20	<0.40	<0.214	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2.2	D035	1.1	0.66	<0.40	<0.214	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
838	D039	F 924	F 514	F 308	F 11.596	<0.50	F 1230	F 221	F 240	F 165	F 828	1.8	0.62
15.4	D040	F 22.8	F 2.6	F 16.8	0.227	F 32.2	F 9.7	F 221	F 240	F 1510	F 828	F 477	F 11.1
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<0.905	<5.0	<5.0	<200	<5.0	<25	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<0.635	<2.0	<2.0	<200	<2.0	<10.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.1027	<0.13	<0.13	<40	<0.13	<0.65	<0.13	<0.13	<0.13
ND	D023	200	<5.0	<5.0	<45.95	<5.0	<5.0	<200	<5.0	<25	<5.0	<5.0	<5.0
ND	D024/25	400	<5.0	<5.0	<45.96	<5.0	<5.0	<200	<5.0	<25	<5.0	<5.0	<5.0
ND	D032	0.13	<0.025	<0.025	<0.025	<0.025	<0.025	<40	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	0.5	<0.10	<0.10	<0.464	<0.10	<0.10	<200	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	3	<1.0	<1.0	<0.545	<1.0	<1.0	<200	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	2	<0.40	<0.40	<0.491	<0.40	<0.40	<200	<0.40	<2.0	<0.40	<0.40	<0.40
ND	D037	100	<5.0	<5.0	<0.905	<5.0	<5.0	<200	<5.0	<25	<5.0	<5.0	<5.0
ND	D038	5	<1.0	<1.0	<0.57685	<1.0	<1.0	<210	<1.0	<5.0	<1.0	<1.0	<1.0
144	D001	F 136	148	153	166	F 130	F 130	160	152	F 132	146	148	148
7.1	D002	6.3	6.62	4.46	9.52	F 7.29	F 7.29	6.55	7.46	F 6.35	7.79	7.23	7.23
		0.769	0.799	0.878	1.028	0.802	0.802	0.731	0.821	0.812	0.807	0.804	0.804

Waste Parts Washer Solvent - 105

84 SAMPLES		2062345	2064802	2066247	2066750	2066973	2066986	2067058	2067069	2067104	2067123	2075107	2075710
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE											
		COHOES, NY	DODGE CITY, KS	EL MONTE, CA	SACRAMENTO, CA	LOS ANGELES, CA	HIGHLAND, CA	SANTA ANA, CA	OAKLAND, CA	SALIDA, CA	ROHNERT PARK, CA	GERING, NE	DENTON, TX
Reg Limit	Code	5	100	1	5	0.2	1	5	0.7	0.5	7.5	0.5	0.7
ND	D004	<5.00	<5.00	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500
0.768	D005	2.07	0.768	<0.500	<0.090	<0.500	0.787	2.42	3.73	5.00	1.89	11.8	<5.00
ND	D006	<0.500	<0.500	<0.500	0.098	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.535	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	<4.00	<4.00	<4.00	<0.400	<4.00	<4.00	F 10.3	<4.00	<4.00	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.050	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.80	<0.80	<0.40	<0.80	<0.40	<0.80	<0.80	<0.80	<0.80	<0.80	<2.0	<1.6
ND	D028	<0.40	<0.40	<0.20	<0.40	<0.20	<0.40	<0.40	<0.40	<0.40	<0.40	<1.0	<0.80
2.5	D027	3.4	<1.0	2	1.4	2.4	1.5	1.4	1.4	1.3	6.6	2	2
1.8	D018	F 0.4	F 0.83	F 1.7	F 1.2	F 1.5	F 3.3	F 2.4	F 3.8	F 81.6	F 21.1	F 8.1	F 8.1
ND	D019	<0.40	<0.40	<0.20	<0.40	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0	<0.80	<0.80
ND	D021	<0.40	<0.40	<0.20	<0.40	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0	<0.80	<0.80
ND	D022	<0.40	<0.40	<0.20	<0.40	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0	<0.80	<0.80
2.2	D035	<1.0	18.3	5.2	1.4	6.6	4.9	<1.0	1.2	142	<1.0	2.8	2.8
838	D039	F 213	F 3360	F 1050	F 324	F 751	F 10800	F 416	F 725	F 2430	<2.5	4.5	4.5
15.4	D040	F 1.2	F 12.2	F 20.8	F 17.4	F 10.6	F 33.3	F 7	F 10.1	F 15.4	F 892	F 4090	F 892
ND	D043	<0.15	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.26	<0.13	<0.13	<0.13
ND	D023	6.64	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<5.0	<5.0	<5.0
ND	D024/25	5.04	<5.0	<5.0	<5.0	<5.0	5.55	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.80	<0.80	<0.40	<0.40	<0.40
ND	D037	<50	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<1.0	<1.0	<1.0
144	D001	141	150	154	156	154	154	F 69	154	F 78	F 129	149	149
7.1	D002	7.05	6.03	4.64	5.96	5.96	5.83	6.89	8.34	7.12	7.44	6.69	6.69
		1.150	0.811	0.829	0.805	0.833	0.832	0.812	0.819	0.793	0.810	0.801	0.801

Waste Parts Water Solvent - 105

84 SAMPLES		2078392	2078397	2078406	2078822	2080677	2082219	2082497	2083420	2083438	2083444	2083717	2083720
		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	ORANGE, TX		OMAHA, NE	FARGO, ND	SIOUX FALLS, SD	ALBUQUERQUE, NM	GRAND ISLAND, NE	SYRACUSE, NY	SYRACUSE, NY	SYRACUSE, NY	N AMITYVILLE, NY	N AMITYVILLE, NY
		Reg	Limit										
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
0.768	D005	6.46	6.62	6.82	<0.500	<0.500	0.730	0.869	<0.500	<0.500	1.93	0.740	0.672
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	F 7.11	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	<4.00	4.29	<4.00	<4.00	<4.00	<4.00	F 16.4	<4.00	<4.00	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<2.0	<2.0	<0.40	<2.0	<0.40	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
ND	D028	<1.0	<1.0	<0.20	<1.0	<0.20	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
2.5	D027	<2.5	<2.5	1.7	5.4	0.96	<2.0	4.3	6.7	7.2	7.4	3.7	4.2
1.8	D018	<1.0	<1.0	0.33	F 40.8	0.25	<0.80	F 2	F 1.4	F 1.6	F 2.1	F 38.2	<0.80
ND	D019	<1.0	<1.0	<0.20	<1.0	<0.20	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
ND	D021	<1.0	<1.0	<0.20	<1.0	<0.20	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
ND	D022	<1.0	<1.0	0.26	<1.0	<0.20	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
2.2	D035	<2.5	<2.5	2.6	<2.5	<0.50	<2.0	<2.0	2.5	<2.0	3.1	2.1	<2.0
838	D039	F 36	F 55.7	F 153	F 347	F 0.74	F 945	F 325	F 748	F 2040	F 1050	F 1130	F 949
15.4	D040	<1.0	<1.0	F 6.9	F 12.7	<0.20	F 1.1	F 4.8	F 21.5	F 16.5	F 35.8	F 31.3	F 14.4
ND	D043	<0.30	<0.30	<0.30	<0.30	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11.2	<5.0	<5.0	<5.0	8.41
ND	D024/25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.69	10.1	<5.0	<5.0	<6.7
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
144	D001	164	145	142	F 136	157	F 128	141	152	F 123	F 124	F 122	142
7.1	D002	6.93	4.86	7.94	7.41	7.32	6.85	9.37	5.92	7.24	7.38	8.32	7.68
		0.880	0.880	0.780	0.870	0.786	0.802	0.830	0.815	0.797	0.794	0.783	0.791

