Dist Review of Contamination Assessment Report & CAP dated 11/91.

Black Book

RCRA PERMITTING -- ROUTING SLIP

Facility/Item: Safety Kleen - Tallahassee

Pats No: H037-171747

Date Document Received: _____

Date Action Required: _____

Action Is: Urgent

Routine

TO	Name	SIGNATURE	DATE
	JOHN GRIFFIN		
	DIANE HUNT		
	SATISH KASTURY		
	SHELTON GRAVES		
	RABIN PRUSTY		
X	DOUG OUTLAW	DO	3/11/92
X	MERLIN RUSSELL	MRR	12 Mar 92
	CINDY SMITH		
	LORRAINE CLARK		
	JANET ASHWOOD		
	BILL NEIMES		
X	Camille - cc EPA extra copy attached		

~~but EPA~~ not an L.D

REQUIRED ACTION & COMMENT:

Camille

RETURN TO: Doug Outlaw FOR FILING !

LOGGED IN

Florida Department of Environmental Regulation

Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794

Lawton Chiles, Governor

Carol M. Browner, Secretary

February 28, 1992

FLD982133

Ms. Deborah Green
Senior Project Manager
Safety Kleen Corporation
777 Big Timber Road
Elgin, Illinois 60123

Dear Ms. Green:

As part of the Closure Permit Application for the Entrepot Boulevard facility in Tallahassee, we have reviewed the Contamination Assessment Report and the Corrective Action Plan dated November 1991. These documents do not appear acceptable. I am enclosing our staff review comments for your information and compliance.

If you have any questions, please call Bill Kellenberger at (904) 436-8360.

Sincerely,

Thomas W. Moody

Thomas W. Moody, P.E.
Waste Management Program
Administrator

TWM:bkk
Enclosure
cc: Shelton Graves
John G. Hodges

RECEIVED
MAR 2 1992
HAZARDOUS WASTE
PERMITTING

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee

To: _____ Location: _____
To: _____ Location: _____
To: _____ Location: _____
From: _____ Date: _____

Interoffice Memorandum

TO: William E. Kellenberger, P.E.

THROUGH: Michael S. Kennedy, P.G.

FROM: Robin M. Bjorklund

DATE: February 4, 1992

SUBJECT: Safety-Kleen Corp. Tharpe Street Facility - Contamination Assessment Report (CAR), Risk-Based Demonstration Document, and Corrective Action Plan Leon County

I have reviewed the subject documents, and am providing the following comments for your information.

This facility is located in a paleo-karst environment that is characterized by karstic processes and features and is typified by discontinuous aquifers, confining units and semi-confining units. This means that hydraulic connection between the units is the rule rather than the exception. The aquifer systems present at this site appear to be the intermediate system and the Floridan Aquifer. This facility has demonstrated that considerable soil contamination and groundwater contamination of the intermediate system exists at the site.

Soil sampling has been limited to the tank farm area. The extent of the soil contamination appears to encompass the horizontal area of the tank farm and extend vertically to the groundwater table (approximately 7.5' BLS). It is unclear if soil sampling is needed elsewhere at the site. The fact that groundwater contamination has been detected at MW-1S/B-1, which is located to the west of the site, indicates that contamination is more wide-spread than would be expected and additional soil sampling may be necessary. Therefore, at this time it is uncertain if the extent of all the soil contamination has been delineated.

The soil contamination in the tank farm involves a variety of metals and volatile organics. The report compares the concentrations of soil contamination with "Action Levels" from proposed rule 40 CFR Part 264.521. The action levels cited include concentrations in the millions of ug/kg. These levels are inappropriate for a paleo-karst environment where the drinking water supply is threatened. It is likely that it is just a matter of time before these high concentrations of contaminants leach through the soils and affect the drinking water reservoir. It has been demonstrated at numerous other facilities that it is feasible to remove or otherwise treat contaminated soils.

Elevated heavy metals, volatile organics and mineral spirits concentrations have also been identified in the groundwater at this site. The horizontal and vertical extent of the contamination has not been adequately determined. The one "deep" well at this site (MW-7D, screened approx. 50' BLS) is situated beneath an approximately 5' thick clay layer which does appear to exhibit confining properties. However, this well has confirmed contamination, even after well re-development. This clay has only been identified at the one well, therefore its extent and continuity remain questionable. The fact that this well is contaminated would suggest at best semi-confining properties of the clay and/or a discontinuous clay.

