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CERTIFIED MAIL
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Article Number: P 619 183 623

Geoff Jones
Corporate Project Manager
Safety-Kleen Corporation
P.O. Box 11393
Columbia, South Carolina 29211

Dear Mr. Jones:

RE: Safety-Kleen Corporation
Wichita, Kansas
EPA ID# KSD007246846

The Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment (KDHE) have reviewed the revised RCRA Facility Investigation Workplan dated February 24, 1999 (RFIWP). The EPA does not approve the RFIWP as written, however, with a few changes in the form of revised pages, the RFIWP will be approved.

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ARTD: H:\RCAP BRANCH\LOWE UNIT\LOWE\SKLEEN\skl-hri-wp.699: bfr June 22, 1999

RCAP	**RCAP**
LOWE	**PEDICINO**
WP 7/1/99	WP 7/2/99

R00132569
RCRA RECORDS CENTER

4. **Section 5.4, Groundwater Data Collection, SK must add a third bullet as follows**: To identify data gaps, for resolution in future investigation phases, to complete the horizontal and vertical definition of any contaminant plumes, originating from facility releases, both on and off the facility, this must be stated in the RFIWP.

5. **Section 5.4.4, Analytical Testing of Groundwater Samples:** The groundwater plume must be defined horizontally and vertically to levels below MCL's.

6. **Section 5.4.4, Analytical Testing of Groundwater Samples:** The EPA suggests that SK review the analytes recommended in the EPA document Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater (EPA/600/R-98/128.) This will help ensure that SK collects the appropriate samples and performs the proper analysis to evaluate the potential for natural attenuation.

7. **Section 6.2, Data Presentation:** SK must include a table listing the "Preliminary Remediation Goals" (PRGs) for each target analyte.

8. **Section 6.2, Data Presentation:** The Phase I RFI Report must identify any data gaps that will require subsequent investigations, including off site investigations that may be necessary to complete the definition of the horizontal and vertical extent of contamination as required in the Facility Permit, Part II, Section VII. 4. C.

9. **Section 6.4, Proposed Stage 1 Action Levels:** See Comment 4 above. The EPA and KDHE have not agreed that "industrial land use PRGs" are appropriate. Depending on the definition of these PRG's, they may or may not be determined protective. Since this determination will be made later in the corrective action process, SK should define the extent of soil contamination to levels that are protective of groundwater. For many constituents, these levels are tabulated in the April 19, 1996 EPA Region III Risk Based Concentration Table. If SK does not have a copy of the Region III table, the EPA will furnish a copy.

10. **Section 6.5, Health and Environmental Assessment:** SK should explain in the RFIWP that the HEA will follow the guidance provided in the document Risk Assessment Guidance for Superfund Parts A through D.

KDHE reviewed this document with regards to KDHE's source control measures scope of work and evaluated the ability of the proposed investigation to determine if the Safety-Kleen facility is or was a contributing source of contamination to the ground water in the NIC site. KDHE provides the following comments:

1. **Section 3.3.2. Aerial Photographs, Page 6-7:** KDHE notes that an air photo circa 1980 was not utilized in this evaluation. KDHE also notes that there was a significant level of activity and changes occurring at the site during the late1970's to mid 1980's, and that a number of environmental violations were documented by the EPA and KDHE Bureau of Waste Management during this time. KDHE notes that a photo from this time period might help pinpoint potential problem areas

and, in particular, might help locate two potential source areas identified in documentation dated April 1978 and December 1980, respectively:

1) the hand dug trench diverting waste solvent and still bottom sludge under the facility fence to the drainage channel, and

2) the propane tank cut in half and utilized as a settling tank/sludge separator in the southwest corner of the site. No sampling has been proposed to locate and characterize these potential source areas. KDHE requests that the locations of these activities be determined to the extent possible and presented in the investigation report. Appropriate samples should be collected from these areas either as part of this investigation or a subsequent investigation. KDHE suggests that the sampling include sediment samples from the drainage channel north of the facility.

2. **Section 5.3.2. Sampling Locations and Selected Analytes, Page 20:** The second to last paragraph in this section indicates that the disturbed areas in the northeastern most corner of the site (northeast of Building K) are reportedly associated with non-hazardous household debris, and no sampling was proposed in this area. KDHE files indicate that waste solvent tanks, accessed by trucks, were located in this extreme northeast corner of the site. Acid tanks may also have been located in this area. Soil gas samples collected in this general area in 1992 indicated the presence of various chlorinated solvents. KDHE requests that sampling be conducted in the north east portion of the facility.

