Dear Dr. Moody:

This is in response to your November 15, 2006 request for the Environmental Protection Agency's (EPA) approval of the WIPP Waste Information System (WWIS) for tracking remote-handled (RH) waste characterized by the Central Characterization Project (CCP) at the Idaho National Laboratory (INL) and the Argonne National Laboratory (ANL).

EPA conducted a baseline inspection of INL CCP RH (Inspection Number EPA-INL-CCP-RH-06.06-8) during June 2006 (with follow up inspections in July and August 2006) and ANL CCP RH (Inspection Number EPA-ANL-CCP-RH-09.06-8) during September 2006, to assess the characterization of transuranic (TRU) waste in accordance with EPA regulations (40 CFR 194.8(b)(3), 40 CFR 194.8(c) and 40 CFR 194.24). EPA's proposed baseline approvals established a tiered system for evaluating changes to the approved INL CCP RH and ANL CCP RH waste characterization programs (EPA Air Docket No: A-98-49; II-A4-69 and A-98-49; II-A4-70). EPA's baseline approval dated January 12, 2007, and January 16, 2007, allowed the characterization and disposal at the Waste Isolation Pilot Plant (WIPP) of retrievably-stored, RH TRU debris waste from INL and ANL, respectively (EPA Air Docket No: A-98-49; II-A4-72 and A-98-49; II-A4-73). However, during the baseline inspections EPA did not evaluate the WWIS for compliance.

EPA identified the WWIS as a Tier 1 change, which requires EPA approval prior its use for tracking waste to be disposed of at WIPP. As stated in the baseline reports, the WWIS needed to be approved prior to disposal of any RH waste at WIPP. According to the requirements of 40 CFR 194.8 (b), DOE appropriately requested approval of WWIS for RH waste from INL and ANL as a Tier 1 change to the INL CCP RH and ANL CCP RH baseline approvals.
EPA conducted a review of WWIS data entry and waste component tracking by interactive conference call on November 21, 2006. EPA reviewed the WWIS documentation in the “test” mode for RH waste from INL CCP and ANL CCP. The enclosed inspection report gives the details of EPA’s review. EPA did not identify any findings or concerns from this review. With this approval, CCP can implement the WWIS to enter and track actual waste component data. EPA will, however, evaluate the submission of actual/complete RH waste characterization data into the WWIS shortly after the first shipment of RH waste containers from INL.

Approval Summary

EPA has determined that the WWIS system is adequate for tracking the components of RH waste characterized by INL CCP and ANL CCP.

Additionally, EPA is adding a Tier 2 element for WWIS as a result of this evaluation as reflected in the enclosed Table I for INL-CCP (approved January 12, 2007, Docket no. A-98-49; II-A4-72) and Table II for ANL-CCP RH (approved January 16, 2007, Docket no. A-98-49, II-A4-73). All other assigned tiering designations remain applicable. The enclosure to this letter reflects those changes.

If you have any questions regarding this approval, please contact Ed Felton at (202) 343-9422 or Rajani Joglekar at (202) 343-9462.

