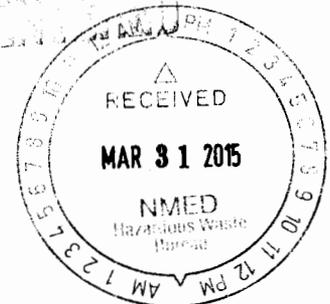




FFCO



Waste Management Division
P.O. Box 1663, Mail Stop K499
Los Alamos, New Mexico 87545
(505)667-4873/Fax:(505)-667-1745

National Nuclear Security Administrations
Los Alamos Field Office, A316
Los Alamos, New Mexico 87545
(505) 667-7203/FAX (505) 665-4504

Date: MAR 31 2015
Refer To: WM-DO-15-008
LA-UR: 15-21918
Locates Action No: N/A

RETURN RECEIPT REQUESTED

Ms. Siona Briley, STP Project Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East Building 1
Santa Fe, New Mexico 87505-6303

Dear Ms. Briley:

SUBJECT: SUBMITTAL OF SITE TREATMENT PLAN, FISCAL YEAR 2014 UPDATE AND PROPOSED REVISION 25.0, FEDERAL FACILITY COMPLIANCE ORDER, OCTOBER 4, 1995, LOS ALAMOS NATIONAL LABORATORY

This letter transmits to the New Mexico Environment Department (NMED) the Los Alamos National Laboratory (LANL) Site Treatment Plan (STP) Fiscal Year 2014 (FY14) Annual Update and requests approval of Proposed Revision 25.0 to the Compliance Plan (CP) of the STP in accordance with requirements of the Federal Facility Compliance Order (FFCO).

This update to the STP follows the format of the FY13 Annual Update. The principal changes consist of the following:

- NMED has deferred the removal of shipped mixed transuranic (MTRU) covered waste until more information becomes available and it is determined that the waste currently stored at the off-site facility will not be returned to LANL. MTRU waste shipped offsite for storage/disposal will not be included in the Deletion of MTRU Covered Waste.
At this time, the DOE/LANS cannot confidently predict the anticipated delay in performance for shipping covered STP MTRU waste for which the only currently allowed deletion pathway is disposal at WIPP. As NMED is aware, all MTRU covered waste inventory to the WIPP were suspended in May 2014 due to the WIPP shutdown.



Likewise, off-site management of STP covered MLLW that may have been associated with or derived from processing MTRU nitrate salts containers has been placed on hold until a regulatory determination can be made confirming that such waste is acceptable for shipping offsite. Likewise, the DOE/LANS cannot confidently predict when the TA-54 processing lines will come back online for processing MTRU and/or MLLW covered waste. LANL is keeping NMED continuously updated regarding these developments via daily written technical reports and twice-weekly conference calls.

- The Confinement Vessel Disposition (CVD) Project has kicked off during the summer of 2014 in which one CVD has been transferred to CMR for material retrieval. As a relatively new process, the first vessel (and subsequently vessels) will be used as lessons learned for the next material retrieval for meeting the compliance date of 9-30-2017 of the remaining nine CVDs.
- A contract has been awarded for the characterization, packaging, transportation, treatment and disposal of the high activity waste.

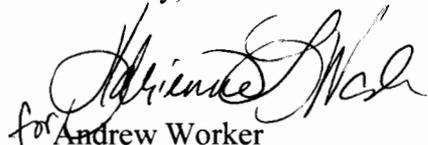
Enclosure 1 contains two final copies of the FY14 Annual Update and Proposed Revision 25.0. Enclosure 2 is a compact disk with a final copy and a redlined version of the FY14 Annual Update in Microsoft Word.

In accordance with the requirements of Section XX of the FFCO, "*Documents, Information, and Reporting Requirements*," we certify, as the project managers responsible for overseeing the implementation of the Site Treatment Plan for the Los Alamos National Laboratory and for Los Alamos Site Office/National Nuclear Security Administration, that, to the best of our knowledge and belief, the information in this document is true, accurate, and complete. If you have any questions, please contact Monica Noll at (505) 667-5999, or by email at mdn@lanl.gov, or Andrew Worker at (505) 606-0787, or by email at andrew.worker@nnsa.doe.gov.

Sincerely,


Monica Noll
STP Project Manager
Waste Management Programs (WM-PROG)
Los Alamos National Security, LLC

Sincerely,


for Andrew Worker
STP Project Manager
Los Alamos Field Office
U.S. Department of Energy
National Nuclear Security Administration

MN/AW:tav

Enclosure:

1. FY14 Annual Update
2. Compact Disk

Cy: John E. Kieling, NMED-HWB, Santa Fe, NM (E-File)
George C. Henckel III, NA-00-LA, (E-File)
Adrienne L. Nash, NA-00-LA, (E-File)
Isaac M. Valdez, NA-00-LA, (E-File)
Andrew Worker, NA-00-LA, (E-File)
Michael A. Lansing,, PADOPS, (E-File to aosburn@lanl.gov)
Michael T. Brandt, ADESH, (E-File to mtford@lanl.gov)
Raeanna Racine Sharp-Geiger, ADESH, (E-File)
Andrew J. Montoya, WM-DO, (E-File)
Michelle L. Coriz, WM-PROG, (E-File)
Anthony R. Grieggs, ENV-CP, (E-File)
Mark P. Haagenstad, ENV-CP, (E-File)
David E. Frederici, LTP-SSS, (E-File)
Sean B. French, LTP-SSS, (E-File)
James S. Clemmons, LTP, (E-File)
Davis V. Christensen, LTP-PTS, (E-File)
Susan L. McMichael, LC-LESH, (E-File)
Monica Noll, WM-PROG, (E-File)
lasomailbox@mnsa.doe.gov, (E-File)
locatesteam@lanl.gov, (E-File)
wm-correspondence@lanl.gov, (E-File)

08/11/2015 10:00 AM

LA-UR-15-21918

March 31, 2015

**Los Alamos National Laboratory
Federal Facility Compliance Order
Annual Site Treatment Plan Update
for Fiscal Year 2014**



Prepared by the Waste Management Division

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ACRONYMS

40 CFR	Title 40 of the Code of Federal Regulations
AMWTP	Advanced Mixed Waste Treatment Plant
CCA	Compliance Certification Application
CCP	Central Characterization Project
CMR	Chemistry and Metallurgy Research (Building)
CP	Compliance Plan
DOE	U.S. Department of Energy
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FFCA	Federal Facility Compliance Act
FFCO	Federal Facility Compliance Order
FR	Federal Register
FY	Fiscal Year
HWA	Hazardous Waste Act
INL	Idaho National Laboratory
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
LDR	Land Disposal Restrictions (RCRA)
LWAA	Land Withdrawal Act Amendments
M&EC	Materials and Energy Corporation
MLLW	Mixed Low-Level Waste
MTRU	Mixed Transuranic (Waste)
MWIR	Mixed Waste Inventory Report
NMED	New Mexico Environment Department
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
RTR	Real-time radiography
STP	Site Treatment Plan
TA	Technical Area
TBD	To be determined
TBV	To be verified
TRU	Transuranic
UC	University of California
WCRRF	Waste Characterization, Reduction, and Repacking Facility
WCS	Waste Control Specialist LLC
WIPP	Waste Isolation Pilot Plant

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INTRODUCTION

On October 6, 1992, Congress passed the Federal Facility Compliance Act (FFCA) to address compliance by the U.S. Department of Energy (DOE) with the Land Disposal Restrictions (LDR) for the storage of mixed waste set forth in Section 3004(j) of the Resource Conservation and Recovery Act (RCRA). The FFCA requires DOE to submit a Site Treatment Plan (STP) for developing treatment capacities and technologies to treat all of the facility's mixed waste, regardless of the time generated, to the standards promulgated pursuant to Section 3004(m) of RCRA. The FFCA provides that the appropriate regulatory authority, the New Mexico Environment Department (NMED), may approve, approve with modifications, or disapprove the STP. Prior to making such a determination, the FFCA requires NMED to provide public notice, consider public comments, and consult with the U.S. Environmental Protection Agency (EPA) and any other state in which a facility affected by the STP is located.

On October 4, 1995, the NMED issued a Federal Facility Compliance Order (FFCO) to DOE and its then management and operating contractor, the University of California (UC) Regents. On June 1, 2006, Los Alamos National Security, LLC (LANS) replaced UC as operating contractor of Los Alamos National Laboratory (LANL) at which time LANS assumed responsibility for compliance with the FFCO.

The FFCO required DOE/LANS to implement an STP for the treatment of mixed waste at LANL. The STP is intended to fulfill the requirements of the FFCA and establish an enforceable framework to allow DOE and LANS (Respondents) to achieve full compliance with LDR requirements under the New Mexico Hazardous Waste Act (HWA) and RCRA. The compliance dates set forth in the STP are enforceable time periods in which Respondents are required to treat or otherwise meet the requirements set forth for LDR under the HWA and RCRA.

On March 31, 1995, DOE submitted its proposed STP, which addressed treatment capacities and technologies to treat all of LANL's mixed waste, regardless of the time it was generated, to NMED. On April 17, 1995, the public was provided an opportunity to comment to NMED on DOE's draft STP. After considering public comment and otherwise complying with the FFCA, NMED approved the draft STP with modifications.

Section VII of the FFCO requires DOE/LANS to submit an Annual STP Update to the NMED each year on or before March 31. The FFCO requires that the Annual Update bring the information in both the Background and the Compliance Plan (CP) current to the end of the previous federal fiscal year (FY). Part I of this Annual Update constitutes the update to the Background. Part II contains the changes that have occurred since the last Annual Update and also identifies proposed revisions and amendments to the CP. Part III incorporates the changes in Part II into the proposed CP revision (Revision 25.0).

PART I BACKGROUND UPDATE

1.0 INTRODUCTION

The Background (Part I) provides the following information.

- The estimated volume of covered waste in storage at the end of the previous FY and anticipated to be placed in storage for the next five FYs.
- A progress report from the end of the previous federal FY describing treatment progress and treatment technology development for each treatment facility and activity scheduled in the STP.
- A description, if applicable, of current or anticipated alternative treatment technology that is being evaluated for use instead of treatment technologies or capacities identified in the STP.
- A description of DOE's funding for STP-related activities and any funding issues that may affect the schedule.
- The status of the "No-Migration Variance Petition" or any treatability variances.
- A progress report on characterization and/or treatment capabilities or plans for mixed transuranic (MTRU) waste related to the waste treatment standards, if any, for the DOE Waste Isolation Pilot Plant (WIPP) facility near Carlsbad, New Mexico.

The STP-covered waste inventory is verified during quality control activities. Inconsistencies in treatability group or volume between the original inventory and the current inventory may exist. These inconsistencies are reconciled annually with the STP update.

2.0 AMOUNT OF EACH COVERED WASTE STORED AT LANL

2.1 Mixed Low-Level Waste (MLLW) Inventory

During FY14, STP-covered MLLW inventories decreased from approximately 100 m³ to 14 m³. The decrease was mainly due to the FY13 and FY14 budget augment that increased shipments of 10–100 nCi/g Waste along with the waste identified in the Framework Agreement. In FY14, the reclassified waste inventory (201.4007 m³) was completed before the April 16, 2014 compliance date as proposed in the FY12 STP Annual Update. The remaining STP covered FY13 and FY14 MLLW inventory (approximately 14 m³) being readied for shipment and recharacterized during FY15. Table 2.1-1 summarizes changes to the estimated FY14 STP-covered MLLW inventory. Approximately 709 m³ of covered MLLW was treated, recycled, disposed of, or otherwise deleted during FY14.

Appendix A provides the detailed changes to the FY14 covered MLLW inventory by treatability group, including the inventory at Technical Area (TA)-55 and the Chemistry and Metallurgy Research Building (CMR). Appendix B (Table B-1) lists the FY13 MLLW shipments. Table B-2 identifies other deleted waste. If any, administrative adjustments to the MLLW inventory are shown in Appendix C (Table C-1). Detailed information about the administrative adjustments in Table C-1 are shown in Table C-2. The MLLW inventory reported in the FY13 Annual Update is included as Appendix D.

Table 2.1-1 FY14 MLLW Inventory Summary

Contribution	Volume (m ³) ¹
Estimated MLLW Inventory Reported in FY13 Annual Update	100.381
Proposed Revision 25.0	
New Covered Waste	0.208
Administrative Adjustments ²	621.721
Offsite Treatment	-708.631
Offsite Recycle	NA ³
Onsite Decontamination	NA
Treatability Study Use	NA
Estimated MLLW Inventory Reported in FY13 Annual Update	13.679

¹ MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322

² Includes transfers of MTRU and other wastes into MLLW categories

³ NA = No Activity

2.2 Mixed Transuranic (MTRU) Inventory Summary

During FY14, STP-covered MTRU inventories decreased from approximately 1312 m³ to 1124 m³.

Table 2.2-1 summarizes changes to the estimated FY14 MTRU covered waste inventory. The total volume of MTRU waste in Table 2.2-1 includes the CMR and TA-55 MTRU volumes, which are maintained in a separate inventory from the MTRU inventory at TA-54. Appendix E contains additional detail for the MTRU inventory; Table E-1 covers the TA-54 inventory, and Table E-2 covers the inventory at CMR and TA-55. The volume of STP-covered MTRU waste that is part of the “non-cemented above-ground Environmental Management (EM) Legacy TRU” (MTRU waste only) has been summarized in Appendix E-1 and Section 4.0 of the Compliance Plan Volume. Appendix F (Table F-1) provides a summary of FY13 MTRU shipments to WIPP. In Appendix G, Tables G-1 and G-2 describe the administrative adjustments that were made to resolve differences in the TA-54 and the CMR/TA-55 MTRU inventory data, respectively. DOE/LANS anticipates STP-covered MTRU inventory increases because of the WIPP shutdown as of February 14, 2014.

Administrative adjustments typically represent the following types of activities:

- DOE/LANS may correct database entries so that waste items not previously listed as STP waste are now identified as STP waste.
- DOE/LANS may correct waste data, such as volume or EPA codes, through quality control activities. Under DOE standards, waste that was formerly classified as MTRU because it had radioactivity greater than 10 nCi/g has been reclassified to MLLW (LA-W935) if its activity is less than 100 nCi/g.
- New analytical data may also require that waste streams previously managed as transuranic (TRU) waste should, as a prudent measure, be reclassified and managed as MTRU waste.
- During repacking or other quality control activities, TRU waste may be recharacterized as MTRU waste when previously unidentified hazardous contents, such as lead, are determined to be present.

- During repacking, treatability groups are frequently reassigned to be consistent with current management and shipping criteria.
- Containers of waste are occasionally determined not to belong to mixed waste streams and are reclassified as TRU waste; removal of WIPP-prohibited items, if they are the only hazardous constituent, will result in the remaining waste being classified as nonmixed.
- Addition or removal of 85-gallon overpacks changes the volume of waste in the inventory; rounding container volumes to three decimal places also changes the inventory volume.

Appendix G includes changes to the MTRU waste inventory that resulted from repacking activities. MTRU waste volumes in the STP inventory reflect the volume of the container rather than the volume of the contents. When containers are repacked, the STP inventory volume of any given treatability group may either increase or decrease. When a container is repacked, the contents are sometimes split into two or more new containers to meet shipping and waste acceptance criteria or to meet characterization criteria (e.g., nondestructive analysis calibration limits). In addition, the new containers may be assigned to different treatability groups depending on the contents of each drum. Therefore, the volume of a single drum may ‘multiply’ into more volume than the original container. For example, repacking one container of *Cemented Sludge* (0.208 m³) may result in one drum of *Combined Combustible-Noncombustible Waste* (0.208 m³) and one drum of *Noncombustible Waste* (0.208 m³). In addition, changes in the waste volume in the STP inventory occur when an 85-gallon ‘overpack’ is removed from, or added to, a 55-gallon drum during repackaging. Removal of overpacks decreases the volume of waste in the STP inventory. Adding an overpack to a 55-gallon drum increases the volume of waste shown in the STP inventory.

