

**Annual Change Report 2013/2014**

**From July 1, 2013, to June 30, 2014**

**November 14, 2014**

Prepared for:

**The U.S. Department of Energy**

Prepared by:

**Nuclear Waste Partnership LLC**

**Regulatory Environmental Services**

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## Introduction

The U.S. Environmental Protection Agency (EPA) requires the U.S. Department of Energy (DOE) to provide information on any change in conditions or activities pertaining to the disposal system since the most recent compliance application. This requirement is identified in Title 40 Code of Federal Regulations (CFR), Section 194.4(b)(4), which states:

“No later than six months after the administrator issues a certification, and at least annually thereafter, the Department shall report to the Administrator, in writing, any changes in conditions or activities pertaining to the disposal system that were not required to be reported by paragraph (b)(3) of this section and that differ from information contained in the most recent compliance application.”

The DOE provides an annual report each November of applicable changes under this requirement. This annual report informs the EPA of changes to information in the most recent compliance application (the 2014 Compliance Recertification Application (CRA)). Significant planned changes must be reported to the EPA prior to implementation by the DOE. In addition, Title 40 CFR, Section 194.4(b)(3) requires that significant unplanned changes be reported to the EPA within 24 hours or ten days, depending on the severity of the activity or condition. Planned changes are submitted on an individual basis. Other changes are reported annually.

Changes in activities or conditions are reviewed to determine if 40 CFR Section 194.4(b)(3) reporting is necessary. The enclosed tables list those items identified for reporting under 40 CFR Section 194.4(b)(4). The majority of the items described in this report are inspections, reports, and modifications to written plans and procedures for Waste Isolation Pilot Plant (WIPP) operations.

This report captures the summary of each change within seven tables for the period July 1, 2013, through June 30, 2014:

Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4), documents EPA and DOE interactions during the reporting period with a one- or two-sentence description of each correspondence.

Table 2: Procedure Revision Table, documents changes to relevant plans and procedures during the reporting period.

Table 3: Waste Emplacement Summary Report, documents the transuranic (TRU) waste inventory for the waste parameters. The summary provides the total emplaced inventory in the repository as of June 30, 2014.

Table 4: Performance Assessment, Software, and Hardware Changes, documents the changes to relevant codes, software, and hardware that have occurred during the reporting period.

Table 5: Passive Institutional Controls (PICs) Activity, documents the relevant activities that would be applicable to the development of PICs. This table has been added in compliance with the EPA revised PICs schedule. (Reyes to Moody, March 7, 2008)

Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014, documents inspections performed by the EPA pertaining to Tier 1 changes to the baseline approvals at generator and storage sites for TRU waste. This table was added to the Annual Change Report at the request of the EPA during the EPA/DOE management meeting held July 29, 2010. Inspections prior to January 2008 were documented in Table CARD 8-1, EPA Waste Characterization Inspections, submitted with the five-year recertification applications and are included. (EPA request, July 29, 2010)

Table 7: EPA Quality Assurance Audits – January 2008 to June 2014, documents audits performed by the EPA for generator and storage sites for TRU waste. This table was added to the Annual Change Report at the request of the EPA during the EPA/DOE management meeting held July 29, 2010. Audits prior to January 2008 were documented in Table CARD 8-2, EPA Quality Assurance Audits by Site, submitted with the five-year recertification applications and are included. (EPA request, July 29, 2010)

In accordance with the EPA requests and feedback, this report incorporates suggestions and guidance for capturing the appropriate level of detail and the layout of information with respect to the WIPP certification criteria. This report does not include administrative changes to procedures such as editorial changes, reformatting, correcting the titles of references, correcting inconsistency within a procedure, and other changes that do not change the substance or intent of the document.

Due to an underground fire on February 5, 2014, and a radiological event occurring on February 14, 2014, normal underground activities have been suspended. Suspended activities include waste receipt, waste emplacement, and non-WIPP experimental activities. (See Table 1, page 7, for WIPP correspondence relating to recovery efforts for this data period.)

**Table 1:**  
**Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

<b>Regulatory Requirements</b>	<b>Implementing Document or Activity that Changed</b>	<b>Description of the Change and DOE Assessment of the Impact of the Change</b>
194.4(b)(3) Planned Change Requests	Planned Change Requests	<p><u>DOE to EPA, August 5, 2013</u>. Submittal of additional information on surface dose rate measurements on shielded containers.</p> <p><u>DOE to EPA, December 9, 2013</u>. Submittal of comparison of surface dose rate modeled versus measured data on the first shielded container shipment from Argonne National Laboratory (ANL).</p> <p><u>EPA to DOE, January 16, 2014</u>. EPA informed DOE that the Repository Reconfiguration Planned Change Request review would be put on hold so that they may complete the review of the Panel Closure Planned Change Request. EPA also stated that the DOE will need to modify the Repository Reconfiguration performance assessment.</p> <p><u>EPA to DOE, February 10, 2014</u>. EPA notified DOE that a new performance assessment and possible peer review will be needed for the Repository Reconfiguration Planned Change Request.</p>

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.4(b)(4) Annual Change Report	Annual Change Report	<p><u>DOE to EPA, November 14, 2013.</u> Submittal of Waste Isolation Pilot Plant 2012/2013 Annual Change Report.</p> <p><u>DOE to EPA, February 5, 2014.</u> Telephone notification of an underground fire. The underground fire that occurred on February 5, 2014, did not create a condition that would have resulted in any type of release from already emplaced waste. Nor did it result in a change in the disposal system or any disposal system activities that impacted the performance of the repository or resulted in a major change not indicated in the most recent compliance application. Therefore, there is no regulatory requirement to notify the Administrator under 40 CFR Part 194.4(b)(3), and documentation is placed in this report as identified in 40 CFR Part 194.4(b)(4).</p> <p><u>DOE to EPA, February 15, 2014.</u> Telephone notification of a radiological incident. There were no planned or unplanned changes in activities or conditions pertaining to the disposal system that differ significantly from the most recent compliance application. Specifically:</p> <ul style="list-style-type: none"> <li>• The containment requirements established by 40 CFR 191.13 (Appendix A to Part 191 Table for Subpart B Release Limits for Containment Requirements) were not exceeded or expected to be exceeded. To exceed this requirement a change would have to occur that would demonstrate a reasonable expectation that the probabilities of cumulative radionuclide releases from the disposal system during the 10,000 years following closure would fall above specified limits.</li> <li>• A release or expected release from emplaced waste is not anticipated to lead to a committed effective dose in excess 15 millirems as established by 40 CFR 191.15.</li> <li>• There was not a release or expected release from the WIPP of radionuclides in underground sources of drinking water.</li> <li>• There was no significant unplanned change in the disposal system or disposal system activities that impacts the performance of the repository or results in a major change not indicated in the most recent compliance application.</li> </ul>

