DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION

Interim Final 2/5/99

RCRA Corrective Action
Environmental Indicator (EI) RCRAInfo code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name:	Safety-Kleen Systems, Inc.
Facility Address:	1606 Missile Rd., Wichita Falls TX, 79915
Facility EPA ID #:	TXD000747428

1. Has **all** available relevant/significant information on known and reasonably suspected releases to the groundwater media, 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?

X If yes - check here and continue with #2 below.

___ If no - re-evaluate existing data, or

___ if data are not available skip to #8 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 "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

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 "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

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. Is **groundwater** known or reasonably suspected to be "**contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

___ If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

__X__ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

___ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

Facility Description

The Safety-Kleen Wichita Falls, Texas facility is located within the city limits of Wichita Falls at 1606 Missile Road, Wichita Falls, Wichita County, Texas. The site is situated in Segment 0214 of the Wichita River in the Red River Basin (North Latitude 33^{o} 58' 58"; West Longitude 98^{o} 31' 11").

The facility occupies 26,125 sq. feet (1.503 acres) of land. It is surrounded by a perimeter fence and located within an industrialized portion of the City.

Safety-Kleen is registered as a Large Quantity Generator (LQG), receiver, transporter, and transfer facility. It serves the businesses that generate hazardous wastes. Primary customers are small quantity generators including auto repair facilities, auto body repair shops, fleet operators, dry cleaners, and manufacturing plants. Equipment and clean solvent are leased and subsequently returned as spent or contaminated solvent (a waste material). At this facility, small quantities of spent solvent are combined into larger volumes. During this process the facility generates contaminated sludges, solvent soaked debris and solid debris. The spent solvent is then shipped to a Safety-Kleen recycling center in Denton, Texas. After the impurities are removed from the spent solvents, the products are returned to the facility for redistribution.

Regulatory History

A permit was issued to Safety-Kleen Systems, Inc. – Wichita Falls Branch to operate a hazardous waste processing and storage facility on August 16, 1990. Section VII of this permit required a RCRA Facility Investigation for an underground storage tank. The permit was renewed November 18, 2002. There were no waste units identified as requiring corrective action investigation at the time of the 2002 re-issued permit. There have been many permit modifications through the years of operations. There are five currently active, permitted units associated with the Facility;

Container Storage Areas

- NOR Unit 002: 3,600 gallon capacity with 360 gallon containment.
- NOR Unit 003: 1,100 gallon capacity with 1,222 gallon containment

Tanks and Tank Systems

- NOR Unit No. 001, a 10,000 gallon storage unit with 16,830 gallons of containment volume

[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 appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

- NOR Unit No. 004, a 162 gallon storage unit with 1,496 gallons of containment volume
- NOR Unit No. 005, a 162 gallon storage unit with 1,496 gallons of containment volume

Safety-Kleen also processes material received under their Continuous Use Program (CUP) within an identified "wet dumpster" area.

The Wichita facility holds a 'multisector general permit for industrial stormwater' and an air new source permit (no. 50467)

There are relatively recent Site Inspection reports (2005 being the most current) indicating no violations or release history. The waste units are described as being contained and compliant. The current permitting TCEQ representative (Charles Keith) was contacted to determine the current status of the facility. He indicated that the above referenced units are currently permitted and active. There are no additional records indicating corrective action measures have taken place. There is no indication that any contamination of various media has occurred.

Although the 1990 Hazardous Waste Permit required an RFI of an underground storage tank, there was very little information in the available file materials regarding corrective action activities. An internal TNRCC Memorandum, dated January 18, 1994, indicates the facility submitted a RFI Work Plan addressing an "alleged underground storage tank"; however, the submittal date cannot be determined due to the poor quality of the microfilm record (Reference 2). The plan was approved by the TWC on August 6, 1991.

The RCRAInfo Comprehensive Corrective Action Report (CCAR), run on December 28, 2005, indicates that a voluntary RFI was approved in 1993 and 1994, and the CA375PA of petition for no further action was achieved on September 18, 1995. Also according to the CCAR, the facility achieved CA725YE and CA750YE on September 1, 1998 although no records of these milestones were found in the available file materials.