Table 2.2-1 Covered MTRU Inventory Summary

Description	Volume (m ³)
Covered MTRU Inventory Reported in FY13 (46.965 m ³ at CMR/TA-55 and 1264.723 m ³ at TA-54)	1311.688
New Covered MTRU Waste at TA-54	3.120
New Covered MTRU Waste at CMR/TA-55	6.092
Covered MTRU Waste Shipped to WIPP in FY14	-217.262
Covered MTRU Waste Shipped to Waste Control Specialist, LLC, Texas in FY14	-155.718
Covered MTRU Waste Shipped to the Advanced Mixed Waste Treatment Plant (AMWTP) for DOE, Idaho in FY14	-22.892
Covered MTRU Waste Shipped in FY14 on hold per the NMED	395.872
Net Administrative Adjustments for TA-54 in FY14	-185.870
Net Administrative Adjustments for CMR/TA-55 in FY14	-10.700
Covered MTRU Inventory at End of FY14	1124.330

3.0 TREATMENT PROGRESS

3.1 Offsite Treatment

During FY14, covered MLLW streams were shipped for treatment to the following offsite commercial treatment facilities: Perma-Fix in Gainesville, Florida; Perma-Fix/Material and Energy Corporation (M&EC) in Oak Ridge, Tennessee; and Perma-Fix Northwest in Richland, Washington; and Waste Control Specialist LLC (WCS) in Andrews, Texas.

Perma-Fix/Florida

Perma-Fix in Gainesville, Florida, is a RCRA-permitted facility with a Radioactive Materials License for processing scintillation cocktail vials and other mixed waste fluids for blending and shipment to an energy recovery facility. Perma-Fix services include the decommissioning of labpacks, thermal treatment of organics, stabilization and solidification of inorganics, and distillation of halogenated organics. The facility also performs chemical treatments such as solvent extraction, demulsification/precipitation/flocculation, chelation, oxidation-reduction, ion exchange, absorption/adsorption, amalgamation, and chemical decontamination.

Perma-Fix/Material and Energy Corporation (M&EC)

M&EC, located in the East Tennessee Technology Park in Oak Ridge, Tennessee, is a permitted treatment facility for low-level radioactive and MLLW. The facility installed six treatment processes and has the capability for treating organic and inorganic mixed waste to meet the LDR criteria. These processes include stabilization/solidification, chemical extraction, chemical fixation, metals precipitation, neutralization, and debris treatment.

Perma-Fix Northwest

Perma-Fix Northwest, located in Richland, Washington, is a permitted treatment facility for the treatment of low-level radioactive and MLLW. The site houses both a low-level radioactive waste treatment facility and a MLLW treatment facility, licensed under Nuclear Regulatory Commission regulations (State of Washington licenses WN-I00393-1 and WN-I00508-1) and permitted under RCRA regulations through the State of Washington. The facility can perform thermal treatment, compaction, macroencapsulation, neutralization, and stabilization.

Waste Control Specialists LLC (WCS)

WCS, located in Andrews, Texas, is a permitted treatment facility for the treatment and disposal of low-level radioactive and MLLW. The site has regulatory authorization for industrial solid waste and hazardous waste storage, processing, and land disposal under RCRA permit # HW-50358 granted by the state of Texas. EPA has authorized the site for treatment, storage, and land disposal of Toxic Substances Control Act (TSCA) wastes (TXD988088464). The facility can process waste that requires compaction, microencapsulation, macroencapsulation, neutralization, deactivation, chemical oxidation, chemical reduction and stabilization.

Appendix B summarizes LANL's offsite shipments for treatment and/or disposal of covered MLLW in FY14. Approximately 709 m³ of STP-covered MLLW was shipped offsite for treatment and/or disposal.

3.2 Offsite Recycling

LANL did not recycle any STP-covered MLLW offsite in FY14.

3.3 Onsite Treatment and Recycling

LANL did not treat or recycle any STP-covered MLLW onsite in FY14.

3.4 Onsite Lead Decontamination

No LANL STP-covered MLLW was decontaminated onsite during FY14.

3.5 Treatability Studies

LANL conducted no treatability studies in FY14.

3.6 Administrative Adjustments and Corrections

Administrative adjustments and corrections are due to discrepancies found during quality control activities related to preparing waste for treatment, inventory, and disposal or when preparing the STP Annual Update. A data quality review is conducted annually to compare shipment notifications and shipping manifests with database updates.

3.6.1 Adjustments to MLLW Inventory

Appendix C (Table C-1) details the administrative adjustments to the MLLW inventory. The principal adjustment reflects the transfer of MTRU waste to MLLW (LA-W935, 10–100 nCi/g). A substantial volume of LANL's STP-covered MTRU waste has been determined to no longer meet the criteria for TRU waste and has been reclassified as MLLW. If previously unidentified hazardous materials, such as lead, are revealed during repacking or other quality control activities, low-level waste may be recharacterized as MLLW. (Appendices C and G).

3.6.2 Adjustments to MTRU Inventory

During the preparation of the FY14 STP Annual Update, DOE/LANS identified a number of adjustments to the MTRU inventory volume (Appendix G, Tables G-1 and G-2), including additions of newly-identified STP-covered waste, recharacterization of waste, and reclassification of MTRU waste to MLLW. Other adjustments were needed to account for volume changes due to repacking of waste and transfers of waste from one treatability group to another or to correct database entries.

4.0 TREATMENT TECHNOLOGY DEVELOPMENT

During FY14, the availability of commercial and federal facility offsite treatment and disposal capacity for MLLW remained stable. As a result of DOE's increasing reliance on commercial treatment/disposal for mixed wastes, nearly all funding for onsite technology development has been prioritized to support offsite treatment and disposal of mixed wastes. DOE treatment technology development initiatives are generally limited to specific technologies or technology adaptations in response to specific needs that cannot be addressed through commercial facilities.

4.1 Treatment Technologies Being Evaluated

DOE/LANS continues to monitor the development of other potential treatment technologies that may become available in the future. Some of these technologies are being developed at LANL and at other DOE sites. Numerous other commercially developed treatment processes exist that have not been demonstrated on mixed wastes.

4.1.1 Offsite Commercial Treatment Facilities

DOE/LANS continues to monitor the availability and capabilities of offsite commercial facilities for treatment technologies and permitting that are appropriate to LANL waste. These facilities are listed in Appendix H (Table H-1).

4.1.2 Offsite DOE Treatment Facilities

During FY14, DOE/LANS received approval from NMED to ship approximately 18 corrugated metal boxes (CMBs) to Idaho National Laboratory (INL) for TRU waste remote handling and repackaging with final disposition at WIPP. These CMBs were packaged at the Waste Characterization, Reduction, and Repacking Facility in the early 1980s. INL Advanced Mixed Waste Treatment Plant (AMWTP) was the desired receiving facility for this work. The AMWTP is a 500 million dollar state-of-the-art repackaging facility that uses robotic equipment to size reduce metallic waste. Nine CMBs were successfully treated at AMWTP and shipped directly to WCS in November 2014 for storage until WIPP is re-opened to accept waste.

5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES

Funding to implement the LANL STP for mixed waste during FY14 was sufficient to meet all compliance dates as required by the STP issued on October 4, 1995. As stated in previous updates to the STP, funding is no longer available for development of mobile treatment units at LANL, but funding was provided in all years between FY98 and FY05 and between FY07 and FY14 for shipment of mixed waste offsite for treatment and disposal at DOE and commercial facilities. Funding during FY15 may be sufficient to meet all compliance dates established in the STP; however, FY15 federal budget restrictions may impact LANL shipping schedules. Should funding reductions occur that would affect STP compliance dates, the DOE and LANS will so notify the NMED to address compliance schedules and activities.

6.0 TREATMENT VARIANCES

RCRA allows certain case-by-case variances from LDR standards. Variances that may be sought under RCRA relate to requests for substitution of an alternative treatment technology in place of the LDR-required treatment technology. This section discusses any potential treatment variances related to LANL's covered waste, as described below.

6.1 WIPP No-Migration Variance Petition/Land Withdrawal Act Amendments

WIPP, located near Carlsbad, New Mexico, is a DOE repository for TRU waste generated by the nation's defense-related activities. Some of the TRU waste contains hazardous waste constituents regulated under the RCRA.

The WIPP repository is considered to be a deep geologic repository rather than a shallow landfill. It is wholly sited 2,100 ft below the land surface in a salt bed. Because salt has the advantageous characteristic of slow plastic deformation, it is predicted that the salt will entomb the waste and seal it from the human environment, making potential release of hazardous constituents a low-probability event.

The WIPP Land Withdrawal Act Amendments of 1996 (LWAA) (PL 104-201, Section 3188) exempted waste designated by the Secretary of Energy for disposal at WIPP from RCRA's LDRs. Following passage of the LWAA, the EPA terminated its review of the No-Migration Variance Petition, submitted by DOE to EPA in May 1995. EPA formalized its withdrawal by letter to George Dials, DOE/Carlsbad Area Office Manager, dated December 29, 1997.

On October 29, 1996, DOE submitted its Compliance Certification Application (CCA) to EPA. The CCA is intended to demonstrate to EPA that WIPP meets the requirements of Title 40 of the Code of Federal Regulations (40 CFR) Part 191 and 40 CFR Part 194. On October 23, 1997, EPA announced its proposed decision to issue a certification of compliance, subject to a number of specified conditions, and to a public

comment period of 120 days. On May 18, 1998, EPA published in the Federal Register (63 FR 27354) its final rule certifying that WIPP will comply with the requirements of Subparts B and C of 40 CFR Part 191 and amending the WIPP compliance criteria in 40 CFR Part 194. The final rule became effective June 17, 1998. On March 25, 1999, WIPP received its first shipment of non-mixed (radioactive only) TRU waste from LANL. Other facilities have also shipped non-mixed TRU waste to WIPP. The NMED issued a hazardous waste permit for WIPP on October 27, 1999, authorizing the DOE to manage, store, and dispose of contact-handled MTRU waste at the facility.

6.2 Other Treatment Variance(s)

No treatment variances were requested or granted in FY14.

7.0 WIPP FACILITY CAPABILITIES

As discussed above, DOE is disposing of its defense TRU waste, both mixed and nonhazardous, in its deep geologic repository at the WIPP near Carlsbad, New Mexico. This facility is a receiving and disposal facility, without the capability of routinely opening and repackaging waste. TRU waste will already be containerized when received at the WIPP facility. The WIPP facility is not a generator of TRU waste, and, therefore, will receive all of the waste in shipments from offsite. On February 2014 the NMED received notice of a release at the WIPP nuclear waste repository. A LANL container sent to WIPP experienced an energetic chemical reaction which ultimately led to the release of radioactive material. The cause of the chemical reaction is still under investigation and the need for additional remediation of these containers is unknown. In light of recent events, and the potential need to re-remediate all nitrate salt-bearing waste, the NMED has determined that the removal of MTRU from the STP will be deferred until more information becomes available and it is determined that waste currently stored at WCS and WIPP will not be returned to LANL. All shipments of MTRU covered waste inventory to WIPP were suspended in May 2014 due to the WIPP shutdown.

7.1 Characterization Capabilities at WIPP

Wastes proposed for shipment to WIPP are characterized and certified at LANL by the Central Characterization Project (CCP), a contractor to DOE's Carlsbad Field Office.

7.2 MTRU Treatment Capabilities and Plans

WIPP is not required to treat MTRU waste to meet the LDR standards. As described above, the LWAA exempted wastes designated by the Secretary of Energy for disposal at the WIPP from this requirement.

PART II COMPLIANCE PLAN UPDATE

1.0 INTRODUCTION

This update to the CP contains

- Changes to the CP occurring since the previous Annual Update, including
 - correspondence, including notices of shipments; and
 - new covered and deleted waste;
- Proposed revisions and amendments, including
 - compliance date changes;
 - description of waste deleted in accordance with the requirements in FFCO Section IX, *Deletion of Waste*;
 - documentation of new covered waste in accordance with the requirements in Section VIII, *Addition of New Covered Waste*; and
 - proposed changes to the overall schedule in the CP.

2.0 CHANGES AND REVISIONS TO THE CP OCCURRING SINCE THE PREVIOUS ANNUAL UPDATE

This section describes revisions, amendments, or other changes to the LANL CP.

2.1 Activities Completed During FY14

Proposed FY12 STP annual milestone schedules completed are shown in Table 2.1-1.

Table 2.1-1 FY12 FFCO and STP Milestones Compilation

STP/CP Section	MWIR* Waste ID	Treatability Group	FY12 Milestone Net Volume	Compliance Date	Reference Letter
3.3.4	LA-W935	10-100 nCi/g Waste	201.4007	4-16-2014	WM-DO-14-030
3.1.5	LA-W922	Noncombustible Debris Waste	0.208	9-30-2014	WM-DO-14-046
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing	0.832	6-30-2014	WM-DO-14-049

*MWIR is Mixed Waste Inventory Report

2.2 Expedited Shipment Letters

Expedited shipment letter is listed in Appendix I, Table I-1.

2.3 Correspondence

Between October 1, 2013 and March 31, 2015, DOE/LANS communicated with the NMED on issues related to:

- FY14 and FY15 waste shipment notifications
- 15-day notification, proposed deletion of waste

This correspondence is listed in Appendix I (Table I-2). Correspondence previously listed in Appendix I, Table I-2 of Revision 24.0 of the STP is so noted in the appendix.

3.0 DESCRIPTION OF DELETED WASTE

A proposal for deletion of STP waste items is included with this update as Proposed Revision 25.0 in accordance with FFCO Section IX, *Deletion of Waste*. These deletions are proposed because the wastes were shipped offsite for treatment, disposal, or recycling or were otherwise determined not to be mixed wastes. These covered wastes are included in Appendix B, Appendix F, and Appendix G.

4.0 DOCUMENTATION OF NEW COVERED WASTE

A proposal for addition of STP waste items is included with this update in accordance with FFCO Section VIII, *Addition of Waste*. These additions consist of wastes placed in storage during FY13 and were proposed to become covered wastes in FY14. These covered wastes are included in Appendix E. Addition of new covered and newly characterized as MTRU waste to be added to the STP is identified in Section 6.1.

5.0 PROPOSED CHANGES TO THE COMPLIANCE PLAN SCHEDULE

DOE/LANS is proposing new milestones for *Compressed Gases Requiring Scrubbing* (LA-W917) Activity 3.1.8(A) to “complete shipping of existing wastes to an offsite treatment facility or complete parallel option”; and *10-100 nCi/g Waste* (LA-W935) Activity 3.3.4(A) to “complete radiological characterization” and Activity 3.3.4(B) “complete shipment of existing waste to offsite facility for treatment, or complete parallel options.” DOE/LANS expects to be able to complete shipping wastes by September 30, 2018.

I. Compliance Dates and Waste Description

LA-W917: This waste consists of pressurized pipe overpacks and aerosol cans removed from TRU waste containers during the repackaging process that were assayed and are considered MLLW.

Current proposed compliance date: September 30, 2015
Proposed Revision 25 compliance date: September 30, 2018

LA-W935: This waste consists of 10-100 nCi/g derived from TRU and MTRU covered inventory as a result of the repackaging process.

Current proposed compliance date (A): September 1, 2015, and (B): September 30, 2015
Proposed Revision 25 compliance date (A): September 1, 2018, and (B): September 30, 2018

II. Treatment Process

The preferred treatment process for LA-W917 and LA-W935 is shipment offsite for treatment to meet LDRs. These wastes may be treated by macroencapsulation and/or thermal treatment or other RCRA treatment methods according to the standards in 40 CFR 268.40 at an offsite commercial facility.

III. Availability of Commercial Facilities

DOE/LANS uses the facilities identified in Appendix H for treatment and disposal of MLLW. No additional facilities are needed to treat the current inventory of *Compressed Gases Requiring Scrubbing* (LA-W917) and *10-100 nCi/g Waste* (LA-W935).

IV. Justification for Milestone

Since commercial treatment facilities are available, DOE/LANS does not anticipate any significant delays in shipping this waste offsite for treatment. Prior to shipment, LA-W917 (pressurized pipe overpacks and aerosol cans) need to be verified to be punctured via real-time radiography (RTR) or visual examination. There is no processing capability at TA-54 for containers of pressurized pipe overpack or aerosol cans components until processing lines become available. LA-W935, (MLLW containers that may be related to remediated TRU containers that contained nitrate salts) are restricted from being shipped during the investigation into the cause of the drum event at WIPP. Until a determination is made by DOE/LANS, these drums are to be stored at LANL until it is acceptable to ship.

No other changes to the schedule in the CP of the STP are proposed.