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Notification	<u>DOE to EPA, August 1, 2013.</u> Notification of instruction to generator sites to begin over-packing multiple waste streams into a single payload container.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Advanced Mixed Waste Treatment Project (AMWTP)	<p><u>EPA to DOE, July 9, 2013.</u> Approval of the Acceptable Knowledge (AK) of the Tier 1 request to add direct shipment (uncompacted) and super-compaction of contact-handled (CH) debris (summary category group (SCG) S5000), and direct shipment of homogenous solid waste (SCG 3000). EPA Docket no. A-98-49; II-A4-174.</p> <p><u>EPA to DOE, September 16, 2013.</u> Approval of Tier 1 request for the addition of CH TRU debris waste from Los Alamos National Laboratory (LANL) to the super-compacted debris waste stream of AMWTP. EPA Docket no. A-98-49; II-A4-178.</p> <p><u>EPA to DOE, February 11, 2014.</u> Approval of Tier 1 request for the addition of Idaho National Laboratory SCGs S3000 and S5000 CH TRU waste to the AMWTP approved program. EPA Docket number A-98-49; II-A4-180.</p>
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Argonne National Laboratory (ANL)	<u>EPA to DOE, March 24, 2014.</u> Approval of Tier 1 request for the addition of five remote-handled (RH) TRU solidified waste containers to the AERHDM waste stream. EPA Docket number A-98-49; II-A4-181.

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Idaho National Laboratory (INL)	<p><u>EPA to DOE, July 16, 2013</u>. Notification of the Central Characterization Project (CCP) INL CH and RH TRU waste characterization program continued compliance inspection. EPA Docket no. A-98-49; II-A4-175.</p> <p><u>DOE to EPA, October 1, 2013</u>. Tier 1 request to add the RH TRU waste stream ID-EBR-S5000 (Lot 5B).</p> <p><u>DOE to EPA, October 18, 2013</u>. Tier 1 request to evaluate radiological approach for RH TRU 55-gallon containers from waste stream IN-ID-BTO (Lot 3).</p> <p><u>DOE to EPA, October 18, 2013</u>. Tier 1 request to evaluate the radiological approach for RH TRU 55-gallon containers from waste stream ID-HFEF-S5400-RH (Lot 5C).</p> <p><u>DOE to EPA, November 12, 2013</u>. Tier 1 request to evaluate the radiological approach of four RH TRU 55-gallon containers from waste stream ID-MFC-SOLID-RH (Lot 5A).</p> <p><u>DOE to EPA, April 15, 2014</u>. Revised Tier 1 request to evaluate the radiological approach of INL RH-ID-HFEF-S5400-RH (Lot 5C) population of containers with Co-60 and/or Eu-154 dose contribution greater than 5 percent.</p> <p><u>EPA to DOE, April 16, 2014</u>. Approval of RH TRU waste stream ID-EBR-S5000 (Lot 5B). EPA Docket No. A-98-49; II-A4-183.</p> <p><u>DOE to EPA, April 23, 2014</u>. Submittal of documentation in support of continued compliance inspection.</p> <p><u>DOE to EPA, May 30, 2014</u>. Tier 1 request to evaluate the radiological approach of one RH 55-gallon container at INL.</p>
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Los Alamos National Laboratory (LANL)	<p><u>EPA to DOE, July 22, 2013</u>. Approval for the use of the mobile In Situ Object Counting System (ISOCS) Large Container Counter (MILCC). EPA Docket no. A-98-49; II-A4-176.</p> <p><u>DOE to EPA, October 31, 2013</u>. Submittal of documents requested in support of the EPA continued compliance inspection.</p> <p><u>DOE to EPA, December 4, 2013</u>. Documents requested in support of the Plutonium Ice Waste.</p>

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Oak Ridge National Laboratory (ORNL)	<p><u>DOE to EPA, January 7, 2014.</u> Tier 1 request to evaluate the Mobile Characterization Services (MCS) IQ3.</p> <p><u>DOE to EPA, January 7, 2014.</u> Tier 1 request to add S3000 waste category to ORNL-CCP.</p> <p><u>EPA to DOE, February 11, 2014.</u> Inspection issue number ORNL-CCP-CC-RTR-2014-02CR submitted from CCP continued compliance inspection that took place February 4-6, 2014.</p> <p><u>DOE to EPA, February 20, 2014.</u> Response to EPA continued compliance inspection issue number ORNL-CCP-RTR-2014-02CR.</p> <p><u>DOE to EPA, May 30, 2014.</u> Tier 1 request for use of MILCC2 and approval of CH VE.</p> <p><u>EPA to DOE, June 18, 2014.</u> Confirmation that CH TRU waste characterization program is technically adequate. Approval of Tier 1 for changes made to the nondestructive assay system (NDA) IQ3.</p>
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Sandia National Laboratories (SNL)	<p><u>DOE to EPA, March 24, 2014.</u> Notification of readiness for initial baseline inspection.</p> <p><u>EPA to DOE, May 30, 2014.</u> Transmittal of scope for baseline inspection (No. EPA-SNL-CCP-RH-06-14.8).</p>
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Savannah River Site (SRS)	<p><u>EPA to DOE, August 20, 2013.</u> Approval of the addition of waste stream SR-RH-221H.01. EPA Docket no. A-98-49; II-A4-177.</p> <p><u>DOE to EPA, October 2, 2013.</u> Tier 1 request to add the RH waste stream SR-RH-SDD.01.</p> <p><u>DOE to EPA, December 17, 2013.</u> Tier 1 request for the 5-foot setback configuration on the large box counter (LBC) for standard large boxes 2 (SLB2s) and submittal of calibration reports.</p> <p><u>EPA to DOE, March 24, 2014.</u> Approval of the Tier 1 request for the 5 foot setback configuration on the LBC for SLB2s and submittal of calibration reports. EPA Docket Number A-98-49; II-A4-182.</p> <p><u>EPA to DOE, May 22, 2014.</u> Approval of RH sealed sources waste stream SR-RH-SDD.01. EPA Docket No. A-98-49; II-A4-184.</p> <p><u>DOE to EPA, May 30, 2014.</u> Tier 1 request to evaluate the radiological approach of one 55-gallon container BC0152.</p>