Waste Parts Water Solvent - 105

84 SAMPLES		2083721	2085292	2085303	2085304	2085317	2089012	2089567	2090894	2091979	2092403	2093718	2093722
		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE		CLACKAMAS, OR	LACKAWANNA, NY	LACKAWANNA, NY	MACON, GA	COLUMBUS, GA	OKLAHOMA, OK	TULSA, OK	LONGVIEW, TX	COHOES, NY	COHOES, NY
		Reg	Limit										
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
0.768	D005	<0.500	<0.500	4.00	4.00	<0.500	3.73	2.32	1.45	2.23	18.2	<0.500	<0.500
ND	D006	F 1.56	<0.500	<0.500	<0.500	<0.500	<0.500	0.759	0.670	<0.500	0.587	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.563	<0.500	<0.500	0.975	<0.500	<0.500
ND	D008	<4.00	<4.00	<4.00	<4.00	4.85	<4.00	F 16.2	4.02	<4.00	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<1.6	<1.6	<1.6	<1.6	<1.6	<2.0	<2.0	<2.0	<0.80	<1.6	<1.6	<1.6
ND	D028	<0.80	<0.80	<0.80	<0.80	<0.80	<1.0	<1.0	<1.0	<0.40	<0.80	<0.80	<0.80
2.5	D027	5.2	4.2	2.1	4.4	4.4	<2.5	<2.5	<2.5	<1.0	<2.0	5.1	4.5
1.8	D018	<0.80	F 1.8	F 5.8	F 2	F 2	F 1.7	<1.0	F 4.8	F 0.7	F 1.9	F 4.9	F 4.3
ND	D019	<0.80	<0.80	<0.80	<0.80	<0.80	<1.0	<1.0	<1.0	<0.40	<0.80	<0.80	<0.80
ND	D021	<0.80	<0.80	<0.80	<0.80	<0.80	<1.0	<1.0	<1.0	<0.40	<0.80	<0.80	<0.80
ND	D022	<0.80	<0.80	<0.80	<0.80	<0.80	<1.0	<1.0	<1.0	<0.40	<0.80	<0.80	<0.80
2.2	D035	<2.0	<2.0	<2.0	2	2	12.1	36.5	4.6	91.3	2.2	17.2	18.4
838	D039	F 509	F 900	F 748	F 1360	F 889	F 1090	F 838	F 758	F 268	F 286	F 943	F 852
15.4	D040	F 7.8	F 17.8	F 16.3	F 24.8	F 17.8	F 24.9	F 1.4	F 8.8	F 7.9	F 10.7	F 18.2	F 17.3
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
144	D001	144	144	148	144	144	F 116	160	154	156	158	F 118	F 120
7.1	D002	2-12.5	7.07	6.26	5.07	5.07	6.44	6.77	7.23	7.05	6.02	7.12	6.05
		0.776	0.809	0.819	0.806	0.806	0.872	0.841	0.840	0.794	0.750	0.810	0.800

Waste Parts Water Solvent - 105

84 SAMPLES		2093723	2093898	2094180	2094379	2094880	2097351	2098603	2098615	2100671	2107122	2107132	2107134
YEAR		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE		SITE		SITE		SITE		SITE		SITE	
		COHOES, NY		FARMINGTON, NM		MORROW, GA		SANTA ANA, CA		DODGE CITY, KS		ASHLAND, KY	
		Reg Limit		Reg Limit		Reg Limit		Reg Limit		Reg Limit		Reg Limit	
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
0.768	D005	0.532	1.67	<0.500	8.26	<0.500	1.59	1.16	0.608	0.609	<0.500	<0.500	<0.500
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.879
ND	D008	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	F 5.58	4.56	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.40	<1.6	<0.40	<0.40	<0.40	<0.80	<1.6	<1.6	<0.80	<0.40	<0.40	<0.40
ND	D028	<0.20	<0.80	<0.20	<0.20	<0.20	<0.40	<0.80	<0.80	<0.40	<0.20	<0.20	<0.20
2.5	D027	5.7	4.5	<0.50	1.3	<0.50	3.7	<2.0	<2.0	<1.0	4.9	5.3	6.6
1.8	D018	F 5.3	F 4.6	F 0.82	F 0.99	F 0.82	F 2.1	F 1.7	F 0.80	F 0.5	<0.20	F 9.8	F 0.81
ND	D019	<0.20	<0.80	<0.20	<0.20	<0.20	<0.40	<0.80	<0.80	<0.40	<0.20	<0.20	<0.20
ND	D021	<0.20	<0.80	<0.20	<0.20	<0.20	<0.40	<0.80	<0.80	<0.40	<0.20	<0.20	<0.20
ND	D022	<0.20	<0.80	<0.20	<0.20	<0.20	<0.40	<0.80	<0.80	<0.40	<0.20	<0.20	<0.20
2.2	D035	18.5	19.4	82.5	2	<2.0	90.9	99.9	56.5	<1.0	<0.50	2.2	0.76
838	D039	F 1150	F 912	F 22.9	0.57	F 1520	F 1060	F 1170	F 835	F 184	F 121	F 830	F 934
15.4	D040	F 23.2	F 19	0.3	<0.20	F 19.6	F 37.4	F 30.2	F 4.8	F 6.8	<0.20	F 42.5	F 22.7
ND	D043	<0.15	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	5.01
ND	D024/25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	0.043108	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	F 0.52691	0.25329	0.48637
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
144	D001	F 118	F 78	F 122	152	150	146	153	156	160	146	F 134	F 136
7.1	D002	6.52	6.99	6.30	7.66	7.09	7.22	6.49	6.72	9.04	7.18	7.12	7.66
		0.810	0.800	0.813	0.799	0.810	0.814	0.813	0.930	0.802	0.910	0.940	0.950

Waste ,rts Washer Solvent - 105

84 SAMPLES		2113299
YEAR		2001
SITE ⇄		NORCROSS, GA
90 UCL for the 50 th Percentile	Waste Code	Reg Limit
ND	D004	5
0.768	D005	100
ND	D006	1
ND	D007	5
ND	D008	5
ND	D009	0.2
ND	D010	1
ND	D011	5
		<5.00
		<0.500
		<0.500
		<4.00
		<0.10
		<0.45
		<0.500

ND	D029	0.7	<0.40
ND	D028	0.5	<0.20
2.5	D027	7.5	1.3
1.8	D018	0.5	F 16.7
ND	D019	0.5	<0.20
ND	D021	100	<0.20
ND	D022	6	<0.20
2.2	D035	200	0.98
838	D039	0.7	F 766
15.4	D040	0.5	F 13.2
ND	D043	0.2	<0.60

ND	D041	400	<5.0
ND	D042	2	<2.0
ND	D030	0.13	<0.13
ND	D023	200	<5.0
ND	D024/25	400	<5.0
ND	D032	0.13	<0.025
ND	D033	0.5	<0.10
ND	D034	3	<1.0
ND	D036	2	<0.40
ND	D037	100	<5.0
ND	D038	5	<1.0

144	D001	140	154
7.1	D002	2-12.5	7.1
			0.821

Waste Parts Washer Solvent (105/150)

53 Samples		9943595	9955802	9956878	9957571	9958772	9965799	9966765	9966767	2016048	2016050	2016264	2016269
YEAR		1999	1999	1999	1999	1999	1999	1999	1999	2000	2000	2000	2000
90 UCL for the Waste	SITE ⇄	BLAINE, MN	SALT LAKE CITY, UT	ASHLAND, KY	LEXINGTON, KY	EAGAN, MN	EAGAN, MN	BLAINE, MN	BLAINE, MN				
50 th Percentile	Reg Limit	5	5	5	5	5	5	5	5	5	5	5	5
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1.27	D005	2.11	2.7	21.6	4.98	50.0	10.4	1.03	1.27	1.30	1.08	1.10	1.10
ND	D006	0.574	<0.500	<0.500	<0.500	<0.500	0.580	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	0.854	<0.500	<0.500	<0.500	<0.500	0.718	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
4.04	D008	F 9.55	4.58	F 9.99	<4.00	F 14.7	F 13.1	F 6.50	F 5.38	F 5.81	F 12.4	F 12.2	F 12.2
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<4.0	<4.0	<2.0	<0.40	<0.20	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
ND	D028	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D027	<5.0	<5.0	<2.0	<0.50	<0.20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2.5	D018	F 6.7	F 3.8	<2.0	<0.20	<0.20	<2.0	<2.0	F 2.6	F 2.4	<2.0	<2.0	<2.0
ND	D019	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D021	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D022	<2.0	<2.0	<2.0	<0.20	<0.20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
5	D035	11.3	<5.0	<5.0	<0.50	<0.50	<5.0	21.1	7.6	<5.0	<5.0	<5.0	<5.0
1.060	D039	F 17.70	F 10.80	F 146.65	<0.20	<0.20	F 9.9	F 354	F 894	F 847	F 1360	F 1330	F 1330
30.5	D040	F 19.9	F 24	<2.0	<0.20	<0.20	F 137.4	F 9360	F 86.1	F 95.2	F 54.2	F 54.2	F 54.2
ND	D043	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ND	D041	<4.7	<4.7	<71	<71	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<1.3	<1.3	<86	<86	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.10	<0.10	<37	<37	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	4.255	2.108	<150	<150	<5.0	<5.0	<5.0	<5.0	5.68	<5.0	<5.0	<5.0
ND	D024/25	4.499	<3.8	<130	<130	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	0.02025	<0.0050	<34	<34	0.009	<0.0050	<0.0050	<0.025	<0.025	F 0.15903	F 0.16651	F 0.16651
ND	D033	<0.020	<0.020	<51	<51	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
ND	D034	0.84325	<0.20	<47	<47	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D036	<0.46	<0.46	<58	<58	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<8.1	<8.1	<89	<89	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<0.32	<0.32	<180	<180	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
145	D001	F 128	155	F 121	165	146	145	145	142	142	F 122	146	146
7.0	D002	7.22	7.1	8	8.36	7.59	8.1	6.8	7.2	7.0	7.9	8.1	8.1
		0.809	0.816	0.837	0.821	0.838	0.820	0.829	0.850	0.850	0.787	0.792	0.792

