UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

APR 6 1995

4WD-RCRA

Satish Kastury
Environmental Administrator
Hazardous Waste Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Review of Safety-Kleen's Technical Bulletin Profile of Mineral Spirits

Dear Mr. Kastury:

A letter from you to the Environmental Protection Agency (EPA) dated September 27, 1994, requested Region 4's review of a document entitled Technical Bulletin Profile of Mineral Spirits. This document was initially submitted to the Florida Department of Environmental Protection (FDEP) by Safety-Kleen, Incorporated. As stated in the disclaimer section of the document, its purpose is to present information necessary to develop risk-based cleanup levels for the remediation of mineral spirits. Per a request by the RCRA Permitting Section (RPS) to Safety-Kleen for a copy of Reference 84 in the Technical Bulletin Profile of Mineral Spirits, a document entitled Draft Site Assessment Guide for Mineral Spirits was received in December 1994 (copy enclosed). It should be noted that a later version of this document (i.e., dated 1993 and not identified as "draft") is referenced repeatedly in Section 5.0, Toxicity Criteria for Risk Assessment, of the Technical Bulletin Profile of Mineral Spirits. The documents were forwarded to Region 4's Office of Health Assessment (OHA) with a request to review the Technical Bulletin Profile of Mineral Spirits. Below are Region 4's comments on that document.

1) The document attempts to "short-cut" the risk evaluation process by deriving noncarcinogenic reference doses (RfDs) for what are named the "aliphatic" and "aromatic" fractions of the solvent mixture commonly known as mineral spirits. This is contrary to the method generally used by EPA of characterizing each environmental medium of a facility/site by "full scan" analyses. "Full scan" analyses can be interpreted under the Resource Conservation and Recovery Act (RCRA) to mean an Appendix VIII analysis of soils and an Appendix IX analysis of ground water. In other words, the determination of the specific constituents present in a media contaminated with mineral spirits needs to be made. The OHA recommends that the potential risks from each medium

be evaluated for all detected chemicals for which EPA has toxicity values (RfDs, slope factors).

2) Two of the chemicals identified by the document as primary components of mineral spirits (cyclohexane and n-Nonane) do not have EPA-verified RfDs or carcinogenicity assessments. The document, therefore, attempts to derive "RfDs" (for both oral and inhalation exposure) for these two chemicals by identification of toxicity information from the literature and application of uncertainty factors. EPA Region 4 cannot make a judgement for the Agency as a whole on the validity of the proposed RfDs for cyclohexane and n-Nonane. However, the calculated values have omitted a 10-fold value usually included in the uncertainty factor when subchronic data are used to derive a chronic reference dose.

3) The issue of "weathering" raised in the document (a factor affecting many environmental contaminants, not just the components of mineral spirits) would support the idea of "full scan" analyses, at least in the initial characterization of the site, rather than only analyzing for a few predetermined parameters.

If you or your staff have questions or would like to discuss the comments above, please feel free to contact Mr. Davy Simonson of my staff, at (404) 347-3555, extension 6348.

Sincerely,

G. Alan Farmer
Chief, RCRA Branch
Waste Management Division

Enclosure

cc: RPS Unit Chiefs

Filed in supplemental file for SK | Altamonte HPØ2-236952 or see Camille Beatty or H. Singh