

Annual Change Report 2007/2008

From July 1, 2007 to June 30, 2008

November 15, 2008

Prepared for:

The Department of Energy

Prepared by:

**Washington Regulatory and Environmental Services
an affiliate of
Washington TRU Solutions LLC**

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Introduction

As part of continuing compliance, 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.”

In meeting the requirement, the DOE provides an annual report each November of all applicable changes under the above requirement. This annual report informs the EPA of changes to information in the most recent compliance application (the 2004 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. All 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 WIPP operations. Additional items have been added at the request of the EPA.

This report captures the summary of each change within five tables:

1. 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.
2. Table 2: Procedure Revision Table documents changes to relevant plans and procedures during the reporting period.
3. Table 3: Waste Emplacement Summary Report documents the Transuranic (TRU) waste inventory for the waste parameters identified in Table 4-11 of the CRA-2004. The summary provides the total emplaced inventory in the repository as of June 30, 2008.
4. Table 4: Performance Assessment, Software, and Hardware Changes documents the changes to relevant codes, software, and hardware that have occurred during the current reporting period.
5. Table 5: Passive Institutional Controls Activity documents the relevant activities that would be applicable to the development of Passive Institutional Controls (PICs). This table has been added since the last report in compliance with the EPA revised PIC schedule. (EPA, March 7th, 2008)

In accordance with the EPA's requests and feedback over the past nine years, this report incorporates many of the 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 all administrative changes to procedures. Examples of administrative changes to procedures that were not included are editorial changes, reformatting, correcting the title of references, correcting inconsistency within a procedure, and other changes that do not change the substance or intent of the document.

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)

Regulatory Requirements	Implementing Document or Activity that Changed	Description of the Change and DOE Assessment of the Impact of the Change
194.4 Conditions of Compliance Certification	Panel Closure Planned Change Request	Letter from DOE to EPA (October 9, 2007) withdrawing the Planned Change Request to modify the panel closure design.
194.4 Conditions of Compliance Certification	Annual Change Report	Letter from DOE to EPA (November 1, 2007) submitting, for EPA review, the Annual Change Report in accordance with 194.4(b)4.
194.4 Conditions of Compliance Certification	Planned Change Request for Shielded Containers	The DOE submitted (November 15, 2007) the Planned Change Request for Shielded Containers to the EPA. Letter from EPA to DOE (December 7, 2007) acknowledging receipt of the Planned Change Request for Shielded Containers and requesting additional information including Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) approval prior to making their final decision.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from EPA to DOE (July 11, 2007) approving the DOE-Carlsbad Field Office draft recertification of waste streams S3000, S5000, and Off-Site Source Recovery Project (OSRP) from Los Alamos National Laboratory (LANL). (Docket: A-98-49, Item II-A4-88).
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from EPA to DOE (July 31, 2007) pertaining to approval of the Hanford Quality Assurance (QA) program. (Docket: A-98-49, II-A1-95). Letter from DOE to EPA Air and Radiation Docket and Information Center (March 12, 2008) pertaining to comments concerning the EPA Proposed Approval of the Transuranic Waste Characterization Program at the Hanford Site. (Docket no. EPA-HQ-OAR-2008-0027). Also included were comments on the Waste Characterization (WC) Inspection Report: "EPA baseline inspection no. EPA-HAN-06.07-8 of the Waste Characterization Program at the Hanford Site".

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	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (October 17, 2007) stating that the Central Characterization Program (CCP) at Oak Ridge National Laboratory (ORNL) will be ready for EPA inspection on November 12, 2007. Letter from EPA to DOE (October 24, 2007) transmitting the scope of the EPA's baseline inspection of the CCP at the ORNL scheduled for November 13-15, 2007. Inspection No. EPA-ORNL-CCP 11.07-8. DOE letter to EPA (December 21, 2007) provided responses to the EPA concerns from the Baseline inspection of the CCP at ORNL (ORNL-CCP-CH-DOE-07-003F). Letter from DOE to EPA (February 11, 2008) providing additional information requested by the EPA from the baseline inspection of CCP operations at ORNL. EPA letter to DOE (February 25, 2008) rescheduling the ORNL-CCP remote-handled (RH) baseline inspection after completion of the CBFO QA qualifying audit.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (November 7, 2007) providing the response to comments on the EPA Baseline Inspection Report LANL-CCP-RH-5.07-8. EPA letter to DOE (February 19, 2008) approving the LANL-CCP RH WC program limited to the sixteen canisters in the LANL-RH waste stream no. LA-MHD03-002. (Docket no. A-98-49, Item II-A4-96).
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from EPA to DOE (November 26, 2007) with the DOE audit inspection results of the Advanced Mixed Waste Treatment Plant (AMWTP) at Idaho National Laboratory (INL). EPA did not identify any non-conformances during this inspection.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (February 15, 2008) responding to the July 18, 2007 EPA concern SRS-RH-AK-07-001F from the EPA baseline inspection (EPA-SRS-CCP-RH-07.07-8) of the CCP RH TRU waste characterization program at the Savannah River Site (SRS).

