

**DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION**  
Interim Final 2/5/99  
**RCRA Corrective Action**  
**Environmental Indicator (EI) RCRIS code (CA725)**  
**Current Human Exposures Under Control**

Facility Name: Safety-Kleen Corporation  
Facility Address: 5784 Lincoln Highway, Route 30, Stoystown, Pennsylvania 15563  
Facility EPA ID #: PAD000738831

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?

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

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **“contaminated”**<sup>1</sup> 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)?

	<u>Yes</u>	<u>No</u>	<u>?</u>	<u>Rationale/Key Contaminants</u>
Groundwater		<b>X</b>		No known/documented releases to groundwater from operations.
Air (indoors) <sup>2</sup>		<b>X</b>		The former operations portion of the facility was essentially capped with the building floor and concrete pavement at the wet dumpster unit and over the USTs. Detected VOCs observed during the closure of the USTs were below the PADEP MSCs.
Surface Soil (e.g., <2 ft)		<b>X</b>		No known/documented releases to surface soil from operations.
Surface Water		<b>X</b>		No known/documented releases to surface water from operations.
Sediment		<b>X</b>		No known/documented releases to sediment from operations.
Subsurf. Soil (e.g., >2 ft)		<b>X</b>		Limited contamination observed in the backfill and adjacent soil/weathered bedrock was removed during closure activities. Detected constituents observed during the closure of the USTs were below the PADEP MSCs (0-15 feet).
Air (outdoors)		<b>X</b>		No known/documented releases to air from operations.

  **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.

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

**Rationale and Reference(s):**

<sup>1</sup> “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).

<sup>2</sup> 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.

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Safety-Kleen Corporation (Safety-Kleen) operated a treatment, storage, and disposal (TSD) facility (USEPA ID No. PAD000738831) in Stoystown, Shade Township, Somerset County. Safety-Kleen Corporation (now Safety-Kleen Systems, Inc.) is a national solvent recycler. The former Safety-Kleen Service Center (service center or facility) in Stoystown (one leased acre) functioned as a transfer facility for product and spent/waste solvent between a customer (waste generator) and Safety-Kleen's off site recycle center.

The facility was located along the north side of U.S. Route 30, approximately 1.75 miles east of Stoystown in Shade Township, Somerset County, Pennsylvania. The facility is in a rural setting, with both commercial and residential structures in the area. Currently, the property including the facility is used as a junk yard.

The facility operated under interim status, issued July 27, 1981, for the storage of characteristic and listed hazardous wastes (waste mineral spirits, used immersion cleaner and dry cleaning waste). The facility was primarily a local sales/service office and warehouse for Safety-Kleen products. Safety-Kleen collected spent/waste solvents from the customer for temporary storage at this facility. Once a sufficient quantity of materials was collected, the materials were moved off site to Safety-Kleen's recycling center. According to the facility's Part A hazardous waste permit application, the facility began operation on May 1, 1975. The Pennsylvania Environment, Facility, Application, Compliance Tracking System (eFACTS) database identifies the facility as inactive.

The facility consisted of four basic units: USTs, drum storage area, wet dumpster unit, and flammables storage shed. The drum storage area, wet dumpster unit, and flammables storage shed were all decontaminated on April 26, 1988 in accordance with the closure plan approved by PADEP on September 2, 1987. Closure of these units included removal and transportation of all remaining hazardous material to Safety-Kleen's recycling facility. Closure also required the decontamination of the units by pressure washing with a water/detergent solution with the collection of representative wash water samples. The areas were water-rinsed 5 times, squeegeed dry and vacuumed. The final rinse water was sampled and analyzed for designated laboratory analyses. The analytical results demonstrated that the attained decontamination levels were within the limits of the target decontamination levels. All wash water generated during the decontamination of the drum storage area, wet dumpster unit and the flammables storage shed was transported via vacuum truck to Safety-Kleen's recycling center.

Three USTs were present during operations; they were removed/closed in 1989. All the USTs were paved over with concrete. Visually contaminated backfill material was excavated and removed from the facility over two iterations. Analytical results collected indicated no lateral migration of fugitive mineral spirits had occurred. VOCs were not detected in the confirmatory samples. Subsequently, the excavation was backfilled with No. 2 limestone gravel. The area was covered with concrete pads.

No other releases were documented at the former facility. Reportedly, small spills were cleaned using rags and/or absorbent material.

