



State of Ohio Environmental Protection Agency

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December 3, 2007

Mr. Robert Schoepke, P.G.
Director - Remediation
Safety-Kleen Systems, Inc.
1502 East Villa Street
Elgin, IL 60120

Re: **Safety-Kleen Systems, Inc.**
Hebron Recycle Center
TSD/LQG
OHD980587364/01-45-0518
Licking County, CDO
NOV

Dear Mr. Schoepke:

On September 17, 2007, Ohio EPA received the January to June 2007 Semiannual Corrective Action Progress Report from Safety-Kleen Systems, Inc. (Safety-Kleen) for the Hebron Recycle Center in Licking County. This report was reviewed for compliance with Ohio's hazardous waste laws and rules as found in Chapter 3734 of the Ohio Revised Code (ORC) and Chapter 3745 of the Ohio Administrative Code (OAC) and the terms and conditions of Safety-Kleen's hazardous waste permit.

We found the following violations of Ohio's hazardous waste rules and Safety-Kleen's hazardous waste permit:

1. **OAC Rule 3745-50-58(A) and Permit Condition E.9(a)(vi)(b), Ground Water Sampling:** The permittee must comply with all conditions of the hazardous waste permit. Pursuant to Permit Condition E.9(a)(vi)(b), Safety-Kleen must analyze for the presence of metals in unfiltered samples and should also collect filtered samples from wells in which a turbidity level exceeds five (5) nephelometric turbidity units (NTUs) despite reasonable care to minimize turbidity.

Unfiltered metal samples have not yet been collected from any of the 15 wells where modified appendix sampling was to be conducted in accordance with Permit Condition E.9(a)(vi)(b). This violation was also noted in Ohio EPA letters dated June 7, 2007, and October 26, 2007.

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

- ☛ To return to compliance, Safety-Kleen must resample all of the wells listed in Permit Condition E.9(a)(vi)(b), analyze for the presence of metals in unfiltered samples, and provide Ohio EPA with the results. Ohio EPA recommends that Safety-Kleen use a low flow purge and sample method to minimize turbidity. Safety-Kleen may resample the wells as part of the next ground water sampling event scheduled for December 2007. In addition, Safety-Kleen must establish conditions for any confirmed naturally occurring constituents in accordance with Permit Condition E.9(a)(vii)(b).

In addition, as stated in Ohio EPA's October 26, 2007, letter, Safety-Kleen remains in violation of the following hazardous waste rule and permit condition:

- 2. OAC Rule 3745-50-58(A) and Permit Condition E.9(a)(vii)(a), Ground Water Confirmation Sampling:** The permittee must comply with all conditions of the hazardous waste permit. Permit Condition E.9(a)(vii)(a) requires Safety-Kleen to conduct confirmation sampling within thirty (30) days of the date the data is reported and validated.

Confirmation samples for metals were not conducted for any of the 13 downgradient monitoring wells subsequent to the initial modified appendix sampling conducted in April 2006, although confirmation sampling was conducted for volatile organic compounds (VOCs). In addition, confirmation sampling was conducted in the background wells, but not for the appropriate metals samples.

- ☛ To return to compliance, Safety-Kleen must resample all of the wells listed in Permit Condition E.9(a)(vi)(b) to analyze for metals. If the sampling results in the detection of any metals, Safety-Kleen must conduct confirmation sampling within 30 days of the date the data is reported and validated and provide the results to Ohio EPA. Safety-Kleen may resample the wells as part of the next ground water sampling event scheduled for December 2007.

Violation #3 from the October 26, 2007, letter is being addressed under separate cover.

General Comments

- 1. More information is needed to determine whether Safety-Kleen is in compliance with Permit Condition E.9(a)(iv), which requires the permittee to perform semi-annual ground water monitoring and reporting.** The chain-of-custody and laboratory sample receipt forms need to be submitted for the ground water samples received by Analytical Services, Inc. laboratory on March 15, 2007, and June 16, 2007.

The Tier I data validation review found that the above requested items were absent from the report. The documents are needed for Ohio EPA to evaluate the data quality from the associated ground water sampling events.

2. **Ohio EPA strongly recommends that Safety-Kleen install additional monitoring wells in all three ground water bearing zones to adequately determine the complete extent of contamination in groundwater in both horizontal and vertical directions.** These wells are needed to define the extent of contamination for purposes of completing the risk assessment required by Permit Condition A.27(a)(ii) and for monitoring the effectiveness of the corrective action program specified in Permit Condition A.27(a)(iii). Ohio EPA should be consulted for concurrence with new well locations prior to installation by Safety-Kleen.

Note: Direct push technology should be used to conduct screening in the shallow zone to identify the best areas to install additional shallow wells.

3. **Ohio EPA recommends that Safety-Kleen evaluate the effect of contaminant discharge to the river from the shallow ground water zone.** Contaminants have been observed in the wells located closest to the river (H-23S and H-24S) where the shallow ground water zone discharges to the river. All chemicals of concern (COCs) identified in ground water should be evaluated for impacts to the river, including metals once they have been properly evaluated.
4. **Ohio EPA recommends taking additional steps to obtain representative samples of ground water for metals.** In the past, Safety-Kleen has purged the wells and then allowed them to stabilize overnight in order to reduce turbidity. This practice is likely to result in the loss of COCs in the ground water prior to sampling. Loss of COCs can occur due to the change in oxidation state as ground water flows from the formation into the well, leading to precipitation of metals, as is seen with the scale formation on the well screens at the site.

Ohio EPA recommends taking the following steps to obtain representative ground water samples:

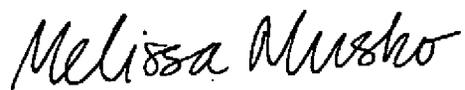
- a. Redevelop any wells currently producing turbid samples to reduce turbidity.
 - b. Purge wells and sample ground water immediately after purging.
 - c. Sample the ground water immediately after purging.
 - d. Collect and immediately preserve unfiltered samples.
 - e. Any filtered samples should be field-filtered and immediately preserved to prevent loss of COCs due to precipitation.
5. **Ohio EPA recommends that all wells installed in the middle or deep water bearing zones be installed using methods which prevent cross-contamination from overlying water bearing zones.** This can be achieved through the use of telescoping or double-cased well installation methods.

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6. Ohio EPA recommends that all new COCs detected during the modified appendix sampling continue to be sampled and analyzed in all wells during each sampling event until the background concentrations can be established. Following this recommendation would enable Safety-Kleen to begin statistical analysis of detected contaminants across the site soon after background values have been established.
7. Ohio EPA recommends that metals be sampled at a quarterly frequency in background wells H-1S and H-1DD until sufficient data has been collected to establish background levels in ground water in accordance with Permit Condition E.9(a)(vii)(b).

Should you have any questions, please feel free to call me at (614) 728-3887. You will find copies of the rules and other information on the division's web page at: <http://www.epa.state.oh.us/dhwm>.

Sincerely,



Melissa Musko
Environmental Specialist
Division of Hazardous Waste Management
Central District Office

c: Stephen Lear, Safety-Kleen Systems, Inc.
Tammy McConnell, DHWM/CO
Randy Sheldon, DHWM/CDO
Jason Reed, DDAGW/CDO
CDO File

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NOTICE:

Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with all applicable regulations.