DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action Environmental Indicator (EI) RCRAInfo code (CA725)

Current Human Exposures Under Control

Facility Name:	Safety-Kleen Systems, Inc., San Antonio Center (SWR 69048)			
Facility Address:	5243 Sinclair Road; San Antonio, TX; 78222			
Facility EPA ID #:	TXD000729400			

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

	* *								
ę		If yes -	check	here a	and c	ontinue	with #	#2 be	low

- ____ If no re-evaluate existing data, or
- _____ If data are not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

X

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRAInfo national database ONLY as long as they remain true (i.e., RCRAInfo status codes must be changed when the regulatory authorities become aware of contrary information).

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be "**contaminated**"¹ above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale / Key Contaminants
Groundwater		Х		See groundwater section below
Air (indoors) ²		Х		No history of groundwater
				contamination or significant releases to
				soils
Surface Soil (e.g., <2 ft)		Х		See surface and subsurface soil section
				below
Surface Water		Х		See surface water section below
Sediment		Х		See surface water section below
Subsurf. Soil (e.g., >2 ft)		Х		See surface and subsurface soil section
				below
Air (outdoors)		Х		Units meet subpart BB/CC RCRA air
				standards

Х

- If no (for all media) skip to #6, and enter "YE" status code after providing or citing appropriate "levels", and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.
- If yes (for any media) continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.
 - ____ If unknown (for any media) skip to #6 and enter "IN" status code.

Rationale and Reference(s):

FACILITY DESCRIPTION

Safety-Kleen Systems, Inc. (Safety-Kleen) (SWR 69048) operates a service center at 5243 Sinclair Road, San Antonio, Texas under Permit No. HW-50246-001 (Reference 5). The permit was initially issued by TWC on September 2, 1992. Safety-Kleen serves businesses that generate hazardous wastes. The facility provides

¹ "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

² Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

equipment and cleaning solvent to customers and then collects the spent solvents for recycle and reuse (Reference 11). All wastes are ultimately shipped offsite for recycling or disposal. The following wastes are accepted at the Safety-Kleen Facility: spent parts washer cleaning solution, spent immersion cleaner, dry cleaning wastes, aqueous brake cleaning solution, aqueous parts cleaning solution, dumpster/drum washer unit sediment, bottom sediment from tanks, paint waste, vacuum heel sludge, contaminated debris and transfer waste (Reference 9).

The area surrounding the warehouse/office building and hazardous wastes management units (HWMUs) is covered with concrete or asphalt. Surrounding property use includes industrial and commercial businesses (Reference 5).

The facility's permit included three tanks, two container storage area and two tank systems. On August 30, 2001, Safety-Kleen submitted to TNRCC a Partial Facility Closure Certification Report (Report) for the closure of the West Return and Fill Station, two 8,000 gallon above grade storage tanks, and the West Drum Storage Area. According to the Report, verification sampling was conducted after closure of the units in the soils adjacent to the container storage area and fill station. With the exception of lead, all detected contaminants were found at levels below the TNRCC Tier 1 Protective Concentration Levels (PCLs) for Residential Soils (30 acre Source Area – Class 1 Groundwater). Contaminants and respective concentrations were chlorobenzene (0.55 mg/kg), 1,2 dichlorobenzene (0.016 mg/kg), 1,4 dichlorobenzene (0.018 mg/kg), ethylbenzene (0.012 mg/kg), 1,2 4 trimethylbenzene (0.08 mg/kg), xylenes (0.032 mg/kg), n-propyl benzene (0.077 mg/kg), barium (92 mg/kg), and Chromium (10 mg/kg). Lead was detected at 13 mg/kg, which was above the PCL but determined to be within background range for the area (Reference 5).

On October 22, 2001, TNRCC notified Safety-Kleen that the units were not closed in accordance with 40 CFR 264.17 and the permit requirements based on a lack of some information and due to releases to the soils surrounding the units being closed under Risk Reduction Standard 1. This type of "split-media closure" was deemed unacceptable. No further information regarding Safety-Kleen's response to this letter was found in the available file materials. However, by letter dated February 19, 2002, TNRCC accepted partial closure of the site which included two above ground storage tanks, the waste return/fill station, and one of the container storage areas (Risk Reduction Level 2). The letter indicated that the closure was in accordance with 40 CFR 264.110 through 264.115, the Texas Risk Reduction Rules 30 TAC 335.551 through 335.569 and RCRA Permit No. HW-50246-001, Provision IV, (Reference 16). The letter did not require a deed certification or post closure care.

