I.H.V 68053 Co

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*
Margaret Hoffman, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 6, 2003

Mr. Gary Risse
Senior Project Manger- Remediation
Safety-Kleen Corporation
4800 S. Old Peach Tree Rd.
Norcross, Georgia 30071

Re: Closure of the Safety Kleen - Corpus Christi
TCEQ SWR No. 68053
TCEQ Hazardous Waste Permit No. HW-50233
EPA ID No. TXD000747402

Dear Mr. Risse:

The Texas Commission on Environmental Quality (TCEQ) has reexamined your *Offsite Delineation* Report at the Safety-Kleen Corpus Christi facility. The TCEQ has determined that Safety-Kleen has fulfilled it's Corrective Action obligation for the Corpus Christi facility. The TCEQ believes Safety-Kleen has demonstrated that offsite sources of contamination have migrated onto the property, therefore the TCEQ grants closure for the Safety-Kleen Corpus Christi facility.

Please be aware that it is the continuing obligation of persons associated with a site to ensure that municipal hazardous waste and industrial solid waste are managed in a manner which does not cause the discharge or imminent threat of discharge of waste into or adjacent to waters in the state, a nuisance, or the endangerment of the public health and welfare as required by 30 TAC §335.4. If the actual closure fails to comply with these requirements, the burden remains upon Safety-Kleen to take any necessary and authorized action to correct such conditions. A TCEQ field inspector may review your Final Report and conduct a closure inspection of the site.

Questions concerning this letter should be directed to me at (512) 239-2350. When responding by mail, please submit an original and one copy of all correspondence and reports to the Corrective Action Section at Mail Code MC-127 with an additional copy submitted to the TCEQ

Region 14 Office in Corpus Christi. The TCEQ Solid Waste Registration Number should be referenced in all submittals.

Sincerely,

Brad Wilkinson

Brad Wilkinson, Project Manager
Team I, Corrective Action Section
Remediation Division
Texas Commission on Environmental Quality

BW/bw

cc: Waste Program Manager, TCEQ Region 14 Office, Corpus Christi

Notification For Hazardous or Industrial Waste Management (TNRCC-0002)

TNRCC Use Only
IHW_____CO

The TNRCC Core Data Form (TNRCC-10400) must be submitted with this form. Please print or type and provide all requested information. Definitions and codes can be found in the Hazardous or Industrial Waste Form Instructions.

PART I. Notification Type and Registration Numbers

1. Notification Type (Check one)	Initial ☐	Update ☒	• If this is an Initial Notification, leave registration numbers blank. • If updating an existing Notice of Registration, please provide current registration numbers.

2. Solid Waste Registration Number:	6 B 0 5 3	3. EPA Identification Number:	T X D Ø Ø Ø 7 4 7 4 0 2
4. Customer Reference Number:	C N	5. Regulated Entity Number:	R N

Section A. Company Information

1. Company Name:	SAFETY-KLEEN SYSTEMS, INC.
2. Site Name:	SAFETY-KLEEN SYSTEMS, INC.

3. Registration Type: (Check all that apply)	Generator	Receiver	Transporter	Recycler
	☒	☒	☒	☐

4. Name of Contact:		
	First Name: RICARDO	Telephone: (210) 648-7066
	Last Name: SAUCEDO	Email: RSAUCEDO@SAFETY-KLEEN.com
	Title: EHS MGR.	Fax Number: (210) 648-0212

5. Waste Handler Status: (Check all that apply)	Not Applicable	Permitted TSD	Interim TSD	Recycler	Other
	☐	☒	☐	☐	☐

Section B. Generator Information

G If your facility does not fit the definition of a "Generator", check this box and go to Section C.

1. Generator Type (Check One)	Industrial	Nonindustrial/Municipal	Railroad Commission
	☒	☐	☐

2. Hazardous Waste Generation Status (Check One)			
	☒	Large Quantity Generator (LQG)	• 2200 pounds (1000 kilograms) or more of hazardous waste **and/or** • 2.2 pounds (1 kilogram) or more of acutely hazardous waste
	☐	Small Quantity Generator (SQG)	• between 220 and 2200 pounds (100 and 1000 kilograms) of hazardous waste **and** • less than 2.2 pounds (1 kilogram) of acutely hazardous waste
	☐	Industrial Conditionally Exempt Small Quantity Generator (CESQG)	• 220 pounds (100 kilograms) or less of hazardous waste **and** • less than 2.2 pounds (1 kilogram) of acutely hazardous waste **and** • 220 pounds (100 kilograms) or more of industrial Class 1 waste

Section C. Receiver Information

G If your facility does not fit the definition of a "Receiver", check this box and go to Section D.

