US EPA ARCHIVE DOCUMENT

STATEMENT OF BASIS/FINAL DECISION AND RESPONSE TO COMMENTS SUMMARY

REGION IV
ID # 7451
KYD 981 027 451

Safety-Kleen Corporation
Ashland, Kentucky
(Signed)

Facility/Unit Type: **Distributes/collects cleaning solvents**
Contaminants: **Arsenic, Barium, Chromium, Lead, Mercury, Acetone, Toluene**
Media: **Soil**
Remedy: **No further action**

FACILITY DESCRIPTION

The Ashland, Kentucky Safety-Kleen facility began operation in 1985 on leased property approximately one mile west of the intersection of I-60 and State Route 180. This area was previously used for strip mining. When mining activities ceased, the vacant land was turned into a industrial park in 1980 and the facility structure was constructed in 1982. Prior to Safety-Kleen's occupancy of the facility, the facility was used for heavy equipment storage.

The facility is primarily a local sales/service office and warehouse for Safety-Kleen products. The company leases small parts washing equipment to automotive repair and industrial maintenance shops. Safety-Kleen's contractual agreement with their customers provides regularly scheduled solvent changes and machine maintenance. They also provide a pick-up service for paint and dry cleaning wastes. Safety-Kleen maintains ownership of all solvents.

The 1990 visual site investigation of the Safety-Kleen facility revealed several storage areas, including three drum storage areas for solvent and paint waste, a tank storage area for spent mineral spirits and sediments, a concrete pad, a wet dumpster area for solvent return, and a gravel driveway which was used for truck washing.

Safety-Kleen was issued the Federal portion of its RCRA permit on September 28, 1990. The permit became effective on November 1, 1990.

The geologic unit immediately beneath the Safety-Kleen facility is the Breathitt Formation which is comprised of three cyclothymic zones and two coal beds (the Princess No. 7 and the Princess No. 3 coal beds).

These geologic units have been disturbed by strip mining operations. Mining operations removed the Princess Coal Beds. The present sequence beneath the site may be comprised of a layer of replaced overburden materials derived from the Bearthitt Formation. These materials unconformably overlay the lower portion of the Breathitt Formation.

Groundwater resources in the area are derived from two principal sources. Abundant yields ranging up to 500 gallons per minute can be derived from alluvial sediments along the Ohio River (10 miles north of the facility) with lesser yields approximately 100 gallons per minute obtained from alluvial filled valleys along tributaries of the Ohio River. Most wells are not capable of sustaining domestic use. Depths to groundwater range from 10 to 80 feet.

EXPOSURE PATHWAYS

Soil and groundwater are the two potential pathways for environmental exposure. Safety-Kleen routinely transfers waste mineral spirits and used antifreeze from containers and/or tanks to the storage tanks at the facility. Containerized material stored in the warehouse is stored in the container in which it is received. These wastes and transfers are managed and performed in a manner which nearly eliminates all potential for releases to the environment. Further, results obtained from the Confirmatory Sampling (CS) Report and Phase I of the facilities RCRA RFI Report indicate that no hazardous constituents above action levels were present in soils at the solid waste management units (SWMUs)

CONTAMINATION DETECTED AND CLEANUP GOALS

Media	Estimated Volume	Contaminant	Maximum Concentration (mg/kg)	MCL Action Level (mg/kg)	MCL Cleanup Goal	Point of Compliance
Soil	Not given	Arsenic Barium Chromium Lead Mercury Acetone Toluene	16 210 22 34 0.3 2.3 0.086	23 5,600 400 N/A 20 8,000 20,000	Not given	Not given

examined. However, if a release to the environment were to occur it would most likely be to surface soils located beneath the gravel driveways of the facility. Due to the low level of hazardous constituents found in the soils, it was determined that the need for groundwater evaluations was not necessary.

If a release were to occur, there are three potential human exposure pathways: 1) the general public off site; 2) direct contact to general public on site; and 3) direct contact to workers on site via ingestion.

It is believed that visitor access to the site is rare, and other exposure to the general public off site is unlikely due to the facility structure. The facility is bordered along the front of the property. The remaining area is fenced, with controlled access through three locked gates and one overhead door to the main building. Direct contact to workers on site via ingestion of contaminated groundwater is also unlikely because the facility is served by city water and sanitary sewers.

SELECTED REMEDY

The 1990 RCRA RFA for Safety-Kleen identified 3 of the 7 SWMUs as potential sources of a release to the environment. The SWMUs identified were SWMU 5 (the tank loading/unloading area), SWMU 6 (the truck washing area), and SWMU 7 (the drum storage warehouse). A CS plan and CS report addressing these three SWMUs was prepared and implemented.

In a letter dated September 30, 1992, EPA and Kentucky Department for Environmental Control (KDEP) directed Safety-Kleen Corporation to prepare and RFI workplan to address SWMUs 6 and 7. No further actions were required for SWMU 5.

On October 15, 1992, a spill occurred during the transfer of waste mineral spirits from the tank system to a tanker truck located in the truck loading/unloading area. Approximately 90 gallons of waste mineral spirits were released to the gravel pavement of the facility. An emergency response resulted in the excavation of approximately 70 to 90 cubic yards of contaminated soil and gravel. Safety-Kleen provided written documentation of the emergency response in an October 30, 1992 letter to KDEP. The letter also stated that the spill would be designated as area of concern 1 (AOC1) and that determination of the nature and extent of the contamination would be addressed in the RFI Workplan.

The Phase I sampling required in the RFI Workplan was completed on March 15, 1994. Arsenic, barium, chromium, lead, mercury, acetone, and toluene were detected in soils at the facility.

Sampling results indicated that the upper tolerance level (UTL) for arsenic (9.4 mg/kg) was exceeded in two locations, AOC1 and SWMU 7 both at a concentration of 16 mg/kg. The UTLs for all other detected constituents at the site were not exceeded.

However, the maximum concentration for each contaminate at the Safety-Kleen facility is well below its respective action level as described in the proposed corrective action rule (55 FR 30798, July 1990).

Before determining that no further action was

warranted at the facility, Region IV decided to compare the average concentration of all the constituent to their respective soil screening levels. The intent of this exercise was to compensate for the lack of groundwater data. Soil screening levels were used as a guideline because they take into consideration exposure to soil contaminants via ingestion, inhalation, and migration to groundwater. The concentration for each contaminant at the Safety-Kleen facility was determined to be well below its respective migration to groundwater pathway levels.

Based upon the above results, no further action is required at the facility.

INNOVATIVE TECHNOLOGIES CONSIDERED

None.

PUBLIC PARTICIPATION

A HSWA Modification to incorporate the "No Further Action" recommendation will be submitted for public comment. If no petition for review is filed by the facility, the Federal portion of the RCRA permit will become effective thirty days after issuance.

NEXT STEPS

The facility will continue to monitor its operations for previously unidentified or newly created SWMUs/AOCs. If new SWMUs/AOCs are discovered/created, the facility will notify EPA.

KEYWORDS:
Groundwater, Soil; Direct Contact, Ingestion; Arsenic, Barium, Chromium, Lead, Mercury, Acetone, Toluene; Dry Cleaning, Mineral Spirits, Spent Immersion, Sediments; Monitoring; No Further Action

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