6.0 DETAILED DESCRIPTION OF THE PROPOSED REVISION

The purpose of this revision request is to reflect changes in the STP inventories in the LANL CP of the STP in accordance with FFCO Section X.C.2.a. The changes proposed by this revision to the CP will allow the added covered wastes to be treated or otherwise managed in accordance with the Activities and Compliance Dates pertaining to each treatability group, as adopted or revised herein. The CP text changes are indicated in the redlined version provided to the NMED.

DOE/LANS is proposing to revise the CP text to reflect the following change in STP-covered inventories:

- Increases and decreases in covered mixed waste inventories due to the addition of new covered waste and offsite shipments during FY14 and other changes in the STP inventory.

The CP changes are proposed in accordance with the applicable requirements in the FFCO, as amended: Section VIII, *Addition of New Covered Waste*; Section X.B.4, *Revisions*; and Section XI, *Deletion of Waste*.

6.1 Addition of New Covered¹ Waste

DOE/LANS is requesting that the following waste be added to the STP as covered waste.

6.1.1 MLLW Additions

The volume of MLLW requested for addition is 0.208 m³ of new-covered *Noncombustible Debris* (LA-W922).

¹ Waste generated during the previous FY that was not shipped offsite within one year is termed new-covered STP waste.

Table 6.1.1-1 Proposed Addition of New Covered MLLW Waste

CP Section	MWIR ¹ Waste ID	Treatability Group	Volume (m ³) ²
3.1.5	LA-W922	Noncombustible Debris	0.208
Total			0.208

¹MWIR is Mixed Waste Inventory Report.

²Corrections were made to the accumulation start date at time of shipment.

6.1.2 MTRU Waste Additions

The volume of new covered MTRU waste requested for addition is 9.212 m³ (Table 6.1.2-1). DOE/LANS also requests the addition of 5.858 m³ of *Combustible-Noncombustible Waste*, previously managed in the TRU inventory (Appendix G, Table G-1). Table 6.1.2-2 identifies waste that is proposed for addition following activities that identified waste in the TRU inventory as MTRU either through review of waste characteristics or as a result of identifying potentially hazardous constituents during repacking TRU waste.

Table 6.1.2-1 Proposed Addition of New Covered¹ MTRU Waste

CP Section	Treatability Group	Volume (m ³)
4.0	Combustible-Noncombustible Waste	2.912
4.0	Combustible Waste	0.000
4.0	Solidified Inorganic and Organic Waste	0.208
Total TA-54 New Covered		3.120²
4.0	Combustible-Noncombustible Waste at CMR	3.800
4.0	Combustible-Noncombustible Waste at TA-55	1.252
4.0	Combustible Waste at TA-55	0.208
4.0	Noncombustible Waste at TA-55	0.832
Total CMR/TA-55 New Covered		6.092³
Total New Covered Waste		9.212

¹New covered waste in Table 6.1.2-1 refers to waste generated in the previous FY.

²Confirmation of reassy to determine TRU or LLW concentration for containers to continue on a path for disposition.

³New covered waste at TA-55 was a result of radioactive assay problems, radioactive free liquids, and waste containers entrapped in the TA-55 safety pause. New covered waste at CMR was a result of waste containers that have not been completely filled.

Table 6.1.2-2 Proposed Addition of Waste Newly Characterized as MTRU

CP Section	Treatability Group	Volume (m ³)
4.0	Combustible-Noncombustible Waste (from identification of potentially hazardous constituents during repacking of TRU waste)	5.858
Total Newly Characterized MTRU		5.858

6.2 Deletion of Covered Waste

Both MLLW and MTRU wastes were shipped offsite for treatment and disposal or recycling or are otherwise proposed as deleted waste.

6.2.1 Deletion of MLLW

DOE/LANS is requesting that covered MLLW identified in Appendix B be deleted from the STP. These covered wastes were shipped offsite for treatment and disposal or recycling. The total volume of covered MLLW that is requested for deletion under this revision to the CP is 708.631 m³ (Appendix B, Table B-1).

6.2.2 Deletion of MTRU Waste

DOE/LANS is requesting that a total of 185.870 m³ of covered MTRU waste be deleted from the STP. These covered wastes were administrative adjustments due to reclassification, repackaging, volume and treatability group changes. The NMED has determined that the removal of shipped MTRU from the STP will be deferred until more information becomes available and it is determined that the waste currently stored at the offsite facility will not be returned to LANL. Details of the administrative adjustments are given in Appendix G. Details of the offsite shipments are given in Appendix F.

6.2.3 Other Deletions of FY14 Waste

No waste is proposed for deletion due to recycling or onsite treatment in FY14. No waste was shipped offsite for treatability studies.

6.3 Adjustments to the Original (October 4, 1995) STP-Covered MLLW Inventory

DOE/LANS is requesting adjustments to the original (October 4, 1995) STP-covered MLLW inventory as listed in Appendix C (Table C-1). Most administrative adjustments are due to reclassification of MTRU waste to MLLW treatability groups and to quality control activities related to preparing waste for treatment and disposal. These adjustments may result in additions of newly-identified covered waste or transfers of waste to other treatability groups.

6.4 Adjustments to MTRU Waste Inventory

DOE/LANS is requesting adjustments (Appendix G, Tables G-1 and G-2) to the original (October 4, 1995) STP-covered MTRU waste inventory. Most administrative adjustments are due to reclassification of MTRU waste to MLLW treatability groups or to other MTRU treatability groups and to reclassification of TRU to MTRU as a result of quality control activities related to preparing waste for treatment and disposal. These adjustments may result in additions of newly-identified covered waste or transfers of waste to other treatability groups.

6.5 Establishment of New Milestone Activity Dates

DOE/LANS is not requesting any new compliance milestones.

6.6 Additional Revisions

No other revisions are requested.

7.0 RATIONALE FOR THE PROPOSED REVISION

This information is provided in accordance with FFCO Section X.C.2.a.

7.1 Establishment of New Proposed Milestone

No new milestones are proposed.

7.2 Addition of New Covered Waste

Waste that was newly generated in FY13, which was not treated within 12 months of generation, became new covered waste during FY14 (see Appendix E). In addition, TRU wastes, re-evaluated during repacking and quality control activities as having previously unidentified RCRA constituents, were also added to the STP inventory (Appendix G). Approval of these proposed additions to the STP inventory will allow the added covered wastes to be treated or otherwise managed in accordance with the activities and compliance dates pertaining to each treatability group, as adopted or revised herein.

7.3 Deletion of Covered Waste

Decreases in covered waste inventory reflect the treatment and disposal or recycling of covered waste at offsite commercial facilities during FY14. Deletion of this covered waste is proposed to more accurately reflect the LANL STP inventory as of the end of FY14.

7.4 Adjustments to the Original (October 4, 1995) STP-Covered Waste Inventory

Administrative adjustments result from quality control activities related to preparing waste for treatment and disposal. These adjustments result in additions of newly-identified covered waste and transfers of waste to other treatability groups. The adjustments to the original (October 4, 1995) STP-covered waste inventory are proposed to more accurately reflect the LANL STP inventory as of the end of FY14.

8.0 ANTICIPATED LENGTH OF ANY DELAY IN PERFORMANCE

In accordance with FFCO Section X.C.2.c, DOE/LANS cannot confidently predict the anticipated delay in performance for shipping covered STP MTRU waste for which the only currently allowed deletion pathway is disposal at WIPP. All shipments of MTRU covered waste inventory to WIPP were suspended in May 2014 due to the WIPP shutdown. Off-site management of STP covered MLLW that may have been associated with or derived from processing MTRU nitrate salts containers has been placed on hold until a regulatory determination can be made confirming that such waste is acceptable for shipping offsite. At this time, DOE/LANS cannot confidently predict when the TA-54 processing lines will come back online for processing MTRU and/or MLLW covered waste.

9.0 PLAN AND SCHEDULE FOR IMPLEMENTING ALL REASONABLE MEASURES

All other measures proposed could be implemented within the framework of the existing plan and schedule for the STP (FFCO Section X.C.2.d).

PART III COMPLIANCE PLAN – PROPOSED REVISION 25.0

1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN

1.1 Introduction

Part III of this document identifies changes that require NMED approval as a revision under Section X, *Revisions*, or an amendment under Section XI, *Other Amendments to the STP*.

The CP includes a schedule for offsite transportation for treatment, or completion of parallel options as defined in each Treatability Group Section, and the treatment of mixed wastes in full compliance with the HWA and the implementing regulations at 20 NMAC 4.1, that incorporates by reference 40 CFR Parts 260 through 270. Part I, Background, contains progress reports as required in the FFCO. Respondents shall carry out the activities described in the STP, including the CP, in accordance with the schedules and requirements set forth in the STP and the FFCO.

1.2 STP Revisions and Amendments

The STP CP has been modified several times since it was originally issued, in accordance with the provisions of Section X, *Revisions*, and Section XI, *Other Amendments to the STP*, of the October 4, 1995, FFCO, as amended and revised. The history of revisions is provided in Appendix J.

2.0 COMPLIANCE SCHEDULES

The STP provides overall schedules for achieving compliance with LDR storage and treatment requirements for mixed waste at LANL. The schedules include those activities required to process backlogged and currently generated waste and include schedules required to establish an overall timeframe for achieving compliance with the LDR requirements under the HWA and 20 NMAC 4.1.

2.1 Categories of Activities for Compliance Dates

The categories of activities for which compliance dates will be provided for different types of treatment approaches in the STP are listed in the tables below. The categories of activities are based on Section 3021(b)(1)(B)(i), (ii), and (iii) of the RCRA, to the extent appropriate.

2.1.1 Plans Where Treatment Technology Exists

For most of the mixed waste, treatment technologies have been identified and developed. For the waste that will be treated onsite, the categories of activities for compliance dates identified in Table 2.1.1-1 shall apply.

Table 2.1.1-1 Categories of Activities for Compliance for Mixed Waste with Existing Treatment Technologies

- | |
|---|
| <ul style="list-style-type: none">A. Submit permit applications to the NMED.B. Initiate construction as specified in the NMED permit.C. Complete system testing and commence operation.D. Begin treating mixed waste.E. Complete treatment of existing wastes to applicable regulatory standards. |
|---|

2.1.2 Plans Where Technology Must Be Developed

For some mixed waste, no treatment technologies have been identified and developed, or the treatment technology must be modified or adapted to apply to such waste. For the waste that will be treated onsite, the categories of activities for compliance dates are identified in Table 2.1.2-1 and shall apply.

Table 2.1.2-1 Categories of Activities for Compliance Dates for Mixed Waste Without Existing Treatment Technologies

- | |
|---|
| <ul style="list-style-type: none">A. Identify and develop technology.B. Submit permit application to NMED; orC. Submit a Notification of Intent to perform treatability study to NMED a minimum of 45 days prior to commencement of the study.D. Initiate construction as specified in the NMED permit.E. Commence systems testing.F. Begin treating mixed waste.G. Complete treatment of existing wastes to applicable regulatory standards. |
|---|

2.2 Primary Preferred Treatment

Offsite treatment at a commercial or noncommercial mixed waste treatment facility is the primary preferred treatment option applicable to all mixed waste streams in the STP inventory unless otherwise indicated in the descriptions of individual waste treatability groups. DOE may also pursue parallel treatment options, such as recycling/re-use or radiological decontamination. Requirements for waste shipped offsite for recycling are discussed under Part III, Section 2.6. All activities and compliance dates related to the construction, permitting, and operation of onsite treatment skids were removed from this document. This change was due to the increased availability of offsite treatment and disposal capacity for mixed waste. Respondents will continue evaluating new commercial and DOE offsite treatment facilities as potential options for managing mixed waste, as they become available.

2.3 Plans for Mixed Waste to be Shipped Offsite for Treatment

Should DOE decide to treat or recycle waste at a commercial offsite facility (Table 2.3-1), DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the treatment/recycling facility.

Table 2.3-1 Activities for Offsite Shipment for Treatment or Recycling at a Commercial Facility

- | |
|---|
| <ul style="list-style-type: none">A. Meet all regulatory requirements for shipment.B. Provide documentation to the NMED that waste has been received at an offsite facility for treatment or recycling within 45 working days of receipt of waste at the treatment facility. |
|---|

DOE shall notify the NMED Project Manager in writing as soon as possible if mixed waste is planned to be sent to a noncommercial facility. Notification should be made if possible when DOE is first

considering such an option to allow the NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed offsite noncommercial treatment option proposed by DOE prior to any shipment by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the treatment/recycling facility. Activities for mixed waste to be shipped offsite for treatment/recycling at a noncommercial facility are identified in Table 2.3-2.

Table 2.3-2 Activities for Shipment Offsite for Treatment or Recycling at a Noncommercial Facility

A.	Request necessary approval from the NMED for shipment of waste by category before shipping.
B.	Meet all regulatory requirements for offsite shipment.
C.	Provide documentation to the NMED of confirmation of shipment date within 14 working days prior to sending waste to an offsite facility for treatment, disposal, or recycling, or storage pending treatment, disposal, or recycling.
D.	Provide documentation to the NMED that waste has been received at an offsite facility for treatment within 45 working days of receipt of waste at the offsite facility.
E.	Meet all regulatory requirements to include RCRA Permit modifications for residual or newly-generated waste streams after treatment or recycling.
F.	Provide documentation to the NMED within 30 working days after receipt of residual or newly-generated waste streams upon return to LANL.

2.3.1 Specific Site Requirements for Noncommercial Treatment Facilities

Shipment to Idaho National Laboratory

Prior to shipment, INL and Idaho Division of Environmental Quality shall be notified of any pending shipments of waste should DOE ship MLLW to INL. Proper procedures including additional approvals (if necessary) and documentation shall be completed prior to the shipment of wastes to INL. Management of post-treatment waste residuals or newly-generated waste streams will be in accordance with the requirements of DOE, the State of Idaho, and that state where they will be disposed. A modification to LANL's RCRA permit providing for the return of such wastes and/or residues to LANL must be approved by the NMED prior to any such return of wastes and/or residues to LANL. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 30 working days after receipt of shipment of treatment residuals or newly-generated waste streams from INL.

Shipments of MLLW to planned facilities (not yet existing) will occur only after treatment and schedules are approved by DOE-ID and the State of Idaho. Upon approval of the planned treatment facilities, the applicable protocol from the paragraph above will be implemented for mixed wastes to be treated at planned facilities.

Shipment to Oak Ridge Reservation

If Oak Ridge Reservation may not dispose of mixed-waste residues or new waste streams generated from offsite treatment, and they cannot be sent to another facility for disposal, then the residues may return to LANL. Should residual or newly-generated waste streams be returned to LANL, the proper permits for the State of New Mexico must exist. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 30 working days after receipt of shipment of treatment residuals or newly-generated waste streams from Oak Ridge Reservation.

2.4 Requirements Pertaining to Radionuclide Separation

The FFCA sets additional requirements in cases where DOE intends to conduct radionuclide separation of mixed waste. Should DOE determine to do radionuclide separation of such mixed waste, DOE will schedule specific compliance dates based on category activities identified in Table 2.4-1. "Radionuclide separation" shall mean segregating the radioactive portion of the mixed waste from the hazardous portion of the mixed waste.

Table 2.4-1 Activities for Radionuclide Separation

- | |
|--|
| <ul style="list-style-type: none">A. Complete an estimate of the volume of waste generated by each case of radionuclide separation.B. Complete an estimate of the volume of waste that would exist or be generated without radionuclide separation.C. Complete an estimate of the costs of waste treatment and disposal if radionuclide separation is used compared with the estimated costs if it is not used.D. Provide the assumptions underlying such estimates of waste volumes and cost estimates.E. Provide characterization methodologies for determining waste type.F. Submit a plan for treating or managing hazardous waste residues, accompanied by an NMED permit application. |
|--|

2.5 Plans Related to Other Mixed Waste Activities

Activities other than the types of activities specifically called for in the FFCA as requiring schedules are described in this STP. Some of these activities may be associated with schedules that may contain compliance dates related to treatment of DOE's mixed waste.

For mixed waste, which is not sufficiently characterized to allow identification of appropriate treatment, notification of the characterization of such waste shall be in accordance with the annual update process described in the FFCO. If such characterization results in the addition or deletion of a treatability group or an increase in volume in a treatability group, a revision would be required pursuant to Section X of the FFCO.

DOE will notify the NMED when offsite treatability studies are conducted on STP waste. Treatability studies are used to explore alternative treatment options that may be practical for any or all of the STP mixed waste streams. When preparing waste for shipment for an offsite treatability study, DOE will evaluate the potential for incidental waste treatment or secondary waste generation, which are often associated with treatability studies.