Waste Parts Wash Solvent (105/150)

53 Samples		2024844	2024861	2035145	2042518	2042576	2042585	2057300	2058620	2064580	2067245	2075099	
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2001	
90 UCL for the 50 th Percentile	Waste Code	BLAINE, MN	BLAINE, MN	SALT LAKE CITY, UT	BLAINE, MN	BLAINE, MN	EAGAN, MN	ASHLAND, KY	SALT LAKE CITY, UT	REEDLEY, CA	LEXINGTON, KY	FRESNO, CA	GERING, NE
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1.27	D005	0.867	1.48	1.19	1.28	1.15	1.29	1.03	0.870	1.31	0.946	<5.00	2.45
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
4.04	D008	<4.00	4.66	<4.00	F 12.2	F 12.5	<4.00	<4.00	<4.00	<4.00	<4.00	F 17.4	4.04
ND	D009	<0.10	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.100
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<4.0	<4.0	<0.40	<0.80	<0.80	<4.0	<0.40	<0.80	<0.80	<0.80	<0.80	<2.0
ND	D028	<2.0	<2.0	<0.20	<0.40	<0.40	<2.0	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0
ND	D027	<5.0	<5.0	1.9	F 33.7	F 161	<5.0	1.7	1.2	4.5	2.8	<1.0	F 8
2.5	D018	F 2.8	F 2.9	F 41.2	F 2.6	F 2.4	F 3.2	F 4.9	F 8.5	F 4.7	F 3	F 1.3	F 2.2
ND	D019	<2.0	<2.0	<0.20	<0.40	<0.40	<2.0	<0.20	<0.40	<0.20	<0.40	<0.40	<1.0
ND	D021	<2.0	<2.0	<0.20	8.1	47.1	<2.0	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0
ND	D022	<2.0	<2.0	<0.20	<0.40	<0.40	<2.0	<0.20	<0.40	<0.40	<0.40	<0.40	<1.0
5	D035	8	6.4	<0.50	7.7	5.4	24.3	2	2.1	8.6	9	<1.0	<2.5
1,060	D039	F 1770	F 1470	F 1190	F 1850	F 1890	F 887	F 953	F 984	F 2040	F 773	F 815	F 3280
30.6	D040	F 57.6	F 49	F 6.7	F 28.6	F 34.3	F 58.6	F 43.7	F 474	F 16.7	F 50.3	F 11.6	F 11.6
ND	D043	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<200	<5.0
ND	D042	<2.0	<2.0	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<200	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<40	<0.13
ND	D023	<5.0	<5.0	<5.0	7.65	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<200	<5.0
ND	D024/25	<5.0	<5.0	<5.0	5.73	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<200	<5.0
ND	D032	0.064636	0.064502	<0.025	<0.025	<0.025	<0.025	<0.025	0.047759	<0.025	<0.025	<40	0.028925
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<200	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<200	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<200	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<200	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<210	<1.0
145	D001	F 118	F 122	146	146	F 135	145	F 92	158	152	150	160	F 136
7.0	D002	6.42	7.01	7.25	7.78	6.87	6.69	7.17	8.11	6.91	7.20	6.91	7.19
		0.830	0.814	0.794	0.801	0.770	0.805	0.810	0.822	0.825	0.847	0.798	0.807

Waste Parts Washer Solvent (105/150)

53 Samples		2076552	2076554	2079301	2082499	2083130	2083428	2087153	2088692	2089538	2089559	2091972	2094182
YEAR		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	EAGAN, MN	EAGAN, MN	OMAHA, NE	GRAND ISLAND, NE	SALT LAKE CITY, UT	GARDEN CITY, GA	FRESNO, CA	LOS ANGELES, CA	SALIDA, CA	SANTA ANA, CA	SACRAMENTO, CA	OAKLAND, CA
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1.27	D005	1.21	1.20	1.49	0.774	1.40	<5.00	<5.00	<5.00	0.762	<5.00	0.678	1.34
ND	D006	<0.500	<0.500	<0.500	0.512	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	F 2.56
ND	D007	<0.500	<0.500	<0.500	0.501	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
4.04	D008	<4.00	F 5.34	<4.00	F 7.71	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	F 9.19	F 6.86
ND	D009	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<1.6	<1.6	<2.0	<0.40	<1.6	<1.6	<1.6	<2.0	<4.0	<0.80	<0.80	<1.6
ND	D028	<0.80	<0.80	<1.0	<0.20	<0.80	<0.80	<0.80	<1.0	<2.0	<0.40	<0.40	<0.80
ND	D027	3.7	3.4	4.9	4.5	<2.0	<2.0	3.1	<2.5	<5.0	1.3	<1.0	<2.0
2.5	D018	F 2	F 2.4	F 3.9	F 4.4	F 5	F 3.2	<0.80	F 3.5	F 3.8	F 7.7	<0.40	F 3.4
ND	D019	<0.80	<0.80	<1.0	<0.20	<0.80	<0.80	<0.80	<1.0	<2.0	<0.40	<0.40	<0.80
ND	D021	<0.80	<0.80	<1.0	<0.20	<0.80	<0.80	<0.80	<1.0	<2.0	<0.40	<0.40	<0.80
ND	D022	<0.80	<0.80	<1.0	<0.20	<0.80	<0.80	<0.80	<1.0	<2.0	<0.40	<0.40	<0.80
5	D035	3.4	5.7	5.7	<0.50	12.4	<2.0	<2.0	124	53.1	F 226	2.4	60
1,060	D039	F 691	F 745	F 1270	F 1070	F 1090	F 1370	F 1060	F 1470	F 1130	F 1120	F 3100	F 1720
30.6	D040	F 51.4	F 60.2	F 124	F 16.6	F 43.9	F 28.1	F 11	F 35.8	F 30.6	F 69	F 1	F 8.8
ND	D043	<0.30	<0.60	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
ND	D041	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<300	<5.0	<5.0	<5.0	<5.0
ND	D042	<200	<200	<2.0	<2.0	<2.0	<2.0	<2.0	<300	<2.0	<2.0	<2.0	<2.0
ND	D030	<40	<40	<0.13	<0.13	<0.13	<0.13	<0.13	<40	<0.13	<0.13	<0.13	<0.13
ND	D023	<200	<200	5.42	<5.0	<5.0	<5.0	<5.0	<400	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	<5.0
ND	D032	<40	<40	<0.025	<0.025	<0.025	<0.025	<0.025	<40	<0.025	<0.025	<0.025	<0.025
ND	D033	<200	<200	<0.10	<0.10	<0.10	<0.10	<0.10	<200	<0.10	<0.10	<0.10	<0.10
ND	D034	<200	<200	<1.0	<1.0	<1.0	<1.0	<1.0	<200	<1.0	<1.0	<1.0	<1.0
ND	D036	<200	<200	<0.40	<0.40	<0.40	<0.40	<0.40	<200	<0.40	<0.40	<0.40	<0.40
ND	D037	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<520	<5.0	<5.0	<5.0	<5.0
ND	D038	<210	<210	<1.0	<1.0	<1.0	<1.0	<1.0	<580	<1.0	<1.0	<1.0	<1.0
145	D001	142	147	144	F 138	154	145	152	152	151	148	158	152
7.0	D002	6.88	6.71	5.33	7.27	5.18	6.24	5.39	6.87	5.76	7.91	8.02	5.33
		0.800	0.840	0.890	0.843	0.807	0.797	0.798	0.805	0.798	0.803	0.803	0.785

Waste Pails Washer Solvent (105/150)

