Los Alamos
NATIONAL LABORATORY

Date: October 22, 1997
Refer to: EM:97-197

George Dials, Area Manager
US Department of Energy
Carlsbad Area Office
P.O. Box 3090
Carlsbad, NM 88221-3090

Dear Mr. Dials:

SUBJECT: TRU WASTE, MIXED TRU WASTE SEGREGATION

In response to your request for shipments of non-mixed waste to WIPP, LANL has reviewed its inventory of retrievably-stored waste to determine how many such shipments could be made available this year. LANL's inventory of potentially non-mixed waste consists of two main categories: metallic debris waste and combustible debris waste. At this time, the Acceptable Knowledge Reports for the non-mixed portions of each of the debris waste categories have not been prepared or audited by CAO. We anticipate that the report for the metallic debris waste could be ready for CAO review within a month. Unfortunately, the report for the combustible debris waste will not be ready for approximately 5 months. We believe at this time that the acceptable knowledge for the metallic debris waste is likely to pass CAO audit. The portion of our combustible debris waste that will be determined non-mixed is unknown at this time. Therefore we will address only the metallic debris waste.

LANL's ability to ship the metallic debris waste to CAO is slightly hampered at this time. The reason is, the TRUCON code approved for shipping metallic waste from LANL is one for standard waste boxes (SWBs). We will need to repackage waste from drums into SWBs for shipment under this code, which adds a small cost to the preparation of this waste (Option 1 on the following table). In addition, we have several drums of non-mixed waste that are over the thermal power limits for the TRUCON code 117A, which we can repackage into multiple SWBs for shipment (Option 2 on the following table). Finally, we have some large crates of lead-lined gloveboxes that can be stripped of the lead lining and size-reduced to produce non-mixed waste in SWBs. This effort is time-intensive, and thus, is the highest cost option shown (Option 3 on the following table). The table provides details of the volumes of waste, number of TRUPACT-II shipments obtained, and additional costs encountered above our funded baseline for each option.

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<table>
<thead>
<tr>
<th>Option</th>
<th>Initial Package Type</th>
<th>SWBs shipable under LA117A</th>
<th>Number of TRUPACT-II shipments</th>
<th>Additional cost for repackaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>169 drums</td>
<td>46 SWBs</td>
<td>8</td>
<td>$300k</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- at this point an SWB assay system is required, estimated cost</td>
<td>$2.1M</td>
</tr>
<tr>
<td>2</td>
<td>27 drums</td>
<td>67 SWBs</td>
<td>11</td>
<td>$675k</td>
</tr>
<tr>
<td>3</td>
<td>49 crates</td>
<td>150 SWBs</td>
<td>25</td>
<td>$3.7M</td>
</tr>
</tbody>
</table>

If CAO could somehow expedite the approval of LANL TRUCON Code LA117B, submitted with Rev. 17 of the SARP, then the waste described in Options 1 and 2 above could be shipped in 236 drums, or 6 TRUPACT-II shipments. LANL would not require use of a standard waste box assay system at this time. However, an additional cost of $675K would still be incurred for repackaging the Option 2 waste into multiple drums.

If you have any questions or need further information, please call Ines Triay at (505) 665-1755.

Sincerely,

Thomas E. Baca, Program Director
Environmental Management Program
Los Alamos National Laboratory

Sincerely,

Bruce Lebrun, Los Alamos Area Office
US Department of Energy

TEB/jja

Cy: I. Triay, CST-7, MS J514
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