On February 28, 2002 Safety-Kleen submitted an Application for Permit Renewal to TNRCC. Units that remained active included a spent part washer solution tank (# 004), the east warehouse container storage area (CSA #005), and one drum washer/dumpster (# 006) (Reference 9). All remaining units are constructed with secondary containment structures to reduce spills and releases into the environment. Additionally, the facility operates under TPDES Permit No. TXRO50000.

Communication with the TCEQ Project Manager, Vaishali Tendolkar, indicated that there was no known environmental threat currently present at the site (Reference 17).

Incidents of Release

The Safety-Kleen facility has a history of spills, which appear to have been satisfactorily addressed based on available file materials. On April 12, 2001, 200 gallons of chemical solvent (clean) and 75 gallons of chemical solvent (dirty) were released. The chemical solvent (clean) spill occurred when a hose came loose from the truck while offloading the material. The chemical solvent (dirty) was spilled when the truck was overfilled. Absorbent material was used to clean up the spills and materials were placed in 12 drums and included removal of contaminated soils and asphalt. None of the material leaked offsite (Reference 4).

On July 1, 2003, a spill of approximately 50 gallons of waste solvent occurred when waste solvent was being offloaded into a tanker truck from an above ground storage tank. Waste solvent was spilled onto the asphalt in the

facility. The spill was immediately cleaned using absorbent material. Materials generated from the spill were placed in four 30-gallon drums and was then sent to Safety-Kleen Systems Accumulation Center in Missouri City where they would be shipped to the Safety-Kleen, Denton, Texas Recycling Center (Reference 13). The TCEQ determined that the actions taken to clean up the spill were satisfactory and no further actions were required (Reference 13).

On January 27, 2005 an estimated 20 gallons of used oil and 40 gallons of wastewater discharge was reported at the Safety-Kleen facility. The spill occurred when the wastewater mixed with used oil (Vac-Waste) was being transferred into a frac tank. The mixture spilled onto the pavement. The spill was contained with absorbent materials and pads. The waste was pumped into 55-gallon drums. No surface soils were impacted and the spill did not discharge offsite (Reference 14).

<u>Rationale</u> Groundwater

There are no water wells located within one mile of the facility (Reference 9). From the information presented in the file material, waste management units are operated within secondary containment and there is no reported history of groundwater contamination at the facility.

Surface Water

Rosillo Creek is located approximately 250 feet northeast of the facility and is the closest surface water body (Reference 9). Perimeter drainage around the property directs storm water to the northeast corner of the site (Reference 5). From the information presented in the file material, there is no reported history of surface water contamination at the facility.

Surface and Subsurface Soils

The tank storage area and container storage areas are located within a building or have secondary containment structures to assist in the prevention of releases into the environment.

A letter dated October 22, 2001 (Reference 7) indicates that there have been releases to the surrounding soils at the container storage area (Unit 3) and the return and fill station (Unit 9). Soil samples were collected at these two areas (Reference 5). Based on a closure approval letter dated February 19, 2002 (Reference 16), closure of these units was accepted under Risk Reduction Standards 2.

Management of releases from facility activities appears to be under control at the facility. From the information presented in the file materials, it appears that soil contamination at the site is not a concern at the facility.

REFERENCES

1. HW Permit No. HW-50246 -001; SWR 69048, Issued September 2, 1992.

2. Correspondence from Michael Sanderock of Safety-Kleen to Jeffrey Saitas of TNRCC. RE: Change of Internal Site Inspection Forms and Corporate Name Change, dated October 6, 1998.

3. Correspondence from Henry Karnei of TNRCC to Randy Lembke of Safety-Kleen Systems. RE: RCRA Compliance Investigation conducted September 2000, dated May 15, 2001.

4. Correspondence from Henry Karnei of TNRCC to Randy Lembke of Safety-Kleen Systems. RE: Notice of Violation for the Incident Which Occurred on April 12, 2001, dated May 23, 2001.

5. TriHydro Corporation. Partial Facility Closure Certification Report, dated August 29, 2001.

6. Correspondence from Gerhard Risse of Safety-Kleen to Karen Cleveland of TNRCC. RE: Partial Facility Closure, dated August 30, 2001.