1. Facility Category: (Check One)	Commercial	Captive	Captured	Other
	☒	☐	☐	☐

2. Class of Waste Received (Check all that apply)	Hazardous	Class 1	Class 2	Class 3	Nonindustrial/Municipal
	☒	☒	☒	☐	☒

3. Do you receive hazardous waste for treatment, storage or disposal?	Yes ☒	No ☐
4. Do you receive manifested Class 1 waste for treatment, storage or disposal?	Yes ☒	No ☐

5. If you receive waste from off-site and recycle it, answer the following:

a.	Describe the material(s) to be recycled.
	SPENT WASTE SOLVENT
b.	Describe any storage of the material(s) prior to recycling. (If no storage occurs, write "NONE".)
	STORE @ PERMITTED STORAGE TANK
c.	Describe how the material(s) will be recycled.
	SENT TO RECYCLING FACILITY TO REMOVE CONTAMINANTS
d.	Describe the purpose/function of the material(s) in the recycling activity.
	THE SOLVENT ITSELF IS BEING RECYCLED

Section D. Transporter Information

G If your facility does not fit the definition of a "Transporter", check this box and go to Certification of Company Information.

1. Carrier Classification: (Check all that apply)	a. Do you transport for hire?	b. Do you transport your own waste?	c. Is this site a Transfer Facility?
	Yes ☐ No ☒	Yes ☒ No ☐	Yes ☒ No ☐

2. Types of waste transported: (Check all that apply)	Hazardous*	Class 1	Class 2	Class 3	*Other
	☒	☒	☒	☐	☐ *Refer to Instructions

*** To transport hazardous waste you must have an EPA Identification Number. See PART IV, Notification of Regulated Waste Activity.**

Certification of Company Information

I certify that the information submitted herein is complete and accurate to the best of my knowledge.

Print Preparer Name: RICARDO SAUCEDO	Telephone No.: 210-648-7066
Preparer Signature: [signature]	Date: 2/23/03

Texas Department of License and Regulation

Water Well Driller/Pump Installer Program
P.O. Box 12157, Austin, Texas 78711 (512)463-7880 FAX (512)463-8616
Email address: water.well@license.state.tx.us

This form must be completed and filed with the department within 30 days following the plugging of the well.

PLUGGING REPORT

A. WELL IDENTIFICATION AND LOCATION DATA

1) OWNER

Name	Address	City	State	Zip
Safety Kleen	1890 Noblin Ridge trail	Duluth	Ga.	30097

2) WELL LOCATION

County	Physical address	City	State	Zip
Nueces	3820 Bratton Rd.	Corpus Christi	TX	78413

3) Owner's Well No. Long. 27.69N Lat. 97.39 W Grid #

4) Type of Well ☐ Water ☑ Monitor ☐ Injection ☐ De-Watering

5) NT

Drill, Pump Installer, or Landowner performing the plugging operations must locate and identify the location of the well within a specific grid on a full-scale gridded map available from Texas Natural Resource Information Service. The location of the well should be denoted within the grid by placing a corresponding dot in the square to the right. The legal description is optional.

B. HISTORICAL DATA ON WELL TO BE PLUGGED (if available)

6) Driller License No.

7) Drilled / / 8) Diameter of hole _____ inches 9) Total depth of well _____ feet.

C. CURRENT PLUGGING DATA

10) Date well plugged 3 / 21 / 03

12) Name of Driller/Pump Installer or Well Owner performing the plugging Carlos Cantu

License No. 0437 M

11) REMOVE ALL REMOVEABLE CASING
Please check box beside the method of plugging used

- ☐ Tremmie pipe cement from bottom to top.
- ☐ Tremmie pipe bentonite from bottom to 2 feet from From surface, cement top 2 feet.
- ☑ Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth, cement top 2 feet.
- ☐ Large diameter well filled with clay material from top to bottom.

CASING LEFT IN WELL

[illegible]	[illegible]	[illegible]
5	0	40
MW-1 through MW-4		

CEMENT/BENTONITE PLUG(S) PLACES IN WELL

[illegible]	[illegible]	[illegible]
0	40 ft.	1 Lbgs
MW-1 through MW-4		

COMMENTS

D. VALIDATION OF INFORMATION INCLUDED IN FORM

I certify that I plugged this well (or the well was plugged under my supervision) and that all of the statements herein are true and correct. I understand that failure to complete items 1 through 13 will result in the report(s) being returned for completion and resubmitted.

Company or individual's Name (type or print) Jone Environmental Drilling Inc.