On June 29, 1990, PADEP determined that Safety-Kleen had satisfactorily completed the closure of the hazardous waste container and tank storage facility. The closure certifications from the professional engineer (dated March 27, 1990) and Safety-Kleen (dated March 12, 1990) were acceptable. PADEP confirmed facility closure at a September 22, 1989 inspection.

**Groundwater:** There have been no known hydrogeological investigations conducted at the facility. On January 13, 1989, two soil borings were attempted to a maximum depth of 5.8 feet. No groundwater was encountered. The facility was not directly connected to a well or water system; the water line was tapped into Mr. Sigmund's building's water line and used during the spring, summer and fall.

Since the facility is located on the northwest flank of a northeast trending anticline, probable movement of the groundwater would be toward the northwest. Topographic features indicate that surface runoff would tend to move

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toward the west or west-southwest (GTI, 1989). Aquifer usage in the area surrounding the facility is primarily private water wells and springs; no municipal or township water authority serves the immediate area (GTI, 1989).

Three wells were identified in the Pennsylvania Groundwater Information System (PaGWIS) database within 0.5 miles of the facility (searched November 19, 2012). An industrial withdrawal well (228 feet deep) owned by Highland Tank is located approximately 800 feet southwest of the facility; a domestic well (100 feet deep) installed in 1984 is located 0.37 mile west-southwest of the facility; and a domestic well (37 feet deep) installed in 1966 is located 0.43 mile northwest of the facility. As the area is rural, and there are residences within 500 feet of the facility, it is possible that other wells may be present. It is likely that Mr. Sigmund's building was connected to a well (not identified in the PaGWIS database). Highland Tank currently is not connected to public water, and personnel use bottled water for drinking water.

A spring is located under Route 30 approximately 200 feet southwest of the facility. A resident who uses the spring had complained of "bad" tasting water (GTI, 1989).

The operations area was covered with concrete, minimizing water infiltration to the ground. Limited contamination observed in the backfill and adjacent soil/weathered bedrock was removed during UST closure activities. Analytical results collected indicated no lateral migration of fugitive mineral spirits had occurred. VOCs were not detected in the confirmatory samples. Poor water quality, as reported by GTI, and associated use of bottled water for drinking water by the facility and Highland Tank, may be related to the historic surface mining activity in this area, not as a result of historic Safety-Kleen operations.

**Air (Indoors):** VOCs were detected in the soil during the UST closure activities in 1989 within 100 feet of the building. The results of the samples collected from the bottom of the UST excavation detected various concentrations of TPH as mineral spirits (ranging from nondetect [ND] to 5,100 mg/kg), as well as low levels of 1,2-dichlorobenzene (ranging from ND to 11.00J mg/kg) (PADEP Statewide Health Standards, residential, medium specific concentration [MSC] 3,800 mg/kg), 1,4-dichlorobenzene (ranging from ND to 0.75J mg/kg) (PADEP MSC 40 mg/kg), trichloroethene (ranging from ND to 0.59 mg/kg) (PADEP MSC 260 mg/kg), trans-1,2-dichloroethene (ranging from ND to 2.50 mg/kg) (PADEP MSC 1,100 mg/kg), and 1,1,1-trichloroethane (ranging from ND to 2.20 mg/kg) (PADEP MSC 10,000 mg/kg). The analytical results of the wall samples collected near the bottom of the excavation indicated that no lateral migration of fugitive mineral spirits had occurred. VOCs were not detected in the wall samples. No soil constituents analyzed were detected above the MSCs (0-15 feet).

The former operations portion of the facility was essentially capped with the building floor and concrete pavement at the wet dumpster unit and over the USTs. Reportedly, small spills on concrete during operations were cleaned up using rags and/or absorbent material; they were reported to have not migrated to soil. As the detected VOCs observed during the closure of the USTs were below the PADEP MSCs, the VI exposure pathway is considered incomplete.

**Soil (Surface/Subsurface):** On January 13, 1989, two soil borings were attempted. Sandy clay was recovered in the spilt-spoons from 0 to 1.5/2.0 feet deep. Weathered sandstone was encountered at split-spoon refusal at 2.5 feet and 5.8 feet deep. Shale bedrock was exposed in the UST excavation.

