

INTER-OFFICE COMMUNICATION

PS Memo #: PS94-001

TO: Permit Section Staff
FROM: Chip Hancock III
DATE: January 11, 1994
RE: Landfill Gas Emissions

EPA LANDFILL GAS EMISSION PROGRAMS

The following programs from the CTC bulletin board have been downloaded: LANDFILL.ZIP & LANDFIL2.ZIP

The unzipped programs are on the disk that accompanies this menu.

LANDFILL calculates gas emissions for a landfill that is in operation. LANDFIL2 calculates gas emissions for a landfill after closure. Note: for an operating landfill, use SAND&GVL.WK1 to calculate particulate emissions.

These programs calculate methane, CO, VOC, and HAP emissions. The following HAPs are calculated: Benzene, Carbon Tetrachloride, Chloroform, Ethylene Dichloride, Methylene Chloride, Perchloroethene, Trichloroethene, Vinyl Chloride, 1,1-Dichloroethylene.

The emissions will increase each year up until closure and then will begin to decrease. For permit purposes I suggest using the highest year's emissions for the permit limits. For AIRs actual emissions, I suggest averaging the emissions for the next 5 years.

The inputs and outputs for this program are in Mg (Mega grams). Use the following conversion factors:

1 cubic yard of MSW (trash) approx.= 0.5523 Mg
1 Mg = 1.1 tons

You will notice that the two programs are in different directories on the disk. If you copy these files you will also have to put them in separate directories. This is because whoever wrote the second program gave all the files the same names! (Note: you cannot just rename the files for one of the programs without re-writing the program for the executable file, since

the program addresses these files by name.)

You may wish to come see me (Chip) before running these programs. I can show you how to run the program a little quicker than by playing with it, and I can show you one or two tricks for making it easier.