53 Samples		2094452	2095479	2096846	2097353	2099685	2112364
YEAR		2001	2001	0	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE ⇄					
		ARCHDALE, NC	REEDLEY, CA	BOYNTON BEACH, FL	AVON, NY	ROHNERT PARK, CA	BLAINE, MN
	Reg Limit						
ND	D004	<0.500	<5.00	<5.00	<5.00	<5.00	<5.00
1.27	D005	3.58	1.26	<0.500	1.39	1.80	1.17
ND	D006	F 3.06	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	0.147	<0.500	<0.500	<0.500	<0.500	<0.500
4.04	D008	F 123	<4.00	<4.00	4.98	4.98	F 15.9
ND	D009	<0.0008	<0.10	<0.10	<0.10	<0.10	<0.100
ND	D010	<0.750	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.050	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.20	<0.80	<0.80	<0.80	<1.6	<0.40
ND	D028	<0.20	<0.40	<0.40	<0.40	<0.80	<0.20
ND	D027	<0.20	<1.0	<1.0	3.3	<2.0	1.2
2.5	D018	<0.20	F 7	F 15	F 1.9	F 10.8	F 0.53
ND	D019	<0.20	<0.40	<0.40	<0.40	<0.80	<0.20
ND	D021	<0.20	<0.40	<0.40	<0.40	<0.80	<0.20
ND	D022	<0.20	<0.40	<0.40	<0.40	<0.80	<0.20
5	D035	0.64	34.6	3.8	51.7	49.9	<0.50
1,060	D039	F 1.135	F 1130	F 1660	F 906	F 3710	F 726
30.6	D040	<0.20	F 66.6	<0.40	F 33.7	F 10	F 77
ND	D043	<0.75	<0.30	<0.30	<0.30	<0.30	<0.30
ND	D041	<0.15	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<0.15	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.020	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.020	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.10	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<0.26	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<0.25	<1.0	<1.0	<1.0	<1.0	<1.0
145	D001	F 138	151	160	145	F 138	F 131
7.0	D002	F 7.77	6.58	F 7.91	7.20	7.19	7.36
		1.400	0.810	0.790	0.810	0.849	0.750

Waste Premium Gold Piles Washer Solvent (150)

78 SAMPLES		2009202	2011424	2015443	2015468	2015472	2015505	2015607	2015609	2015611	2017074	2017075
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
ANALYSIS METALS	90 UCL for the 50 th Percentile	Waste Code	SITELoc	Reg Limit	SITELoc							
					DENTON, TX	GERING, NE	ALBUQUERQUE, NM	LACKAWANNA, NY	LACKAWANNA, NY	LACKAWANNA, NY	SYRACUSE, NY	SYRACUSE, NY
AS	ND	D004	5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
BA	ND	D005	100	<0.500	<0.500	<0.500	<0.500	<0.500	6.88	7.80	<0.500	<0.500
CD	ND	D006	1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
CR	ND	D007	5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.549	<0.500	<0.500
PB	ND	D008	5	4.34	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
HG	ND	D009	0.2	<0.10	<0.10	<0.040	<0.040	<0.10	<0.10	<0.10	<0.10	<0.10
SE	ND	D010	1	<0.45	<0.008	<0.008	<0.008	<0.45	<0.45	<0.45	<0.45	<0.45
AG	ND	D011	5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
VOA												
1,1-DCE	ND	D029	0.7	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
1,2-DCE	ND	D028	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
PDCB	1	D027	7.5	<0.50	<0.50	<0.50	<0.50	0.81	<0.50	<0.50	<0.50	<0.50
BENZ	0.23	D018	0.5	0.23	<0.20	<0.20	<0.20	F 1.4	<0.20	<0.20	0.26	0.23
CCL4	ND	D019	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MCB	ND	D021	100	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
CHCL3	ND	D022	6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
MEK	ND	D035	200	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
PERC	3.2	D039	0.7	<0.20	<0.20	<0.20	F 5760	F 2920	F 13.2	F 335	F 3.2	F 3.3
TCE	0.2	D040	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	F 26.5	<0.20	<0.20
VC	ND	D043	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
BNA												
2,4,5-TCP	ND	D041	400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-TCP	ND	D042	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2,4-DNT	ND	D030	0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
2-MP	ND	D023	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
3+4-MP	ND	D024/25	400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
HCB	ND	D032	0.13	<0.0050	<0.0050	<0.0050	<0.0050	0.010796	0.009367	0.013648	<0.025	<0.025
HCBd	ND	D033	0.5	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
HCE	ND	D034	3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
NTB	ND	D036	2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
PCP	ND	D037	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
PYR	ND	D038	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MISC												
FP	158	D001	140	158	153	158	159	154	158	164	160	158
pH	7.1	D002	2-12.5	7.2	6.8	7.0	6.6	7.1	7.4	7.5	7.4	7.4
SpG				0.805	0.780	0.792	0.798	0.788	0.796	0.787	0.798	0.781

Waste Premium Gold P s Washer Solvent (150)

78 SAMPLES		2017076	2017077	2017364	2017904	2017906	2017908	2018172	2022090	2039382	2045078	2046598	2048603
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
90 UCL for the 50 th Percentile	Waste Code	SITE N. AMITYVILLE, NY											
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
ND	D005	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	F 14.5	<4.00	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.040	<0.040	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.008	<0.008	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D028	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1	D027	<0.50	<0.50	1.2	0.77	1.4	<5.0	<5.0	5.2	<0.20	0.9	<0.50	1.1
0.23	D018	<0.20	0.22	<0.20	<0.20	<0.20	<2.0	F 4	<2.0	F 0.61	<0.20	<0.20	<0.20
ND	D019	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<2.0	<2.0	<0.20	<0.20	<0.20	<0.20
ND	D021	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<2.0	<2.0	<0.20	<0.20	<0.20	<0.20
ND	D022	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0	<2.0	<2.0	<0.20	<0.20	<0.20	<0.20
ND	D035	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<5.0	<0.50	<0.50	<0.50	<0.50
3.2	D039	F 4.6	F 3.2	F 8.9	F 30	0.28	F 2950	F 1590	F 4160	0.24	0.39	0.39	F 29.2
0.2	D040	F 0.59	<0.20	F 1.8	F 1.5	<0.20	F 2.6	F 10.6	F 57.9	<0.20	<0.20	<0.20	0.33
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<1.5	<1.5	<1.5	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0050	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
158	D001	161	156	160	160	167	157	153	F 100	154	155	158	154
7.1	D002	7.8	7.8	7.2	4.6	5.8	8.4	4.89	6.7	7.23	7.14	6.91	7.86
		0.787	0.782	0.765	0.780	0.791	0.793	0.801	0.812	0.810	0.809	0.834	0.807

Waste Premium Gold Process Washer Solvent (150)

78 SAMPLES		2049651	2051051	2051523	2051525	2051528	2051529	2054244	2054689	2054692	2056272
YEAR		2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
90 UCL for the 50 th Percentile	Waste Code	SITING		SITING		SITING		SITING		SITING	
		Reg	Limit	Reg	Limit	Reg	Limit	Reg	Limit	Reg	Limit
ND	D004	5	<5.00	LEXINGTON, KY	<5.00	LEXINGTON, KY	<5.00	MORROW, GA	<5.00	LEXINGTON, KY	<5.00
ND	D005	100	<0.500	FARMINGTON, KY	3.56	LEXINGTON, KY	0.539	LEXINGTON, KY	<0.500	ASHLAND, KY	<5.00
ND	D006	1	<0.500	LEXINGTON, KY	43.5	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500
ND	D007	5	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500
ND	D008	5	<4.00	LEXINGTON, KY	F 5.25	LEXINGTON, KY	<4.00	LEXINGTON, KY	<4.00	LEXINGTON, KY	<4.00
ND	D009	0.2	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.10
ND	D010	1	<0.45	LEXINGTON, KY	<0.45	LEXINGTON, KY	<0.45	LEXINGTON, KY	<0.45	LEXINGTON, KY	<0.45
ND	D011	5	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500	LEXINGTON, KY	<0.500
ND	D029	0.7	<0.80	LEXINGTON, KY	<0.40	LEXINGTON, KY	<0.40	LEXINGTON, KY	<0.40	LEXINGTON, KY	<0.40
ND	D028	0.5	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20
1	D027	7.5	1.8	LEXINGTON, KY	0.91	LEXINGTON, KY	1.2	LEXINGTON, KY	0.74	LEXINGTON, KY	<0.20
0.23	D018	0.5	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	0.22	LEXINGTON, KY	1.5
ND	D019	0.5	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20
ND	D021	100	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	F 133
ND	D022	6	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20	LEXINGTON, KY	<0.20
ND	D035	200	<1.0	LEXINGTON, KY	<0.50	LEXINGTON, KY	<0.50	LEXINGTON, KY	<0.50	LEXINGTON, KY	<0.20
3.2	D039	0.7	F 0.98	LEXINGTON, KY	F 11300	LEXINGTON, KY	0.21	LEXINGTON, KY	F 1.2	LEXINGTON, KY	<0.50
0.2	D040	0.5	<0.40	LEXINGTON, KY	<0.40	LEXINGTON, KY	<0.20	LEXINGTON, KY	F 5.4	LEXINGTON, KY	0.61
ND	D043	0.2	<0.15	LEXINGTON, KY	<0.15	LEXINGTON, KY	<0.15	LEXINGTON, KY	<0.15	LEXINGTON, KY	F 1250
ND	D041	400	<5.0	LEXINGTON, KY	<10.0	LEXINGTON, KY	<10.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<0.15
ND	D042	2	<2.0	LEXINGTON, KY	<4.0	LEXINGTON, KY	<2.0	LEXINGTON, KY	<2.0	LEXINGTON, KY	<5.0
ND	D030	0.13	<0.13	LEXINGTON, KY	<0.26	LEXINGTON, KY	<0.13	LEXINGTON, KY	<0.13	LEXINGTON, KY	<2.0
ND	D023	200	<5.0	LEXINGTON, KY	<10.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<0.13
ND	D024/25	400	<5.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<5.0
ND	D032	0.13	<0.025	LEXINGTON, KY	<0.025	LEXINGTON, KY	<0.025	LEXINGTON, KY	<0.025	LEXINGTON, KY	<5.0
ND	D033	0.5	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.10	LEXINGTON, KY	<0.025
ND	D034	3	<1.0	LEXINGTON, KY	<1.0	LEXINGTON, KY	<1.0	LEXINGTON, KY	<1.0	LEXINGTON, KY	<0.10
ND	D036	2	<0.40	LEXINGTON, KY	<0.80	LEXINGTON, KY	<0.40	LEXINGTON, KY	<0.40	LEXINGTON, KY	<1.0
ND	D037	100	<5.0	LEXINGTON, KY	<10.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<5.0	LEXINGTON, KY	<0.40
ND	D038	5	<1.0	LEXINGTON, KY	<2.0	LEXINGTON, KY	<1.0	LEXINGTON, KY	<1.0	LEXINGTON, KY	<5.0
158	D001	140	154	152	152	163	155	160	158	154	146
7.1	D002	2-12.5	6.99	7.3	7.45	7.09	7.25	7.38	7.56	7.94	4.44
			0.778	0.787	0.790	0.794	0.811	0.722	0.808	0.917	0.942
			0.819								0.799