Sincerely,

Juan Reyes, Director
Radiation Protection Division

Enclosures

cc: Electronic Distribution
Frank Marcinowski, DOE HQ
Lloyd Piper, CBFO
Vernon Daub, CBFO
Ava Holland, CBFO
Courtland Fesmire, CBFO
Norma Castaneda, CBFO
Martin Navarrete, CBFO
Dennis Miehls, CBFO
Allison Pangle, CTAC
Wayne Ledford, CTAC
<table>
<thead>
<tr>
<th>RH WC Process Elements</th>
<th>INL-CCP RH WC Process - T1 Changes</th>
<th>INL-CCP RH WC Process - T2 Changes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Knowledge (AK)</td>
<td>Modification of the approved waste stream ID-ANLE-S5000 to include additional containers, i.e., K Cell or other debris wastes; AK (1) and AK (5)</td>
<td>Notification to EPA when updates to CCP-INL-AK-500, CCP-INL-AK-501, and CCP-INL-AK-502 are approved by CBFO; AK (4)</td>
</tr>
<tr>
<td></td>
<td>Any new waste streams not approved under this baseline; AK (1) and AK (7)</td>
<td>Notification to EPA when changes to AK documentation as a result of WCPIP revisions** have been made (e.g., CRR); AK (7) and AK (9)</td>
</tr>
<tr>
<td></td>
<td>Substantive modification(s)*** that have the potential to affect the characterization process: CCP-AK-INL-500, CCP-AK-INL-501, or CCP-AK-INL-502; AK (6) and AK (7)</td>
<td>Notification to EPA when a Correlation or Surrogate Summary Form is completed for each of the RH containers in this waste stream identified as CH based upon measured dose rates that present NDA results for assayed containers; AK (10), AK (14) and RC (8.2.2)</td>
</tr>
<tr>
<td></td>
<td>Load management for any RH waste stream; AK (16)</td>
<td>Notification to EPA once waste stream data package for debris waste stream, and any modifications to the WSPF including the CRR and AK Summary are completed; AK (14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notification to EPA that the final DTC determination is complete for RH containers numbers 728 through 737, as identified in AK Reference P030; all other AK accuracy reports prepared annually at a minimum; AK (15)</td>
</tr>
<tr>
<td>Radiological Characterization, including Dose-to-Curie (DTC)</td>
<td>Application of new scaling factors for isotopic determination other than those documented in CCP-AK-INL-501; RC (8.2.2 and 8.2.3) Use of any alternate radiological characterization procedure other than DTC with established scaling factors as documented in CCP-TP-504 or substantive modification of the DTC procedure***; RC (8.2.2 and 8.2.3) Any new waste stream not approved under this baseline or addition of containers to Waste Stream ID-ANLE-S5000 that requires changing the established radionuclide scaling factors; RC (8.2.3)</td>
<td>Revisions of CCP-AK-INL-501 or CCP-TP-504 that require CBFO approval; RC (8.2.2 and 8.2.3)</td>
</tr>
<tr>
<td>Visual Examination of audio/video media (VE)</td>
<td>Implementation of VE following this baseline approval; if INL-CCP decides to use VE in the future, EPA approval is necessary</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:**
- **AK (I):** Approval of waste stream.
- **AK (2):** Notification to EPA.
- **AK (3):** Application of new scaling factors.
- **AK (4):** Approval of new waste stream package.
- **AK (5):** Notification to EPA.
- **AK (6):** Application of alternate characterization procedure.
- **AK (7):** Notification to EPA.
- **AK (8):** Identification of CH.
- **AK (9):** Notification to EPA.
- **AK (10):** Notification to EPA.
- **AK (11):** Notification to EPA.
- **AK (12):** Notification to EPA.
- **AK (13):** Notification to EPA.
- **AK (14):** Notification to EPA.
- **AK (15):** Notification to EPA.
- **AK (16):** Notification to EPA.

**Abbreviations:**
- RH: Radioactive Waste
- TRU: Transuranic
- WC: Waste Characterization
- CCP: Compliance Plan
- AK: Acceptable Knowledge
- DTC: Dose-to-Curie
- VE: Visual Examination
- ID-ANLE-S5000: Waste Stream

**Revisions:**
- RC (8.2.2) and RC (8.2.3) in CCP-TP-504

**Modifications:**
- AK (1) and AK (5) in CCP-AK-INL-501
- AK (6) and AK (7) in CCP-AK-INL-502
- AK (16) in CCP-AK-INL-503
### Table I
Tiering of RH TRU WC Processes Implemented by INL-CCP
Revised January 17, 2007

<table>
<thead>
<tr>
<th>RH WC Process Elements</th>
<th>INL-CCP RH WC Process - T1 Changes</th>
<th>INL-CCP RH WC Process - T2 Changes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-Time Radiography (RTR)</td>
<td>Any use of RTR requires EPA approval</td>
<td>None</td>
</tr>
<tr>
<td>WIPP Waste Information System (WWIS)</td>
<td>None</td>
<td>Changes made to WWIS procedure(s) that require CBFO approval</td>
</tr>
</tbody>
</table>

* INL-CCP will report all T2 changes to EPA every three months.