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

<b>Regulatory Requirements</b>	<b>Implementing Document or Activity that Changed</b>	<b>Description of the Change and DOE Assessment of the Impact of the Change</b>
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste Control Specialists (WCS)	<u>EPA to DOE, June 9, 2014.</u> Concurrence of waste inventory tracking requirements for storage of waste at WCS. EPA Docket no. A-98-49; II-A4-187.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Fiscal Year (FY) 2013 Quarterly Tier 2 reports, first quarter	<u>DOE to EPA, January 22, 2014.</u> Notification of Tier 2 changes for AMWTP and CCP activities for FY14, first quarter.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	FY13 Quarterly Tier 2 reports, second quarter	<u>EPA to DOE, July 9, 2013.</u> EPA concurs with the FY13 second quarter Tier 2 report. <u>DOE to EPA, May 1, 2014.</u> Tier 2 changes for AMWTP and CCP activities for the second quarter of FY14.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	FY13 Quarterly Tier 2 reports, third quarter	<u>DOE to EPA, July 22, 2013.</u> Tier 2 changes for AMWTP and CCP activities for the third quarter of FY13. <u>EPA to DOE, September 10, 2013.</u> Request for additional information prior to concurrence of the FY13 third quarter Tier 2 report. <u>DOE to EPA, October 7, 2013.</u> Response to EPA request for Tier 2 third quarter FY13 documents.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	FY13 Quarterly Tier 2 reports, fourth quarter	<u>DOE to EPA, November 18, 2013.</u> Notification of Tier 2 changes for AMWTP and CCP activities for FY13 fourth quarter. <u>EPA to DOE, January 14, 2014.</u> Request for additional information on FY13 Tier 2 fourth quarter changes. <u>DOE to EPA, January 16, 2014.</u> Response to request for additional information on FY13 Tier 2 fourth quarter changes.
40 CFR Subpart B, 194.11-15	Certification/Recertification	<u>DOE to EPA, March 26, 2014.</u> Transmittal of the 2014 Compliance Recertification Application.

**Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR Section 194.4(b)(4)**

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.14(b) Design of the Disposal System	Status of Experiments in the WIPP Underground	<p>SEGA (Segmented Enriched Germanium Assembly) and MEGA (Multiple Element Germanium Array) All activities are on hold until appropriate “Evaluation of the Safety of the Situation” documentation is revised and underground access is re-established.</p> <p>EXO (Enriched Xenon Observatory) All activities are on hold until appropriate “Evaluation of the Safety of the Situation” documentation is revised and underground access is re-established.</p> <p>LBRE (Low Background Radiation Experiment) All activities are on hold until appropriate “Evaluation of the Safety of the Situation” documentation is revised and underground access is re-established.</p> <p>DMTPC (Dark Matter Time Projection Chamber) All activities are on hold until appropriate “Evaluation of the Safety of the Situation” documentation is revised and underground access is re-established.</p> <p>Salt Disposal Investigations (SDI)/Salt Defense Disposal Investigations (SDDI) All activities are on hold until appropriate “Evaluation of the Safety of the Situation” documentation is revised and underground access is re-established.</p> <p>Integrated Project Team (IPT) All activities are on hold.</p>
194.21 Inspections	40 CFR Part 191, Subpart A inspection	<p><u>EPA to DOE, April 4, 2014.</u> Notification of 40 CFR Part 191, Subpart A inspection and supporting inspection resulting from radiological incident.</p> <p><u>DOE to EPA, May 8, 2014.</u> Transmittal of data packages for Station B, WIPP Far Field and WIPP south data for time periods of February 11-22, 2014, and March 9-18, 2014.</p>

**Table 2:  
Procedure Revision Table**

**Table 2: Procedure Revision Table**

Procedure	Revision and Effective Date	Description
WP 08-NT3020, TRU Waste Receipt	Rev. 24, December 18, 2013	<ul style="list-style-type: none"> <li>• Added new Table 1, Radiological Limits.</li> <li>• Added a new bullet under step 2.20 pertaining to radiation dose rates exceeding Department of Transportation limits.</li> <li>• Added step 2.20 to attachment 1 for Department of Transportation dose rates.</li> <li>• Added step 2.30 to attachment 5 to provide a new row for receipt time.</li> </ul>
WP 02-EM1010, Field Parameter Measurements and Final Sample Collection	Rev. 2, March 10, 2014	<ul style="list-style-type: none"> <li>• Revised sections 1.0 and 2.0 to describe calibration only.</li> <li>• Added section 3.0, Continuous Measurements and Post-Testing QC.</li> <li>• Added section 4.0, Printing Multimeter Reports.</li> <li>• Revised sections 6.0 and 7.0 into section 8.0, Collecting and Preserving Unfiltered Final Samples, and section 9.0, Collecting and Preserving Filtered Final Samples.</li> <li>• Added section 13.0, Field Data Package Completion and Finalization.</li> </ul>
SP 12-32, Pressure Transducer Calibration Using the Mensor CPC 6000	Rev. 1, April 8, 2014	<ul style="list-style-type: none"> <li>• Section 2.9, added a description on how to adjust or linearize a pressure transducer using a field calibration program.</li> <li>• Section 2.7.2 was revised to describe how to select a pressure calibration system output port and selection of a Mensor CPC 6000 pressure module after plumbing modifications are made to the system.</li> </ul>

