MESSAGE DISPLAY FOR BOB SWEENEY

To Sweeney, Bob CC Duran, J David

From: Richard Stafford Postmark: 22 Jan 96 08:09 Delivere Status: Previously read Subject: Triassic Park HELP Modelling Procedure

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Comments:

Attached is the HELP modelling procedure modified for this application. Please review and give me your comments. In particular, the notation of "RCRA specified liner" and item no. 4. Do you have a leachate depth limitation?

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Will this be part of letter to GMI requesting Sincil specs?

"RCRA specified liner" -

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## HELP MODELING PROCEDURE for LANDFILL ALTERNATIVE LINER

1. Regulations require the design of the alternative liner must provide equivalent protection as the RCRA specified liner. Two computer modeling analyses must be performed - (1) an analysis of the RCRA specified liner and (2) an analysis of the proposed alternative liner. Equivalent protection must be demonstrated through a comparison of the performance of the alternative liner with the performance of the RCRA specified liner.

2. Provide justification for all input parameters in the model utilizing the attached forms. Demonstrate the relationship of the characteristics of on-site or other sources of soil proposed for the construction and operation of the landfill and the parameter values used in the model. Justify the values used to characterize the waste. Show justification for the soil and waste moisture content parameters, synthetic material properties, climatic and evapotranspiration parameters, storm water run-off fraction, etc.

3. Simulate actual design conditions and operational development of the landfill by doing a succession of model simulations. This succession must attempt to simulate moisture conditions in the landfill as closely as possible. To aid in accomplishing this, each successive computer simulation must use the previous simulation's moisture content output as the input for the following simulation. Describe the design approach modelled.

3.1 Initial simulation of the open landfill at start-up when landfill has little to no waste. The time period should extend for the anticipated duration of this condition, a minimum of one year and a probable maximum of five years.

3.2 A succeeding simulation to model conditions of the partially full landfill for some anticipated time period, most probably five years. This would incorporate daily cover and intermediate cover.

3.3 Perform subsequent computer simulations to model the landfill in the closed condition for the duration of the entire post-closure care period.

3.3.1 Model bare ground for the time period expected until vegetation becomes established.

3.3.2 Model the vegetated condition for the remainder of the post-closure care period.

4. Compliance with the regulatory requirements regarding leachate must be demonstrated. Consequently, the area modeled must incorporate, at a minimum, one leachate collection "watershed" in order to simulate the leachate drainage distance. It is anticipated that the entire area of the landfill will be modelled.