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	Waste characterization equipment, procedures and waste streams	Letter from EPA to DOE (April 11, 2008) approving DOE's request for a Tier 1 change to the INL-CCP RH baseline. This change was in accordance with 40 CFR 194.8(b) and was for a change in waste characterization equipment to a high range dose-to-curie (DTC) probe for analyzing RH TRU waste.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (April 14, 2008) notifying the EPA of a Tier 2 change in the method used at the AMWTP for non-destructive assay (NDA) to cool the detectors associated with the assay. Letter from EPA to DOE (April 28, 2008) stated EPA was in concurrence with this change as a Tier II to the AMWTP baseline approval.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (April 17, 2008) stated that in accordance with 40 CFR 194.8(b)(4) the DOE reported changes in specific characterization and certification activities at AMWTP, CCP-Idaho National Laboratory (INL), CCP-SRS, CCP-Argonne National Laboratory (ANL), and CCP-LANL. The notification included Tier 2 activity changes.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (May 14, 2008) submitting CCP documents for EPA Docket (CBFO Audit A-08-12) pertaining to the Oak Ridge National Laboratory (ORNL) program documents. The submittal included CCP-PO-001 revision 16, "CCP Transuranic Waste Characterization Quality Assurance Project Plan", and CCP-PO-002 revision 20, "CCP Transuranic Waste Certification Plan".
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (May 15, 2008) for notification of operational readiness at ORNL for waste characterization processes and programs for RH waste. CBFO will conduct the certification audit at ORNL during the week of June 30, 2008, to the requirements of DOE/WIPP-02-3214 at the same time the EPA conducts the baseline inspection for RH waste at ORNL.

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	Waste characterization equipment, procedures and waste streams	Letter from DOE to EPA (May 23, 2008) submitting documents for EPA review prior to the EPA baseline inspection at ORNL for CCP RH waste.
194.8 Approval Process for Waste Shipment from Waste Generator Sites for Disposal at the WIPP	Waste characterization equipment, procedures and waste streams	Letter from EPA to DOE (June 5, 2008) to transmit the scope of the EPA baseline inspection (EPA-ORNL-CCP-RH.06.08-8) to take place June 30 – July 2, 2008.
194.14(b) Design of the disposal system	Status of experiments in the WIPP underground	EXO Experimental modules, emplaced in the WIPP underground, continued to be assembled, outfitted, and tested at WIPP. Data acquisition will begin once these activities have been completed.
194.21 Inspections	WIPP Technical Inspection	Letter from EPA to DOE (February 21, 2008) with results of a technical inspection to gain an understanding of the DOE document development and review process. (Docket no: A-98-49, Item II-B3-103).
194.21 Inspections	WIPP Technical Inspection	Letter from EPA to DOE (March 18, 2008) that the EPA will perform an unannounced inspection of the WIPP periodic shrouded probe pull activities at Station A under authority of 40 CFR 191, Subpart A and 40 CFR 194.21(A)(1).
194.21 Inspections	WIPP Technical Inspection	Letter from EPA to DOE (April 1, 2008) notifying the DOE that the EPA was performing an unannounced transuranic waste characterization inspection of the CCP at LANL in accordance with 40 CFR 194.21(A)(1).
194.21 Inspections	WIPP Technical Inspection	Letter from EPA to DOE (April 15, 2008) describing the results of EPA's unannounced inspection on March 18, 2008 (Docket No. A-98-49, II-B-105). The inspection was performed under the authority of 40 CFR 194.21(A)(1) and 40 CFR 191, Subpart A. The EPA did not identify any findings or concerns during this inspection.