Address 1911 N. Lexington Blvd. City Corpus Christi State TX Zip 78409

Signature [signature] 3 / 21 / 03 Signature [signature] 3 / 21 / 03

Licensed Driller/Pump Installer Date Apprentice Date

TDLR FORM 2004WWD White - TDLR Yellow - Owner Pink - Driller/Pump Installer

ATC ASSOCIATES INC.

T / F / IHW 68053 CO RP
WWC COMM # 10250353
PROJ. MGR. B Wilkinson

3928 Bluebonnet Drive
Stafford, Texas 77477
www.atc-enviro.com
281.240.0154
Fax 281.240.8909

April 2, 2003

Mr. Brad Wilkinson
Corrective Action Section
Texas Commission on Environmental Quality
P.O. Box 13087 – MC 127
Austin, Texas 78711

Received
APR 04 2003
Remediation Division
Corrective Action Section

Subject: Site Decommissioning Activities at the Corpus Christi Service Center
3820 Bratton Road
Corpus Christi, Texas
TNRCC SWR No. 0068053
TNRCC Haz Waste Permit No. HW-50233

Dear Mr. Wilkinson:

This letter is intended to document final site decommissioning activities at the above-mentioned facility. The work was conducted in accordance with the closure acceptance letter from the Texas Commission on Environmental Quality (TCEQ) and applicable TCEQ regulations. The closure activities, conducted on March 21, 2003, included: 1) proper plugging and abandonment of the four (4) onsite monitoring wells, 2) removal of well abandonment debris, and 3) restoration of the site to existing conditions. The State of Texas Well Report is included for your records.

Safety-Kleen appreciates the Commission's assistance on completing this project. If you have any questions, please contact Mr. Gary Risse with Safety-Kleen at (770) 418-1860 or Mr. Hal G. Kuntz II with ATC Associates at (281) 240-0154.

Sincerely,
ATC Associates

Hal G. Kuntz II
Senior Hydrogeologist

Glen A. Dolezal
Operations Manager

Enclosure

cc: TCEQ Region 14
Safety-Kleen, Gary Risse
Safety-Kleen Branch

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Robert J. Huston, Chairman
R.B. "Ralph" Marquez, Commissioner
Kathleen Hartnett White, Commissioner

Date: June 12, 2003

From: KHN Katherine Nelson, Manager
Industrial & Hazardous Waste Permits Section
Waste Permits Division

Subject: Revocation of Industrial Solid Waste Permit
Safety-Kleen Systems, Inc. Corpus Christi II Branch
Permit No. HW - 50338-001

Pursuant to 30 Texas Administrative Code (TAC) §305.67(b), you are hereby notified of the revocation of Industrial Solid Waste Permit No. HW - 50338-001, issued to Safety-Kleen Systems, Inc. in Corpus Christi, Nueces County. The permittee requested revocation of the permit in accordance with 30 TAC §305.67(b).

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

REVOCATION OF

INDUSTRIAL SOLID WASTE PERMIT NO. HW-50338-001
ISSUED ON DECEMBER 8, 1993
TO SAFETY-KLEEN SYSTEMS, INC.

APPROVED, ISSUED AND EFFECTIVE in accordance with 30 Texas Administrative Code, Section 305.67.

ISSUED DATE: JUN 11 2003

Margaret Hoffman
For the Commission

I IW/SWRH 04053 /C0

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*
Margaret Hoffman, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 12, 2003

Mr. Ricardo Saucedo, P.E.
Environmental Health & Safety Manager
Safety-Kleen Systems, Inc 5243 Sinclair Road
San Antonio, TX 78222

Re: Revocation of Permit No. HW-50338-001
Safety-Kleen Systems, Inc. - Corpus Christi II Branch
Hazardous Waste Permit No. HW-50338-001
Industrial Solid Waste Registration No. 68053

Dear Mr. Saucedo:

The Texas Commission on Environmental Quality (TCEQ) has received your letter of February 28, 2003 submitting a Consent to Revocation Form for the voluntary revocation of Permit No. HW-50338-001 in accordance with 30 Texas Administrative Code (TAC) Section 305.67(b). Permit No. HW-50338-001 was originally issued by The Texas Natural Resource Conservation Commission (the predecessor agency to the TCEQ) on December 8, 1993 and authorized the management of hazardous waste in two (2) tanks, two (2) dumpster/drumwashers, and two (2) container storage areas.

The facility was never constructed hence closure was not required. There are no outstanding corrective action or post-closure care requirements related to the permit.

