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A102. The EPA has developed an Equation HH-1 worksheet to perform the necessary calculations; this spreadsheet is available through e-GGRT. As an alternative to the Equation HH-1 worksheet, either the IPCC waste model or LandGEM may be used for calculating modeled methane generation under subpart HH. Note that although LandGEM may be used directly for bulk MSW, it is not available by waste type. LandGEM may still be used, but separate runs would need to be done to model different types of waste.

The following steps can be taken to select the appropriate values for k and L_0 to use in LandGEM in accordance with Part 98:

The value for k should be selected from Table HH-1 for the waste type option that you are modeling (e.g., bulk MSW, modified and the average amount of precipitation received by the area in which your facility is located. For example, if your facility is located in Arizona and accepted bulk waste, a k value of 0.02 is recommended. In Step 2 on the LandGEM "USER INPUTS" worksheet (Determine Model Parameters), select "User-specified" from the drop-down box under Methane Generation Rate. This will allow you to enter the appropriate k value for your facility from Table HH-1.

LandGEM provides 5 default L_0 values depending on the type and composition of the waste placed in the landfill. The following equation can be used to determine a value for L_0 in accordance with the rule: L_0 = 493.5 x DOC, where the DOC must be a value from Table HH-1. This equation applies default values for MCF (1), DOC_f (0.5), and F (0.5).

Note that $L_0 = DOC \times MCF \times DOC_f \times F \times 16/12$.

Updated on Sep 10, 2019 17:55