Reportedly, any small spills were limited to the warehouse/containment area and paved areas. However, on October 10, 1985, PADEP conducted a hazardous waste inspection at the facility. It was noted that the ground near the wet dumpster unit was discolored and should be analyzed to determine if it was hazardous waste or the dry dumpster waste. The wet dumpster secondary containment system was composed of three connected steel trays with 6-inch sides and was used to catch material that may have been spilled during the use of the dumpster. During closure activities, the wet dumpster and the secondary containment system were cleaned, dismantled and removed.

The results of the samples collected during closure activities from the UST excavation detected various concentrations

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of TPH as mineral spirits (ranging from ND to 5,100 mg/kg), as well as low levels of 1,2-dichlorobenzene (ranging from ND to 11.00J mg/kg) (PADEP MSC 3,800 mg/kg), 1,4-dichlorobenzene (ranging from ND to 0.75J mg/kg) (PADEP MSC 40 mg/kg), trichloroethene (ranging from ND to 0.59 mg/kg) (PADEP MSC 260 mg/kg), trans-1,2-dichloroethene (ranging from ND to 2.50 mg/kg) (PADEP MSC 1,100 mg/kg), and 1,1,1-trichloroethane (ranging from ND to 2.20 mg/kg) (PADEP MSC 10,000 mg/kg). Lead and cadmium were not detected in the samples. The analytical results of the wall samples collected near the bottom of the excavation indicated that no lateral migration of fugitive mineral spirits had occurred. VOCs and cadmium were not detected in the wall samples; lead was detected (ranging from 41.00 to 20.00 mg/kg) (PADEP MSC 450 mg/kg) at concentrations less than the background sample (21 mg/kg). No soil constituents analyzed were detected above the PADEP Statewide Health Standards residential MSCs (0-15 feet).

**Surface Water/Sediment:** Drainage of the concrete pad and the former facility area is primarily to the southwest toward a culvert adjacent to Route 30. Additional drainage (a shallow drainage ditch) was located east of the driveway along Route 30. No storm sewer inlets were observed at the facility during the November 2013 site visit.

An intermittent stream, located approximately 1,000 feet to the west of the facility, flows toward the north approximately 1.25 miles, where it intersects Oven Run. Oven Run drains into Stony Creek. Stony Creek eventually flows into the Conemaugh River, approximately 15 miles to the north, in the city of Johnstown.

Based on information obtained from PADEP eMapPA (2013), the facility is not within the statewide floodplains or the FEMA 100 or 500 year floodplains of the nearby surface water bodies.

Reportedly, any small spills were limited to the warehouse/containment area and paved areas. Surface water drainage discharges into the storm water drainage culvert located southwest of the facility's driveway or into a small drainage ditch southeast of the driveway. There are no known or documented releases to the drainage culvert or drainage ditch during operations of the Safety-Kleen facility.

**Air (Outdoors):** Safety-Kleen operated/occupied the facility from May 1, 1975 through mid-1989 when they closed the facility and vacated the property. Available records indicate that the facility did not operate under an air permit. There are no records indicating that the facility generated any outside air emissions.

Considering the information presented within this EI and the reference document groundwater, soil, surface water, sediments, and air media are not known or reasonably suspected to be contaminated above appropriately protective levels.

**Reference:**

March 2014 Final Environmental Indicator Inspection Report

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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

Contaminated Media	Potential <b>Human Receptors</b> (Under Current Conditions)						
	<u>Residents</u>	<u>Workers</u>	<u>Day-Care</u>	<u>Construction</u>	<u>Trespassers</u>	<u>Recreation</u>	<u>Food<sup>3</sup></u>
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 mediareceptor 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):**

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

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4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**<sup>4</sup> (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):**

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):**

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<sup>4</sup> 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.

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6. Check the appropriate RCRIS 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 Safety-Kleen Corporation facility, EPA ID # PAD000738831, located at 5784 Lincoln Highway, Route 30, Stoystown, Pennsylvania 15563 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

4/22/14

(print)

Kevin Bilash

(title)

RPM

Supervisor

(signature)



Date

4-22-14

(print)

Paul Gotthold

(title)

Associate Director, Office of PA Remediation

(EPA Region or State)

EPA Region III

Locations where References may be found:

USEPA Region III  
Land & Chemicals Division  
1650 Arch Street  
Philadelphia, PA 19103

PADEP  
South West Regional Office  
400 Waterfront Drive  
Pittsburgh, PA 15222

Contact telephone and e-mail numbers

(name)

Kevin Bilash

(phone#)

215-814-2796

(e-mail)

bilash.kevin@epa.gov

**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.**