Effective the date of this letter Permit No. HW-50338-001 is revoked. Please note that it is the continuing obligation of persons associated with a site to assure that industrial or hazardous waste is managed in such a way that it does not cause the discharge or imminent threat of discharge of waste into or adjacent to waters in the state, a nuisance, or the endangerment of the public health and welfare (refer to 30 TAC Section 335.4). Safety-Kleen Systems, Inc. must comply with all state and federal regulations to properly manage any other waste management activities that may be conducted at this site in order to protect human health and the environment.

Should you have any questions regarding this matter, please contact Mr. Tom Weirich of the Industrial & Hazardous Waste Permits Section, Waste Permits Division at 512/239-6609. If responding by mail, please be sure to use mail code MC-130 (MC-130).

Sincerely,

Katherine Nelson

Katherine Nelson, Manager
Industrial and Hazardous Waste Section
Waste Permits Division

KN/TKW/fp

Austin File Review, EPA Region 6
Communication Log

Site Name: File Review Project – Safety Kleen Corpus Christi

Contact Name: Rick Ehrhardt

Contact Phone: 214-665-6765

Contact Title: U.S. EPA

Contact E-Mail:

Date Contacted: 7/7/06

Time Contacted: 8:30 a.m.

Contacted By: Ann Anderson

Summary of Communication:

Rick returned call at 12:45 p.m.
Situation: SK had spilled which cleaned up to RRS Criteria 2. TCEQ approval but no deed recordation in files. Closed under RCRA, and voluntarily revoked permit. All CA obligations met.

However, groundwater plume exists underneath site. Has benzene, and is attributed to an offsite source (TCEQ agrees). No additional information available. How should we handle?

Suggests we attempt to reach TCEQ and get a feel for what they know about plume.
- What do they know about plume?
- Is drinking water impacted?
- What are concentrations and depth of plume? Is vapor intrusion a concern?

Most likely going to have to go with an "IN" on this one, unless TCEQ can give us a good feeling that it is under control and they are on top of it. Put explanation in there to explain what more information is needed.

Austin File Review, EPA Region 6
Communication Log

Site Name: File Review Project – Safety Kleen Corpus Christi

Contact Name: Brad Wilkinson

Contact Phone: 512/239-1000

Contact Title: TCEQ, Corrective Action

Contact E-Mail:

Date Contacted: 7/7/06

Time Contacted: 3:30 p.m.

Contacted By: Andrew Dorn

Summary of Communication:

Corrective Action was completed in 2001 for the mineral spirits spill at the SK CC site. The corrective action included excavation of mineral spirit contaminated soil, deed certification and completion of innocent landowner forms. A "gasoline" groundwater plume existed under the site at the time of closure. The gasoline plume was attributed to a LPST adjacent to the property. Mr. Wilkinson does not recall the LPST number.

The TCEQ only receives confirmation of deed certification, they do not receive details about what it says, therefore Mr. Wilkinson could not comment on any provisions put forward in the certification.

The contaminated aquifer is not a potential drinking water source.

The SK building does not have a basement, and according to Mr. Wilkinson's recollection probably vacant.

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.- Corpus Christi
Facility Address:	3820 Bratton Rd., Corpus Christi, TX, 78413
Facility EPA ID #:	TXD000747402

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?

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

___ 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

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			X	See below
Air (indoors)[2]			X	" "
Surface Soil (e.g., <2 ft)		X		" "
Surface Water		X		" "
Sediment		X		" "
Subsurf. Soil (e.g., >2 ft)			X	" "
Air (outdoors)		X		" "

___ 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.

X If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

According to file information the Safety-Kleen Corpus Christi site is closed under Texas RRS No. 2, although file materials did not include specific details of the contaminants of concern or the concentrations remaining in place. Additionally, contamination from outside (unknown) source(s) was documented and indicated a plume of contamination existed under the site. File information regarding the source of this contamination was not available for review. In addition, specific contaminant levels were not available, and therefore a final determination cannot be made at this time.

Facility Background:

Safety-Kleen Corp. (SK) is an international service-oriented company whose customers are primarily engaged in

---

[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) suggests 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.

automotive repair, industrial maintenance and dry cleaning. The company has been operating since 1968 offering solvent collection and reclamation services for its more than 400,000 customers, more than 99% of which generate less than 1000 kg of waste per month. In 1986, SK reclaimed more than 40 million gallons of spent solvent.

The Corpus Christi service center began operating as a storage facility October 1, 1971. The facility consisted of the following structures: a 4,000 sq. ft. warehouse with offices and a contained area for drum storage; two 8,000-gallon AST, with diking, for clean and spent solvent; and a 200 square foot solvent return and fill station with a loading dock.