Waste Premium Gold P. s Washer Solvent (150)

78 SAMPLES		2056649	2057491	2058155	2066751	2067124	2075109	2075382	2075384	2075447	2075705	2077301	2077306
YEAR		2000	2000	2000	2000	2000	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE		Reg Limit	SACRAMENTO PARK, CA	ROHNERT PARK, CA	GERING, NE	COHOES, NY	COHOES, NY	COHOES, NY	DENTON, TX	BLAINE, MN	BLAINE, MN
		LONGVIEW, TX	BOYNTON BEACH, FL										
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
ND	D005	0.919	<0.500	<0.500	0.846	<0.500	2.32	<0.500	<0.500	<0.500	<0.500	1.90	1.09
ND	D006	<0.500	<0.500	<0.500	<0.500	<0.500	0.582	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	<4.00	<4.00	<4.00	<4.00	F 6.65	<4.00	<4.00	<4.00	<4.00	<4.00	4.53	<4.00
ND	D009	<0.10	<0.10	<0.100	<0.10	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<0.40	<0.40	<0.80	<0.40	<0.80	<1.6	<1.6	<1.6	<1.6	<0.40	<1.6	<1.6
ND	D028	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
1	D027	4.1	0.96	1.5	<0.50	<1.0	4.5	<2.0	<2.0	<2.0	<0.50	2.6	2.6
0.23	D018	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	F 3	F 2.9
ND	D019	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
ND	D021	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
ND	D022	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
ND	D023	<0.20	<0.20	<0.40	<0.20	<0.40	<0.80	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
ND	D035	<0.50	<0.50	<1.0	<0.50	<1.0	4.3	<2.0	<2.0	<2.0	<0.50	<2.0	<2.0
3.2	D039	<0.20	F 4920	F 2.1	F 3.9	F 1.9	F 502	F 1.5	F 1.4	F 1.4	<0.20	F 2.3	F 2.2
0.2	D040	F 0.71	F 9.6	<0.40	<0.20	<0.40	F 568	<0.80	<0.80	<0.80	<0.20	<0.80	<0.80
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.26	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.80	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
158	D001	160	160	156	163	163	148	163	160	161	155	154	157
7.1	D002	F 6.96	6.62	4.54	6.64	7.18	7.22	6.65	6.21	6.81	6.89	7.39	6.27
		0.798	0.839	0.808	0.797	0.789	0.802	0.794	0.801	0.790	0.791	0.810	0.810

Waste Premium Gold P&S Washer Solvent (150)

78 SAMPLES		2078383	2078387	2078401	2081037	2081043	2081045	2082490	2082496	2083422	2083431	2083435	2083713
YEAR		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	ORANGE, TX	ORANGE, TX	OMAHA, NE	LACKAWANNA, NY	LACKAWANNA, NY	LACKAWANNA, NY	ALBUQUERQUE, NM	GRAND ISLAND, NE	SYRACUSE, NY	SYRACUSE, NY	SYRACUSE, NY	N AMITYVILLE, NY
Site Reg Limit	Code	5	5	5	5	5	5	5	5	5	5	5	5
ND	D004	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
ND	D005	5.81	<0.500	4.53	<0.500	<0.500	<0.500	<0.500	0.680	<0.500	<0.500	2.41	0.845
ND	D006	0.700	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D007	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	F 5.14	<4.00	<4.00	F 13.7	<4.00	<4.00	4.34	<4.00	<4.00	<4.00	<4.00	<4.00
ND	D009	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D010	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	<2.0	<0.40	<1.6	<0.40	<0.40	<0.40	<1.6	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D028	<1.0	<0.20	<0.80	<0.20	<0.20	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
1	D027	<2.5	<0.50	3.6	<0.50	2.1	F 93	F 93	1.4	0.79	0.84	0.74	0.62
0.23	D018	F 9.8	<0.20	<0.80	<0.20	<0.20	<0.20	F 63.1	<0.20	<0.20	<0.20	F 0.7	F 1
ND	D019	<1.0	<0.20	<0.80	<0.20	<0.20	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D021	<1.0	<0.20	<0.80	<0.20	<0.20	<0.20	12.7	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D022	<1.0	<0.20	<0.80	<0.20	<0.20	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D035	<2.5	<0.50	<2.0	<0.50	<0.50	<0.50	2.2	<0.50	<0.50	<0.50	<0.50	<0.50
3.2	D039	F 122	0.36	F 172	0.43	0.53	F 68.4	F 68.4	F 0.72	<0.20	0.41	0.5	F 608
0.2	D040	F 4.3	<0.20	<0.80	<0.20	<0.20	F 4.5	F 4.5	F 43.7	<0.20	<0.20	<0.20	F 0.6
ND	D043	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<300	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<300	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<40	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<400	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<40	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<100	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<200	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<200	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<520	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<580	<1.0	<1.0	<1.0	<1.0	<1.0
158	D001	157	156	156	F >200	158	F 95	F 95	159	154	143	148	168
7.1	D002	6.87	6.93	7.02	6.76	6.89	9.00	9.00	8.32	7.35	4.69	7.18	10.34
		0.850	0.890	0.790	0.775	0.777	0.802	0.802	0.819	0.792	0.802	0.793	0.827

Waste Premium Gold P₂S Washer Solvent (150)