3. **Section 5.3.4. Sampling Intervals and Selection, Page 21:**

A. It is not clear to KDHE how the sampling depths stated on Table 4 for B-4, B-25, and B-26 were determined. KDHE notes that due to the former activities in the vicinity of B-24 and B-25, both shallow and deep soil samples may be appropriate. KDHE recommends determining sample depths in the field based on head-space screening, soil staining, or other applicable indicators.

B. KDHE requests that sampling location B-35 also be advanced to a depth greater than three feet due to the potential that the former lagoon area may have been backfilled to bring the area up to grade. Sample depth should be determined in the field based on appropriate indicators.

C. The Workplan must include a SOP or description for collecting soil head-space measurements.

4. **Section 5.4.1. Monitoring Well Installation and Development, Page 22:** KDHE agrees that the proposed wells should be sufficient for assessing the ground water gradient and flow direction across the site. However, KDHE is concerned that ground water quality, both on site and upgradient, cannot be fully

assessed without well pairs that evaluate both shallow and deep water at the same location, and without water samples from the vicinity of potential source areas. Work in the Wichita area has shown that the groundwater contamination often exhibits a significant vertical stratification within the alluvial aquifer. There are many variables that affect this stratification, such as: specific gravity of the compound, age of the release, distance from source area, differential permeability in the aquifer, or differential degradation rates. A good understanding of the vertical stratification of contamination at the facility will be necessary for adequate interpretation of the data since this site has many complicating factors. These factors include: the long history of chemical handling and the potential for multiple releases over a long time frame; petroleum contamination upgradient and down gradient which may increase degradation rates in the shallow zone of the aquifer; and potential chlorinated solvent impact from upgradient sources. Due to the history of the site, documented poor handling practices in the past, and the nature of the alluvial sediments as discussed in the comment letter dated September 28, 1999, soil sampling based primarily on identified SWMUs, AOCs, and limited aerial photos, may miss potential source areas. Therefore, the currently proposed level of groundwater sampling will not fully satisfy KDHE's requirements for ground water characterization, even if little or no soil contamination is identified.

KDHE strongly recommends collecting shallow and deep groundwater samples with the geoprobe from some of the proposed soil boring locations. The following locations are suggested for evaluating potential source areas and ground water quality across the site: B-8, B-20, B-22, B-24, B-31, B-35, EB-1, EB-2, EB-5, and several upgradient locations. This list of potential ground water sampling locations is not intended to be definitive. KDHE acknowledges that this work could also be performed in a subsequent phase of work after collecting ground water gradient data from the proposed wells.

5. **Section 5.4.1. Monitoring Well Installation and Development, Page 23:** No criteria is provided in the text or in SOP #6-B for determining when a well has been sufficiently developed. KDHE policy typically requires development to continue until field parameter measurements have stabilized to within 10% for three consecutive measurements, fines have been removed from or significantly reduced in the ground water.

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7. **General:** KDHE has diagrams or photos showing tanks and tanks or truck trailers located both east and west of the fence running north from the northeast corner of building I. Samples have not been proposed in this immediate area but, depending on sampling results, may be requested in the future.

Please provide two copies of the Revised Pages, including revised binder inserts within 30 days of your receipt of this letter to: William F. Lowe, US EPA ARTD/RCAP, 901 N. 5th Street, Kansas City Kansas, 66101, plus two copies of the Revised Pages to KDHE.

If you have any questions, or wish to meet to discuss these comments, call me at (913) 551-7547 and I will arrange a meeting/conference call with EPA and Christine R. Jump, State Remedial Unit/Remedial Section, Kansas Dept. of Health and Environment, Forbes Field, Building 740, Topeka, Ks. 66620-0001

Sincerely,

William F. Lowe
Unit leader
RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division

cc: Ms. Kay Tauscher, Safety-Kleen Inc.
Christine R. Jump, KDHE

Ms. Kay Tauscher
Safety-Kleen Inc.
5665 Flatiron Parkway
Boulder Colorado 80301

Christine R. Jump
State Remedial Unit/Remedial Section
Kansas Dept. of Health and Environment
Forbes Field, Building 740
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

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Sincerely,

William F. Lowe

William F. Lowe
Unit leader
RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division

cc: Ms. Kay Tauscher, Safety-Kleen Inc.
Christine R. Jump, KDHE

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Corporate Project Manager
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