Several of the neighboring facilities have or have had registered USTs, with the site due east being a LUST site with documented contamination of the soil and groundwater. The name of this site was not found in the available file materials. The industrial park was developed in 1970, prior to which the land was used for agricultural purposes.

Regulatory History:

Safety-Kleen began leasing the site in 1971.

In October 1991 Canonie Environmental submitted a Site Assessment Report, which provided documentation/ verification of cleanup associated with a small spill in May 1991. (Reference 3)

In January 1993 anomalies were excavated from the SK site. The first was a 1,000-gallon steel UST, and the second was not determined. (Reference 3)

An 800-gallon mineral spirits spill occurred on April 28, 1993, when a newly installed solvent pump malfunctioned and solvent leaked through a weep hole onto concrete secondary containment. As reported by the facility, the mineral spirits recovery accounted for all but 10-gallons of the release. Excavation of contaminated soils revealed the presence of a co-mingled plume of petroleum hydrocarbons and VOCs which appeared to be unrelated to the mineral spirits spill. Benzene concentrations were reported at levels up to 6,170 ug/L. On February 21, 1996, Delta Environmental Consultants submitted an Offsite Delineation report for SK. In this report, it was concluded that there were several areas of mineral spirits contamination; however there was no indication that SK had released the gasoline-like contaminants, which had impacted the site's groundwater. (Reference 3)

In April 1998, Flour Daniel submitted a Corrective Measures Proposal to address the mineral spirits contamination present at the site. The report proposed submitting Innocent Landowner forms for benzene-impacted groundwater. SK also would prepare a certificate of remediation to be attached to the property deed in the real property records of Nueces County. (Reference 5)

On October 23, 2001 the TNRCC sent a letter to SK stating that based on the information contained in the Final Report and other information available to staff, it appears that the cleanup has achieved RRS No. 2. One of the requirements of this closure is deed certification; however, proof of deed recordation or a copy of the deed certification was not found in available file materials. (Reference 6) SK Corpus Christi's permit was renewed on December 10, 2002. (Reference 7) On February 6, 2003 the TCEQ sent SK a letter stating that the SK Corpus Christi Facility has fulfilled its Corrective Action obligation. The TCEQ believes SK has demonstrated that off-site sources of contamination have migrated onto the property, therefore the TCEQ granted closure for the SK Corpus Christi facility. (Reference 8) On June 12, 2003 Hazardous Waste Permit No. HW-50338-001 was voluntarily revoked. (Reference 10) Current status of the site is unknown; however, the TCEQ representative stated he thought the facility had shut down (Reference 11).

References:

1. Storage Facility Permit Application, Safety Kleen Corp. Service Center, Corpus Christi, Texas, TXD 000747402, Rev. May 30, 1990.
2. Permit for Industrial Solid Waste Management Site, for Safety-Kleen, Corpus Christi, Texas, December 8, 1993.
3. Interoffice Memorandum, To: File (TNRCC), From: Karen Dodson, TNRCC Region 14, Safety-Kleen Corporation, SWR No. 68053, HW Permit No. HW-502333, EPA ID No. TXD000747402, dated December 16, 1994.
4. Offsite Delineation Report, for Safety-Kleen Corpus Christi, February 21, 1996.
5. Correspondence from Sara C. Brothers of Safety-Kleen Corporation to Mr. Brad Wilkinson of TNRCC. RE: Groundwater Sampling Event Report, dated February 17, 1998
6. Corrective Measures Study for the Safety-Kleen Corp., Corpus Christi, Texas Site, April 1998.
7. Letter to Gary Risse, SK, from Brad Wilkinson, Project Manager, TNRCC, dated October 23, 2001, Regarding: Approval of Closure Report-RSS No. 2.
8. Technical Summary and Executive Director's Preliminary Report Decision, dated August 15, 2002
9. TCEQ Core Data Form, dated September 2002.
10. Permit for Industrial Solid Waste Management Site and permit application materials, for Safety-Kleen, Corpus Christi, Texas, and December 10, 2002.
11. CEI report for SK Corpus Christi, investigation date January 30, 2003.
12. Permit application for a Hazardous Waste Storage/processing/disposal Facility, dated February 3, 2003.
13. Letter to Gary Risse, SK, from Brad Wilkinson, Project Manager, TCEQ, dated February 6, 2003, Regarding: Closure of the Safety Kleen-Corpus Christi.
14. Notification for Hazardous or Industrial Waste Management, dated February 23, 2003
15. Plugging Report. Dated April 1, 2003
16. Correspondence from Hal G. Kuntz of AVT Associates to Mr. Brad Wilkins of Safety-Kleen. RE: Site Decommissioning Activities at the Corpus Christi Service Center, dated April 2, 2003.
17. Letter to Ricardo Saucedo, SK, from Katharine Nelson, Waste Permits Division, TCEQ, dated June 12, 2003, Regarding: Revocation of Permit No. HW-50338-001.
18. Communication Log; Telephone Conversation; Andrew Dorn, TechLaw and Brad Wilkinson, TCEQ; dated July 7, 2006.
19. Communication Log; Telephone Conversation; Ann Anderson, TechLaw and Rick Ehrhardt, U.S. EPA; dated July 7, 2006.
20. Facility Map