**Table 3:  
Waste Emplacement Summary Report**

**Table 3: Waste Emplacement Summary Report**

<b>TRU Waste Inventory</b>				
	<b>Reporting Period<sup>1</sup> Emplaced Volume (m<sup>3</sup>)</b>	<b>Cumulative<sup>2</sup> Emplaced Volume (m<sup>3</sup>)</b>		
<b>RH TRU</b>	20	357		
<b>CH TRU</b>	3,595	90,627		
<b>Waste Components Inventory</b>				
	<b>Reporting Period<sup>1</sup> Emplaced Mass (kg)</b>	<b>Cumulative<sup>2</sup> Emplaced Mass (kg)</b>	<b>Maximum Emplaced Limiting Value<sup>3</sup> (kg)</b>	<b>Percent of Limiting Value<sup>3</sup> Emplaced</b>
<b>Cellulose, Plastic, Rubber Materials<sup>4</sup></b>	205,264	8,914,542	22,000,000	40.52%
	<b>Reporting Period<sup>1</sup> Emplaced Mass (kg)</b>	<b>Cumulative<sup>2</sup> Emplaced Mass (kg)</b>	<b>Minimum Emplacement Limiting Value<sup>3</sup> (kg)</b>	<b>Percent of Limiting Value<sup>3</sup> Emplaced</b>
<b>Fe-Metals<sup>5</sup></b>	1,115,246	27,736,311	20,000,000	Minimum met
<b>Non-Fe Metals</b>	22,132	438,100	2,000	Minimum met
<b>Residual Liquids</b>	Liquid waste is prohibited at the WIPP repository. The total residual liquid in any payload container shall not exceed one percent by volume of that payload container.			
<b>Emplaced Radiological Activity Inventory (curies)</b>				
<b>Radionuclide</b>	<b>Cumulative Activity in FY 2012/2013 Annual Change Report<sup>6</sup></b>	<b>CH Repository Reporting Period Activity<sup>6</sup></b>	<b>RH Repository Reporting Period Activity<sup>6</sup></b>	<b>Total Activity as of June 30, 2014<sup>6</sup></b>
<sup>241</sup> Am	2.491E+05	2.579E+05	6.208E+02	2.585E+05
<sup>137</sup> Cs	1.255E+04	1.421E+01	1.444E+04	1.445E+04
<sup>238</sup> Pu	4.764E+05	4.828E+05	7.289E+02	4.835E+05
<sup>239</sup> Pu	3.263E+05	3.333E+05	3.839E+02	3.337E+05
<sup>240</sup> Pu	8.068E+04	8.239E+04	2.802E+02	8.267E+04
<sup>242</sup> Pu	2.658E+01	2.720E+01	3.821E-01	2.759E+01
<sup>90</sup> Sr	6.784E+03	1.595E+01	7.599E+03	7.615E+03
<sup>233</sup> U	6.740E+00	6.536E+00	3.848E-01	6.921E+00
<sup>234</sup> U	8.665E+01	8.669E+01	1.140E+00	8.783E+01
<sup>238</sup> U	1.737E+01	1.758E+01	3.915E-02	1.762E+01
<b>Total</b>	<b>1.152E+06</b>	<b>1.157E+06</b>	<b>2.405E+04</b>	<b>1.181E+06</b>

**Table 3: Waste Emplacement Summary Report**

<b>Magnesium Oxide (MgO)<sup>7</sup> and Cellulose, Plastic and Rubber (CPR) Mass Emplaced Per Waste Panel</b>				
<b>Panel</b>	<b>Room</b>	<b>MgO (kg)</b>	<b>CPR* (kg)</b>	<b>Excess Factor</b>
1	all	4,482,355	1,237,732	1.87 <sup>8</sup>
2	2-7	5,972,300	1,241,928	2.26 <sup>8</sup>
2	1	691,515	186,200	1.71
3	7	960,120	104,831	4.03
3	6	954,405	228,033	1.95
3	5	1,022,985	284,651	1.70
3	4	960,120	255,054	1.79
3	3	931,545	243,860	1.89
3	2	944,880	227,889	2.03
3	1	662,940	183,072	1.76
4	7	942,975	248,903	1.90
4	6	925,830	267,494	1.71
4	5	948,690	265,302	1.71
4	4	1,049,655	290,739	1.76
4	3	1,015,365	285,755	1.70
4	2	931,545	374,327	1.22 <sup>7</sup>
4	1	668,655	265,884	1.23
5	7	937,260	353,262	1.28
5	6	875,477	140,009	2.85
5	5	782,346	298,808	1.24
5	4	737,167	225,425	1.64
5	3	714,286	215,937	1.61
5	2	730,612	194,045	1.84
5	1	485,714	135,742	1.75
6	7	744,218	167,581	2.11
6	6	666,667	189,857	1.74
6	5	474,294	203,473	1.24
6	4	471,586	202,410	1.25
6	3	406,533	171,306	1.25
6	2	291,716	121,686	1.22
6	1	235,107	80,199	1.46
7	7	57,692	15,876	1.77
7	6	0	28	*.00

**Table 3: Waste Emplacement Summary Report**

**Footnotes**

1. Reporting Period includes emplacement that occurred between July 1, 2013, and June 30, 2014.
2. Cumulative period includes from the beginning of emplacement until June 30, 2014.
3. Limiting Value—Values from CRA 2009 Section 24. These values are based on inventory assumptions.
4. Cellulose, Plastic, Rubber Materials (CPR) include CPR within the waste, container materials and emplacement materials.
5. Fe-Metals include both materials in the waste and containers in total.
6. There is no decay correction for the listed isotope activities.
7. New minimum value for excess factor of MgO to be implemented as approved by EPA (February 11, 2008) reduces excess factor from 1.67 to 1.20 and ensures minimum reactivity of 94%.
8. MgO, CPR and Excess Factor results for all of panel 1 and rooms 2-7 of panel 2 have been recalculated to replace averaged data with actual emplaced data.

**\* Note**

Waste emplacement is a three-step process. The first step is emplacement of RH waste into the walls of the emplacement room. The second step involves CH waste emplacement into the room. The third step involves emplacement of MgO onto the waste stacks as each row is completed and the MgO calculations are performed.

**Table 4:  
Performance Assessment, Software, and Hardware Changes**

**Table 4: Performance Assessment, Software, and Hardware Change**

<b>WIPP Use Codes/Software and Code Version</b>	<b>Version Date</b>	<b>Description</b>	<b>New Code Version</b>
POSTSECOTP2D 1.04	July 23, 2013	POSTSECOTP2D 1.04 was ported to the new Solaris computer system.	POSTSECOTP2D 1.05
PRESECOTP2D 1.22	July 30, 2013	PRESECOTP2D 1.22 was ported to the new Solaris computer system.	PRESECOTP2D 1.23
EPAUNI 1.15A	July 30, 2013	EPAUNI 1.15A was ported to the new Solaris computer system.	EPAUNI 1.16
BLOTADB 1.37	August 29, 2013	BLOTADB 1.37 was ported to the new Solaris computer system.	BLOTADB 1.38
STEPWISE 2.21	September 5, 2013	STEPWISE 2.21 was ported to the new Solaris computer system.	STEPWISE 2.22
SECOTP2D 1.41A	October 10, 2013	SECOTP2D 1.41a was ported to the new Solaris computer system.	SECOTP2D 1.43
PRECCDFGF 2.00	October 14, 2013	PRECCDFGF 2.00 was ported to the new Solaris computer system.	PRECCDFGF 2.01
CCDFGF 6.00	November 12, 2013	CCDFGF 6.00 was ported to the new Solaris computer system.	CCDFGF 6.01
FMT 2.4	November 12, 2013	FMT 2.4 was ported to the new Solaris computer system.	FMT 2.41
NONLIN 2.01	November 20, 2013	NONLIN 2.01 was ported to the new Solaris computer system.	NONLIN 2.02
CCDFGF 7.00	November 21, 2013	CCDFGF 7.00 was ported to the new Solaris computer system.	CCDFGF 7.01
DRSPALL 1.10	November 27, 2013	DRSPALL 1.10 was ported to the new Solaris computer system.	DRSPALL 1.21