7. Correspondence from Karen Cleveland of TNRCC to Gerhard Risse of Safety-Kleen. RE: Partial Facility Closure Certification Report, dated October 22, 2001.

8. Correspondence from Gerhard Risse of Safety-Kleen to Dipak Bhakta of TNRCC. RE: Partial Facility Closure, dated November 21, 2001.

9. Application for Permit Renewal, dated February 28, 2002.

10. Correspondence from Henry Karnei of TNRCC to Ricardo Saucedo of Safety-Kleen. RE: Notice of Violation for the Compliance Evaluation Investigation, dated July 10, 2002.

11. Correspondence from Ricardo Saucedo of Safety-Kleen to Dipak Bhakta of TNRCC. RE: Class 1 Permit Modification, dated August 4, 2003.

12. TCEQ Investigation Report, dated November 13, 2003.

13. Correspondence from Henry Karnei of TNRCC to Ricardo Saucedo of Safety-Kleen. RE: Review of Documentation submitted for the July 7, 2003 and September 11, 2003 for the incident of July 1, 2003, dated November 19, 2003.

14. Correspondence from TNRCC to Ricardo Saucedo of Safety-Kleen. RE: Incident of January 27, 2005 at Disposal Properties Facility, dated March 23, 2005.

15. Correspondence from Vaishali Tendolkar of TCEQ to Ricardo Saucedo of Safety-Kleen. RE: Biennial Report 2004/2005-Waste Minimization Certification, dated February 27, 2006.

16. Correspondence from TNRCC to Gerhard Risse of Safety-Kleen Systems. RE: Partial Facility Closure Certification Report, dated February 19, 2002.

17. Communication between Vaishali Tendolkar of TCEQ and Elisa Durum of TechLaw on June 23, 2006.

18. Facility maps

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential Human Receptors (Under Current Conditions)

" Contaminated" Media Groundwater	Residents	Workers Day-Care	Construction Trespassers	Recreation Food ³
Air (indoors)				
Soil (surface, e.g., <2 ft)				
Surface Water				
Sediment				
Soil (subsurface e.g., >2 ft)				
Air (outdoors)				

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors spaces for Media which are not "contaminated" as identified in #2 above.

2. Enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("____"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- X If no (pathways are not complete for any contaminated media-receptor combination) skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional <u>Pathway Evaluation Work Sheet</u> to analyze major pathways).
- If yes (pathways are complete for any "Contaminated" Media Human Receptor combination) continue after providing supporting explanation.
 - If unknown (for any "Contaminated" Media Human Receptor combination) skip to #6 and enter "IN" status code.

Rationale and Reference(s):

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be "**significant**"⁴ (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

- If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
- If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."
- If unknown (for any complete pathway) skip to #6 and enter "IN" status code

Rationale and Reference(s):

⁴ If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

- 5. Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?
 - If yes (all "significant" exposures have been shown to be within acceptable limits) continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).
 - If no (there are current exposures that can be reasonably expected to be "unacceptable") continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.
 - _____ If unknown (for any potentially "unacceptable" exposure) continue and enter "IN" status code

Rationale and Reference(s):

- 6. Check the appropriate RCRAInfo status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):
 - YE YE Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the <u>Safety-Kleen</u> <u>Systems, Inc., San Antonio Center, facility, EPA ID # TXD000729400</u>, located at <u>5243 Sinclair Road; San Antonio, TX; 78222</u> under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

NO - "Current Human Exposures" are NOT "Under Control."

IN - More information is needed to make a determination.

Completed by	(signature)		Date	
	(print)		_	
	(title)		-	
Researched by	(signature)	Elisa Den	Date	June 23, 2006
	(print)	Elisa Durum	_	
	(title)	TechLaw, Inc. (U.S. EPA Contractor)	_	
Supervisor	(signature)		Date	
	(print)			
	(title)			
	(EPA Region or	· State)	_	

Locations where References may be found:

Texas Commission on Environmental Quality File Room, Building E 12118 N IH 35 Austin, TX 78753

Filed under:

SWR# 69048

Contact telephone and e-mail numbers

(name)	
(phone #)	
(e-mail)	

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

Recommended Action Items: Since partial closure of the facility occurred under TRRP 2, EPA may wish to verify that a deed certification was not required.