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	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater							
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.

___ 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 Pathway Evaluation Work Sheet 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 - 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 _____ _____facility, EPA ID # _____, located at _____ 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."

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

Completed by	(signature)		Date _____
	(print)		
	(title)		
Researched by	(signature)	[signature]	Date June 21, 2006
	(print)	Andrew Dorn	
	(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:
IHW: 68053

Contact telephone and e-mail numbers

(name)	Brad Wilkinson
(phone #)	512/239-2350
(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:

1. Further research is warranted to verify human exposures are under control. The file materials document that Safety Kleen completed corrective action for releases of mineral spirits under Texas Risk Reduction Standard Criteria No. 2 and successfully closed their facility. However, additional information indicates that a plume of benzene extended underneath the site from an offsite source. TechLaw contacted the Corrective Action Project Manager, who confirmed that Safety Kleen had completed a cleanup of the site. He was not able to provide any additional information on the groundwater plume, extent of contamination or name of facility thought to contain the source. Although he stated that groundwater was not used for drinking water at this site, further research is warranted to confirm the current status of the groundwater contamination and the potential for vapor intrusion.

2. Further research is needed to obtain a copy of the deed certification and to determine the levels of contaminants that remain in place as a result of the Safety Kleen remediation.

Tech

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

August 31, 2015

MEMORANDUM

SUBJECT: Documentation of Achievement of GPRA Facility-wide Corrective Action Complete (CA900CR)

FROM: David Vogler, Geologist 8/31/2015
RCRA State and Tribal Oversight Section (6PD-O)

THRU: Randall Rush, Section Chief 8/31/15
RCRA State and Tribal Oversight Section (6PD-O)

TO: RCRA Technical Files

RE: Safety-Kleen Systems, Inc (TXD000747402)
Corpus Christi, Texas

Based on review of all available relevant information on known or reasonably suspected releases to soil, groundwater, surface soil, sediments, and air, subject to RCRA Corrective Action, *e.g.* from Solid Waste Management Units (SWMUs), Regulated Units (RU), and Areas of Concern (AOC), the following determination has been made:

> **Corrective Action Performance Standards Attained – Controls Required:** Remedies selected for the protection of human health and the environment standard have been fully implemented and associated performance standards have been attained at the entire facility. (CA900CR)

This determination is made 1) after the Certification of Remedy Completion or Construction Completion (CA550) and/or 2) after stabilization measure(s) has been completed in a manner that meets the stabilization objectives, goals, performance standards, and/or desired results (CA650), and terminating corrective action at this point at the facility, would satisfy all permit, order, or other mechanism requirements for corrective action.

Achievement of this milestone is based on the issuance of a "No Further Action Letter" from the TCEQ on February 6, 2003. Safety-Kleen (SK) has proven that the contamination that exists onsite is not attributable to SK operations and is an "Innocent Landowner".

This information can often be found on the CA550: Certification of Remedy Completion or Construction Completion memorandum. Also, the "CA725: Current Human Exposures Under Control" and "CA750: Migration of Contaminated Groundwater Under Control" forms can provide additional information.

This determination is protective of human health and the environment. It completes the RCRA corrective action process under HSWA, at this time. In some instances, performance of required operation and maintenance and monitoring actions and/or maintenance of institutional controls may be ongoing, consistent with EPA's February 2003 document, *Final Guidance on Completion of Corrective Action Activities at RCRA Facilities (68 FR 8757)*. This determination will be re-evaluated if the regulatory agencies or the facility becomes aware of significant information regarding the facility, which would change the conditions. The facility must continue to comply with all applicable parts of RCRA.

Tech

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

August 31, 2015

MEMORANDUM

SUBJECT: Documentation of Achievement of Facility-wide Remedy Selection (CA400), and Remedy Construction Complete (CA550).