2.6 Recycling/Re-Use

Respondent will pursue onsite or offsite recycling/re-use as a parallel preferred option.

Should DOE elect to use recycling facilities in lieu of (or in combination with) treatment, it will follow requirements as if the waste were shipped offsite for treatment. Any and all requirements by the recycling facility and all state, federal, or other regulatory requirements applicable at the recycling site shall be met by Respondents.

DOE shall notify the NMED Project Manager in writing as soon as possible if mixed waste is planned to be sent to an offsite noncommercial recycling facility. Notification should be made if possible when DOE

is first considering such an option to allow the NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed offsite noncommercial recycling option prior to any shipment by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the recycling facility. Activities for mixed waste to be recycled are identified in Table 2.6-1.

Table 2.6-1 Requirements for Recycling

- | |
|---|
| <ul style="list-style-type: none">A. Meet all regulatory requirements for recycling/re-use.B. Provide documentation to the NMED that waste has been received within 45 working days of receipt of waste at the recycling facility. |
|---|

Should DOE elect to use recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements as if the waste were shipped offsite for treatment. DOE will submit a notification letter to the NMED within 45 days, in place of documentation, that waste was received at a recycling facility.

2.7 Onsite Radiological Decontamination

DOE will pursue onsite radiological surface or external decontamination as a preferred option. No volumetric or internal decontamination processes will be considered or performed. Surface radiological decontamination includes activities such as sand blasting, hand-scrubbing, or electrolytic decontamination. These decontamination activities could result in reducing or removing the radiological contaminant from the waste such that the waste could be recycled in accordance with CP Section 2.6 (*Recycling/Re-Use*) or be proposed for deletion in accordance with Section IX (*Deletion of Waste*) of the FFCO.

Activities for mixed waste to be radiologically decontaminated are identified in Table 2.7-1.

Table 2.7-1 Activities for Radiological Decontamination

- | |
|--|
| <ul style="list-style-type: none">A. Meet all DOE requirements for radiological decontamination.B. Provide documentation to the NMED that waste has been received within 45 working days of receipt of waste at the recycling facility; orC. Propose waste for deletion in accordance with Section IX of the FFCO. |
|--|

3.0 MIXED LOW-LEVEL WASTE STREAMS

This section presents the preferred options to treat MLLW at LANL. All preferred options not described below must be approved by the NMED in accordance with the revision process pursuant to the FFCO.

The original October 4, 1995, STP inventory in each MLLW treatability group has been modified through the revision process in the FFCO. The tables in the STP Background (Part I) Appendices A–M of the FY09 STP Annual Update provide a comprehensive summary of changes to the CP covered waste inventories (additions, deletions, and shifts of waste between treatability groups) occurring as of the date of that revision. In Part III, the original STP inventory in each MLLW treatability group is denoted as subgroup 0 of that treatability group (e.g., the original volume of STP treatability group LA-W906 became LA-W906-0). Each revision that has since added volumes to individual treatability groups has

resulted in creation of an additional subgroup, having the same number as the revision (e.g., LA-W906-4 was created in Revision 4.0, and LA-W906-5 was created in Revision 5.0).

In most subsections of this section, the subgroups of the treatability groups are not shown. In those cases, the Activities and Compliance Dates are applicable to the entire net volume of that treatability group. However, when subgroups of a treatability group have been assigned Activities and Compliance Dates unique to that subgroup, those subgroups are detailed in the text. Activities and Compliance Dates that have been met in previous years are not shown in this document.

3.1 Mixed Waste Streams

The following subsections summarize MLLW treatability groups.

3.1.1 IPA Wastes and Scintillation Fluids

Table 3.1.1-1 Treatability Groups for IPA Wastes and Scintillation Fluids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
IPA Wastes	LA-W901	D001, D009, F002, F003, F005	0.00
Scintillation Fluids	LA-W902	D001, F003, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: The waste will be treated at an offsite facility that combusts organic liquid waste.

3.1.2 Lead Blankets, Soil with Heavy Metals, Environmental Restoration (ER) Soils

Table 3.1.2-1 Treatability Groups for Lead Blankets, Soil with Heavy Metals, ER Soils

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Blankets	LA-W903	D007, D008	0.00
Soil With Heavy Metals	LA-W904	D004, D005, D006, D007, D008, D009, D010, D011	0.00
ER Soils	LA-W905	D028, D029, F001, F005 D010, D011	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: The waste will be treated at an offsite facility that stabilizes or macroencapsulates wastes.

3.1.3 Aqueous Organic Liquids

Table 3.1.3-1 Treatability Groups for Aqueous Organic Liquids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Organic Liquids	LA-W906-0 LA-W906-4 LA-W906-5	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.3-2 Additional Treatability Groups for Aqueous Organic Liquids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Organic Liquids	LA-W906-6 LA-W906-9 LA-W906-10 LA-W906-15	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.4 Organic-Contaminated Combustible Solids

Table 3.1.4-1 Treatability Groups for Organic-Contaminated Combustible Solids

Treatability Group	MWIR* Waste ID	RCRA codes	Net Volume (m ³)
Organic-Contaminated Combustible Solids	LA-W911	D001, D004, D008, D009, F001, F002, F003, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.4-2 Treatability Groups for Organic-Contaminated Noncombustible Solids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Organic-Contaminated Noncombustible Solids	LA-W919	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D018, D019, D020, D022, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.5 Combustible Debris, Activated or Inseparable Lead, Noncombustible Debris

Table 3.1.5-1 Treatability Groups for Combustible Lead, Activated or Inseparable Lead, and Noncombustible Debris

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Combustible Debris	LA-W912	D001, D002, D003, D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005	0.00
Activated Or Inseparable Lead	LA-W921	D008	0.00
Noncombustible Debris	LA-W922 LA-W922-17 LA-W922-22 LA-W922-23 LA-W922-24 LA-W922-25	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.6 Aqueous Wastes with Heavy Metals, Corrosive Solutions, Aqueous Cyanides, Nitrates, Chromates, and Arsenates

Table 3.1.6-1 Treatability Groups for Aqueous Wastes with Heavy Metals, Corrosive Solutions, Aqueous Cyanides, Nitrates, Chromates, and Arsenates

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Wastes With Heavy Metals	LA-W913	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011	0.00
Corrosive Solutions	LA-W914	D001, D002	0.00
Aqueous Cyanides, Nitrates, Chromates, and Arsenates	LA-W915	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F007, P029, P098	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.7 Water-Reactive Metal

Table 3.1.7-1 Treatability Groups for Water-Reactive Metal

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Water-Reactive Metal	LA-W916	D001, D003, D004, D005, D007, D008, D010, D011	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.8 Compressed Gases Requiring Scrubbing

Table 3.1.8-1 Treatability Groups for Compressed Gases Requiring Scrubbing

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Compressed Gases Requiring Scrubbing	LA-W917 LA-W917-21 LA-W917-24 LA-W917-25	D001, D002, D003, D008, D009, P056	0.833
Totals			0.833

*MWIR is Mixed Waste Inventory Report

Table 3.1.8-2 Activities and Compliance Dates for Compressed Gases Requiring Scrubbing

Activity	Compliance Dates
A. Complete shipping of existing wastes to an offsite treatment facility or complete parallel option.	September 30, 2018
B. Provide documentation to the NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option.

3.1.9 Compressed Gases Requiring Oxidation

Table 3.1.9-1 Treatability Groups for Compressed Gases Requiring Oxidation

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Compressed Gases Requiring Oxidation	LA-W918	D001, U226	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.10 Elemental Mercury

Table 3.1.10-1 Treatability Groups for Elemental Mercury

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Elemental Mercury	LA-W920 LA-W920-16	D006, D009, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.11 Halogenated Organic Liquids, Nonhalogenated Organic Liquids, Bulk Oils, Polychlorinated Biphenyl (PCB) Wastes with RCRA Components, Liquid and Solid Oxidizers

Table 3.1.11-1 Treatability Groups for Halogenated Organic Liquids, Nonhalogenated Organic Liquids, Bulk Oils, PCB Wastes with RCRA Components

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Halogenated Organic Liquids	LA-W907	D001, D002, D003, D007, D009, D010, D011, D018, D019, D022, D028, D029, D035, D043, F001, F002, F003, F004, F005, U077, U080, U226, U227, U228, U236	0.00
Nonhalogenated Organic Liquids	LA-W908 LA-W908-18	D001, D002, D003, D004, D007, D008, D009, D011, D018, D038, D040, F002, F003, F004, F005, U002, U019, U154, U169, U188, U220, U246	0.00
Bulk Oils	LA-W909 LA-W909-15 LA-W909-16 LA-W909-17	D002, D004, D005, D006, D007, D008, D009, D010, D011, D021, D027, D039, F001, F002, F003, F005	0.00
PCB Wastes With RCRA Components	LA-W910 LA-W910-16	D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D019, D027, D028, D030, D031, D032, D033, D034, D036, D039, D042, D043, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.11-2 Additional Treatability Groups

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Liquid And Solid Oxidizers	LA-W923	D001, D003, D005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.2 Mixed Waste Requiring Further Characterization or for Which Technology Assessment Has Not Been Done

Table 3.2-1 Treatability Groups for Waste Requiring Characterization or Assessment

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Wastes – to be determined (TBD)	LA-W924	D003, D008	0.00
Mercury Wastes - TBD	LA-W925-0	D007, D008, D009, F001	0.00
Compressed Gases - TBD	LA-W926	D001, D007, D009, D022, P056, U080, U226	0.00
Biochemical Laboratory Wastes	LA-W927	D001, D003	0.00
Dewatered Treatment Sludge	LA-W928		0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.2-2 Additional Wastes Requiring Characterization or Assessment

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Wastes - TBD	LA-W924-15	D003, D008	0.00
	LA-W924-16		0.00
	LA-W924-17		0.00
Mercury Wastes – TBD	LA-W925-4	D003, D007, D008, D009 F001, F002, F005	0.00
	LA-W925-5		
	LA-W925-6		
	LA-W925-15		
	LA-W925-16		
	LA-W925-17		
Explosives	LA-W932	D003	0.00
Labpacks	LA-W933	D001, D002, D003, D004, D005, D006, D007, D008, D010, F003, F005, D011, P012, P029, P098, P106, P113, P120, U131, U144, U145, U188, U190, U204, U216, U219	0.00
	LA-W933-17		
High Activity Waste	LA-W934	D001, D003, D008, D009	1.301
	LA-W934-16		
	LA-W934-19		
	LA-W934-20		
	LA-W934-24		
Totals			1.301

*MWIR is Mixed Waste Inventory Report

Table 3.2-3 Activities and Compliance Dates for Wastes Requiring Characterization or Assessment

Activity	Compliance Dates
J. Complete shipping of wastes to an offsite treatment facility, or submit documentation assigning waste items to applicable treatability groups or complete parallel option.	June 30, 2018
K. Provide documentation to the NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at offsite facility or within 45 days after completion of parallel option.

LANL’s inventory of *High Activity Waste* consists of five containers with a combined volume of 1.301 m³. Assuming that shipping issues can be resolved, LANL expects to meet the June 30, 2018, milestone for the remaining *High Activity Waste*.

DOE/LANS continues to diligently pursue all possible options to ship the waste offsite prior to the milestone for the remaining five containers (tritium traps with mercury contamination and the mole sieves and squib assemblies with very high tritium). Since the submission of the FY13 Annual Update, DOE/LANS is still pursuing the 10-160B cask as an alternate shipping method. However, since confirming the receiving facility, DOE/LANS no longer needs to open and characterize the waste onsite. DOE/LANS has put into place a contract that would allow for LANL to ship the High Activity Waste offsite for treatment and disposal. PermaFix has been confirmed as the receiving commercial facility. This contract requires complete characterization, packaging, transportation, treatment and disposal for containers of the high activity waste. The characterization (evaluation including calculations and certification statement identifying all hazardous and radioactive characteristics of the waste) has been completed by PermaFix. The Contractor is in the process of preparing 1) a Transportation Plan that will address all aspects of Department of Transportation requirements to compliantly package and ship the waste; 2) Certificate of Compliance modifications for the selected Type B Cask (TRU Pac II) for transport to the commercial treatment facility; and 3) the Nuclear Regulatory Commission permit with the State of Tennessee for a tritium project-specific license required to handle the curie content in the High Activity Waste.

3.3 Plans for Other Types of Activities

The following subsection summarizes plans for other types of activities.

3.3.1 Lead Decontamination

Table 3.3.1-1 Treatability Groups for Lead Decontamination

Treatability Group	MWIR* Waste ID	First Category	Second Category	Totals
		Net Volume (m ³)	Net Volume (m ³)	Net Volume (m ³)
Lead For Surface Decontamination	LA-W930-0	0.00	0.00	0.00
	LA-W930-5			
Totals		0.00	0.00	0.00

*MWIR is Mixed Waste Inventory Report

Treatment: Any lead not acceptable for onsite or offsite lead decontamination, and any lead unsuccessfully decontaminated, will be designated in the following two categories: 1) for treatment and disposal at an offsite facility or 2) for recycle through an offsite capability, such as

metal melting to create shielding blocks or a DOE lead bank. Non-conforming items will be reassigned to appropriate treatability groups in accordance with the FFCO.

Table 3.3.1-2 Additional Wastes for Lead Decontamination

Treatability Group	MWIR* Waste ID	First Category	Second Category	Totals
		Net Volume (m ³)	Net Volume (m ³)	Net Volume (m ³)
Lead For Surface Decontamination	LA-W930-6	0.00	0.00	0.00
Totals		0.00	0.00	0.00

*MWIR is Mixed Waste Inventory Report

3.3.2 Sorting, Surveying, and Decontamination

Table 3.3.2-1 Treatability Groups for Sorting, Surveying, and Decontamination

Treatability Group	MWIR* Waste ID	Net Volume (m ³)
Nonradioactive or Suspect Waste Items To Be Surveyed	LA-W929-0(1)	0.00
Nonradioactive or Suspect Waste Items To Receive RCRA and Radiological Characterization	LA-W929-0(2)	0.00
Nonradioactive or Suspect Waste Items That Cannot or Should Not Be Sampled	LA-W929-0(3)	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

Table 3.3.2-2 Additional Wastes for Sorting, Surveying, and Decontamination

Treatability Group	MWIR* Waste ID	Net Volume (m ³)
Nonradioactive or Suspect Waste Items	LA-W929-5	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

3.3.3 Lead Requiring Sorting

Table 3.3.3-1 Treatability Groups for Lead Requiring Sorting

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Requiring Sorting	LA-W931	D008	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: Wastes in this treatability group will require different treatment processes. Drums will be opened, the contents removed, and the waste repackaged based on appropriate treatment requirements. Wastes in this treatability group are primarily lead pieces, lead shot, and lead-contaminated soils that have been packaged in the same drum.

The wastes will be reclassified as the applicable treatability group after physical separation and repackaging. The wastes will be treated by appropriate technology.

3.3.4 10–100 nCi/g Waste

Table 3.3.4-1 Treatability Groups for 10–100 nCi/g Waste

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
10-100 nCi/g	LA-W935 LA-W935-19 LA-W935-20 LA-W935-21 LA-W935-22 LA-W935-23 LA-W935-24 LA-W935-25	D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005, F006, F007, F009	11.545
Totals			11.545

*MWIR is Mixed Waste Inventory Report

Treatment: Wastes in this treatability group are a population of legacy drums packaged and managed as MTRU (> 100 nCi/g) but, after assay, are determined to be MLLW (< 100 nCi/g). Once confirmed, these drums are segregated from other TRU waste and stored in a designated MLLW storage area. Waste Profiles are prepared to allow acceptance into the low-level waste population, and drums are relabeled appropriately. The drum is reclassified from TRU to MLLW in the database. TRU programs will be notified of the drums reclassified from TRU to MLLW for evaluation of possible other drums based on waste stream. CCP will be notified for removal of drums from Acceptable Knowledge.

The drum numbers will be submitted to Production Control for retrieval and staging as MLLW prior to offsite disposal. The MLLW drums are prepared for treatment and disposal to an offsite facility using CCP-Acceptable Knowledge documentation and onsite and offsite profiles generated for debris or sludge drums.

Table 3.3.4-2 Activities and Compliance Dates for 10–100 nCi/g Waste

Activity	Compliance Dates
A. Complete radiological characterization.	September 1, 2018
B. Complete shipment of existing waste to offsite facility for treatment, or complete parallel options.	September 30, 2018
C. Provide documentation to the NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option.