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
194.21 Inspections	WIPP Technical Inspection	Letter from EPA to DOE (June 12, 2008) notifying the DOE that the EPA will conduct an inspection on June 18, 2008 under regulatory authority 40 CFR 194.21 and 194.24 as a result of WIPP receipt of an uncertified non-conformant drum from LANL.
194.21 Inspections	WIPP Waste Information System (WWIS)	Letter from EPA to DOE (February 21, 2008) provided the results of the follow-up inspection at CBFO (conducted on December, 2007) showing that CBFO has adequately resolved EPA concerns specific to the WWIS from January, 2004 (EPA-CBFO-WWIS-01.04-24.)
194.21 Inspections	Advanced Mixed Waste Treatment Plant (AMWTP) and Accelerated Retrieval Project (ARP)	Letter from EPA to DOE (November 26, 2007) provided the results of an unannounced inspection at the AMWTP and the ARP in the INL complex. The EPA found that the corrective actions and the chain of custody process that has been implemented is technically adequate and addresses any deficiencies. Additional information was requested by the EPA pertaining to the ARP-CCP communication with DOE. Docket No. A-98-49, II-A4-94. Letter from DOE to EPA (December 28, 2007) providing the additional information requested from the November 26, 2007, inspection. Letter from EPA to DOE (March 15, 2008) acknowledging receipt of additional information requested that adequately addressed EPA concerns.
194.22 Quality Assurance	Sandia National Laboratories (SNL) Performance Assessment Software	Letter from EPA to DOE (May 8, 2008) described the review of Sandia National Laboratories software documentation to determine compliance with the requirements of Nuclear Quality Assurance (NQA). Review of activities selected for this audit showed that SNL documentation for the WIPP PA continues to comply with the NQA standard.
194.24 Waste characterization	AMWTP	Letter from EPA to DOE (August 3, 2007) Notification of EPA's intent to perform an inspection of the AMWTP pursuant to the improper shipment and disposal of one contact-handled (CH) TRU waste drum. EPA letter to the DOE (August 16, 2007) relayed the results of the inspection of August 7, 2007. EPA approved continuation of payload assembly activities using the revised procedures specified in CAR # 28920. EPA letter to DOE (August 23, 2007) provided the basis for EPA concurrence for resumption of AMWTP shipments to WIPP. Letter from DOE to EPA (February 13, 2008) requesting EPA concurrence for recertification of the AMWTP. EPA letter to DOE (February 20, 2008) concurring that the waste characterization equipment, procedures and waste streams comply with all of EPA's existing approvals for CH TRU waste at AMWTP.

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
194.24 Waste characterization	Waste Generator Site-Argonne National Laboratory (ANL)	Letter from DOE to EPA (November 8, 2007) requesting EPA concurrence for the CCP TRU waste program deployed at ANL. EPA letter to DOE (November 26, 2007) confirmed EPA's concurrence that the waste characterization equipment, procedures and waste streams encompassed in DOE's draft recertification letter comport with all of EPA's existing approvals for Remote Handled (RH) TRU waste at ANL-CCP.
194.24 Waste characterization	Waste Acceptance Criteria (WAC)	Letter from EPA to DOE (August 28, 2007) stating acknowledgment of receipt of Revision 6.1 of the WAC. EPA stated it does not need to concur on this document in order for it to be implemented by the DOE. EPA follow up letter (September 12, 2007) stated that the EPA needed no further information pertaining to "machine compacted remote-handled waste" and requested that the DOE notify the EPA in advance when the DOE intends to perform waste compaction at any other waste generator sites.
194.24 Waste characterization	Waste Generator Site-Hanford	Letter from DOE to EPA (July 5, 2007) with responses to EPA concerns identified during baseline inspection No. EPA-HAN-06.07-8. DOE letter to the EPA (September 6, 2007) providing procedures revised to address issues raised during the EPA baseline inspection of the Hanford TRU waste characterization program. DOE letter to the EPA (October 4, 2007) provided the final resolution to concerns identified by the EPA in inspection EPA-HAN-06.07-8. DOE to EPA letter (February 11, 2008) providing EPA requested container management procedures from large sites shipping to the WIPP.
194.24 Waste characterization	Waste Generator Site - INL	Letter from EPA to DOE (August 3, 2007) Notification of EPA's intent to perform an inspection of the AMWTP pursuant to the improper shipment and disposal of one CH drum. EPA letter to the DOE (August 16, 2007) relayed the results of the inspection of August 7, 2007. DOE letter to the EPA (August 17, 2007) relaying the objective evidence for completion of "Actions to Preclude Recurrence" of items 3-6 and 8 identified in the AMWTP CAR # 28920. EPA approved continuation of payload assembly activities using the revised procedures specified in CAR # 28920. EPA letter to the DOE (September 19, 2007) pertaining to an inspection the EPA performed on April 24-25, 2007, of the INL- CCP QA program showed that the program continues to be properly implemented.