The CAR seems to imply that the Floridan Aquifer is not at risk of becoming contaminated because of the semi-confining properties typically associated with the intermediate system. The fact that it is only semi-confining indicates that the potential for downward migration of contaminants does exist. This has been evidenced at numerous other nearby facilities with similar hydrogeologic characteristics. In fact, a facility located approximately 1200 to 1300 feet northeast of this site, McKenzie Tank Lines, has demonstrated groundwater contamination of both aquifers. The Floridan Aquifer plume associated with McKenzie Tank Lines has been identified as far 3000 feet downgradient. (FDER Ground Water Investigation Report Number 91-04, Country Lane PCE Contamination, Leon County)

It is interesting to note that the contamination at McKenzie Tank Lines was first identified in nearby private drinking water wells. The Safety-Kleen CAR identifies 23 domestic wells in the vicinity of the site. Another interesting

aspect of these sites is that Safety-Kleen reports that groundwater flow in the intermediate aquifer is to the southeast while the McKenzie Tank Lines report indicates that the groundwater flow direction at that facility is to the southwest.

At the Safety-Kleen site a perched water table has been identified in the western portion of the site. The flow direction of this perched zone is reported as being to the southeast. Therefore, MW-8P which is northwest of the site, has been identified as the background well. However, there are several concerns involving this well; 1) This well is screened in the uppermost sand unit and through the underlying clay unit and into the next sand unit. 2) The ground water elevations reported for this well are questionable because of its screened interval. However, because it is screened in both sand units it may actually be providing usable data. 3) The reported groundwater elevation for this well indicates that it would be actually downgradient of the groundwater contamination identified in the perched zone. 4) Because this well is screened in both sand zones and appears to be downgradient of known groundwater contamination, it has the potential for transporting contaminants from one sand zone to the deeper sand zone. I recommend that this well be appropriately abandoned (over-drilling and grouting) as soon as possible.

The proposed corrective actions "consists of limited soil excavation in the vicinity of reported spill/leaks to remove residual methylene chloride." The total amount of soils to be removed is identified as 487 cubic yards (top two feet). As stated previously, the soil and groundwater at this facility has been impacted by a variety of contaminants and is a threat to the drinking water supply. The minimal remedial measures proposed appear highly inappropriate for this facility. It should also be noted that because the extent of the soil and groundwater contamination has not been adequately addressed, appropriate remedial measures would be very difficult to determine.

The following items should also be addressed and/or provided:

1) Figure II.K.1.1-1 appears to indicate that an 8" sewer line is connected to a storm drain. This should be checked and clarified or corrected.

2) A PID was used to screen soil samples for additional laboratory analysis. FID calibration and equivalency standards should be provided for future analysis of this type.

3) Hydrogeologic characteristics (i.e. horizontal hydraulic conductivity, vertical permeability, effective porosity, site-wide extent and continuity, etc.) of the various lithologic zones should be determined and provided.

4) The exact location and depth of the nearby domestic and public supply wells should be indicated on appropriately scaled maps.

5) The site-wide vertical and horizontal extent of soil contamination should be determined and delineated on a map of appropriate scale.

6) The horizontal and vertical extent of the groundwater contamination should be determined, contoured and provided. This investigation may also include the Floridan Aquifer. Testing of the nearby domestic wells may also be warranted.

7) MW-8P should be properly abandoned as soon as possible and replaced with cluster wells.

8) Appropriate corrective actions should be proposed. These remedial measures should consider the potential threat to our drinking water supply and the complete extent of soil and groundwater contamination after it has been determined.

I recommend that the proposed soil action levels be considered inappropriate for this site. I also recommend that the above mentioned information be provided and assessment of the extent of soil and groundwater contamination continue. Once this information has been gathered, appropriate corrective actions should be proposed.

RMB:rmb

Florida Department of Environmental Regulation
Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794
Lawton Chiles, Governor Carol M. Browner, Secretary

FILE

February 28, 1992

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