78 SAMPLES		2083715	2083719	2085316	2090897	2091977	2092408	2093900	2094175	2094383	2097348	2100674	2107128
YEAR		2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
90 UCL for the 50 th Percentile	Waste Code	SITE → AMITYVILLE, NY		CLACKAMAS, OR	OKLAHOMA CITY, OK	TULSA, OK	LONGVIEW, TX	PINEVILLE, LA	FARMINGTON, NM	ST CHARLES, MO	AVON, NY	DODGE CITY, KS	ASHLAND, KY
		Reg Limit											
ND	D004	5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
ND	D005	100	2.14	<0.500	<0.500	3.08	1.56	1.59	<0.500	<0.500	<0.500	1.41	<0.500
ND	D006	1	<0.500	<0.500	<0.500	<0.500	<0.500	0.720	<0.500	<0.500	<0.500	0.686	<0.500
ND	D007	5	<0.500	<0.500	0.784	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D008	5	<4.00	<4.00	<4.00	<4.00	4.95	4.00	<4.00	<4.00	<4.00	4.08	<4.00
ND	D009	0.2	<0.10	<0.10	<0.10	<0.10	<0.100	<0.10	<0.100	<0.10	<0.10	<0.10	<0.10
ND	D010	1	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45
ND	D011	5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
ND	D029	0.7	<1.6	<0.40	<2.0	<0.80	<0.40	<1.6	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D028	0.5	<0.80	<0.20	<1.0	<0.40	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
1	D027	7.5	<2.0	<0.50	<2.5	<1.0	<0.50	<2.0	<0.50	1.2	0.99	0.63	0.9
0.23	D018	0.5	<0.80	<0.20	F 1	F 0.8	<0.20	<0.80	0.24	0.3	<0.20	F 0.5	<0.20
ND	D019	0.5	<0.80	<0.20	<1.0	<0.40	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D021	100	<0.80	<0.20	<1.0	<0.40	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D022	6	<0.80	<0.20	<1.0	<0.40	<0.20	<0.80	<0.20	<0.20	<0.20	<0.20	<0.20
ND	D035	200	<2.0	<0.50	<2.5	<1.0	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20
3.2	D039	0.7	F 116	0.37	F 3.2	F 12.4	3.2	2.6	1.2	1.1	1.2	F 42.9	<0.50
0.2	D040	0.5	F 630	<0.20	F 164	F 2	F 8	F 497	F 28.6	0.22	0.41	F 130	F 42.9
ND	D043	0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
ND	D041	400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D042	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
ND	D030	0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
ND	D023	200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D024/25	400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D032	0.13	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
ND	D033	0.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
ND	D034	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ND	D036	2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
ND	D037	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
ND	D038	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
158	D001	140	162	156	156	160	164	166	158	144	152	160	158
7.1	D002	2-12.5	9.52	6.44	6.21	6.62	5.70	7.92	7.59	7.49	5.76	5.95	7.46
			0.801	0.805	0.800	0.798	0.796	0.800	0.834	0.784	0.815	0.806	0.940

Waste Premium Gas Parts Washer Solvent (150)

78 SAMPLES		2107905	2107909	2107914	2108193	2108196	2108372	2108373	
		YEAR		YEAR		YEAR		YEAR	
90 UCL for the 50 th Percentile	Waste Code	ASHLAND, KY	ASHLAND, KY	ASHLAND, KY	EAGAN, MN	EAGAN, MN	ASHLAND, KY	ASHLAND, KY	
ND	SITE Reg Limit	ASHLAND, KY	ASHLAND, KY	ASHLAND, KY	EAGAN, MN	EAGAN, MN	ASHLAND, KY	ASHLAND, KY	
ND	D004 5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
ND	D005 100	2.56	0.776	0.79	0.88	0.88	<0.500	<0.500	
ND	D006 1	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
ND	D007 5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
ND	D008 5	4.94	4.00	4.00	F 5.25	F 5.25	4.00	4.00	
ND	D009 0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
ND	D010 1	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	
ND	D011 5	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	
ND	D029 0.7	<0.40	<2.0	<0.40	<0.40	<0.40	<0.40	<0.40	
ND	D028 0.5	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	
1	D027 7.5	1.3	4.3	2.7	3.1	3.1	1.4	0.65	
0.23	D018 0.5	<0.20	F 4.1	F 3.4	F 3.2	F 3.2	F 0.58	0.42	
ND	D019 0.5	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	
ND	D021 100	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	
ND	D022 6	<0.20	<1.0	<0.20	<0.20	<0.20	<0.20	<0.20	
ND	D035 200	0.76	<2.5	3.5	4.8	4.8	<0.50	<0.50	
3.2	D039 0.7	F 11.6	F 1180	F 700	F 746	F 746	0.39	F 297	
0.2	D040 0.5	<0.20	F 40.8	F 73.6	F 72.2	F 72.2	<0.20	<0.20	
ND	D043 0.2	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	
ND	D041 400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
ND	D042 2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
ND	D030 0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
ND	D023 200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
ND	D024/25 400	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
ND	D032 0.13	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	
ND	D033 0.5	<0.10	0.24389	<0.10	<0.10	<0.10	<0.10	<0.10	
ND	D034 3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
ND	D036 2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	
ND	D037 100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
ND	D038 5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
158	D001 140	162	148	155	155	157	158	158	
7.1	D002 2-12.5	6.93	7.28	7.1	7.19	7.01	6.77	6.77	
		0.810	0.820	0.800	0.800	0.810	0.810	0.810	

ATTACHMENT No. 2

Phoenix Chemical Laboratory, Inc.

FUEL AND LUBRICANT TECHNOLOGISTS

3953 SHAKESPEARE AVENUE
CHICAGO, ILL. 60647-3497

January 20, 2000

RECEIVED FROM Safety-Kleen Corp.
P.O. Box 92050
Elk Grove Village, IL 60009
Attn: Anne O'Donnell

SAMPLE OF Spent Mineral Spirits

LABORATORY NO. 00 1 5 11-29

MARKED See below

Lab. No.	00 1 5 11	00 1 5 12	00 1 5 13	00 1 5 14
Marked	A-1	A-2	A-3	A-4

Vapor Pressure by Isoteniscope (ASTM D2879)

Temperature, °F	Vapor Pressure, torr			
32	3.7	4.9	2.7	-
50	5.8	7.4	4.6	0.18
68	8.8	11.0	7.4	0.36
100	17.0	20.0	16.2	1.1
150	44	48	49	5.3
200	96	99	120	19.0
250	190	185	260	57
300	335	320	530	150
325	-	-	720	-
350	580	520	-	370
375	-	630	-	530



Phoenix Chemical Laboratory, Inc.

FUEL AND LUBRICANT TECHNOLOGISTS

3953 SHAKESPEARE AVENUE
CHICAGO, ILL. 60647-3497

January 20, 2000

RECEIVED FROM Safety-Kleen Corp.

SAMPLE OF Spent Mineral Spirits

LABORATORY NO. 00 1 5 11-29

MARKED See below

Page 2 of 5

Lab. No.	00 1 5 15	00 1 5 16	00 1 5 17	00 1 5 18
Marked	A-5	A-6	A-7	A-8

Vapor Pressure by Isoteniscope (ASTM D2879)

Temperature, °F	Vapor Pressure, torr			
32	-	5.0	0.37	-
50	0.19	7.7	0.68	-
68	0.38	11.2	1.2	0.20
100	1.1	20.0	3.0	0.62
150	5.3	49	10.6	3.2
200	18.5	99	30	12.4
250	55	180	75	40
300	145	315	165	110
350	345	510	340	280
375	490	620	-	-
400	-	-	630	630



Phoenix Chemical Laboratory, Inc.

FUEL AND LUBRICANT TECHNOLOGISTS

3953 SHAKESPEARE AVENUE
CHICAGO, ILL. 60647-3497

January 20, 2000

RECEIVED FROM Safety-Kleen Corp.

SAMPLE OF Spent Mineral Spirits

LABORATORY NO. 00 1 5 11-29

MARKED See below

Page 3 of 5

Lab. No.	00 1 5 19	00 1 5 20	00 1 5 21	00 1 5 22
Marked	A-9	A-10	A-11	A-12

Vapor Pressure by Isoteniscope (ASTM D2879)

Temperature, °F	Vapor Pressure, torr			
32	0.16	0.26	0.11	0.31
50	0.32	0.50	0.23	0.61
68	0.60	0.91	0.46	0.92
100	1.7	2.4	1.3	2.5
150	7.3	9.3	6.2	10.0
200	23	29	22	31
250	65	75	65	82
300	160	275	170	195
350	365	380	400	425
375	505	520	570	570



JAN 20 '00 15:49

Phoenix Chemical Laboratory, Inc.

FUEL AND LUBRICANT TECHNOLOGISTS

3953 SHAKESPEARE AVENUE
CHICAGO, ILL. 60647-3497

January 20, 2000

RECEIVED FROM Safety-Kleen Corp.

SAMPLE OF Spent Mineral Spirits

LABORATORY NO. 00 1 5 11-29

MARKED See below

Page 4 of 5

Lab. No.	00 1 5 23	00 1 5 24	00 1 5 25	00 1 5 26
Marked	A-13	A-14	A-15	A-16

Vapor Pressure by Isoteniscope (ASTM D2879)

Temperature, °F	Vapor Pressure, torr			
32	0.27	-	0.16	0.21
50	0.52	0.19	0.33	0.42
68	0.96	0.37	0.64	0.78
100	2.5	1.1	1.8	2.1
150	10.0	5.0	7.6	8.9
200	32	17.0	25	29
250	84	50	70	78
300	200	130	170	190
350	440	305	390	415
375	600	640	540	570



JAN 20 '00 15:50

Phoenix Chemical Laboratory, Inc.