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
194.24 Waste characterization	Waste Generator Site - INL	Letter from DOE to the EPA (August 29, 2007) requesting EPA's review and concurrence of the recertification for the CCP TRU waste program at INL. EPA letter to DOE (September 6, 2007) stating that EPA concurs that the waste characterization equipment, procedures, and waste streams encompassed in DOE's draft recertification letter complies with all of EPA's existing approvals for CH and RH waste at INL-CCP. Letter from DOE to EPA (October 2, 2007) requesting concurrence of the draft recertification letter for INL-CCP to include grab sampling activities. EPA letter to DOE (January 30, 2008) concurring with the DOE that the waste characterization equipment, procedures and waste streams comply with all of EPA's existing approvals for CH and RH waste at INL-CCP.
194.24 Waste characterization	Waste Generator Site - INL	Letter from DOE to the EPA (November 5, 2007) requesting the EPA approval of a Tier 1 change for the CCP waste characterization program at INL. The request is for the modification of the approved RH waste stream ID-ANLE-S5000 to add 56 waste containers of K cell debris waste. DOE letter to EPA (January 28, 2008) requesting concurrence of the expansion for the CCP TRU waste program at INL for 56 RH containers from K Cell to INL waste stream ID-ANLE-S5000. EPA letter to DOE (January 25, 2008) approved DOE's Tier 1 change to add the K cell debris waste stream ID-ANLE-S5000.
194.24 Waste characterization	Waste Generator Site - INL- Tier 1	Letter from DOE to EPA (January 30, 2008) requesting approval for a change to the CCP waste characterization program at INL involving a modification to a high range dose-to-curie (DTC) probe used in the implementation of procedure CCP-TP-504.
194.24 Waste characterization	Waste Generator Site - INL	Letter from EPA to DOE (June 16, 2008) providing concurrence on the revised draft recertification request for CCP at INL.
194.24 Waste characterization	Waste Generator Site - LANL	Letter from DOE to EPA (July 10, 2007) requesting EPA's review and concurrence of the draft recertification letter for the CCP TRU waste program at LANL. Docket No. EPA-HQ-OAR-2007-0643-0001, (A-98-49, II-A4-89). Letter from EPA to DOE (July 11, 2007) approving of DOE's draft recertification of waste streams S3000, S5000 and OSRP from LANL.