A substantial inventory of LA-W935 waste that resulted from reclassifying MTRU waste between FY07 and FY12 (a total of 201.4007 m³) was shipped offsite, completing the proposed FY12 Annual Update milestone of April 16, 2014. As much waste as possible that was reclassified in FY13 and FY14 was shipped offsite during FY14. These estimated waste volumes will be subtracted from the MTRU STP inventory and added to MLLW STP inventory as the waste is reclassified as MLLW. However, because of the repackaging process, the apparent volume of waste will reflect the number of additional containers needed to repack the waste into compliant configurations for transportation and disposal. Ongoing repackaging process for waste to be accepted at offsite treatment and disposal facilities will continue to produce 10-100 nCi/g Waste (LA-W935); therefore, DOE/LANS will seek updates to milestone(s) annually.

3.4 Management of “Missing” Items

Table 3.4-1 Waste Category for “Missing Waste”

Category	MWIR* Waste ID	Net Volume (m ³)
Missing/Nonexistent/To be verified (TBV)	None	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

Treatment: During visual inspections and sampling activities in support of STP waste work-off, occasionally an item cannot be found, or it is not located in the expected containers, according to the LANL data files for the waste item. In some instances, such items cannot be verified as having been received in storage at LANL, and follow-up investigations of the record files reveal that although they were included in the original STP inventory, the waste items were never generated.

Some waste items were determined not to exist after visual inspection and document review. When DOE/LANS determines that an STP-covered waste item does not exist, transfer of the item to the category called “Missing/nonexistent/TBV (to be verified)” is requested through the revision process associated with the next Annual Update.

DOE verified the absence of all “Missing/nonexistent/TBV” items container by container as each STP waste item was being sampled, repackaged, or otherwise prepared for onsite or offsite treatment. The final verification of all “Missing/nonexistent/TBV” items was completed by 2004. All missing or nonexistent items have been deleted from the STP. All remaining MLLW items in the original STP inventory have been treated and disposed of.

If, at any time, any of these items is discovered in the inventory, the NMED would be notified and approval requested for assignment of the rediscovered items to the appropriate treatability group. If necessary, they would be assigned new Activities and Compliance Dates in accordance with the terms of the FFCO.

4.0 MIXED TRANSURANIC WASTE

Treatment Group(s): Assorted MTRU Waste

Offsite Disposal: MTRU waste at LANL will be shipped for disposal at WIPP, located in Carlsbad, New Mexico.

Disposal: Waste volumes listed in Table 4.0-1 constitute the remaining original population of the Framework Agreement of “non-cemented above-ground EM Legacy TRU” and “above-ground cemented EM Legacy TRU” that is MTRU waste only. Volume adjustments noted below are due to corrections of database entries, treatability group, EPA codes, overpacks removed/added, containers repacked and shipped/hold for waste items identified as the non-cemented and cemented above-ground EM Legacy TRU for MTRU STP waste.

Table 4.0-1 *Treatability Groups for The Framework Agreement MTRU Waste (remaining original containers)*

Treatability Group	CP Section	FY13 Volume (m ³)	FY14 Administrative Adjustments	FY14 Shipped (on hold)*	FY14 Volume (m ³)
<i>Cemented Sludge</i>	4.0	0.000	0.416	0.416	0.416
<i>Combustible – Noncombustible Waste</i>	4.0	290.383	-216.621	28.045	73.762
<i>Combustible Waste</i>	4.0	0.208	0.530	0.530	0.738
<i>Metallic Waste</i>	4.0	19.258	-19.050	0.000	0.208
<i>Noncombustible Waste</i>	4.0	1.248	2.838	2.838	4.086
<i>Solidified Inorganic and Organic Waste</i>	4.0	29.172	-8.440	0.832	20.732
Totals		340.269			99.942

* Volume not to be subtracted from the STP inventory. Removal of waste from STP inventory is on hold until NMED approval is received.

Covered MTRU Inventory at TA-55: The FY14 reported waste volume for STP-covered MTRU inventory at TA-55 and CMR is 42.357 m³. In FY14, approximately 29 m³ of the 42 m³ of TA-55's STP waste is associated with the Confinement Vessel Disposition (CVD) Project (formerly referred to as the Bolas Grande Project), that started in the summer of FY14. This is still a relatively new process that has never been attempted before and because of the uncertainty of how long it will take to process each vessel, the project ending date is expected to be September 30, 2017. The remainder of the covered MTRU waste inventory at TA-55 consists of radioactive-free liquids, requiring management at the Waste Characterization, Reduction, and Repacking Facility. TA-55-PF-4 is under a safety pause that restricted the movement of MTRU waste within and out of the facility; and TA-54 is up-dating its Safety Basis documents that govern Material at Risk and TA-54's Composite Source Term Limits (amount of combustible waste that can be stored at TA-54). This up-dating process reduced the receipt of TA-55 TRU and MTRU waste at TA-54.

Table 4.0-2 *Activities and Compliance Dates for MTRU Inventory at TA-55 and CMR from Table E-2*

Activity	Compliance Dates
A. Complete transfer of existing waste (excluding Metallic Waste) to TA-54 facility	September 30, 2017
C. Complete transfer of Metallic Waste to CMR for material retrieval	September 30, 2017

4.1 Management of "Missing" Items

Table 4.1-2 *Waste Category for "Missing Waste"*

Category	Treatability Groups	Net Volume (m ³)
<i>Missing/Nonexistent/TBV</i>	<i>Cemented Sludge</i>	0.00
	<i>Combustible-Noncombustible Waste</i>	0.000
	<i>Combustible Waste</i>	0.000
Totals		0.000

Treatment: During visual inspections in support of STP waste work-off, occasionally an item cannot be found, or it is not located in the expected containers, according to the LANL data files for the waste item. In some instances, such items cannot be verified as having been received in storage at LANL, and follow-up investigations of the record files reveal that although the items were included in the original STP inventory, the waste items were never generated.

Some items were determined not to exist after visual inspection and document review. When LANS determines that an STP-covered waste item does not exist, transfer of the item to the category called “Missing/nonexistent/TBV” is requested through this revision Annual Update.

If, at any time, any of these items is discovered in the inventory, the NMED would be notified and approval requested for assignment of the rediscovered items to the appropriate treatability group.

Table 4.1-2 Waste Category for “Missing Waste” – Detail [Table Omitted]

APPENDICES

APPENDIX A CURRENT YEAR MLLW INVENTORY DETAIL

Table A-1 FY14 MLLW Inventory1 Detailed Update by Treatability Group

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY13 Annual Update (m ³) ²	Proposed Revision 25.0 (m ³)	Comments ³	FY14 Annual Update (m ³)	Projection FY15 – FY19 (m ³)
3.1.1	LA-W901 <i>IPA Wastes</i>	0	0		0	0
3.1.1	LA-W902 <i>Scintillation Fluids</i>	0	0		0	0
3.1.2	LA-W903 <i>Lead Blankets</i>	0	0		0	0
3.1.2	LA-W904 <i>Soil with Heavy Metals</i>	0	0		0	0
3.1.2	LA-W905 <i>ER Soils</i>	0	0		0	0
3.1.3	LA-W906 <i>Aqueous Organic Liquids</i>	0	0		0	0
3.1.4	LA-W911 <i>Organic-Contaminated Combustible Solids</i>	0	0		0	0
3.1.4	LA-W919 <i>Organic-Contaminated Noncombustible Solids</i>	0	0		0	0
3.1.5	LA-W912 <i>Combustible Debris</i>	0	0		0	0
3.1.5	LA-W921 <i>Activated or Inseparable Lead</i>	0	0		0	0
3.1.5	LA-W922 <i>Noncombustible Debris</i>	0.624	29.375	Administrative Adjustment	0	0
			-29.999	Shipped offsite for treatment/disposal		
3.1.6	LA-W913 <i>Aqueous Wastes with Heavy Metals</i>	0	0		0	0
3.1.6	LA-W914 <i>Corrosive Solutions</i>	0	0		0	0
3.1.6	LA-W915 <i>Aqueous Cyanides, Nitrates, Chromates, and Arsenates</i>	0	0		0	0
3.1.7	LA-W916 <i>Water-Reactive Wastes</i>	0	0		0	0

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY13 Annual Update (m ³) ²	Proposed Revision 25.0 (m ³)	Comments ³	FY14 Annual Update (m ³)	Projection FY15 – FY19 (m ³)
3.1.8	LA-W917 ⁴ <i>Compressed Gases Requiring Scrubbing</i>	1.456	0.624	Administrative Adjustment	0.833	0
			1.249	Administrative Adjustment		
			-1.872	Shipped offsite for treatment/disposal		
3.1.9	LA-W918 <i>Compressed Gases Requiring Oxidation</i>	0	0		0	0
3.1.10	LA-W920 <i>Elemental Mercury</i>	0	0		0	0
3.1.11	LA-W907 <i>Halogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W908 <i>Nonhalogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W909 <i>Bulk Oils</i>	0	0		0	0
3.1.11	LA-W910 <i>PCB Wastes with RCRA Components</i>	0	0		0	0
3.1.11	LA-W923 <i>Liquid and Solid Oxidizers</i>	0	0		0	0
3.2	LA-W924 <i>Lead Wastes – TBD</i>	0	0		0	0
3.2	LA-W925 <i>Mercury Wastes – TBD</i>	0	0		0	0
3.2	LA-W926 <i>Compressed Gases – TBD</i>	0	0		0	0
3.2	LA-W927 <i>Biochemical Laboratory Wastes</i>	0	0		0	0
3.2	LA-W928 <i>Dewatered Treatment Sludge</i>	0	0		0	0
3.2	LA-W932 <i>Explosives</i>	0	0		0	0
3.2	LA-W933 <i>Labpacks</i>	0	0		0	0

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY13 Annual Update (m ³) ²	Proposed Revision 25.0 (m ³)	Comments ³	FY14 Annual Update (m ³)	Projection FY15 – FY19 (m ³)
3.2	LA-W934 <i>High Activity Waste</i>	1.301	0	Shipped offsite for treatment/disposal	1.301	0
			0	Administrative Adjustment		
3.3.1	LA-W930 <i>Lead for Surface Decontamination</i>	0	0		0	0
3.3.2	LA-W929 <i>Nonradioactive or Suspect Waste Items to be Surveyed</i>	0	0		0	0
3.3.3	LA-W931 <i>Lead Requiring Sorting</i>	0	0		0	0
3.3.4	LA-W935 <i>10–100 nCi/g Waste</i>	97.000	591.305	Administrative Adjustment	11.545	50
			-676.76	Shipped offsite for treatment/disposal		
3.4	<i>Missing/ nonexistent/ TBV category</i>	0	0		0	N/A
TOTALS		100.381			13.679	

¹ CP is Compliance Plan; MWIR is Mixed Waste Inventory Report

² MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³; however, due to FY13 changes in the way that the MTRU are process (repackaged) into several different containers and are no longer equal to those added to the MLLW inventory of LA-W935.

³ Shipment details are in Appendix B; Administrative adjustments are in Appendix C.

⁴ Items prohibited from shipment to WIPP are removed from MTRU STP containers and consolidated; some are MLLW and are included in Table A-1 as LA-W917 waste; others are MTRU waste and are considered *Combustible-Noncombustible Waste* in Table E-1.

APPENDIX B CURRENT YEAR MLLW SHIPMENT DETAIL

Table B-1 MLLW Shipped Offsite for Treatment and Disposal in FY14

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing Waste	006640143FLE	PermaFix FL	6/19/2014	7/9/2014 (WM-DO-14-049)	0.416
			006640108FLE	PermaFix FL	5/19/2014	3/24/2015 (WM-DO-15-006)	1.456
LA-W917 Total							1.872
3.1.5	LA-W922	Noncombustible Debris	006639997FLE	PermaFix FL	2/27/2014	4/15/2014 (WM-DO-14-027)	0.416
			006640116FLE	PermaFix NW	5/19/2014	7/3/2014 (wm-do-14-046)	0.416
			006640140FLE	Waste Control Specialists LLC	6/24/2014	8/7/2014 (WM-DO-14-051)	4.800
			006640141FLE	Waste Control Specialists LLC	6/24/2014	8/7/2014 (WM-DO-14-051)	24.367
LA-W922 Total							29.999
3.3.4	LA-W935	10-100 nCi/g Waste	006639825FLE	Waste Control Specialists LLC	11/20/2013	1/2/2014 (WM-DO-13-0092)	46.931
			006639830FLE	Waste Control Specialists LLC	11/20/2013	1/2/2014 (WM-DO-13-0092)	39.999
			006639881FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	2.560
			006639890FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	29.227
			006639891FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	14.494
			006639892FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	19.322
			006639912FLE	Material & Energy Corporation	12/10/2013	1/23/2014 (WM-DO-14-015)	3.972
			006639904FLE	Waste Control Specialists LLC	12/12/2013	1/23/2014 (WM-DO-14-015)	13.540
			006639906FLE	Waste Control Specialists LLC	12/12/2013	1/23/2014 (WM-DO-14-015)	6.662
			006639922FLE	Waste Control Specialists LLC	12/13/2013	1/23/2014 (WM-DO-14-015)	23.207
			006639882FLE	PermaFix NW	12/12/2013	1/23/2014 (WM-DO-14-015)	2.560
			006639903FLE	PermaFix NW	12/12/2013	1/23/2014 (WM-DO-14-015)	1.684

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.3.4	LA-W935	10-100 nCi/g Waste	006639921FLE	Waste Control Specialists LLC	1/28/2014	2/28/2014 (WM_DO-14-019)	8.903
			006639945FLE	Waste Control Specialists LLC	1/21/2014	2/28/2014 (WM_DO-14-019)	6.058
			006639968FLE	Waste Control Specialists LLC	2/11/2014	2/28/2014 (WM_DO-14-019)	2.496
			006639969FLE	Waste Control Specialists LLC	2/11/2014	2/28/2014 (WM_DO-14-019)	3.314
			006639930FLE	Waste Control Specialists LLC	2/18/2014	4/2/2014 (WM-DO-14-021)	18.663
			006639988FLE	Waste Control Specialists LLC	2/18/2014	4/2/2014 (WM-DO-14-021)	1.900
			006639996FLE	Waste Control Specialists LLC	2/25/2014	4/2/2014 (WM-DO-14-021)	40.776
			006639998FLE	Waste Control Specialists LLC	3/11/2014	4/2/2014 (WM-DO-14-021)	54.198
			006640007FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	48.437
			006640010FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	11.091
			006640012FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	11.485
			006640013FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	6.100
			006640024FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	17.766
			006640028FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	13.573
			006640033FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	15.722
			006640034FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	28.455
			006639999FLE	Waste Control Specialists LLC	3/4/2014	4/16/2014 (WM-DO-14-028)	17.179
			006640051FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	10.328
			006640052FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	15.555
			006640050FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	32.103
006640011FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	11.840			
006640022FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	7.646			

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.3.4	LA-W935	10-100 nCi/g Waste	006640023FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	32.353
			006640062FLE	PermaFix NW	4/15/2014	5/9/2014 (WM-DO-14-037)	3.120
			006640063FLE	Material & Energy Corporation	4/16/2014	5/9/2014 (WM-DO-14-037)	3.536
			006640067FLE	Material & Energy Corporation	4/16/2014	5/9/2014 (WM-DO-14-037)	0.208
			006640073FLE	PermaFix NW	4/23/2014	6/9/2014 (WM-DO-14-045)	9.500
			006640086FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	21.061
			006640088FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	4.560
			006640091FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	2.081
			006640092FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	6.554
			006640113FLE	PermaFix NW	5/19/2014	7/3/2014 (WM-DO-14-047)	6.022
			006640194FLE	PermaFix FL	7/29/2014	9/9/2014 (WM-DO-14-054)	0.019
LA-W935 Total							676.760
Grand Total							708.631

*MWIR is Mixed Waste Inventory Report.

