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 Systems, Inc.**
Facility Address: **150 Allenbill Drive Johnstown, Industrial Park, Johnstown, Pennsylvania 15904**
Facility EPA ID #: **PAD981736143**

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 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).

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		No known/documented releases to groundwater from operations.
Air (indoors)[2]		X		The facility operates under SOOP No. OP-11-00408; therefore, releases from routine operations are controlled under the permit. No violations of this air permit have been cited.
Surface Soil (e.g., <2 ft)		X		No known/documented releases to surface soil from operations.
Surface Water		X		No known/documented releases to surface water from operations.
Sediment		X		No known/documented releases to sediment from operations.
Subsurf. Soil (e.g., >2 ft)		X		No known/documented releases to surface soil from operations.
Air (outdoors)		X		The facility operates under SOOP No. OP-11-00408; therefore, releases from routine operations are controlled under the permit. No violations of this air permit have been cited.

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):

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

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

Safety-Kleen is a national solvent recycler and owns and operates the hazardous waste management facility (US Environmental Protection Agency [USEPA] Identification [ID] Number [No]. PAD981736143) located in Johnstown, Richland Township, Cambria County. The 2.4-acre service center (facility) was designed to facilitate the handling (accumulation) and storage of the wastes (transfer station) resulting from the services offered bySafety-Kleen. The services include parts cleaner waste (mineral spirits and immersion cleaner), dry cleaner waste (filter cartridges, powder residue, and still bottoms), and paint waste (thinners and paints) collection/recovery.

Safety-Kleen moved their Stoystown operations to Johnstown on April 23, 1988. The facility is located in the Johnstown Industrial Park. Safety-Kleen collects waste organic liquids from various conditionally exempt small quantity generators (SQGs) and commercial facilities (including gasoline stations, body shops, paint shops, etc.), and stores the waste materials on site until the wastes can be shipped off site to a Safety-Kleen recycling facility or contracted reclaimer and returned to customers as product. The area is zoned for light industrial use. North and west of the property are large warehouse facilities. Immediately north, east and south of the facility is open and wooded land.

The property is rectangular in shape with the shorter side along Allenbill Drive. A large warehouse is located in the southern central portion of the property. An asphalt driveway/parking circles the warehouse, with parking located south, west, and northeast of the building. A loading dock is located on the east side of the warehouse. Farther east, beyond the loading dock and the driveway, is a retention pond. Three ASTs are located north of the warehouse, beyond a grassed area. Within the grassed area is the aboveground piping to the ASTs and a concrete pad. West of the warehouse, beyond the driveway, is a concrete pad/diked area containing the frac tank. The frac tank location was the original proposed location of the tank farm; however, the location did not meet specifications. The diked area was never used for storage, but it was occasionally used for truck parking

The facility is a large quantity generator (LQG) of hazardous waste and is a permitted hazardouswaste storage and transfer facility. The wastes arrive in US Department of Transportation (DOT)-approved containers, including 55-gallon drums, 30-gallon drums, 16-gallon drums, and Safety-Kleen parts washer tanks.

The 1991 Environmental Priorities Initiative Preliminary Assessment (PA) performed by NUS Corporation (NUS) for the USEPA identified four solid waste management units (SWMUs) at the facility: a barrel (drum) washer (SWMU 1), a waste storage area (SWMU 2), a waste oil sample locker (SWMU 3), and a storage tank farm (SWMU 4). SWMUs 1, 2, and 4 handle or store hazardous waste.

The 1988 Part B of the hazardous waste permit application identified the following waste storage units.

Storage Unit	Capacity (gallons)	Secondary Containment (gallons)	Materials to be Stored
Container Storage – Warehouse	6,912	2,645	Dumpster sediment – D001, D006, D008 Spent immersion cleaner – F002, F004 Dry cleaning waste – F002
Container Storage – Warehouse	1,375		Paint waste – D001, D006, D007, D008, F003, F005
Storage Tank	15,000 (initially reported as 12,000 gallons)	22,440	Spent mineral spirits solvent – D001, D008

The 2004 permit allowed the following waste to be stored.