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
194.24 Waste characterization	Waste Generator Site – LANL-Tier 1	Letter from DOE to EPA (August 1, 2007) requesting the EPA approve the Tier 1 change for the CCP High Energy Neutron Counter (HENC) #2 at the LANL. EPA letter to DOE (October 22, 2007) stated that the EPA has determined that the HENCE 2 system is adequate for the characterization of CH TRU waste. DOE letter to EPA (October 25, 2007) requesting the EPA approve a Tier 1 change for the CCP HENC #1 at LANL. Letter from EPA to DOE (December 7, 2007) stating the HENC 1 system used by LANL-CCP is adequate for the characterization of CH TRU waste. (Docket A-98-49; II-A4-95)
194.24 Waste characterization	Waste Generator Site – Savannah River Site (SRS)	Letter from DOE to the EPA (September 12, 2007) providing the draft expansion letter for the CCP TRU waste program at SRS to include the mobile Segmented Gamma Scanner (SGS). Letter from DOE to EPA (January 14, 2008) requesting that the Tier 1 approval for solids at SRS (S3000) be postponed until a new request is made by DOE.
194.24 Waste characterization	Waste Generator Site –SRS-Tier 1	EPA letter to DOE (August 30, 2007) the DOE requested approval of the SGS for non-destructive assay (NDA) for CH TRU waste as a Tier 1 change to the SRS-CCP CH baseline approval. EPA determined that the SGS system used by SRS-CCP is adequate for the characterization of CH TRU waste at SRS-CCP. DOE letter to the EPA (September 14, 2007) requesting to include the S3000 waste for the Tier 1 recertification audit scheduled in October of 2007.
194.24 Waste characterization	Tier 1 and Tier 2	Letter from DOE to EPA (July 26, 2007) providing the quarterly reporting activity changes for the AMWTP and CCP at ANL, CCP at INL and CCP at SRS with specific Tier 2 and general Tier 2 activity changes from April 2007 through June 2007. Letter from DOE to EPA (October 30, 2007) provided notification of Tier 2 changes for AMWTP and CCP Activities at INL, SRS, LANL, and ANL for FY07 4 th quarter. Letter from EPA to DOE (November 14, 2007) stating the EPA does not object to any of the changes reported but also requested additional information. Dockets No. A-98-49; II-A4-59, A-98-49; II-A4-72, A-98-49; II-A4-65, A-98-49; II-A4-73, A-98-49; II-A4-66 and A-98-49; II-A4-88. DOE to EPA letter (January 31, 2008) providing the notification of Tier 2 changes for the AMWTP, CCP-INL, CCP-SRS, CCP-LANL, and CCP-ANL for FY08 first quarter. EPA letter to DOE (March 12, 2008) acknowledging receipt of the Tier 2 changes to the waste characterization activities by the CCP at INL, SRS, ANL, LANL, and AMWTP. EPA does not object to any of the changes reported. Letter from DOE to EPA (March 26, 2008) responding to EPA requests regarding the fourth quarter of 2007 and the first quarter of 2008 Tier Report.

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
194.42 Monitoring	Well development	Wells H-15R (replaces H-15) and H-6bR (replaces H-6b) are new Culebra Member monitoring wells. Wells reconfigured to the Magenta Member are H-15 and H-16.
194.43 Passive Institutional Controls	Testing Schedule	Letter from EPA to DOE (March 7, 2008) approving an extension to the Passive Institutional Controls (PICs) testing schedule (requested by DOE on January 11, 2007) and providing a revised Table 1 from the November 2002 schedule. (Docket no: A-98-49, Item II-B3-67). The DOE is to annually conduct and report on the progress of relevant activities.
194.44 Engineered Barriers	Magnesium Oxide (MgO)	Letter from DOE to EPA (July 10, 2007) responding to EPA's questions pertaining to the efficacy of the Magnesium Oxide supplied to the WIPP. Letter from EPA to DOE (February 11, 2008) for approval of DOE's planned change request to reduce the safety factor from 1.67 to 1.2 with two conditions: 1) DOE must continue to calculate and track both the carbon disposed and the required MgO needed on a room-by-room basis. 2) DOE must annually verify the reactivity of MgO and ensure that it is maintained at 96% as assumed in supporting documentation.

Table 2: Procedure Revision Table

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Procedure	Rev. & Effective Date	Description
WP 02-EM1026, Water Level Data Handling and Reporting	Rev 0 1/14/08	This new procedure provides instructions on handling water level data collected at the WIPP site.
WP 05-WH.01	Rev. 3 02/11/08	Procedure revised to incorporate changes in generator site names and acronyms along with the addition of the procedures for use of electronic bar code readers.
NP 1-1, Organization and QA Program,	Rev. 7 02/12/08	<p>NP 1-1 was revised to:</p> <ul style="list-style-type: none"> • Clarify the authority and responsibility of the QA Team Lead to stop unsatisfactory work. • Clarify the responsibility of the individual to identify conditions for which a Stop Work Order is necessary. <p>Include references to NP 16-1, Corrective Actions, for description of the Stop Work Order process.</p>
WP 02-EM1014	Rev. 4 2/26/08	Procedure revised to add Attachment 1 for reference point determination and adjustment for variably installed tubing during ground water level measurement.
NP 6-2, Document Control Process,	Rev. 3 02/28/08	<p>NP 6-2 was reviewed and revised to meet the requirements of NP 5-1, Section 2.3, which requires a periodic review of procedures to ensure that the requirements of the CBFO QAPD are met and to verify implementation actions are performed as stated in the procedure. Changes were made as follows:</p> <ol style="list-style-type: none"> 1. Removed Design Plans from the list of examples. 2. Since Form NP 5-1-1 now has a Training Determination choice for Specific Procedures (SPs), Section 2.1.2 was changed to add that choice. 3. In Section 3.0, Records, the Preparer and Records Submitter columns were removed.
SP 1-1, QA Grading	Rev.7 04/07/08	This procedure was revised to provide examples of the grading of activities, procured items and services that would be classified as Quality Level-1 (QL-1) and Quality Level-2 (QL-2) in the SNL WIPP QA Program as requested by the EPA during DOE/CBFO Audit A-08-05 conducted November 13-15, 2007.