** Excluding changes that are editorial in nature or are required to address administrative concerns.

*** Substantive modification refers to a change with the potential to affect INL-CCP's RH WC process, e.g., the use of an inherently different type of measurement instrument or the use of the high-range probe as described in CCP-TP-504.
### Table II

**Tiering of RH TRU WC Processes Implemented by ANL-CCP**

Revised January 17, 2007

<table>
<thead>
<tr>
<th>RH WC Process Elements</th>
<th>ANL-CCP RH WC Process - T1 Changes</th>
<th>ANL-CCP RH WC Process - T2 Changes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable Knowledge (AK)</td>
<td>Any new waste streams not approved under this baseline; AK (1)</td>
<td>Modification of the approved waste stream AERHDM to include additional containers beyond the approximately 45 included in CCP-AK-ANLE-500, Revision 1. The 20 additional containers identified in the AK summary as being present are not included in this waste stream approval; AK (1)</td>
</tr>
<tr>
<td></td>
<td>Substantive modification(s)*** that have the potential to affect the characterization process to CCP-AK-ANLE-500, CCP-AK-ANLE-501 or CCP-AK-ANLE-502; AK (8)</td>
<td>Notification to EPA that the final DTC determination is complete for RH containers in the approved waste stream; AK (3)</td>
</tr>
<tr>
<td></td>
<td>Implementation of load management for any RH waste stream; AK (16)</td>
<td>Notification to EPA when updates are made to AK documentation as a result of WCPIP revisions**; AK (4)</td>
</tr>
<tr>
<td></td>
<td><strong>Notification that updates have been completed to the following documents:</strong></td>
<td><strong>Notification that updates have been completed to the following documents:</strong></td>
</tr>
<tr>
<td></td>
<td>• All future revisions of CCP-ANLE-AK-500, CCP-ANLE-AK-501; AK (4)</td>
<td>• All future revisions of CCP-ANLE-AK-502; AK (8)</td>
</tr>
<tr>
<td></td>
<td>• Listing of the references that document the assembly of fuel pin data and review process; AK (5)</td>
<td>• CCP-AK-ANLE-500 and CCP-AK-ANLE-502 to address freeze file changes; AK (8)</td>
</tr>
<tr>
<td></td>
<td>• All future revisions of CCP-ANLE-AK-502; AK (8)</td>
<td>**Notification to EPA that the data package for this debris waste stream is completed, including any modifications to the WSPF including the CRR and AK Summary; AK (9), and AK (14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Notification to EPA when AK accuracy reports are completed, prepared annually at a minimum; AK (15)</strong></td>
</tr>
</tbody>
</table>
### Table II

**Tiering of RH TRU WC Processes Implemented by ANL-CCP**  
Revised January 17, 2007

<table>
<thead>
<tr>
<th>RH WC Process Elements</th>
<th>ANL-CCP RH WC Process - T1 Changes</th>
<th>ANL-CCP RH WC Process - T2 Changes*</th>
</tr>
</thead>
</table>
| Radiological Characterization, including Dose-To-Curie (DTC) | Use of any alternate radiological characterization procedure other than DTC with established scaling factors as documented in CCP-TP-504 and CCP-AK-ANLE-501, Revision 0, respectively, or substantive modification thereof***; RC (8.2.2 and 8.2.3)  
Any new waste stream not approved under this baseline or addition of containers to waste stream AERHDM that require changing the established radionuclide scaling factors; RC (8.2.3)  
Application of new scaling factors for isotopic determination other than those documented in CCP-AK-ANLE-501; RC (8.2.2 and 8.2.3) | Notification to EPA that revisions of CCP-AK-ANLE-501 or CCP-TP-504 that require CBFO approval** are complete; RC (8.2.2 and 8.2.3) |
| Visual Examination (VE)                                    | VE by reviewing existing audio/visual recordings for Summary waste category not covered by this approval; VE (1) & VE (3)  
VE by any new process for S5000 debris wastes; VE (1) and VE (3) | Notification to EPA that revisions of any VE procedure that require CBFO approval are complete; VE (1) and VE (3)  
Addition of new S5000 debris waste streams; VE (2) |
| Real Time Radiography (RTR)                                | Any use of RTR requires EPA approval                                                               | None                                             |
| WIPP Waste Information System (WWIS)                       | None                                                                                              | Changes made to WWIS procedure(s) that require CBFO approval |

* ANL-CCP will report all T2 changes to EPA every three months.

** Excluding changes that are editorial in nature or are required to address administrative concerns. New references that are included as part of the document revision may be requested by EPA.

*** Substantive modification refers to a change with the potential to affect ANL's RH WC process, e.g., the use of an inherently different type of measurement instrument or the use of the high range probe as described for CCP-TP-504 for radiological characterization.