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date: April 18, 2005
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subject: Organic Ligand Masses TRU Waste Streams from TWBID Revision 2.1, Version 3.13, Data Version D4.15, Revision 1

In this correspondence you will find a table that provides you the organic ligand masses associated with the transuranic (TRU) waste streams from the Transuranic Waste Baseline Inventory Database (TWBID) Revision 2.1, Version 3.13, Data Version D4.15. It is this version of the data (Data Version D4.15) that supports the Performance Assessment Baseline Calculation (PABC). The reference for the data in Table 1 is Leigh and Crawford (2003). The data in Table 1 of this document is identical to the data supplied to you for the 2004 Compliance Recertification Application (CRA-2004) performance assessment (PA) in Leigh (2003). None of the revisions that caused the update to TWBID Revision 2.1 Version 3.13 Data Version D4.15 resulted in changes to the total masses of organic ligands expected in the Waste Isolation Pilot Plant (WIPP) from TRU waste streams. Please proceed with the actinide solubility calculations for the PABC using the total organic ligand masses from Table 1 of this document.

Table 1. Total Complexing Agent Masses Associated with the TRU Waste Inventory in TWBID Revision 2.1, Version 3.13, Data Version, D4.15

| Complexing Agent | RFETS | LANL | Hanford | Total |
|---------------------|-------|---------|---------|---------|
| Acetic Acid (kg) | 132 | 10 | --- | 142 |
| Sodium Acetate (kg) | 1,110 | --- | 7,400 | 8,510 |
| Citric Acid (kg) | 90 | 1,100.5 | --- | 1,190.5 |
| Sodium Citrate (kg) | 400 | --- | --- | 400 |
| Oxalic Acid (kg) | 90 | 13,706 | --- | 13,796 |
| Sodium Oxalate (kg) | --- | --- | 33,940 | 33,940 |
| Sodium EDTA (kg) | 25.6 | --- | --- | 25.6 |

References:

Crawford and Leigh 2003. *Estimate of Complexing Agents in TRU Waste for Disposal in WIPP for the Compliance Recertification Application*. Routine Calculation. ERMS #531107. Carlsbad, NM: Los Alamos National Laboratories.

Leigh, C.D. 2003. *New Estimates of the Total Masses of Complexing Agents in the WIPP Inventory for Use in the 2003 WIPP Performance Assessment*. Memorandum to L.H. Brush, September 3, 2003. ERMS# 531319. Sandia National Laboratories. Carlsbad, NM.

WIPP: 1.4.1.2: PA: QA-L: DPRFI: PKO 539325