Table 2: Procedure Revision Table

Procedure	Rev. & Effective Date	Description
SP 9-8, Monitoring Parameter Assessment per 40 CFR 194.42	Rev. 0 04/23/08	<p>New procedure that prescribes the SNL WIPP process used to meet the 40 CFR 194.42 regulatory requirements to monitor WIPP performance against WIPP Performance Assessment (PA) expectations. This procedure is used to:</p> <ul style="list-style-type: none"> • Derive and revise Trigger Values (TVs). • Annually assess WIPP monitoring data against PA expectations and document these activities in the Compliance Monitoring Annual Report, and • Periodically assess the impacts of changes to WIPP programs on the Compliance Monitoring Parameters (COMPs) program and provide the Department of Energy (DOE) with recommendations for changes to the program, a requirement for WIPP recertification.
WP 13-1, Washington TRU Solutions LLC Quality Assurance Program Description	Rev 27 04/23/08	This procedure was revised to update the Contractor Assurance Elements along with the Scope and Frequency of Audits assurance requirements.
WP 02-EM1006, Final Sample and Serial Sample Collection	Rev 6 06/30/08	This procedure was revised to provide updated steps that environmental monitoring (EM) personnel perform to collect water samples from private wells, serial groundwater samples, and final samples in support of the Groundwater Surveillance Program
WP 02EC1001, Characterization Sampling, Shipping, and Documentation	Rev 8 06/30/08	This procedure was revised to provide updated direction in the performance of the Analytical and Quality Control Report Review utilizing Attachment 1 "Verification and Validation of Waste Characterization Analytical Data.

Table 3: Waste Emplacement Summary Report

Table 3: Waste Emplacement Summary Report

TRU Waste Inventory				
	Reporting Period ¹ Emplaced Container Volume (m ³)		Cumulative ² Emplaced Container Volume (m ³)	
RH TRU	14		63	
CH TRU	1,378		55,517	
Waste Components Inventory				
	Reporting Period ¹ Emplaced Mass (kg)	Cumulative ² Emplaced Mass (kg)	Maximum Emplacement Limiting Value ³ (kg)	Percent of Limiting Value ³ Emplaced
Cellulose, Plastic, Rubber Materials ⁴	229,481	5,358,863	22,000,000	24.36%
	Reporting Period ¹ Emplaced Mass (kg)	Cumulative ² Emplaced Mass (kg)	Minimum Emplacement Limiting Value ³ (kg)	Percent of Limiting Value ³ Emplaced
Fe-Metals ⁵	390,115	15,825,357	20,000,000	79.13%
Non-Fe Metals	6,324	318,530	2,000	Minimum met
Residual Liquids	Liquid waste is prohibited at WIPP. The total residual liquid in any payload container shall not exceed one percent by volume of that payload container.			
Emplaced Radiological Activity Inventory (curies)				
Radionuclide	Cumulative Activity in FY 2007/2008 Annual Change Report ⁶	CH Repository Activity ⁶	RH Repository Activity ⁶	Total Activity as of June 30, 2008 ⁶
²⁴¹ Am	1.83E+05	1.876E+05	1.694E+01	1.876E+05
¹³⁷ Cs	9.66E+01	1.466E+00	3.799E+02	3.813E+02
²³⁸ Pu	9.98E+04	1.607E+05	9.631E+00	1.608E+05
²³⁹ Pu	2.65E+05	2.744E+05	3.492E+01	2.744E+05
²⁴⁰ Pu	6.42E+04	6.665E+04	1.837E+01	6.667E+04
²⁴² Pu	9.66E+00	1.041E+01	5.791E-03	1.041E+01
⁹⁰ Sr	7.37E+01	3.259E+00	2.813E+02	2.846E+02
²³³ U	2.66E+00	3.194E+00	6.421E-02	3.258E+00
²³⁴ U	1.69E+01	2.693E+01	1.129E-01	2.704E+01
²³⁸ U	1.05E+01	1.063E+01	6.709E-04	1.063E+01
Total	6.12E+05	6.894E+05	7.412E+02	6.901E+05