Storage Unit	Capacity (gallons)	Materials to be Stored
Container Storage – Warehouse	3,418 (operating capacity)	D001, D004-D011, D018, D019, D021-D030, D032-D043

Storage Tank	15,000 (14,250 operating capacity)	D001, D004-D011, D018, D019, D021-D030, D032-D043

The 2011 PPC plan identified the following hazardous waste storage: 1) tank - 15,000 gallons, 18,356-gallon containment capacity for spent parts washer solvent; and 2) container storage warehouse - 3,418 gallons, 341.8-gallon containment capacity for spent immersion cleaner, dry cleaning waste, spent parts washer solvent, dumpster sediment, and paint waste. The plan identified the following nonhazardous waste storage: 1) portable frac tank – 16,000 gallons, 17,600-gallon containment capacity for waste oil, oily water, and antifreeze (replaced with a 18,000-gallon tank in October 2013); and 2) tank – 15,000 gallons, 18,356-gallon containment capacity for waste oil, oily water, and antifreeze.

SWMU 1 – Barrel Washers (Return/Fill Area with Wet Dumpster/Barrel Washer)
Although NUS identified SWMU 1 as the barrel washers, the entire return/fill area is best described as SWMU 1. One wet dumpster unit for waste mineral spirits waste was originally installed in each of the two bays at the facility. In 1990, one wet dumpster unit was replaced with a drum washer unit. One wet dumpster and a drum washer were observed in the return/fill area during the 2013 site visit; however, the drum washer is not used. (Note: the new hazardous waste permit will not include the drum washer.) The waste solvent from the off-site generators is transferred from the drums directly into the spent solvent reservoir via the wet dumpster. The trucks back into the bays and personnel unload the containerized materials onto the elevated, grated platform that spans the center of the room. The wet dumpster sits atop the platform and overtop of a steel spent solvent reservoir (sump). The wet dumpster is a 4-foot by 8-foot rectangular box with a screen on top for removing debris. The spent solvent passes through the screen and into the spent solvent reservoir. The spent solvent reservoir is essentially a steel box located beneath the elevated grated floor and it sits directly on the concrete floor. There are drip pans beneath the platform in front of each dumpster to collect any spills that occur while emptying the drums.

Currently, the drums are emptied by hand one at a time into the dumpster. The bottoms (sludges) are sucked from the drums over the wet dumpster. Then, the drum is manually rinsed with clean solvent from the fill nozzle. After cleaning for approximately 30 seconds, the drum is air dried on a stand resting over the spent solvent reservoir. Once dry, the drums are filled with clean mineral spirits using a gas service-station-type nozzle, capped, and then shipped to the customer.

Historically, for the drum washer (currently not in use at the facility), the empty drums were brought one at a time to the drum cleaning area and placed on two roller brushes above the spent solvent reservoir. When the drum washer was turned on, the brushes rotated and cleaned the outside of the drum while the inside was sprayed clean with spent solvent. Wastes from the drum washer were handled the same as the wet dumpster. A floor sump is located between the two dumpsters.

Solvent from the spent solvent reservoir is automatically pumped to a 15,000-gallon AST, which is periodically unloaded by a tanker and trucked to the nearest Safety-Kleen recycling facility. The shipments from the facility are manifested with Safety-Kleen as the generator. Historically, the washer and dumpster processes generated approximately 700,000 gallons of spent mineral spirits annually. Currently, the dumpster processes approximately 200,000 gallons annually.

Sludges that accumulate in the dumpster from the transfer of the solvent from drums to the storage tank are cleaned out by shovel every 2 weeks. The waste is placed into 55-gallon drums for off-site disposal.

In addition, each bay has its own 18-inch, self-contained, concrete subfloor sump to receive spills that may occur in the bays. The floor beneath the platform is sloped toward the sumps. Also, the floor in each bay is sloped toward the respective sumps. Liquids contained in the sumps are pumped into the wet dumpster. NUS reported three explosion-proof sumps that can contain 30 to 40 gallons of material each in case a spill is within the wet dumpster barrel washer area. NUS also reported that wet dumpster washers are equipped with alarm systems.

No releases from this unit have been reported.

SWMU 2 – Waste Storage Area (Container Storage Area)
The container waste storage area is located centrally within the warehouse. The container storage area in the warehouse is used for the storage of (1) sediment from cleaning the dumpsters in the return and fill station, (2) spent immersion cleaner, (3) dry cleaning wastes, and (4) paint wastes.