**Table 5:  
Passive Institutional Controls Activity**

**Table 5: Passive Institutional Controls Activity**

<b>Date</b>	<b>Description of Activity</b>
September 23, 2013	DOE attended the Waste Management 2014 abstract review meeting to confirm and approve the submittal of nine abstracts pertaining to oral session R2.7 entitled “Records, Knowledge and Memory (RK&M) for Geologic Repositories of Nuclear Waste.” Also, session R2.6 was confirmed as a panel session to discuss the same topic. DOE intends to use these two panel sessions to develop an expert elicitation for the development of a new Passive Institutional Controls (PICs) conceptual model.
February 18, 2014	DOE notified EPA through email (Patterson to Peake) of CBFO’s intent to place the current PICs testing schedule on hold until the results of current and future international panel sessions can be used as an expert judgment for the development of a new PICs conceptual model. EPA acknowledged CBFO’s actions without comment.
March 5, 2014	CBFO attended and sponsored two panel sessions at Waste Management 2014. The first was session 102, “Records, Knowledge and Memory (RK&M) for Geologic Repositories of Nuclear Waste Part 1.” Eight papers from four countries were presented in this session. The second was panel session 114, “Records, Knowledge and Memory (RK&M) for Geologic Repositories of Nuclear Waste Part 2.” This session included both presentations and a panel discussion involving six countries. The papers presented and panel discussion will be compiled with future papers and evaluated for use as an expert judgment in the future. The expert judgment will result in the development of a new WIPP PICs conceptual model. Once this evaluation is completed, a schedule for development of the new conceptual model will be prepared.

**Table 6:**  
**EPA Waste Characterization Inspections – January 2008 to June 2014**

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
Advanced Mixed Waste Treatment Plant (AMWTP)/Accelerated Retrieval Project (ARP)	October 2006	CH baseline inspection	EPA Docket No. A-98-49; II-A4-66, October 2006
	March 2, 2010, Desk-top evaluation	Tier 1 evaluation adding BN510 waste stream	EPA Docket No. A-98-49; II-14-127, June 10, 2010
	November 17-18, 2010	EPA unannounced continued compliance inspection	EPA Docket No. A-98-49; II-A4-143, March 16, 2011
	October 30- November 1, 2012, and February 26, 2013	EPA Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-173, April 25, 2013
	January 2013	Tier 1 addition of ANLE-generated SCG S3000 and S5000 CH waste	EPA Docket No. A-98-49; II-A4-169, January 2013
	February 2013	Tier 1 Subsurface Disposal Area (SDA) waste stream	EPA Docket No. A-98-49; II-A4-174, July 9, 2013
	February 2013	Tier 1 adding LANL debris waste to the super-compacted CH AMWTP debris waste	EPA Docket No. A-98-49; II-A4-178, September 16, 2013
		Tier 1 adding INL generated waste.	EPA Docket No. A-98-49; II-A4-180, February 11, 2014
Argonne National Laboratory-Illinois (ANL)	January 2007	ANL RH Baseline inspection	EPA Docket No. A-98-49; II-A4-73, January 2007
	January 2007	Tier 1 Visual Examination for newly generated waste	EPA Docket No. A-98-49; II-A4-74, January 2007
	May 28, 2008	Tier 1 SRS-CCP RH Visual Examination (VE) newly packaged waste	EPA Docket No. A-98-49; II-A4-102, July 10, 2008
	October 2008	Tier 1 addition of 100 drums of AGHCF debris waste to AERHDM waste stream	EPA Docket No. A-98-49; II-A4-136, October 2008

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	May 20-21, 2010, Desk-top evaluation	Tier 1 SRS-CCP addition of 30 containers to AERHDM waste stream	EPA Docket No. A-98-49; II-A4-132, September 13, 2010
	June 29, 2010, Desk-top evaluation	Tier 1 SRS-CCP addition of 120 containers to AERHDM waste stream	EPA Docket No. A-98-49; II-A4-134, September 28, 2010
	May 4 and 18, 2010, EPA Inspection	Tier 1 SRS-CCP addition of 30-gallon containers of Fuel Examination Waste (FEW) to previously approved RH debris AERHDM waste stream	EPA Docket No. A-98-49; II-A4-140, November 22, 2010
	September 2011 EPA Inspection	Tier 1 to add eight 55-gallon K-Wing FEW containers to RH debris waste stream AERHDM	EPA Docket No. A-98-49, II-A4-158, February 13, 2012
	January 3, 2012 EPA Inspection (11-2060)	Tier 1 to evaluate Radiation Characterization Approach of Solidified Liquid Waste from K-Wing, Building 205, 55-gallon	EPA Docket No. A-98-49: II-A4-162, June 14, 2012
	February – June, 2012 EPA Inspection Desk-top Review	Tier 1 debris from the Reduced Enrichment Research and Test Reactor (RERTR) program and the second batch of FEW packaged in 30-gallon containers	EPA Docket No. A-98-49; II-A4-140, October 4, 2012
	February – June, 2012 EPA Inspection	Tier 1 to evaluate solidified liquid waste from K-Wing, Bld. 205, 55-gallon drum	EPA Docket No. A-98-49; II-A4-162, June 14, 2012

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	May 8-9, 2012 EPA Inspection	Tier 1 to include Lot 2 waste ID-ANLE-S5000	EPA Docket No. A-98-49; II-A4-163, July 25, 2012
	EPA Inspection July 31-August 1, 2012	Tier 1 of the analytical chemistry lab (ACL)	EPA Docket No. A-98-49; II-A4-165, September 4, 2012
	September, 2012 EPA Desktop evaluation	Tier 1 evaluation of waste stream AERHDM RERTR and second batch debris, (bldg. 212, 30-gallon container)	EPA Docket No. A-98-49; II-A4-167, October 4, 2012
		Tier 1 evaluation of five containers of solidified liquid waste from K-Wing Bldg. 205 to be included in the AERHDM waste stream.	EPA Docket No. A-98-49; II-A4-181, March 24, 2014
Bettis Atomic Power Laboratory (BAPL)	August 30, 2010, September 23, 2010, December 8, 2010 and April 12-13, 2011 EPA Baseline Inspection	EPA Baseline Inspection No. EPA-BAPL-CCP-RH-04.11-8	EPA Docket No. A-98-49; II-A4-151, July 2011
General Electric Vallecitos Nuclear Center (GEVNC)	December 2-4, 2008	CCP RH Initial Certification	EPA Docket No. A-98-49; II-A4-115, August 26, 2009
Hanford	April 27-29, 2010	CH Baseline Inspection	EPA Docket No. A-98-49; II-A4-138, December 21, 2010
Idaho National Laboratory (INL)	November 1, 2005	CH Baseline Inspection	EPA Docket No. A-98-49; II-A4-59, November 1, 2005
	November 16, 2005	Tier 1 addition of the HENC	EPA Docket No. A-98-49; II-A4-60, November 16, 2005
	November 16, 2005	Tier 1 Visual Examination as a Quality Control Check for Real- time Radiography	EPA Docket No. A-98-49; II-A4-61, November 16, 2005