FROM: David Vogler, Geologist 8/31/2015
RCRA State and Tribal Oversight Section (6PD-O)

THRU: Randall Rush, Section Chief 8/31/15
RCRA State and Tribal Oversight Section (6PD-O)

TO: RCRA Technical Files

RE: Safety-Kleen Systems, Inc. EPA ID No. TXD000747402
Facility Location (Corpus Christi, TX 78413)

Based on a file review, no remedy is required to be selected or constructed. Therefore, the milestones of site-wide remedy selection (CA400) and physical remedy construction (CA550RC) have been completed. Achievement of this milestone is based on the issuance of a "No Further Action Letter" from the TCEQ on February 6, 2003. Safety-Kleen (SK) has proven that the contamination that exists onsite is not attributable to SK operations and is an "Innocent Landowner".

The units and AOCs considered in this evaluation include:

RFI Units & AOCs subject to Corrective Action	Remedy Decision	Approval of Remedy Construction/ Completion
Entire Site	n/a	February 6, 2003
RCRA Regulated, Permitted Units subject to Compliance or Corrective Action Monitoring		
None	n/a	Permit voluntarily revoked on June 12, 2003
Interim Status or Unauthorized Units		
Mineral Spirits Spill Areas	n/a	TCEQ Approval dated October 23, 2001

To date, no additional units subject to corrective action requirements have been identified at the facility.

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.- Corpus Christi
Facility Address: 3820 Bratton Rd., Corpus Christi, TX, 78413
Facility EPA ID #: TXD000747402

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?

   X — 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):

GW is contaminated from offsite.(unknown) source(s). SK Corpus Christi's permit was renewed on December 10, 2002. (Reference 7). On February 6, 2003 the TCEQ sent SK a letter stating that the SK Corpus Christi Facility has fulfilled its Corrective Action obligation. The TCEQ believes SK has demonstrated that off-site sources of contamination have migrated onto the property, therefore the TCEQ granted closure for the SK Corpus Christi facility. (Reference 8) According to file information the Safety-Kleen Corpus Christi site is closed under Texas RRS No. 2. Since Safety Kleen – Corpus Christi is an Innocent Landowner in the case of the groundwater contamination coming from offsite, the Migration of Contaminated Groundwater Under Control will be coded a YES for this site even though the ground water is contaminated. Thus the Yes is checked above to alert the reader of the overall situation but the NO is checked for the facility's responsibility.

Facility Background:

Safety-Kleen Corp. (SK) is an international service-oriented company whose customers are primarily engaged in automotive repair, industrial maintenance and dry cleaning. The company has been operating since 1968 offering solvent collection and reclamation services for its more than 400,000 customers, more than 99% of which generate less than 1000 kg of waste per month. In 1986, SK reclaimed more than 40 million gallons of spent solvent.

The Corpus Christi service center began operating as a storage facility October 1, 1971. The facility consisted of the following structures: a 4,000 sq. ft. warehouse with offices and a contained area for drum storage; two 8,000-gallon AST, with diking, for clean and spent solvent; and a 200 sq. ft. solvent return and fill station with a loading dock.

Several of the neighboring facilities have or have had registered USTs, with the site due east being a LUST site with documented contamination of the soil and groundwater. The name of this site was not found in the available file materials. The industrial park was developed in 1970, prior to which the land was used for agricultural purposes.

Regulatory History:

Safety-Kleen began leasing the site in 1971.

In October 1991 Canonie Environmental submitted a Site Assessment Report, which provided

---

[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).

documentation/ verification of cleanup associated with a small spill in May 1991. (Reference 3)

In January 1993 anomalies were excavated from the SK site. The first was a 1,000-gallon steel UST, and the second was not determined. (Reference 3)

An 800-gallon mineral spirits spill occurred on April 28, 1993, when a newly installed solvent pump malfunctioned and solvent leaked through a weep hole onto concrete secondary containment. As reported by the facility, the mineral spirits recovery accounted for all but 10-gallons of the release. Excavation of contaminated soils revealed the presence of a co-mingled plume of petroleum hydrocarbons and VOCs which appeared to be unrelated to the mineral spirits spill. Benzene concentrations were reported at levels up to 6,170 ug/L. On February 21, 1996, Delta Environmental Consultants submitted an Offsite Delineation report for SK. In this report, it was concluded that there were several areas of mineral spirits contamination; however there was no indication that SK had released the gasoline-like contaminants, which had impacted the site's groundwater. (Reference 3)

In April 1998, Fluor Daniel submitted a Corrective Measures Proposal to address the mineral spirits contamination present at the site. The report proposed submitting Innocent Landowner forms for benzene-impacted groundwater. SK also would prepare a certificate of remediation to be attached to the property deed in the real property records of Nueces County. (Reference 5)