Table 3: Waste Emplacement Summary Report

MgO' and Cellulose, Plastic & Rubber (CPR) Mass Emplaced Per Waste Panel	Panel	Room	MgO (kg)	CPR* (kg)	Excess Factor
	1	all	4,482,356	1,237,685	1.79
	2	2-7	5,972,300	1,241,909	2.23
	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	946,785	265,295	1.71
	4	4	1,013,460	290,608	1.70
	4	3	211,455	92,191	*1.08
	4	2	0	1,123	*.00

1. Reporting Period includes emplacement that occurred between April 1 and June 30, 2008
2. Cumulative period includes emplacement from the beginning until June 30, 2008
3. Limiting Value—Values from CRA Table 4-11. These values are based on inventory assumptions.
4. Cellulose, Plastic, Rubber Materials (CPR) includes 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. Excess factor for MgO greater than minimum of 1.67 for waste emplaced, new minimum value for excess factor for MgO of 1.20 to be implemented as approved by EPA (February 11, 2008) to reduce excess factor from 1.67 to 1.20.

* Waste emplacement in the noted room not complete at time of data cut off.

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

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WIPP Use Codes/Software and Code Version	Version Date	Description
MWT3D 2.50	2/1/08	Re-qualified code. "Moving Water Table in 3 Dimensions." Performs steady-state or transient simulations of saturated flow in a porous media.
DTRKCDB 1.00	2/5/08	Retired code. Not replaced.
GRASP-INV 2.01	2/5/08	Retired code. Not replaced.
PEST 5.5	2/5/08	Retired version 5.5 will be replaced with PEST 9.11.
POST_EPAUNI 1.15	2/5/08	Retired code. Not replaced.
POSTSECOFL2D 4.04	2/5/08	Retired code. Not replaced.
PRESECOFL2D 4.05	2/5/08	Retired code. Not replaced.
SECOFL2D 3.03	2/5/08	Retired code. Not replaced.
TRACKER 5.02	2/5/08	Retired code. Not replaced.
PEST 5.51	6/17/08	PEST 9.11 (Parameter ESTimation) is designed as a model-independent parameter estimator, and has been modified to perform calibrations using more pilot points than previous versions.

Table 5: Passive Institutional Controls Activities

Table 5: Passive Institutional Controls Activities

DATE	Description of Activity
03/07/08	Letter from EPA to DOE (Docket A-98-49, Item II-B2-67) responding to DOE's request for an indefinite extension to the PICs testing schedule approved on November 7, 2002 (Docket A-98-49, Item II-B3-41). The EPA agreed (March 7, 2008) to a reasonable extension of the 2002 schedule to provide the DOE more time to seek out viable PICs options and report PIC activities annually.
03/19/08	Carlsbad Field Office of the DOE (CBFO) and Washington Regulatory and Environmental Services (WRES) personnel met to discuss actions to implement the EPA approval of an adjusted PICs schedule (March 7, 2008). Items discussed included funding, reporting annual activities in the Annual Change Report (194.4(b)(4)), obtaining information on newly developed technology for markers (Waste Management 08), and memberships in international organizations for long-term record preservation.
05/06/08	Dialogue was initiated between WIPP and the Radioactive Waste Management Funding and Research Center in Tokyo, Japan for the review and potential development of the use of laser engraving technology on thin sintered silicon carbide plates. These plates may be used to develop record archives and long term monolith signs in compliance with the requirements of the Passive Institutional Controls program.

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

WP 02-PC.02, The Delaware Basin Drilling Surveillance Program. Revision 2 (WRES).

EPA March 7th, 2008 (Letter).