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	August 3, 2006	Tier 1 Pit 4 and Pit 6 (ARP-1 and ARP-II) waste	EPA Docket No. A-98-49; II-A4-67, August 3, 2006
	December 5, 2006	Tier 1 Pit 4 and Pit 6	EPA Docket No. A-98-49; II-A4-71, December 5, 2006
	January 12, 2007	RH Baseline Inspection	EPA Docket No. A-98-49; II-A4-72, January 12, 2007
	January 17, 2007	Tier 1 WIPP Waste Information System	EPA Docket No. A-98-49; II-A4-74, January 17, 2007
	January 25, 2007	Tier 1 Visual Examination	EPA Docket No. A-98-49; II-A4-75, January 25, 2007
	February 12, 2007	Tier 1 real-time radiography	EPA Docket No. A-98-49; II-A4-80, February 12, 2007
	February 28, 2007	Tier 1 SuperHENC	EPA Docket No. A-98-49; II-A4-86, February 28, 2007
	November 26, 2007	Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-94, November 26, 2007
	January 2008	Tier 1 K cell waste	EPA Docket No. A-98-49; II-A4-97, January 1, 2008
	April 11, 2008	Tier 1 high-range gamma probe for DTC	EPA Docket No. A-98-49; II-A4-98, April 11, 2008
	June 9, 2008, Desk-top evaluation	Tier 1 Waste Area Groups (WAGs) density range extension	EPA Docket No. A-98-49; II-A4-107, October 7, 2008
	December 9-11, 2008	Tier 1 addition of VE CH S5000 retrievably stored waste stream	EPA Docket No. A-98-49; II-A4-110, March 4, 2009
	September 22, 2009	Tier 1 visual examination technique	EPA Docket No. A-98-49; II-A4-118, September 22, 2009
	September 22, 2009	Tier 1 recalibration of the HENC	EPA Docket No. A-98-49; II-A4-119, September 22, 2009

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	December 8-9, 2009	Tier 1 addition of ID-HFEF-S5400-RH Lot 1A and ID-ANLE-S5000 waste streams	EPA Docket No. A-98-49; II-A4-122, February 1, 2010
	April-May 2010 Desk-top evaluation	Tier 1 addition of ID-MFC-S5400-RH waste stream	EPA Docket No. A-98-49; II-A4-126, June 11, 2010
	December 8-9, 2009, January 12-13, 2010, and February 17, 2010	Tier 1 addition of ID-INTEC-RH waste stream	EPA Docket No. A-98-49; II-A4-130, August 17, 2010
	July 13, 2009, to June 2010 Desk-top evaluation	Tier 1 addition of Osprey and ID-HFEF-S5400-RH Lot 1B waste stream	EPA Docket No. A-98-49; II-A4-131, August 23, 2010
	July 1, 2009 Desk-top evaluation	Tier 1 High Efficiency Neutron Counter (HENC) operating range extension	EPA Docket No. A-98-49; II-A4-119, September 22, 2010
	September 22, 2009	Tier 1 addition of ID-RTC-S3000 waste stream	EPA Docket No. A-98-49; II-A4-137, November 1, 2010
	August 9-10, 2010	Tier 1 addition of IN-ID-NRF-153 waste stream	EPA Docket No. A-98-49; II-A4-135, November 1, 2010
	November 16-17, 2010	Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-142, March 16, 2011
	March 23, 2011	Tier 1 addition of Lot 4A to waste stream ID-HFEF-S5400-RH	EPA Docket No. A-98-49; II-A4-145, March 23, 2011
	June 23, 2011	Tier 1 supplemental calibration for the WAGS to allow filters	EPA Docket No. A-98-49; II-49-150, June 23, 2011

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	October 4-5, 2011	Tier 1 to include RH waste stream IN-ID-NRF-SPC	EPA Docket No. A-98-49; II-A4-159, March 12, 2012
	January 4, 2012	Inspection of Waste Stream ID-NRD.1	EPA Docket No. A-98-49; II-A4-157, January 4, 2012
	May 8-9, 2012	Tier 1 radiation approach of 48 additional canisters for waste stream ID-ANLE-S5000 AERHDM (Lot 2)	EPA Docket No. A-98-49; II-A4-163, July 25, 2012
	February 2013	Tier 1 evaluate SWEPP Gamma-Ray Spectrometer (SGRS) new calibration	EPA Docket No. A-98-49; II-A4-172, February 26, 2013
	May 7-9, 2013	Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-175, July 16, 2013
	April 16, 2014	Tier 1 addition of waste stream ID-EBR-S5000	EPA Docket No. A-98-49; II-A4-183, April 16, 2014
	May 5-7, 2014	Continued Compliance Inspection	Awaiting final report from EPA
Los Alamos National Laboratory (LANL)	June 21, 2007	CH Baseline Inspection	EPA Docket No. A-98-49; II-A4-88, June 21, 2007
	October 28, 2007	Tier 1 extension of range for the HENC2	EPA Docket No. A-98-49; II-A4-91, October 28, 2007
	December 7, 2007	Tier 1 extension of range for the HENC	EPA Docket No. A-98-49; II-A4-95, December 7, 2007
	May 8-10, 2007	Initial RH Certification	EPA Docket No. A-98-49; II-A4-96, February 19, 2008
	May 25-26, 2010	Tier 1 HENC unit 2 Report (non-approval)	EPA Docket No. A-98-49; II-A4-139, November 8, 2010

