# *ANNEX H to ATTACHMENT F*

# *CLARIFICATION OF DATA REQUIREMENTS*

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March 12, 2003

Dr. Beverly Crawford
Los Alamos National Laboratories
Carlsbad Office
115 N. Main St.
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Subject: Clarification of Requirements for the Transuranic Waste Baseline Inventory Database Revision 2.1 from the Giambalvo Letter dated April 22, 2002

Dear Dr. Crawford:

The stated reference (Giambalvo 2003a) includes the following description of requirements for the Transuranic Waste Baseline Inventory Database Revision 2.1.

"Waste-stream level inventories of radionuclides and nonradioactive waste material parameters supplied by the waste generator sites should include estimates for (1) stored inventory, (2) projected inventory, (3) stored plus projected inventory (anticipated inventory, and (4) inventory scaled to fill the WIPP (disposal inventory). A definition for each type of inventory is given in the TWBIR Rev. 3 [US DOE, 1996]."

The purpose of this letter is to clarify the application of this statement to the waste material parameter data for individual waste streams supplied by the waste generator site. For the performance assessment calculations that will be performed in support of the Compliance Recertification Application, Sandia National Laboratories needs to know the average density of the waste material parameters throughout the repository assuming that waste material parameters are distributed homogenously throughout the repository. That value should be calculated as follows:

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$$^{WMP}\rho_{ave\ Rep} = \sum {}^{WMP}\rho_{ave\ i} \cdot (v_p + v_s + v_e) / (V_p + V_s + V_e) \quad (1)$$

Where

$v_p$ is the projected volume for waste stream i,
$v_s$ is the stored volume for waste stream i,
$v_e$ is the emplaced volume for waste stream i,
$V_p$ is the total projected volume
$V_s$ is the total stored volume
$V_e$ is the total emplaced volume
$^{WMP}\rho_{ave\ Rep}$ is the average density of a WMP throughout the repository
$^{WMP}\rho_{ave\ i}$ is the average density of a WMP in waste stream i

None of the values in Equation 1 should be "scaled" values. This is the average density that will accommodate calculation of gas generation in our repository models.

Please note this clarification and proceed with implementation of Equation 1 for repository waste material parameter density in the TWBID Revision 2.1

If you have any questions or comments regarding this information, please contact Christi Leigh at 234-0038.

Sincerely,

Christi Leigh

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