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SUBSURFACE FATE AND TRANSPORT MODEL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 26 1991

MEMORANDUM

SUBJECT: Fate and Transport Model

FROM: David Bussard
Director
Characterization and Assessment Division (OS-330)

TO: Waste Management Division Directors
Regions I-X

This memorandum concerns the possible use (or misuse) of a subsurface fate and transport model (EPA's Composite Model for Landfills, EPACML) which was developed by the Office of Solid Waste (OSW) for the Toxicity Characteristic Final Rule (55 FR 11798, March 29, 1990).

The EPACML was developed for national regulatory purposes and is implemented using the Monte Carlo procedures. The model is not intended for site-specific use, since it is not designed to simulate site heterogeneities and irregular site boundaries. This is pointed out in the User's Manual for the model.

The OSW is now in the process of proposing to adopt the EPACML for use in evaluating delisting petitions. In this use, we plan to propose the continued implementation of the model on a nationwide basis, although in a modified form. The final implementation procedure will depend on the nature of comments we receive on our forthcoming Federal Register Notice, which is expected to be published later this year. This intended use of the model has significantly increased interest in its use for site-specific purposes. We understand that in some instances EPA Regional staff have recommended using the model in connection with Corrective Action at a particular site.

We would like to discourage these applications of the EPACML and ask that you inform your staff working on RCRA as well as Superfund sites appropriately. We would be happy to assist your staff in locating a model which is buitable for use on a site-

specific basis. Please contact Dr. Zubair Saleem of my staff at FTS-382-4767 with any questions on EPACML or on suitable models for site-specific applications.

cc: Jeffrey Denit