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	May 25-26, 2010	LANL-CCP CH TRU Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-141, February 9, 2011
	April 28, 2010 (10-0810)	CH Tier 1 request expanding the calibration range to the HENC unit 2 to accommodate CH lead-lined 55-gallon drums	EPA Docket No. A-98-49; II-A4-139, April 30, 2012
	October 28, 2011	Tier 1 addition of the Super HENC	EPA Docket No. A-98-49; II-A4-153, October 28, 2011
	June 20-21, 2012	CH Tier 1 request for calibration range extension for the Super HENC and the extend ability for the HENC unit 1 to assay lead-lined 55-gallon drums containing solidified materials	EPA Docket No. A-98-49; II-A4-164, August 14, 2012
	September – November, 2012	Tier 1 approval to add summary category group S4000	EPA Docket No. A-98-49; II-A4-168, December 31, 2012
	June 4-5, 2013	Tier 1 to include the Mobile ISOCS for SWBs, Corrugated Metal Boxes (CMBs), and 55-gallon drums	EPA Docket No. A-98-49; II-A4-176, July 22, 2013
Oak Ridge National Laboratory (ORNL)	June 2007	CH Baseline Inspection	EPA Docket No. A-98-49; II-A4-103, August 25, 2008
	(Desk-top evaluation)	Tier 1 CH Calibration Extension for segmented gamma scanner (SGS)	EPA Docket No. A-98-49; II-A4-108, October 8, 2008
	November 17, 2008	Tier 1 CH Calibration Extension for Drum Waste Assay System (DWAS) Imaging Passive Active Neutron (IPAN)	EPA Docket No. A-98-49; II-A4-109, January 8, 2009

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	June 30-July 2, 2008	EPA RH Baseline Inspection No. EPA-ORNL-CCP-RH-06.08-8	EPA Docket No. A-98-49; II-A4-111, February 3, 2009
	May 6, 2009	Tier 1 OR-REDC-RH-HET to include Solvent Extraction Test Facility (SETF) Time Period (November 1978-November 1991) waste	EPA Docket No. A-98-49;II-A4-120, November 30, 2009
	August 11-12, 2009	Tier 1 addition of CH S4000 SCG waste	EPA Docket No. A-98-49; II-A4-117, October 7, 2009
	November 23, 2009	Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-121, November 23, 2009
	February 23-24, 2010	Tier 1 addition of CH VE and adding the IQ3	EPA Docket No. A-98-49; II-A4-125, March 30, 2010
	February-March, 2010 Desk-top evaluation	Tier 1 addition of RH SETF Pre-79 waste stream	EPA Docket No. A-98-49; II-A4-124, April 21, 2010
	March 23, 2011	Tier 1 addition of NFS Trench B soils to waste stream OR-NFS-CH-SOIL	EPA Docket No. A-98-49; II-A4-144, March 23, 2011
	February 4-6, 2014	Continued Compliance Inspection	EPA Docket No. A-98-49; II-A4-186, June 18, 2014
	June 18, 2014	Tier 1 Adding Refurbished IQ3	EPA Docket No. A-98-49; II-A4-186, June 18, 2014
Sandia National Laboratories (SNL)	March 8, 2011, May 10, 2011, June 7-8, 2011	Initial Baseline Inspection	EPA Docket No. A-98-49; II-A4-155, November 23, 2011

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

<b>Generator Site</b>	<b>Date of Inspection</b>	<b>EPA Inspection No./Tier 1 Evaluation</b>	<b>Docket Number/Approval Date</b>
	December 2011- January 2012	Tier 1 to include RH containers generated from waste groups PKE00027/54 and PKE00047 to existing waste stream SNL-HCF-S5400-RH	EPA Docket No. A-98-49; II-A4-160, March 28, 2012
Savannah River Site (SRS)	July 2006	CH Baseline Inspection	EPA Docket No. A-98-49; II-A4-65, July 2006
	August 2007	Tier 1 Segmented Gamma Scanner Nondestructive Assay system	EPA Docket No. A-98-49; II-A4-90, August 2007
	July 17-19, 2007, July 31-August 2, 2007, and December 4-5, 2007	Tier 1 addition of SRS Battelle Columbus Laboratory (BCL) waste stream SR-RL-BCLDP.001	EPA Docket No. A-98-49; II-A4-104, August 25, 2008
	March 24-26, 2009	Tier 1 addition of Non-destructive Assay Box Counter (NABC)	EPA Docket No. A-98-49; II-A4-114, August 4, 2009
	September 30, 2010 Desk-top evaluation	Tier 1 addition of CH S3000 waste	EPA Docket No. A-98-49; II-A4-123, March 23, 2010
	November 2009 – March 2010	Tier 1 addition of SR-BCLDP.001.001, SR-BCLDP.001.002, SR-BCLDP.002, SR-BCLDP.003, SR-BCLDP.004.002, SR-BCLDP.004.003 waste streams	EPA Docket No. A-98-49; II-A4-129, September 13, 2010
	March 24-26, 2009	Tier 1 extension of calibration to the NABC	EPA Docket No. A-98-49; II-A4-133, September 14, 2010

**Table 6: EPA Waste Characterization Inspections – January 2008 to June 2014**

Generator Site	Date of Inspection	EPA Inspection No./Tier 1 Evaluation	Docket Number/Approval Date
	May 12, 2011 timeframe, EPA Desk-top evaluation	Tier 1 allowing use of American Society for Testing and Materials (ASTM) standard efficiency calibration method for NABC	EPA Docket No. A-98-49; II-A4-148, May 31, 2011
	July 26, 2011 (11-1419)	RH EPA Baseline adding SR-RH-FBL.01 (remainder of RH at SRS)	EPA Docket No. A-98-49; II-A4-161, April 18, 2012
	August 14-15, 2012	Tier 1 request for using five-foot setback configuration of the NABC	EPA Docket No. A-98-49; II-A4-166, September 11, 2012
	February, 2013	Tier 1 to evaluate waste stream SR-RH-235F.01	EPA Docket No. A-98-49; II-A4-170, February 12, 2013
	February, 2013	Tier 1 NABC BSGS 5-foot setback for SWB's	EPA Docket No. A-98-49; II-A4-171, February 2013
	June – July, 2013	Tier 1 SR-RH-221H.01 waste stream	EPA Docket No. A-98-49; II-A4-177, August 20, 2013
	March, 2014	Tier 1 change calibration to include a 5-foot detector setback configuration on the NDA Box Counter to assay SLB's Type 2	EPA Docket No. A-98-49; II-A4-182, March 2014
	May 22, 2014	Tier 1 SR-RH-SDD.01 (Sealed Sources)	EPA Docket No. A-98-49; II-A4-184