The drum storage area has secondary containment in the form of a sloped floor with a 12-foot by 2-foot by 1.75-foot (312-gallon) collection trench located in the caged product storage area. The sloped floor holds 2,333 gallons; no more than 6,912 gallons of spent solvents will be stored in the drum storage area at any time. At least 2 feet of aisle space are maintained and the drums will be stored no more than two high. Some containers in the storage area are placed on pallets and moved with a forklift.

During the November 2013 site visit, the wastes were stored in drums/containers directly on the concrete floor or on pallets in the building and in a truck trailer adjacent the building. The floor of the storage area is epoxy-sealed and sloped to a self-contained grated, concrete collection trench (in the fenced in product storage area). Secondary containment consists of the interior concrete walls and a 6-inch-high curb that surrounds the storage area. Liquids contained in the trench are pumped out and passed through the wet dumpsters (and ultimately pumped to the 15,000-gallon waste solvent AST).

No releases from this unit have been reported.

SWMU 3 – Waste Oil Sample Locker
The waste oil sample locker is approximately 6 feet by 6 feet by 2 feet in size and is located within the fenced in portion of the warehouse. The locker is used to store used oil samples collected from automotive service centers. A 5-ounce sample is taken from each bulk oil pick-up. The sample is collected to facilitate tracking in the event that the oil may contain any hazardous substance. The samples are kept for a period of 90 days. After the 90-day period, the oil samples are emptied into the washer (maximum of 2 gallons), and the glassware is internally recycled.

The cabinet serves as the chief release control. The used oil samples are kept in individual 5-ounce bottles, and the potential for release is low. A collection trench is located approximately 10 feet from the cabinet.

No releases from this unit have been reported.

SWMU 4 – Storage Tank Farm (Waste Solvent Tank)
The storage tank farm is located on the north side of the facility. The tank farm is aboveground and has a secondary storage capacity of 22,440 gallons. There are three tanks; however, only one tank, No. 3, 15,000-gallon capacity, contains waste solvent from the wet dumpster/barrel washing operations. Historically, the tank used to store the spent mineral spirit solvent; both low and high flashpoint solvents were stored in the same AST.

No releases from this unit have been reported.

Areas of Concern (AOCs)
No AOCs have been formally identified for this facility. An AOC was identified during the November 2013 site visit in the 18,000 gallon frac tank located west of the building. The double-walled AST contains oily water, waste oil, and anti-freeze (residual waste), and is located on a concrete pad with three concrete walls. A sump is located in the northwest corner. Drip plans are used when transferring the residual waste.

On July 26, 2007, Safety-Kleen stated the tank (originally 16,000 gallons) was constructed with 110 percent secondary

containment and will be set on a concrete pad that had all cracks ground out and sealed, and the entire concrete area chemically sealed. The pad would hold several hundred gallons in the event a small spill occurs while loading/unloading the tank.

No releases from the AOC have been reported.

Over the course of operations, minor spills have occurred. Copies of the spill reports, which include the date and a brief description of these spills, are maintained at the facility. Any small spills were limited to warehouse/containment area and paved areas; they were reported to have not migrated. The floors of the building are epoxy sealed. Some cracks were observed during the 2013 site visit; however, the cracks have been sealed. The facility has containment structures and sumps in place around their tanks and drum storage areas. The areas are routinely inspected for cracks and sealed

Residents in the area rely on public and private supplies utilizing surface water and groundwater sources for their water supply (NUS, 1991). No wells were identified in the Pennsylvania Groundwater Information System (PaGWIS) database within 0.5 miles of the facility. No wells are present at the facility.

There have been no reports of major spills or releases at the facility. Accordingly, no exposure pathway/release controls are relevant.

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):

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):

[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.

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):

__X__ 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 Systems, Inc.** facility, EPA ID # **PAD981736143**, located at **150 Allenbill Drive, Johnstown Industrial Park, Johnstown, Pennsylvania 15904** 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 8/6/14

(print) Kevin Bilash

(title) RPM

Supervisor (signature) _____ Date 8-12-14

(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

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