APPENDIX C CURRENT YEAR MLLW ADMINISTRATIVE ADJUSTMENTS

Table C-1 Administrative Adjustments

CP Section	MWIR* Number	Administrative Adjustment	Volume (m³)
3.3.4	LA-W935	Transferred into LA-W935 from TA-55	0.019
		Added as a result of reconciliation of inconsistencies in the current inventory	42.964
		Transferred into LA-W935 from repackaging of TRU/MTRU STP Inventory	458.185
		Transferred into LA-W935 from (RTR) recharacterization process	2.576
		Transferred into LA-W935 from reclassification	8.518
		Transferred into LA-W935 from reclassification of TRU waste	90.423
		Removed from LA-W935 as a result of not being STP-covered waste. This waste was declared hazardous waste for reduced worker exposures (improve worker safety – as low as reasonably achievable) and efficiency of waste handling (putting this waste in the same transportainer with other STP waste)	-5.650
		Removed from LA-W935 as a result of reclassifying back to TRU/MTRU waste	-5.730
Total Net Adjustments for LA-W935			591.305
3.1.8	LA-W917	Transferred into LA-W917 from TRU/MTRU repackaging	1.665
		Re-assayed to TRU waste	-0.416
Total Net Adjustments for LA-W917			1.249
3.1.5	LA-W922	Transferred into LA-W922 from LLW	29.167
Total Net Adjustments for LA-W922			29.167
Total Net Adjustments			621.721

*MWIR is Mixed Waste Inventory Report

Table C-2 Administrative Adjustment – Detail

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment	
3.3.4	LA-W935	10-100 nCi/g	Reclassified / Repackaged MTRU STP and TRU inventory to MLLW STP inventory	0.019			Transferred into LA-W935 from TA-55	
					W820785	0.019	Parent MTRU Container 10095775.0.019 m ³	
		10-100 nCi/g	Reclassified/ Repackaged MTRU STP and TRU inventory to MLLW STP inventory	42.964				Added as a result of reconciliation of inconsistencies in the current inventory
					W796933	39.999		
					W797136	0.208		Volume included
					C07194641	0.208		
					W729563	2.549		
		10-100 nCi/g	Reclassified/ Repackaged MTRU STP and TRU inventory to MLLW STP inventory	458.185				Transferred into LA-W935 from combustible-noncombustible MTRU inventory as a result of repackaging process
					W793121	1.900		Parent MTRU Container 3439, 5 m ³
					W792816	1.900		Parent MTRU Container 3439, 5 m ³
					W792817	1.900		Parent MTRU Container 3439, 5 m ³
					W792840	1.900		Parent MTRU Container 53878, 2.56 m ³
					W798410	6.662		Parent MTRU Container 62189, 10.95 m ³
					W801243	28.455		Parent MTRU Container 62450, 26.63 m ³
					W801331	15.722		Parent MTRU Container S792118, 14.16 m ³
					W798129	13.54		Parent MTRU Container S792123, 14.16 m ³
					W798967	40.776		Parent MTRU Container S792124, 23.59 m ³
					W797904	14.494		Parent MTRU Container S792125, 15.09 m ³
					W797945	19.322		Parent MTRU Container S794030, 32.26 m ³
					W800557	11.485		Parent MTRU Container S794036, 22.73 m ³
					W800558	11.84		Parent MTRU Container S794036, 22.73 m ³
					W793391	1.9		Parent MTRU Container S794037, 28.34 m ³

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment	
3.3.4	LA-W935				W800161	48.437	Parent MTRU Container S794037, 28.34 m ³	
					W800787	11.091	Parent MTRU Container S794038, 16.3 m ³	
					W800803	6.1	Parent MTRU Container S794038, 16.3 m ³	
					W799643	17.179	Parent MTRU Container S794071, 27.187 m ³	
					W793384	1.9	Parent MTRU Container S794071, 27.187 m ³	
					W799353	54.198	Parent MTRU Container S794075, 35.75 m ³	
					W801244	13.573	Parent MTRU Container S794076, 13.594 m ³	
					W801094	32.353	Parent MTRU Container S794125, 33.84 m ³	
					W793400	1.9	Parent MTRU Container S794125, 33.84 m ³	
					W798053	18.663	Parent MTRU Container S794128, 23.11 m ³	
					W797833	29.227	Parent MTRU Container S803221, 30.84 m ³	
					W798628	23.207	Parent MTRU Container S803222, 8.82 m ³	
					W798581	8.903	Parent MTRU Container S813232, 11.894 m ³	
								Transferred into LA-W935 from metallic MTRU inventory as a result of repackaging process
						W801162	17.766	Parent MTRU Container 56066, 19.05 m ³
								Transferred into LA-W935 from noncombustible MTRU inventory as a result of repackaging process
						W798825	0.322	Parent MTRU Container 56103, 0.322 m ³
								Transferred into LA-W935 from solidified inorganic and organic MTRU inventory as a result of repackaging process
						W801972	0.322	Parent MTRU Container S870333, 0.416 m ³
						W793049	0.208	Parent MTRU Container S803996, 0.208 m ³
				W796350	0.208	Parent MTRU Container S814063, 0.208 m ³		
				W793052	0.208	Parent MTRU Container S833677, 0.208 m ³		

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
3.3.4	LA-W935				W793042	0.208	Parent MTRU Container S834144, 0.208 m ³
					W798019	0.208	Parent MTRU Container S841588, 0.208 m ³
					W793046	0.208	Parent MTRU Container S841594, 0.208 m ³
		10-100 nCi/g	Reclassified/Repackaged MTRU STP and TRU inventory to MLLW STP inventory	2.576			Transferred into LA-W935 from solidified inorganic and organic MTRU inventory as a result of RTR recharacterization process
					W93890	0.322	Repackaged from MTRU S860196, 0.208 m ³
					W790710	0.322	Repackaged from MTRU S802765 0.208 m ³
					W791177	0.322	Repackaged from MTRU S834721, 0.208 m ³
					W791350	0.322	Repackaged from MTRU S813357, 0.208 m ³
					W93893	0.322	Repackaged from MTRU S861827, 0.208 m ³
					W93939	0.322	Repackaged from MTRU S822945, 0.208 m ³
					W93481	0.322	Repackaged from MTRU S813442, 0.208 m ³
					W93567	0.322	Repackaged from MTRU S815139, 0.208 m ³
		10-100 nCi/g	Reclassified/Repackaged MTRU STP and TRU inventory to MLLW STP inventory	8.518			Less than 100 nCi/g; Derived from combustible-noncombustible MTRU inventory
					W793140	0.644	Parent MTRU Container 69409, 0.322 m ³ & 68692, 0.322 m ³
					W53888	2.56	Parent MTRU Container 53888, 2.56 m ³
					W60595	0.322	Parent MTRU Container 60595, 0.322 m ³
					W21495	0.208	Parent MTRU Container 65382, 0.208 m ³
					W20823	0.208	Parent MTRU Container 65620, 0.208 m ³
					W22600	0.208	Parent MTRU Container 65649, 0.208 m ³
					W20833	0.208	Parent MTRU Container 65653, 0.208 m ³
			W22202	0.208	Parent MTRU Container 65789, 0.208 m ³		

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment	
3.3.4	LA-W935				W22918	0.208	Parent MTRU Container 65917, 0.208 m ³	
					W22771	0.208	Parent MTRU Container 66074, 0.208 m ³	
					W66083	0.208	Parent MTRU Container 66083, 0.208 m ³	
					W782593	0.208	Parent MTRU Container 86239, 0.208 m ³	
					W780908	0.208	Parent MTRU Container 86330, 0.208 m ³	
					W86840	0.208	Parent MTRU Container 86840, 0.208 m ³	
					W784722	0.208	Parent MTRU Container 87171, 0.208 m ³	
					W785495	0.208	Parent MTRU Container 87275, 0.322 m ³	
					W784268	0.208	Parent MTRU Container 88464, 0.208 m ³	
					W78542	0.208	Parent MTRU Container 88486, 0.208 m ³	
					W784265	0.208	Parent MTRU Container 88601, 0.208 m ³	
					W784311	0.208	Parent MTRU Container 88666, 0.208 m ³	
					W789710	0.208	Parent MTRU Container 91804, 1.9 m ³	
					W773037	0.416	Parent MTRU Container S821866, 0.416 m ³	
							Less than 100 nCi/g; Derived from cemented sludge MTRU inventory	
						W748153	0.208	Parent MTRU Container S834124, 0.208 m ³
						W766258	0.208	Parent MTRU Container S850595, 0.208 m ³
						W755795	0.208	Parent MTRU Container S870647, 0.208 m ³
							Less than 100 nCi/g; Derived from noncombustible MTRU inventory	
				W760768	0.208	Parent MTRU Container S830719, 0.208 m ³		
		10-100 nCi/g	Reclassified/Repacked MTRU STP and TRU inventory to MLLW STP inventory	90.423			Less than 100 nCi/g; Derived from TRU inventory	
					W57984	0.208		
					W61852	0.208		
					W797204	0.322		

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
3.3.4	LA-W935				W797953	0.322	
					W798794	0.322	
					L12226561	0.322	
					W799584	0.322	
					W757586	0.322	
					W748685	0.208	
					W750224	0.322	
					W753340	0.322	
					W751268	0.322	
					W757751	0.322	
					W756151	0.322	
					W751605	0.322	
					W747639	0.322	
					W747719	0.208	
					W749149	0.322	
					W756853	0.322	
					W750293	0.416	
					W755853	0.322	
					W753023	0.322	
					W754606	0.322	
					W754979	0.208	
					W750689	0.208	
					W750370	0.208	
					W756866	0.208	
					W749993	0.208	
					W776678	0.208	
					W766109	0.208	
					W789341	0.208	
					W765123	0.208	
					W776584	0.208	
					W763305	0.208	
					W772237	0.208	
			W759859	0.208			
			W771281	0.208			
			W772174	0.208			
			W762503	0.208			
			W772541	0.322			
			W773041	0.322			
			W760345	0.322			
			W759973	0.322			
			W759622	0.322			

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment		
3.3.4	LA-W935				W776406	0.322			
					W758917	0.322			
					W764642	0.322			
					W759067	0.322			
					W801650	32.103			
					W799923	7.646			
					W13995	0.208			
					W21309	0.208			
					W782169	0.208			
					W760466	0.208			
					W14233	0.208			
					W756715	0.208			
					L05179877	21.061			
					L05179878	4.56			
					L05180415	2.081			
					W801888	6.554			
					W792852	1.9			
				10-100 nCi/g	Reclassified/Repacked MTRU STP and TRU inventory to MLLW STP inventory	-5.650			Removed from LA-W935 as a result of not being STP covered waste. This waste was declared hazardous waste for reduced worker exposures and efficiency of waste handling
							L12226676	-3.750	
							L12226738	-1.9	
				10-100 nCi/g	Reclassified/Repacked MLLW STP inventory to TRU and MTRU STP inventory	-5.730			Removed from LA-W935 as a result of reclassifying back to combustible-noncombustible MTRU inventory
							C07194649	-0.208	Parent MTRU Container S860214, 0.208 m ³
							C08196360	-0.208	Parent MTRU Container S824352, 0.208 m ³
							C09207712	-0.208	Parent MTRU Container S860330, 0.208 m ³
							C09207715	-0.208	Parent MTRU Container S860340, 0.208 m ³
							C10211008	-0.208	Parent MTRU Container S816064, 0.208 m ³
							C10211021	-0.208	Parent MTRU Container S841090, 0.208 m ³
					C10211030	-0.208	Parent MTRU Container S846515, 0.208 m ³		
					C10211032	-0.208	Parent MTRU Container S850048, 0.208 m ³		

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment	
3.3.4	LA-W935				C10211041	-0.208	Parent MTRU Container S860206, 0.208 m ³	
					C10211042	-0.208	Parent MTRU Container S860207, 0.208 m ³	
					C10211055	-0.208	Parent MTRU Container S880973, 0.208 m ³	
					C10211056	-0.208	Parent MTRU Container S880976, 0.208 m ³	
					C10211370	-0.208	Parent MTRU Container S860304, 0.208 m ³	
					C10211674	-0.208	Parent MTRU Container 52370, 0.208 m ³	
							Removed from LA-W935 as a result of reclassifying back to combustible MTRU inventory	
						C09207693	-0.208	Parent MTRU Container 55719, 0.208 m ³
						C10211362	-0.208	Parent MTRU Container 55092, 0.208 m ³
						C10211363	-0.208	Parent MTRU Container 55736, 0.208 m ³
								Removed from LA-W935 as a result of reclassifying back to solidified inorganic and organic MTRU inventory
						C10211000	-0.322	Parent MTRU Container S800683, 0.322 m ³
						C10211001	-0.208	Parent MTRU Container S803810, 0.208 m ³
								Removed from LA-W935 as a result of reclassifying back to TRU waste
						C08200663	-0.208	Parent TRU Container
						C08200664	-0.208	Parent TRU Container
						C09201754	-0.208	Parent TRU Container
						C09207694	-0.208	Parent TRU Container
						C07207695	-0.208	Parent TRU Container
						C09207700	-0.208	Parent TRU Container
				C09207701	-0.208	Parent TRU Container		
				C10211153	-0.208	Parent TRU Container		
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing Waste	Repackaged MTRU STP and TRU inventory to MLLW STP inventory	1.665			Transferred into LA-W917 from combustible-noncombustible MTRU inventory as a result of repackaging process	
					W801216	0.001	Parent MTRU Containers S794076, 13.594 m ³	
					W801210	0.208	Parent MTRU Container S824498, 0.208 m ³	

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
3.1.8	LA-W917				W799653	0.208	Parent MTRU Container 65201, 0.208 m ³
							Transferred into LA-W917 from solidified Inorganic and Organic MTRU inventory as a result of repackaging process
					W793056	0.208	Parent MTRU Container S834064, 0.208 m ³
					W793135	0.208	Parent MTRU Container S821620, 0.208 m ³
					W802320	0.208	Parent MTRU Container S821620, 0.208 m ³
							Transferred into LA-W917 from TRU inventory as a result of repackaging process
					W800054	0.208	Parent TRU Container
					W801570	0.208	Parent TRU Container
					W800746	0.208	Parent TRU Container
			Compressed Gases Requiring Scrubbing Waste	Reclassified/ Repackaged MLLW STP inventory to TRU and MTRU STP inventory	-0.416		
				65216	-0.208		
				65211	-0.208		
3.1.5	LA-W922	Non-combustible Debris	Reclassified/ Repackaged LLW inventory to MLLW STP inventory	29.167			Transferred into LA-W922 as a result of reclassifying LLW (glovebox) inventory
					W499644	4.8	
					W801575	24.367	
Subtotal MLLW Volume						621.721	

*MWIR is Mixed Waste Inventory Report

APPENDIX D PREVIOUS YEAR MLLW INVENTORY DETAIL

Table D-1 FY13 MLLW Inventory¹ Detailed Update by Treatability Group

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY12 Annual Update (m ³) ²	Proposed Revision 24.0 (m ³)	Comments ³	FY13 Annual Update (m ³)	Projection FY14 – FY18 (m ³)
3.1.1	LA-W901 <i>IPA Wastes</i>	0	0		0	0
3.1.1	LA-W902 <i>Scintillation Fluids</i>	0	0		0	0
3.1.2	LA-W903 <i>Lead Blankets</i>	0	0		0	0
3.1.2	LA-W904 <i>Soil with Heavy Metals</i>	0	0		0	0
3.1.2	LA-W905 <i>ER Soils</i>	0	0		0	0
3.1.3	LA-W906 <i>Aqueous Organic Liquids</i>	0	0		0	0
3.1.4	LA-W911 <i>Organic-Contaminated Combustible Solids</i>	0	0		0	0
3.1.4	LA-W919 <i>Organic-Contaminated Noncombustible Solids</i>	0	0		0	0
3.1.5	LA-W912 <i>Combustible Debris</i>	0	0		0	0
3.1.5	LA-W921 <i>Activated or Inseparable Lead</i>	0	0		0	0
3.1.5	LA-W922 <i>Noncombustible Debris</i>	0.2082	0.416	Administrative Adjustment	0.624	0
			-0.0002	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
3.1.6	LA-W913 <i>Aqueous Wastes with Heavy Metals</i>	0	0		0	0
3.1.6	LA-W914 <i>Corrosive Solutions</i>	0	0		0	0
3.1.6	LA-W915 <i>Aqueous Cyanides, Nitrates, Chromates, and Arsenates</i>	0	0		0	0
3.1.7	LA-W916 <i>Water-Reactive Wastes</i>	0	0		0	0

