

January 26, 1999

Administrator, Region III  
US Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, IL 60532-4351

REF: 1. SNM-2500  
2. Docket 72-1

Dear Mr. Dyer:

In compliance with 10CFR72.44(d)(3) and SNM-2500 license condition 8.2.1, this report documents our estimate of quantities of principal radionuclides released to the environment by GE Morris Operations in 1998. This report also provides an estimate of the maximum potential dose to the public resulting from GE Morris Operations effluents.

The only measurable particulate airborne radionuclide emitted by GE Morris Operation in 1998 was Cs-137 evaluated by measurement of stack monitor filters. Gaseous radionuclides evaluated are H-3 and Kr-85. The quantity of tritium released is evaluated by calculation using basin water evaporative losses while the amount of Kr-85 released is estimated conservatively using historical analytical results.

COMPLY (the EPA software program) was used to calculate the committed dose equivalent which results from the release of these radionuclides. The quantities released and the resultant maximum potential committed dose equivalent are shown in the following table.

NUCLIDE	AMOUNT RELEASED (Ci)	STACK CONCENTRATION (uCi/ml)	CEDE (mrem)
H-3	0.0365	1.68E-10	See Total Below
Kr-63	1.0	4.61E-9	See Total Below
Cs-137	2.59E-6	1.2E-14	<u>See Total Below</u>
Total Effective Dose Equivalent			2.553E-06 mrem/year

There are no liquid effluents from the site. Therefore there were no measurable quantities of radionuclides released. However, trace quantities of tritium were found in the surface water, and on site wells.

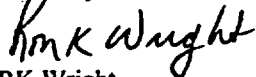
The maximum potential committed dose equivalent to the public which could occur from water was found to be .0113 mrem - based on a person consuming water all year from the North Sanitary Lagoon (.55 pCi/L Co-60 and 17.92 pCi/L tritium).

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- The maximum potential radiation dose commitment to the public resulting from effluent releases is the sum of the two doses given previously ( $2.553e-6$  mrem/year plus  $.0113$  mrem/year =  $1.13e-2$  mrem/year).

Sincerely



RK Wright  
Radiation Safety Officer

cc: Director, Office of Nuclear Material Safety and Safeguards  
US Nuclear Regulatory Commission  
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