FUEL AND LUBRICANT TECHNOLOGISTS

3953 SHAKESPEARE AVENUE

CHICAGO, ILL. 60647-3497

January 20, 2000

RECEIVED FROM Safety-Kleen Corp.

SAMPLE OF Spent Mineral Spirits

LABORATORY NO. 00 1 5 11-29

MARKED See below

Page 5 of 5

Lab. No.	00 1 5 27	00 1 5 28	00 1 5 29
Marked	A-17	A-18	A-19

Vapor Pressure by Isoteniscope (ASTM D2879)

Temperature, °F	Vapor Pressure, torr		
32	0.15	-	0.10
50	0.30	0.19	0.23
68	0.57	0.38	0.46
100	1.6	1.1	1.3
150	6.7	5.5	5.8
200	22	20.0	20.0
250	60	59	59
300	150	157	152
350	330	370	355
375	-	530	500
400	660	-	-



Arthur A. Krawetz



JAN 20 '00 15:50

PAGE 05

ATTACHMENT No. 3

S safety-kleen corp.
MEMORANDUM

To: Desi Chari, Gary Olsen, Catherine McCord
From: Anne O'Donnell
Date: August 2, 2000
Subject: Vapor Pressure of Spent Mineral Spirits Solvents

cc: John Schmitz

Several EHS field personnel had been asked to prove that the vapor pressure of the waste mineral spirits solvent that is bulked and stored at the Branches and at the Recycle Centers is below the 0.3 kPa (2.25 Torr) limit. Because regulators in several parts of the country have been insisting on actual test data rather than knowledge of the waste, we acquired a representative set of samples and submitted them for vapor pressure determination.

Each Recycle Center sent samples from two incoming truckloads of spent mineral spirits. These samples were sent to the Tech Center using the standard TCLP sampling kits and protocols. The vapor pressures were determined by Phoenix Chemical Laboratory, Inc. according to ASTM Standard Test Method D 2879 - 96, Vapor Pressure - Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

Table I identifies all the samples received and lists the vapor pressure data at 68 °F as reported by Phoenix Chemical Laboratory. Three of the samples were submitted it triplicate to establish the precision of the analysis.

Because the vapor pressure of interest for air regulations is the VOC composite partial pressure, the partial pressure due to the water in spent mineral spirits needs to be excluded from the total vapor pressure measured. Data from five of the samples were not used to calculate a mean because the calculated partial pressure for the water content of the sample was greater than the reported total pressure. Part of the discrepancy was due to the difficulty in accurately sampling a two-phase system for analysis. The flash point data on these samples is additional evidence that the higher vapor pressures measured were due to water and not due to VOCs. The water content for the remaining samples was less than 1%, and no correction was made for the calculated partial pressure of water as it was less than 1 Torr. Thus the vapor pressures listed are maximum VOC composite partial pressures.

For the 14 samples without excessive water, the mean vapor pressure at 68 °F was 0.57 Torr (0.08 kPa), with a standard deviation of 0.24. The mean flash point for these samples was 139 °F, and for all samples was 141 °F. These results correlate well with the mean vapor pressures at 68°F for our clean mineral spirits products, as determined by the same procedure in 1998:

SK Premium Gold Solvent:	0.15 Torr (n = 19)	(150°F mean flash point)
SK 105 Solvent Recycled:	0.39 Torr (n = 13)	(134°F mean flash point)
SK 105 Solvent Virgin	0.81 Torr (n = 6)	(106°F mean flash point)

The isoteniscope analysis reports for all samples, which list vapor pressures at multiple temperatures, are available if needed.

Table I - Vapor Pressure of Spent Mineral Spirits Solvents

Receiving Recycle Center	Source Branch	Sample Date	TDA#	VP @ 68°F Torr	FlashPoint °F	Phoenix #
Lexington	Tanker Composite	11/1/99	99-1272	8.3*	147	00-1-5-11
Lexington	Tanker Composite	11/1/99	99-1273	1.2*	148	00-1-5-17
Denton	Orange	11/3/99	99-1319	1.1*	148	00-1-5-12
Denton	Wheatland	11/3/99	99-1320	0.60	140	00-1-5-19
Dolton	Elgin	11/9/99	99-1353	7.4*	133	00-1-5-13
				0.64		00-1-5-25
				0.78		00-1-5-26
Dolton	Greenwood	11/11/99	99-1381	0.91	134	00-1-5-20
Hebron	Youngstown	11/11/99	99-1382	0.36	143	00-1-5-14
Hebron	Wheeling	11/11/99	99-1383	0.46	139	00-1-5-21
Linden	Baltimore	11/1/99	99-1492	0.38	145	00-1-5-15
Linden	Avon	11/3/99	99-1493	0.92	137	00-1-5-22
				0.96		00-1-5-23
				0.38		00-1-5-28
Reedley	Chandler	12/16/99	99-1517	1.2*	139	00-1-5-16
Reedley	Santa Ana	12/17/99	99-1518	0.20	137	00-1-5-18
				0.37		00-1-5-24
				0.57		00-1-5-27
Reedley	Boise	12/17/99	99-1519	0.46	137	00-1-5-29
			# samples:	14	13	
			Mean:	0.57	140.5	
			Std Dev:	0.24	5.2	

* vapor pressure data not used due to high partial pressure of water

Exhibit N-4

Example Leak Detection and Repair Record

LEAK DETECTION AND REPAIR RECORD

Equipment Identification Number _____ Branch Name or Number _____
Description _____
Tank System _____

How was potential or actual leak detected? _____ Date _____ Inspector's Signature _____

Describe the potential or actual leak: _____

Instrument Monitoring Within 5 Days:

Table with 6 columns: Monitoring Results, Repair Attempt, Method, Results, Date, Inspector's Signature. Rows 1, 2, 3.

Date of Successful Report (must be completed within 15 days) _____ Date _____ Inspector's Signature _____

4. Method _____ Results _____ Date _____ Inspector's Signature _____

Followup Monthly Monitoring for Valves

Table with 3 columns: Results, Date, Inspector's Signature. Rows 5, 6.

Monitoring Summary

Reference Number - See Above

Table with 6 columns (1-6) and 4 rows: Instrument #/Operator Calibration, Background Reading, Reading at Equipment, Leak Detected?

Exhibit N-5

Example BB Inspection Log



CO Tank Sys BB Equipment

Form Code: 42

Compliance Header

Inspector Name

Inspection Date

Area of Inspection

CO Tank System BB Equipment Instruction

Note condition of inspection items. Inspect all tagged and non-tagged points per area plan or system drawing specification. All unsatisfactory findings must be explained. Include any repairs, changes or corrective actions.

CO Tank System BB Equipment Inspection Items

Inspect all tagged and non-tagged tank system identified BB equipment points per area plan - Check for evidence of failure. (e.g., all inclusive review of all equipment pumps, valves, flanges, connections, unions, couplings or caps for potential leaks, active leaks, sticking, wear, does not operate smoothly, other).

Each open-ended valve or line is equipped with a cap, blind flange, plug, or a second valve, which seals the open end at all times except when hazardous waste flows through the open ended valve or line. [264.1056/ 265.1056]

Pieces of equipment found to be leaking, usually by visual means, are repaired within 15 calendar days and the first attempt to repair is made within 5 calendar days. [264.1058(c)/ 265.1058(c)]

When a leak is detected, a weatherproof identification tag is attached to the leaking equipment with ID # and the date leak was detected. The identification may be removed after repair. [264.1064(c)/ 265.1064(c)]