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY12 Annual Update (m ³) ²	Proposed Revision 24.0 (m ³)	Comments ³	FY13 Annual Update (m ³)	Projection FY14 – FY18 (m ³)
3.1.8	LA-W917 ⁴ <i>Compressed Gases Requiring Scrubbing</i>	0.8328	0.624	Administrative Adjustment	1.456	0
			-0.0008	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places		
			0	Shipped offsite for treatment/disposal		
3.1.9	LA-W918 <i>Compressed Gases Requiring Oxidation</i>	0	0		0	0
3.1.10	LA-W920 <i>Elemental Mercury</i>	0	0		0	0
3.1.11	LA-W907 <i>Halogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W908 <i>Nonhalogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W909 <i>Bulk Oils</i>	0	0		0	0
3.1.11	LA-W910 <i>PCB Wastes with RCRA Components</i>	0	0		0	0
3.1.11	LA-W923 <i>Liquid and Solid Oxidizers</i>	0	0		0	0
3.2	LA-W924 <i>Lead Wastes – TBD</i>	0	0		0	0
3.2	LA-W925 <i>Mercury Wastes – TBD</i>	0	0		0	0
3.2	LA-W926 <i>Compressed Gases – TBD</i>	0	0		0	0
3.2	LA-W927 <i>Biochemical Laboratory Wastes</i>	0	0		0	0
3.2	LA-W928 <i>Dewatered Treatment Sludge</i>	0	0		0	0
3.2	LA-W932 <i>Explosives</i>	0	0		0	0
3.2	LA-W933 <i>Labpacks</i>	0	0		0	0

CP ¹ Sec.	MWIR ¹ Waste ID and Treatability Group/Category	FY12 Annual Update (m ³) ²	Proposed Revision 24.0 (m ³)	Comments ³	FY13 Annual Update (m ³)	Projection FY14– FY18 (m ³)
3.2	LA-W934 <i>High Activity Waste</i>	1.5079	-0.208	Shipped offsite for treatment/disposal	1.301	0
			0.0011	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places		
3.3.1	LA-W930 <i>Lead for Surface Decontamination</i>	0	0		0	0
3.3.2	LA-W929 <i>Nonradioactive or Suspect Waste Items to be Surveyed</i>	0	0		0	0
3.3.3	LA-W931 <i>Lead Requiring Sorting</i>	0	0		0	0
3.3.4	LA-W935 <i>10–100 nCi/g Waste</i>	201.4007	1058.556	Administrative Adjustment	97.000	50
			-23.0917	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places and removal or addition of overpack)		
			-1139.865	Shipped offsite for treatment/disposal		
3.4	<i>Missing/ nonexistent/ TBV category</i>	0	0		0	N/A
	TOTALS	203.9496			100.381	

¹ CP is Compliance Plan; MWIR is Mixed Waste Inventory Report

² MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³; however, due to FY13 changes in the way that the MTRU are processed (repackaged) into several different containers, volumes are no longer equal to those added to the MLLW inventory of LA-W935.

³ Shipment details are in Appendix B; Administrative adjustments are in Appendix C.

⁴ Items prohibited from shipment to WIPP are removed from MTRU STP containers and consolidated; some are MLLW and are included in Table A-1 as LA-W917 waste; others are MTRU waste and are considered *Combustible-Noncombustible Waste* in Table E-1.

APPENDIX E CURRENT MTRU INVENTORY DETAIL

Table E-1 TA-54 MTRU Covered Inventory (by Treatability Group)

Treatability Group	FY13 Annual Update (m³)	Proposed Revision 25.0 (m³)^{1,2}	Comments³	FY14 Annual Update (m³)	Projection FY15-FY19 (m³)
Cemented Sludge	78.146				
		(0.416)⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-8.882)	Shipped Offsite on Hold ⁵		
		-11.388	Administrative Adjustments		
			FY14 Subtotal Cemented Sludge		66.758
Combustible – Noncombustible Waste	694.935				
		(73.762)⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		2.912	New Covered		
		(-303.388)	Shipped Offsite on Hold ⁵		
		-74.417	Administrative Adjustments		
			FY14 Subtotal Combustible-Noncombustible Waste		623.430
Combustible Waste	3.294				
		(0.738)⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0.000	New Covered		
		(-0.530)	Shipped Offsite on Hold ⁵		
		1.704	Administrative Adjustments		
			FY14 Subtotal Combustible Waste		4.998
Glass Waste	0				
		(0)⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		0	Shipped Offsite		
		0	Administrative Adjustments		
			FY14 Subtotal Glass Waste		0
Leaded Glovebox Waste	0				
		(0)⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		0	Shipped Offsite		
		0	Administrative Adjustments		
			FY14 Subtotal Leaded Glovebox Waste		0

Treatability Group	FY13 Annual Update (m ³)	Proposed Revision 25.0 (m ³) ^{1,2}	Comments ³	FY14 Annual Update (m ³)	Projection FY15-FY19 (m ³)
<i>Metallic Waste</i>	20.506				
		(0.208) ⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-0.208)	Shipped Offsite on Hold ⁵		
		-17.157	Administrative Adjustments		
			FY14 Subtotal <i>Metallic Waste</i>	3.349	0
<i>Noncombustible Waste</i>	35.400				
		(4.086) ⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-44.344)	Shipped Offsite on Hold ⁵		
		29.136	Administrative Adjustments		
			FY14 Subtotal <i>Noncombustible Waste</i>	64.536	100
<i>Solidified Inorganic and Organic Waste</i>	432.442				
		(20.732) ⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0.208	New Covered		
		(-38.520)	Shipped Offsite on Hold ⁵		
		-113.748	Administrative Adjustments		
			FY14 Subtotal <i>Solidified Inorganic and Organic Waste</i>	318.902	10
TOTAL FY13:	1264.723		Total FY14 Inventory:	1081.973	210

¹ MTRU waste volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³.

² Volumes are represented to three decimal places.

³ Shipping details are found in Appendix F, and Administrative Adjustments are found in Appendix G.

⁴ Amount already included in the MTRU STP covered inventory.

⁵ NMED has determined that the removal of MTRU from the STP will be deferred until more information becomes available and it is determined that the waste currently stored at the off-site facility will not be returned to LANL.

Table E-2 MTRU Inventory at TA-55 and CMR

Location	FY13 MTRU Inventory (m ³) ¹	Treatability Group	Proposed Revision 25.0 (m ³)	Comments ¹	FY14 MTRU Inventory (m ³)
CMR	1.9	Combustible-Noncombustible Waste	3.800	New Covered	
			0.000	Administrative Adjustment	
Total FY14 CMR Inventory					5.7
TA-55	3.254	Combustible-Noncombustible Waste	1.252	New Covered	
			-1.475	Administrative Adjustment	
FY14 TA-55 Combustible-Noncombustible Waste Inventory					3.031
TA-55	0.019	Combustible Waste	0.208	New Covered	
			-0.208	Administrative Adjustment	
FY14 TA-55 Combustible Waste Inventory					0.019
TA-55	31.987	Metallic Waste	-3.196	Administrative Adjustment	
FY14 TA-55 Metallic Waste Inventory					28.791
TA-55	9.597	Noncombustible Waste	0.832	New Covered	
			-5.821	Administrative Adjustment	
FY14 TA-55 Noncombustible Waste Inventory					4.608
TA-55	0.208	Solid Inorganic and Organic Waste			
FY14 TA-55 Solidified Inorganic and Organic Waste Inventory					0.208
Total FY14 TA-55 Inventory					36.657
Total FY14 CMR/TA-55 Inventory					42.357

¹ Shipping details are found in Appendix F and Administrative Adjustments are found in Appendix G. Since all waste is shipped from TA-54, there are no shipping data for CMR/TA-55, only transfers to TA-54, which are included in the Appendix G.

APPENDIX F FY14 MTRU WASTE SHIPMENTS TO WIPP

Table F-1 FY14 MTRU Shipments to WIPP

FY14 Quarter	Treatability Group	Existing FY14 Inventory Volume (m ³)	New Covered Volume (m ³)	Total Removed from Inventory (m ³)	Total Volume Shipped (m ³) ¹
Q1	Cemented Sludge Total	7.594	0	7.594	5.200
	Combustible-Noncombustible Waste Total	106.888	0	106.888	122.408
	Combustible Waste Total	0.530	0	0.530	0.416
	Noncombustible Waste Total	24.886	0	24.886	24.544
	Solidified Inorganic and Organic Waste Total	8.548	0.208	8.756	8.528
	Q1 Total	148.446	0.208	148.654	161.096
Q2	Cemented Sludge Total	1.288	0	1.288	0.832
	Combustible-Noncombustible Waste Total	52.344	0	52.344	52.116
	Noncombustible Waste Total	5.408	0	5.408	5.408
	Solidified Inorganic and Organic Waste Total	9.568	0	9.568	9.568
	Q2 Total	68.608	0	68.608	67.924
Q3	Q3 Total	0	0	0	0
Q4	Q4 Total	0	0	0	0
Grand Total		217.054	0.208	217.262	229.020

¹ Volumes shipped may be lower than volumes removed from the STP inventory due to the removal of overpacks before shipping.

Table F-2 FY14 MTRU Shipments to WCS

FY14 Quarter	Treatability Group	Existing FY14 Inventory Volume (m ³)	New Covered Volume (m ³)	Total Removed from Inventory (m ³)	Total Volume Shipped (m ³) ¹
Q3	Combustible-Noncombustible Waste Total	120.848	0.416	121.264	121.264
	Metallic Waste Total	0.208	0	0.208	0.208
	Noncombustible Waste Total	14.050	0	14.050	13.936
	Solidified Inorganic and Organic Waste Total	20.196	0	20.196	19.968
Grand Total		155.302	0.416	155.718	155.376

Table F-3 FY14 MTRU Shipments to AMWTP (INL)

FY14 Quarter	Treatability Group	Existing FY14 Inventory Volume (m ³)	New Covered Volume (m ³)	Total Removed from Inventory (m ³)	Total Volume Shipped (m ³) ¹
Q1	Combustible-Noncombustible Waste Total	5.049	0	5.049	5.049
Q2	Combustible-Noncombustible Waste Total	15.294	0	15.294	15.294
Q3	Combustible-Noncombustible Waste Total	2.549	0	2.549	2.549
Grand Total		22.892	0.416	22.892	22.892

**APPENDIX G CURRENT YEAR MTRU INVENTORY –
ADMINISTRATIVE ADJUSTMENTS**

Table G-1 FY14 MTRU Administrative Adjustments to TA-54 Inventory

Treatability Group	Administrative Adjustment	Volume (m³)
<i>Cemented Sludge</i>	Reclassified as MLLW (LA-W935)	-0.624
	Double counted volume for both reassigned treatability groups and volume changes in FY13.	-10.442
	Volume changes due to addition or removal of overpacks (85 or 110 gallon)	0.114
	S811822 counted as a reassigned treatability group but was not changed in FY13	0.208
	S811812 was reassigned treatability group but was not changed in FY13	-0.208
	STP containers from Cemented Sludge treatability groups were reassigned to 0.644 m ³ Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	-0.644
	STP containers from Solidified Organic and Inorganic treatability groups were reassigned to 0.208 m ³ Cemented Sludge Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	0.208
	<i>Cemented Sludge Net Adjustment</i>	
<i>Combustible-Noncombustible Waste</i>	Reclassified as MLLW (LA-W935)	-7.572
	S793723 inadvertently mistaken for the wrong treatability group in FY13	-0.322
	S811822 counted as a reassigned treatability group but was not changed in FY13	-0.208
	91908 volume increased due to addition of overpacks (496 gallon) in FY13	1.692
	Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the minimum detectable activities for undetected radionuclides.	2.912
	Removed as a result of repackaging/remediation	-423.387
	Added as a result of repackaging/remediation	420.052
	Removed as a result of historical remediation; in that re-packaging activities were overlooked and not properly recorded. Clerical errors related to conversion from paper to database inventory.	-84.650
	63037, 87121, and 87122 counted twice in repacked and reclassified in FY13	2.316
	S822849 inadvertently reassigned to the wrong treatability group in FY13	0.208
	Two glove bags were added as a result of repack in FY13	0.416
	92302 was counted three times. Removed 2x the volume in FY13	-3.800
	Volume changes due to addition or removal of overpacks (85 gallon or SWB)	5.076
	94166, 94161, 94139, 94138 counted twice in Repacking in FY13	-0.832
	64741 counted twice in transfer and New Covered in FY13	-0.208
	STP containers from Combustible-Noncombustible Waste treatability groups were reassigned to 0.530 m ³ Combustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.	-0.530
	STP containers from Solidified Inorganic and Organic Waste treatability groups were reassigned to 1.174 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.	1.174
	Added as a result of recharacterizing TRU inventory as MTRU during repacking	5.858
	Additional covered inventory transferred from TA-55 covered inventory	7.388
	<i>Combustible-Noncombustible Net Adjustment</i>	

Treatability Group	Administrative Adjustment	Volume (m³)
<i>Combustible Waste</i>	Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the minimum detectable activities for undetected radionuclides.	0.624
	Double counted volume for both reassigned treatability groups and volume changes in FY13.	0.550
	STP containers from Combustible-Noncombustible Waste treatability groups were reassigned to 0.530 m ³ Combustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.	0.530
Combustible Waste Net Adjustment		1.704
<i>Metallic Waste</i>	Removed as a result of repackaging/remediation	-19.050
	Added as a result of repackaging/remediation	1.893
Metallic Waste Net Adjustment		-17.157
<i>Noncombustible Waste</i>	Reclassified as MLLW (LA-W935)	-0.208
	Removed as a result of repackaging/remediation	-0.322
	Added as a result of repackaging/remediation	29.666
Noncombustible Waste Net Adjustment		29.136
<i>Solidified Inorganic and Organic Waste</i>	Additional covered inventory transferred from TA-55 covered inventory	0.416
	S793723 inadvertently mistaken for the wrong treatability group in FY13	0.322
	S843646 was reassigned a treatability group however, it was not added into that group in FY13	0.322
	Removed as a result of repackaging/remediation	-130.280
	Added as a result of repackaging/remediation	16.022
	Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the minimum detectable activities for undetected radionuclides.	0.530
	Volume changes due to addition or removal of overpacks (85 or 110 gallon)	-0.1340.476
	S822849 inadvertently reassigned to the wrong treatability group in FY13	-0.208
	S811812 was reassigned treatability group but was not changed in FY13	0.208
	93667 counted twice in repacking in FY13	-0.208
	STP containers from Cemented Sludge treatability groups were reassigned to 0.644 m ³ Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.	0.644
	STP containers from Solidified Inorganic and Organic Waste treatability groups were reassigned to 0.208 m ³ Cemented Sludge Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	-0.208
	STP containers from Solidified Inorganic and Organic Waste treatability groups were reassigned to 1.174 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.	-1.174
	Solidified Inorganic and Organic Waste Net Adjustment	
Total Net TA-54 Adjustment		-185.870

Table G-2 FY14 MTRU Administrative Adjustments for CMR and TA-55 Inventory

Location	Treatability Group	Administrative Adjustment	Volume (m ³)
CMR	Combustible-Noncombustible Waste		0.000
Net Adjustment CMR Inventory			0.000
TA-55	Combustible-Noncombustible Waste	Container was reassayed and removed as a result of recharacterizing to MLLW in FY13.	-0.019
		Containers was reassay and removed as a result of recharacterizing to LLW	-0.624
		Transferred to TA-54 and assigned to <i>Combustible-Noncombustible Waste</i> in the TA-54 inventory	-0.832
Net Adjustment TA-55 Combustible-Noncombustible Waste			-1.475
TA-55	Combustible Waste	Transferred to TA-54 and assigned to Combustible-Noncombustible Waste in the TA-54 inventory.	-0.208
Net Adjustment TA-55 Combustible Waste			-0.208
TA-55	Metallic Waste	Transferred to CMR for Material Retrieval	-3.199
		Volume corrections due to rounding to three decimal places.	0.003
Net Adjustment TA-55 Metallic Waste			-3.196
TA-55	Noncombustible Waste	Transferred to TA-54 and assigned to <i>Combustible-Noncombustible Waste</i> in the TA-54 inventory	-5.405
		Transferred to TA-54 and assigned to Solidified Inorganic and Organic Waste	-0.416
Net Adjustment TA-55 Noncombustible Waste			-5.821
Net Adjustment TA-55 Inventory			-10.700
Total Net TA-55/CMR Adjustment			-10.700

Table G-3 MTRU Administrative Adjustments – TA-54 Volume Adjustments [Table omitted]

Table G-4 MTRU Administrative Adjustments – TA-54 Containers Added [Table omitted]