**Table 7:**  
**EPA Quality Assurance Audits by Site – January 2008 to June 2014**

**Table 7: EPA Quality Assurance Audits by Site – January 2008 to June 2014**

<b>Site</b>	<b>Date</b>	<b>Purpose</b>
Advance Mixed Waste Treatment Plant	August 18-20, 2009	Recertification Audit A-09-19
	August 23-26, 2010	Recertification Audit A-10-24
	November 1-3, 2011	Recertification Audit A-12-03
	October 15-18, 2012	Recertification Audit A-13-01
	October 1-3, 2013	Recertification Audit A-14-01
Argonne National Laboratory East-CCP	July 10, 2008	RH VE Newly Packaged Waste Audit A-08-03
	August 5-7, 2008	CCP RH Recertification Audit A-08-24
	August 4-6, 2009	CCP RH Recertification Audit A-09-21
	August 3-5, 2010	CCP RH Recertification Audit A-10-23
	August 2-4, 2011	CCP RH Recertification Audit A-11-20
	August 28-30, 2012	CCP RH Recertification Audit A-12-16
	December 19, 2012	CCP Recertification Audit A-12-16
	August 27-28, 2013	CCP Recertification Audit A-13-24
Bettis Atomic Power Laboratory (BAPL)	April 19-21, 2011	Initial Certification Audit A-11-12
	April 24-26, 2012	Closeout Audit A-12-10
Carlsbad Field Office	June 29-July 1, 2010 August 3-4, 2010	Audit of the DOE Peer Review used to qualify historical information for TRU waste streams SR-BCLDP-004.002 and SR-BCLDP-004.003. EPA Docket No. A-98-49; II-A1-108.
	April 8-29, 2013	Remote records audit of CBFO Technical Assistance Contractor
	June 18-20, 2013	Audit of the quality assurance program relative to the American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA) Standard NQA-1-1989. EPA Docket no. A-98-49; II-A1-112.
General Electric Vallecitos Nuclear Center (GEVNC)-CCP	December 2-4, 2008	Initial RH S5000 Certification Audit A-09-05
	January 26-28, 2010	Recertification Audit A-10-04
Hanford-CCP	April 6-8, 2010	Initial Certification Audit A-10-07
	April 5-7, 2011	Recertification Audit A-11-10
	May 14-17, 2012	Recertification/Closeout Audit A-12-11
	May 14-16, 2013	Recertification Audit A-13-15
	May 20-21, 2014	Recertification Audit A-14-16
Idaho National Laboratory (INL)-CCP	January 29-30, 2008	Expansion Audit (NMED approval of Acceptable Knowledge (AK)) Audit A-08-11
	May 13-15, 2008	Recertification Audit A-08-10 INL and A-08-22 ID Labs
	December 9-11, 2008	VE of Records Audit A-09-08
	May 5-7, 2009	Recertification Audit A-09-14 INL and A-09-13 ID Labs
	June 8-10, 2010	Recertification Audit A-10-16 INL and A-10-17 ID Labs

**Table 7: EPA Quality Assurance Audits by Site – January 2008 to June 2014**

<b>Site</b>	<b>Date</b>	<b>Purpose</b>
	June 7-9, 2011	Recertification Audit A-11-13 INL Labs and A-11-14 INL
	June 11-14, 2012	Laboratory Recertification Audit A-12-14 and CCP Recertification Audit A-12-13
	June 3-6, 2013	Recertification Audit A-13-18
	July 9-11, 2013	Analytical Laboratories Close Out Audit A-13-19
	May 20-21, 2014	Recertification Audit A-14-16
Los Alamos National Laboratory-CCP	February 19, 2008	Initial Certification Audit A-07-12 and A-07-13
	April 15-17, 2008	CCP CH and RH Recertification Audit A-08-16
	December 9-11, 2008	Addition of VE CH S5000 Retrievably Stored Waste Audit A-09-08
	April 7-9, 2009	CCP CH and RH Recertification Audit A-09-12
	April 27-29, 2010	CCP CH and RH Recertification Audit A-10-14
	May 17-19, 2011	CCP CH and RH Recertification Audit A-11-11
	July 24-26, 2012	CCP CH and RH Recertification Audit A-12-12
	July 23-25, 2013	CCP CH and RH Recertification Audit A-13-23
Nuclear Waste Partnership LLC	June 18-20, 2013	Quality Assurance (QA) audit relative to the American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA) Standard NQA-1-1989. EPA Docket no. A-98-49; II-A1-113.
Oak Ridge National Laboratory-CCP	November 13-15, 2007	AK and NDA Activities Audit A-08-06
	June 30-July 2, 2008	Initial RH Certification Audit A-08-12
	January 13-15, 2009	CH Recertification Audit A-09-07
	June 23-25, 2009	RH Recertification Audit A-09-22
	July 28-30, 2009	Addition of S4000 SCG Audit A-09-24
	February 9-11, 2010	CH and RH Recertification Audit A-10-08
	February 8-10, 2011	CH and RH Recertification Audit A-11-08
	March 27-29, 2012	CH and RH Recertification Audit A-12-08
	April 23-25, 2013	CH and RH Recertification Audit A-13-12
	January 14-26, 2014	CH and RH Recertification Audit A-14-03
Savannah River Site-CCP	October 28-30, 2008	CH and RH Recertification Audit A-09-01
	March 24-26, 2009	Addition of NABC Audit A-09-17
	June 23-24, 2009	Addition of Real-time Radiography (RTR) #4 Audit A-09-16
	October 27-29, 2009	BCL RH Recertification and CH S3000 Initial Certification Audit A-10-01
	October 26-28, 2010	Recertification Audit A-11-01 and RTR Unit 4 for SLB2s and Large Container Non-Destructive Examination (LCNDE) for SWBs and SLB2s.
	November 14-17, 2011	RH Recertification and Initial SR-RH-FBL-01 Audit A-12-04

**Table 7: EPA Quality Assurance Audits by Site – January 2008 to June 2014**

<b>Site</b>	<b>Date</b>	<b>Purpose</b>
	November 6-8, 2012	CH Recertification Audit A-12-02
Sandia National Laboratories - CCP	July 13-15, 2011	Recertification Audit A-11-23
	August 14-16, 2012	Closeout Audit A-12-15

## **Summary**

The DOE believes the changes reported in this version of the WIPP Change Report do not represent significant changes pertaining to the disposal system.

## **References**

Letter from Reyes (EPA) to Moody (DOE), March 7, 2008. Passive Institutional Controls update.

EPA request, July 29, 2010. Addition of Tables 6 and 7 to the Annual Change Report.

Letter from Reyes (EPA) to Moody (DOE), February 11, 2008. Reduction of MgO excess factor from 1.67 to 1.20.

Email correspondence, Patterson (DOE) to Peake (EPA), February 18, 2014. Passive Institutional Controls update.