Rationale

The facility is currently active with five permitted units equipped with secondary containment. There is no record of a notice of violation, or inspection result to indicate that these units have had leaks or spills associated with them. The current permit states that "there are no known units requiring an RFI at this facility at the time of this renewal" (TCEQ, 2002). Given the information available, as summarized in the Closure correspondence and Facility Inspection reports there is no reason to suspect a release of hazardous materials to any media. Each unit has required containment and spill detection systems. The facility achieved CA725YE and CA750YE is 1998. There are no available file records to indicate a change in status is warranted.

Files Referenced:

1. TWC, 1990. Permit for Industrial Solid Waste Management Site; Permit No. HW-50232; EPA ID No. TXD000747428; ISW Reg. No. 6404; issued August 16, 1990.
2. TNRCC, 1994. Interoffice Memorandum from Donald Sharp; Subject: Safety-Kleen Corp. CEI Inspection conducted December 21, 1993; dated January 18, 1994.
3. TNRCC, 1995. Interoffice Memorandum from Michael Burch; Subject: Safety-Kleen Corp. CEI Inspection conducted January 12, 1995; dated January 18, 1995.
4. Safety-Kleen, 2000. Industrial and Hazardous Waste Part B Permit Application; signed February 5, 2000.
5. TNRCC, 2001. Texas Natural Resource Conservation Commission Compliance Summary; Safety-Kleen Systems, Inc. Registration No. 64041, Permit No. 50232; dated May 31, 2001.
6. TNRCC, 2001. Technical Summary and Executive Director's Preliminary Decision; dated August 15, 2001.
7. TNRCC, 2002. Permit for Industrial Solid Waste Management Site; Permit No. HW-50232-001, EPA ID No. TXD000747428-1, ISWR No. 64041; issued November 18, 2002.
8. TCEQ, 2004. Texas Commission on Environmental Quality Investigation Report: Safety-Kleen Systems Inc.; Safety-Kleen, Wichita Falls; dated June 8, 2004.
9. RCRAInfo Comprehensive Permitting Report run on December 22, 2005.
10. RCRAInfo Comprehensive Corrective Action Report run on December 28, 2005.
11. TechLaw, Inc., 2006. Communication Record; Telephone conversation between Karmen King, TechLaw, Inc. and Charles Keith, TCEQ Permitting Section; Regarding Safety-Kleen status; dated June 1, 2006.
12. Plat maps

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

___ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

___ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

___ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does “contaminated” groundwater **discharge** into **surface water** bodies?

___ If yes - continue after identifying potentially affected surface water bodies.

___ If no - skip to #7 (and enter a “YE” status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater “contamination” does not enter surface water bodies.

___ If unknown - skip to #8 and enter “IN” status code.

Rationale and Reference(s):

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be "**insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

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___ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

___ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing;
and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

___ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable"** (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

___ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR
2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

___ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable"**) - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

___ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):

[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

___ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

___ If no - enter "NO" status code in #8.

___ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

8. Check the appropriate RCRAInfo status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

9.

YE YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Safety-Kleen Systems Inc., -Wichita facility, EPA ID # TXD000747428, located at 1606 Missile Road., Wichita Falls, Texas 76306. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

___ NO - Unacceptable migration of contaminated groundwater is observed or expected.

___ IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____
(print) _____
(title) _____

Researched by (signature)  Date June 1, 2006
(print) Karmen King
(title) TechLaw, Inc. (U.S. EPA Contractor)

Supervisor (signature) _____ Date _____
(print) _____
(title) _____
(EPA Region or State) _____

Locations where References may be found:
Texas Commission of Environmental Quality
File Room, Building E
12118 N IH 35
Austin, TX 78753

Filed Under:
SWR 64041

Contact telephone and e-mail numbers

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

Recommended Further Action: None

Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

X YE - Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the Safety Kleen Systems-Longview, facility, EPA ID #TXD000747378, located at 202 Michael Place, Longview, Texas. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater" This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

___ NO - Unacceptable migration of contaminated groundwater is observed

___ IN - More information is needed to make a determination.

Completed by	(signature) Eleanor T. Wehner		Date 10/13/2011
	(print) Eleanor T. Wehner		
	(title) CA Program Specialist (TCEQ		
Researched by	(signature)		Date May 18, 2006
	(print)	June Dreith	
	(title)	TechLaw, Inc. (U.S. EPA Contractor)	
Supervisor	(sigture)		Date 10/20/11
	(print) Geoffrey E. Mayer		
	(title) Supervisor		
	(EPA Region or State) TX		

Locations where References may be found:

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