Compliance Footer

Inspector Signature

Attach Photo

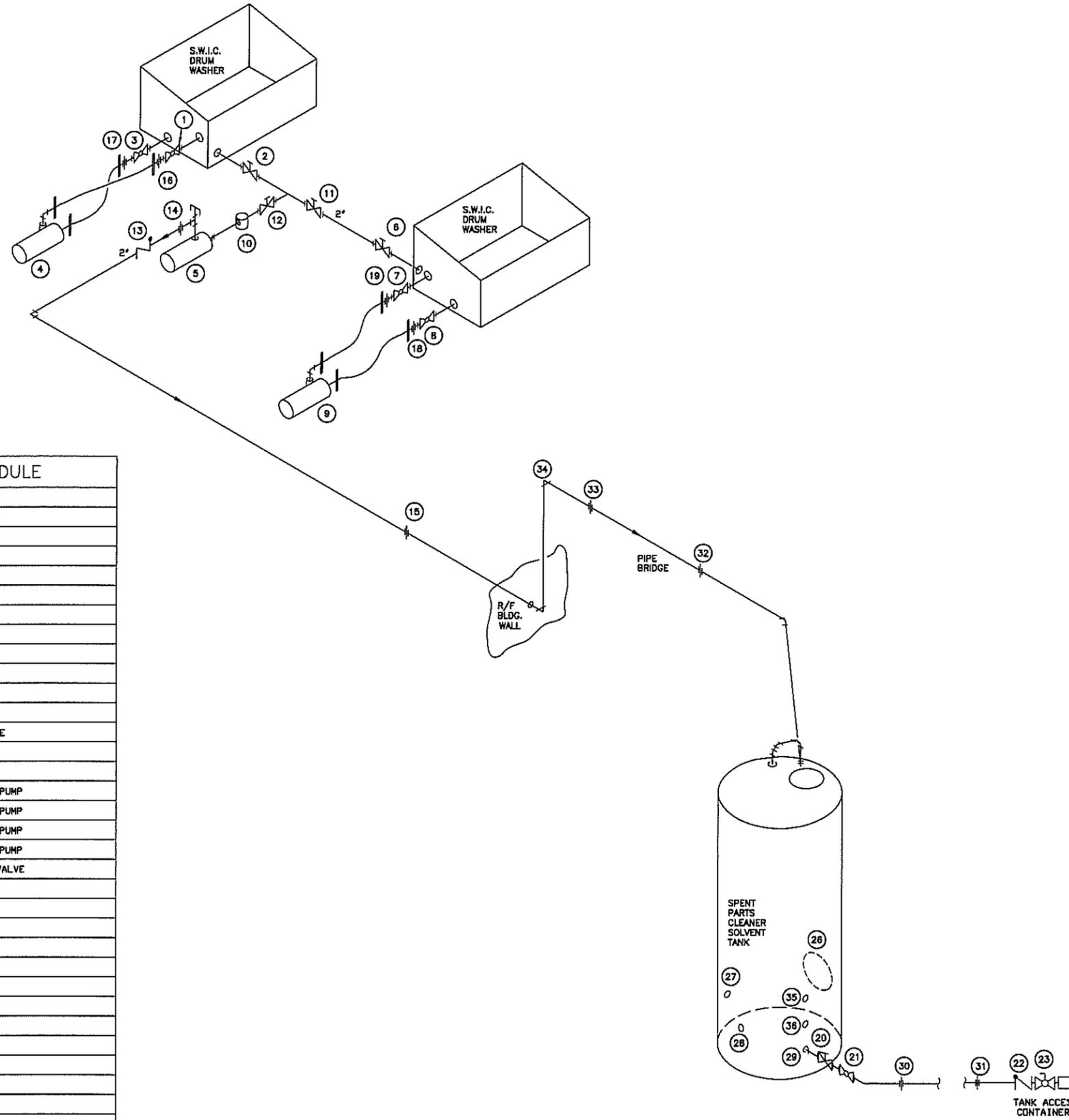
On Demand Work Ticket

Exhibit N-6



Piping Schematic





FITTING SCHEDULE

1	1 1/2" THREADED BALL VALVE
2	2" THREADED GATE VALVE
3	1 1/2" THREADED BALL VALVE
4	RECIRCULATION PUMP
5	USED SOLVENT PUMP
6	2" THREADED GATE VALVE
7	1 1/2" THREADED BALL VALVE
8	1 1/2" THREADED BALL VALVE
9	RECIRCULATION PUMP
10	BASKET STRAINER
11	2" THREADED GATE VALVE
12	2" THREADED GATE VALVE
13	2" THREADED CHECK VALVE
14	THREADED UNION
15	THREADED UNION
16	UNION- CIRCULATION PUMP
17	UNION- CIRCULATION PUMP
18	UNION- CIRCULATION PUMP
19	UNION- CIRCULATION PUMP
20	3" EXTERNAL EMERGENCY VALVE
21	3" THREADED BALL VALVE
22	3" SWING CHECK VALVE
23	3" GATE VALVE
26	HANWAY
27	3" FLANGE/PLUG
28	3" FLANGE/PLUG
29	3" FLANGE
29	3" THREADED UNION
30	3" THREADED UNION
31	3" THREADED UNION
32	2" THREADED UNION
33	2" THREADED UNION
34	2" THREADED ELBOW
35	3" FLANGE/PLUG
36	3" FLANGE/PLUG

GENERAL NOTES

1. PIPING CONFIGURATION AS SHOWN IS BASED ON INFORMATION PROVIDED BY SAFETY-KLEEN ON 10/21/02.
2. NUMBERS IN CIRCLES INDICATE TAGS ATTACHED TO EQUIPMENT OR FITTING AS SHOWN.
3. NON-PERMITTED TANKS & EQUIPMENT MAY CHANGE.
4. ACTUAL PIPING CONFIGURATION MAY VARY DUE TO MAINTENANCE AND/OR UPKEEP OF FACILITY.

PROPRIETARY STATEMENT

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF SAFETY-KLEEN CORP. AND IS PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE DUPLICATED, USED, DIVULGED, REPRODUCED, COPIED, DISCLOSED OR APPROPRIATED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN AS EXPRESSLY AUTHORIZED BY SAFETY-KLEEN CORP. THIS DRAWING MUST BE RETURNED PROMPTLY UPON REQUEST.

SYMBOL LIST

	CAMLOC COUPLING
	90° CAMLOC COUPLING
	GATE VALVE
	INTERNAL EMERGENCY VALVE
	BALL VALVE
	SCREWED COUPLING
	CHECK VALVE
	STRAINER
	PUMP
	BASKET STRAINER
	REDUCER/INCHREASER
	SCREWED UNION
	CAP
	HOSE CLAMP
	FLEXIBLE HOSE
	PIPE PENETRATION/ATTACHMENT TO EQUIPMENT
	DIRECTION OF FLOW

CONNECTION TYPES

	FLANGED
	SCREWED
	WELDED

CERTIFICATION NOTE

APPLICATION OF THIS SEAL INDICATES THAT BASED UPON THE CONDITIONS IDENTIFIED IN THE GENERAL NOTES ON THIS DRAWING, IT IS THE ENGINEER'S PROFESSIONAL OPINION THAT THIS DRAWING ACCURATELY REFLECTS THE CONDITIONS INDICATED AT THE TIME OF THE SITE OBSERVATIONS.

TITLE
ENVIRONMENTAL
PIPING SCHEMATIC
(SPENT PARTS CLEANER SOLVENT)

		SAFETY-KLEEN CORP.	
1000 N. RANDALL ROAD		ELGIN, ILLINOIS 60123 PHONE 708-897-8480	
SCALE	BY	CHKD	APPROVED
NONE	PROJSOL	-	OPERATIONS
NO.	DESCRIPTION	BY	CHK
		APPR	DATE
SERVICE CENTER LOCATION		SC-DWG. NO.	
CHANDLER, AZ		7134-4100-300	
REV. NO.		A	

ENVIRONMENTAL SPENT PARTS CLEANER SOLVENT PIPING SCHEMATIC
NO SCALE

DE-25-01 KSPB0272.DWG 8/31/02

A	REVISED TAGGING	JEK	GS	GS	03101
0	NEW ISSUE FOR REVIEW	JEK	GS	GS	102202
REVISIONS					

EXHIBIT O

SUBPART CC INSPECTION LOG

O-1

Example CAZ Subpart CC Visual Tank Inspection Log

Exhibit O-1

Example
CAZ Subpart CC Visual Tank Inspection Log



CAZ Subpart CC Visual Tank Inspection

Form Code: 1079

Compliance Header	
Inspector Name	
Area of Inspection	
Inspection Date and Time	
CAZ - Subpart CC Visual Tank Inspection Instruction	
Complete the visual tank inspection to satisfy the annual inspection required under Subpart CC.	
CAZ - Subpart CC Visual Tank Inspection Items	
Condition of tank (fixed roof and closure devices). Inspect to determine there are no (a) visible gaps, (b) holes, (c) cracks, (d) Visually ensure the long bolts pressure relief mechanism are not cinched down on the top tank manhole cover and (e) Other open spaces. Check "Pass" if the condition of the tank is acceptable; Check "Fail" if the condition of the tank is not acceptable. If "Fail", select appropriate reason: not closed under normal operation, other.	
These tanks are designed so that all cover openings can be closed with no visible gaps, holes, cracks, or other open spaces into the interior of the tank. The cover and all cover openings operate with no detectable emissions when in a closed position. Cover openings are maintained in a closed position at all times except when waste is being added to or removed from the tank, or when necessary sampling or repair/maintenance is performed on the tanks.	
Compliance Footer	
Inspector Signature	
Attach Photo	
Inspection Overall Assessment	