On October 23, 2001 the TNRCC sent a letter to SK stating that based on the information contained in the Final Report and other information available to staff, it appears that the cleanup has achieved RRS No. 2. One of the requirements of this closure is deed certification;

SK Corpus Christi's permit was renewed on December 10, 2002. (Reference 7)
On February 6, 2003 the TCEQ sent SK a letter stating that the SK Corpus Christi Facility has fulfilled its Corrective Action obligation. According to file information the Safety-Kleen Corpus Christi site is closed under Texas RRS No. 2. The TCEQ believes SK has demonstrated that off-site sources of contamination have migrated onto the property, therefore the TCEQ granted closure for the SK Corpus Christi facility. (Reference 8) On June 12, 2003 Hazardous Waste Permit No. HW-50338-001 was voluntarily revoked. (Reference 10) Current status of the site is unknown; however, the TCEQ representative stated he thought the facility had shut down (Reference 11).

References:

1. Storage Facility Permit Application, Safety Kleen Corp. Service Center, Corpus Christi, Texas, TXD 000747402, Rev. May 30, 1990.
2. Permit for Industrial Solid Waste Management Site, for Safety-Kleen, Corpus Christi, Texas, December 8, 1993.
3. Interoffice Memorandum, To: File (TNRCC), From: Karen Dodson, TNRCC Region 14, Safety-Kleen Corporation, SWR No. 68053, HW Permit No. HW-502333, EPA ID No. TXD000747402, dated December 16, 1994.
4. Offsite Delineation Report, for Safety-Kleen Corpus Christi, February 21, 1996.
5. Correspondence from Sara C. Brothers of Safety-Kleen Corporation to Mr. Brad Wilkinson of TNRCC. RE: Groundwater Sampling Event Report, dated February 17, 1998
6. Corrective Measures Study for the Safety-Kleen Corp., Corpus Christi, Texas Site, April 1998.
7. Letter to Gary Risse, SK, from Brad Wilkinson, Project Manager, TNRCC, dated October 23, 2001, Regarding: Approval of Closure Report-RSS No. 2.
8. Technical Summary and Executive Director's Preliminary Report Decision, dated August 15, 2002
9. TCEQ Core Data Form, dated September 2002.
10. Permit for Industrial Solid Waste Management Site and permit application materials, for Safety-Kleen, Corpus Christi, Texas, and December 10, 2002.
11. CEI report for SK Corpus Christi, investigation date January 30, 2003.

12. Permit application for a Hazardous Waste Storage/processing/disposal Facility, dated February 3, 2003.
13. Letter to Gary Risse, SK, from Brad Wilkinson, Project Manager, TCEQ, dated February 6, 2003, Regarding: Closure of the Safety Kleen-Corpus Christi.
14. Notification for Hazardous or Industrial Waste Management, dated February 23, 2003
15. Plugging Report. Dated April 1, 2003
16. Correspondence from Hal G. Kuntz of AVT Associates to Mr. Brad Wilkins of Safety-Kleen. RE: Site Decommissioning Activities at the Corpus Christi Service Center, dated April 2, 2003.
17. Letter to Ricardo Saucedo, SK, from Katharine Nelson, Waste Permits Division, TCEQ, dated June 12, 2003, Regarding: Revocation of Permit No. HW-50338-001.
18. Communication Log; Telephone Conversation; Andrew Dorn, TechLaw and Brad Wilkinson, TCEQ; dated July 7, 2006.
19. Communication Log; Telephone Conversation; Ann Anderson, TechLaw and Rick Ehrhardt, U.S. EPA; dated July 7, 2006.
20. Facility Map
21. E-mail from Mr. Brad Wilkinson, TCEQ to Mr. David Vogler, EPA, dated on January 15, 2009

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): GW is contaminated by gasoline-like constituents (i.g., benzene concentrations are reported at levels up to 6,170 ug/l.

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

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

X 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.

---

[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.

___ 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)?

___ 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 judgment/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):

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

---

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

[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.

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):

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

---

[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.

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, Inc.- Corpus Christi facility, EPA ID # TXD000747402 , located at 3820 Bratton Rd., Corpus Christi, TX, 78413 . 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 8/31/2015
(print) David Vogler
(title)
Geologist

Supervisor (signature) _____ Date 8/31/15
(print) Randall Rush
(title) Section Chief 6PD-O
(EPA Region 6)

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

Filed Under:
IHW: 68053

Contact telephone and e-mail numbers

(name)	David Vogler
(phone #)	214-665-7428
(e-mail)	vogler.david@epa.gov