APPENDIX H MLLW TREATMENT FACILITIES

Table H-1 Commercial Facilities Contacted for Waste Treatment Capabilities

Commercial Facility	Location
Perma-Fix (including Material & Energy Corporation in Tennessee; Diversified Scientific Services, Inc. in Tennessee; and Perma-Fix North West in Washington)	Florida
Waste Control Specialists	Texas
EnergySolutions of Utah (including Bear Creek Operations in Tennessee)	Utah
Nuclear Fuel Services	Tennessee
Integrated Environmental Services	Tennessee
NSSI	Texas

APPENDIX I CORRESPONDENCE

Table I-1 Expedited Shipment Letters

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 24.0 (Appendix I)
4-15-2014	Notice of Completion of Expedited Offsite Waste Shipment Activity 3.1.5	WM-DO-14-027	25	Yes

Table I-2 Correspondence

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 24.0 (Appendix I)
10-3-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0062	24	Yes
10-3-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0063	24	Yes
10-8-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0070	24	Yes
10-10-2013	Notification of Force Majeure and Lapse of Appropriations	ADESH-13-0056	22	Yes
10-14-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0072	24	Yes
11-1-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0077	24	Yes
11-7-2013	Update to the October 10, 2013 Notice of Force Majeure	ADESH-13-060	22	Yes
11-14-2013	Notification of Activity 4.0 Waste Shipment Offsite for Treatment or Recycling at a Noncommercial Facility	WM-DO-13-0080	25	Yes
11-14-2013	Notice of Completion of Offsite Waste Shipment, FY13, Q4, Activity 4.0	WM-DO-13-0079	24	Yes
11-19-2013	Notification of Activity 4.0 Waste Shipment Offsite for Treatment or Recycling at a Noncommercial Facility – Supplemental Information	WM-DO-13-0082	25	Yes
12-20-2013	Request for Extension for the Los Alamos National Laboratory’s Site Treatment Plan FY12 and FY13 Annual Updates	WM-DO-13-0094	23	Yes
12-20-2013	Request to Extend Compliance Plan Milestone for Activity 3.2	WM-DO-13-0096	22	Yes
12-20-2013	Request for Amendment to Extend STP Compliance Milestone for Activity 3.3.4	WM-DO-13-0095	25	Yes
1-2-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-13-0093	25	Yes
1-2-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0092	25	Yes
1-16-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-004	25	Yes

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 24.0 (Appendix I)
1-23-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-014	25	Yes
1-23-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-015	25	Yes
2-10-2014	Response to the 12-9-2013 Notice of Disapproval of the FY12 STP Annual Report and Proposed Revision 23.0	WM-DO-14-017	23	Yes
2-13-2014	Notice of Completion of Offsite Waste Shipment, FY14, Q1, Activity 4.0	WM-DO-14-018	25	Yes
2-27-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-019	25	Yes
4-2-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-022	25	Yes
4-2-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-021	25	Yes
4-15-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-026	25	Yes
4-15-2014	45-Day Notification, Proposed Deletion of Waste	WM-DO-14-023	25	Yes
4-15-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-025	25	Yes
4-16-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-028	25	Yes
4-24-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-030	25	Yes
5-8-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-037	25	Yes
5-8-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-036	25	Yes
5-8-2014	Notice of Completion of Offsite Waste Shipment, FY14 Q2, Activity 4.0	WM-DO-14-038	25	Yes
5-8-2014	Deletion of Covered Waste Under the STP	WM-DO-14-035	25	Yes
5-14-2014	Amendment to the Proposed FY12 Annual Update	WM-DO-14-034	23	Yes
5-14-2014	Notice of Completion of Offsite Waste Shipment for Storage Pending Disposal, Activity 4.0	WM-DO-14-039	25	Yes
5-21-2014	Correction of Off-Site Waste Shipment Notifications, FY13, Activity 3.3.4	WM-DO-14-040	24	Yes
5-21-2014	15-Day Notification, Proposed Deletion of Waste	WM-DO-14-042	25	Yes
5-22-2014	Correction of Off-Site Waste Shipment Notification, FY13, Activity 4.0	WM-DO-14-041	24	Yes
5-28-2014	Notice of Completion of Offsite Waste Shipment for Storage Pending Disposal, Activity 4.0	WM-DO-14-043	25	Yes
6-9-2014	Submittal of FY13 Annual Update and Proposed 24.0	WM-DO-14-044	24	Yes

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 24.0 (Appendix I)
6-9-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-045	25	No
7-2-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.1.5	WM-DO-14-046	25	No
7-2-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-047	25	No
7-9-2014	Notice of Completion of Off-Site Shipment Activity 3.1.8	WM-DO-14-049	25	No
8-7-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.1.5	WM-DO-14-051	25	No
8-13-2014	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY14 Q3	WM-DO-14-052	25	No
9-8-14	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-054	25	No
11-12-2014	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY14 Q4	WM-DO-14-063	25	No
1-12-2015	15-Day Notification, Proposed Deletion of Waste	WM-DO-15-001	25	No
2-4-2015	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY15, Q1	WM-DO-15-002	25	No
3-24-2015	Corrections of Off-Site Waste Shipment Notification, FY14, Activity 3.3.4 and 3.1.5	WM-DO-15-007	25	No
3-24-2015	Corrections of Off-Site Waste Shipment Notifications, FY14, Activity 4.0	WM-DO-15-003	25	No
3-24-2015	Notice of Completion of Off-Site Waste Shipment Activity 3.1.8	WM-DO-15-006	25	No
3-30-2015	Submittal of FY14 Annual Update and Proposed 25.0	WM-DO-15-008	25	No

APPENDIX J HISTORY OF CHANGES TO THE CP AND FFCO

As discussed in Part III (CP), Section 1.2, the STP CP has been modified several times since it was originally issued, in accordance with the provisions of Section X, "Revisions," and Section XI, "Other Amendments to the STP," of the October 4, 1995, FFCO, as amended and revised. This Appendix provides a summary of these CP changes and of modifications to the FFCO since its issuance.

To date, there have been 25 revisions and three amendments to the CP. In addition, the FFCO was amended once on May 20, 1997. The following Table J-1 provides a summary of these changes. More detailed descriptions can be found in the CP Update portion of each year's STP *Annual Update* and the original correspondence requesting each change.

Table J-1 Summary of Changes to the CP and the FFCO

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 1.0	STP/CP	6/12/96	Added offsite treatment as a parallel preferred option for most MLLW treatability groups.
Rev. 2.0	STP/CP	12/9/96	Reduced volume of LA-W928 by approving reclassification of sludges as LLW.
Amendment 1.0	STP/CP	10/30/96	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates.
Rev. 3.0	STP/CP	1/27/97	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates.
Amendment 1.0	FFCO	5/20/97	Modified FFCO Sections IV, V, IX, and X to streamline waste transfers and deletions.
Amendment 2.0	STP/CP	9/4/97	Extended CP Activity 3.1.2B Compliance Date to 12/29/97.
Rev. 4.0	STP/CP	12/29/97	Transferred original volume of LA-W929 from three subgroups to other treatability groups, added treatability groups, and deleted treated items.
Rev. 5.0	STP/CP	12/29/97	Added volumes reported in FY95 and FY96 <i>Annual Updates</i> (and certain other items) to several treatability groups, added Activities and Compliance Dates, added CP Appendices, and deleted treated items.
Rev. 6.0	STP/CP	7/31/98	Added volumes reported in FY97 <i>Annual Update</i> to several treatability groups, added certain Activities and Compliance Dates, adjusted several original inventory volumes, transferred one LA-W929 item to a new treatability group, and deleted treated items.
Rev. 7.0	STP/CP	11/30/98	Removed onsite treatment skids, added STP inventory items, added onsite recycling/re-use and radiological decontamination, added notification for offsite treatability studies.
Rev. 8.0	STP/CP	12/3/98	Extended compliance dates for treatment of MTRU waste.
Rev. 9.0	STP/CP	6/7/00	Added and deleted volumes reported in FY98 <i>Annual Update</i> to certain treatability groups.
Amendment 3.0	STP/CP	8/30/99	Transferred three items to MTRU, transferred one item to subgroup within same treatability group.
Rev. 10.0	STP/CP	12/18/00	Added and deleted volumes reported in FY99 <i>Annual Update</i> to certain treatability groups.
Rev. 11.0	STP/CP	4/18/01	Added and deleted volumes reported in FY00 <i>Annual Update</i> .

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 12.0	STP/CP	3/13/02	Added and deleted volumes reported in FY01 <i>Annual Update</i> . Extended CP Activity 3.1.5A Compliance Date to 8/25/03. Extended CP Activity 3.1.11A to 2/01/04. Removed the requirement to develop treatment technologies and the associated compliance schedule in CP Activity 4.0 and added language specifying that MTRU waste would be shipped offsite to WIPP for disposal.
Rev 13.0	STP/CP	7/14/03	Added and deleted volumes reported in FY02 <i>Annual Update</i> .
Rev 14.0	STP/CP	1/5/05	Added and deleted volumes reported in FY03 <i>Annual Update</i> .
Rev 15.0	STP/CP	8/16/05	Added and deleted volumes reported in FY04 <i>Annual Update</i> .
Rev 16.0	STP/CP	12/12/06	Added and deleted volumes reported in FY05 <i>Annual Update</i> . Extended CP Activity 3.1.8(A) Compliance Date to 8/09/07. Extended CP Activity 3.1.9(A) Compliance Date to 8/09/07. Extended CP Activity 3.1.10(A) Compliance Date to 8/31/07. Extended CP Activity 3.1.11(A) Compliance Date to 12/31/07. Extended CP Activity 3.2(J) Compliance Date to 12/31/07. Reclassified 0.2082 m ³ of LA-W934 High Activity MLLW waste to MTRU waste.
Rev 17.0	STP/CP	6/26/08	Added and deleted volumes reported in FY06 <i>Annual Update</i> . Extended CP Activity 3.1.5(A) Compliance Date to 12/31/08. Extended CPV Activity 3.1.8(A) Compliance Date to 8/28/08. Extended CP Activity 3.1.9(A) Compliance Date to 8/28/08. Extended CP Activity 3.2(J) Compliance Date to 12/31/08.
Rev 18.0	STP/CP	1/9/09	Added and deleted volumes reported in FY07 <i>Annual Update</i> . Extended CP Activity 3.1.8(A) Compliance Date to 8/28/09. Extended CP Activity 3.1.9(A) Compliance Date to 8/28/09. Proposed a new Section 3.3.4 for Treatability Group, LA-W935 "10-100 nCi/g Waste" with new CP Activity 3.3.4 (A) Compliance Date 12/01/13 and CP Activity 3.3.4 (B) Compliance Date 12/31/13. Extended CP Activity 3.2(J) Compliance Date to 12/31/10.
Rev 19.0	STP/CP	2/5/10	Added and deleted volumes reported in FY08 <i>Annual Update</i> . Extended compliance date for CP Activities 3.1.8(A) and 3.1.9(A) to 8/28/12. Proposed a new milestone of 12/31/2010 for 3.1.4(A) and a new milestone 3.3.4(C) for 10-100 nCi/g Waste.
Rev 20.0	STP/CP	11/8/10	Added and deleted volumes reported in FY09 <i>Annual Update</i> . Proposed an extended compliance date for CP Activity 3.2(J).
Rev 21.0	STP/CP	3/21/12	Added and deleted volumes reported in FY10 <i>Annual Update</i> . Proposed new compliance date for CP Activity 3.1.8(A).
Rev 22.0	STP/CP	12/10/12	Added and deleted volumes reported in FY11 <i>Annual Update</i> .
Rev 23.0	STP/CP	TBD	Added and deleted volumes reported in FY12 <i>Annual Update</i> Added Table 4.0-1 Treatability Groups for the Framework Agreement MTRU Waste
Rev 24.0	STP/CP	TBD	Added and deleted volumes reported in FY13 <i>Annual Update</i> Proposed compliance date for CP Activity 3.1.5(A) Proposed compliance date for CP Activity 3.1.8(A) Extended CP Activity 3.2(J) Compliance Date to 6/30/2018 Proposed compliance date for CP Activity 3.3.4 (A and B)

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev 25.0	STP/CP	TBD	Added and deleted volumes reported in FY14 Annual Update On Hold volumes reported shipped in FY14 Annual Update Proposed compliance date for CP Activity 3.1.8(A) Proposed compliance date for CP Activity 3.3.4 (A and B)

REFERENCES

1. *Federal Facility Compliance Order (Los Alamos National Laboratory)*, New Mexico Environment Department (October 4, 1995).
2. Congress, 1996. Text of Public Law 104-201, Congressional Record dated September 23, 1996, Amendment to Public Law 102-579, 1992 *Waste Isolation Pilot Plant Land Withdrawal Act* (106 Stat. 4777).
3. 40 CFR Part 194, Criteria for the Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations: Certification Decision; Proposed Rule (Federal Register V.62, No. 210, Oct. 30, 1997, pp. 58792-58838).

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~~March~~ ~~June~~ 319, 20154

**Los Alamos National Laboratory
Federal Facility Compliance Order
Annual Site Treatment Plan Update
for Fiscal Year 20143**



Prepared by the Waste Management Division

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ACRONYMS

40 CFR	Title 40 of the Code of Federal Regulations
AMWTP	Advanced Mixed Waste Treatment Plant
CCA	Compliance Certification Application
CCP	Central Characterization Project
CMR	Chemistry and Metallurgy Research (Building)
CP	Compliance Plan
DOE	U.S. Department of Energy
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
FFCA	Federal Facility Compliance Act
FFCO	Federal Facility Compliance Order
FR	Federal Register
FY	Fiscal Year
HWA	Hazardous Waste Act
INL	Idaho National Laboratory
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
LDR	Land Disposal Restrictions (RCRA)
LLNL	Lawrence Livermore National Laboratory
LWAA	Land Withdrawal Act Amendments
M&EC	Materials and Energy Corporation
MLLW	Mixed Low-Level Waste
MTRU	Mixed Transuranic (Waste)
MWIR	Mixed Waste Inventory Report
NMED	New Mexico Environment Department
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
RTR	Real-time radiography
STP	Site Treatment Plan
TA	Technical Area
TBD	To be determined
TBV	To be verified
TRU	Transuranic
UC	University of California
WCRRF	Waste Characterization, Reduction, and Repacking Facility
WCS	Waste Control Specialist LLC
WIPP	Waste Isolation Pilot Plant

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INTRODUCTION

On October 6, 1992, Congress passed the Federal Facility Compliance Act (FFCA) to address compliance by the U.S. Department of Energy (DOE) with the Land Disposal Restrictions (LDR) for the storage of mixed waste set forth in Section 3004(j) of the Resource Conservation and Recovery Act (RCRA). The FFCA requires DOE to submit a Site Treatment Plan (STP) for developing treatment capacities and technologies to treat all of the facility's mixed waste, regardless of the time generated, to the standards promulgated pursuant to Section 3004(m) of RCRA. The FFCA provides that the appropriate regulatory authority, the New Mexico Environment Department (NMED), may approve, approve with modifications, or disapprove the STP. Prior to making such a determination, the FFCA requires NMED to provide public notice, consider public comments, and consult with the U.S. Environmental Protection Agency (EPA) and any other state in which a facility affected by the STP is located.

On October 4, 1995, the NMED issued a Federal Facility Compliance Order (FFCO) to DOE and its then management and operating contractor, the University of California (UC) Regents. On June 1, 2006, Los Alamos National Security, LLC (LANS) replaced UC as operating contractor of Los Alamos National Laboratory (LANL) at which time LANS assumed responsibility for compliance with the FFCO.

The FFCO required ~~LANL-DOE/LANS~~ to implement an STP for the treatment of mixed waste at LANL. The STP is intended to fulfill the requirements of the FFCA and establish an enforceable framework to allow DOE and LANS (Respondents) to achieve full compliance with LDR requirements under the New Mexico Hazardous Waste Act (HWA) and RCRA. The compliance dates set forth in the STP are enforceable time periods in which Respondents are required to treat or otherwise meet the requirements set forth for LDR under the HWA and RCRA.

On March 31, 1995, DOE submitted its proposed STP, which addressed treatment capacities and technologies to treat all of LANL's mixed waste, regardless of the time it was generated, to NMED. On April 17, 1995, the public was provided an opportunity to comment to NMED on DOE's draft STP. After considering public comment and otherwise complying with the FFCA, NMED approved the draft STP with modifications.

Section VII of the FFCO requires ~~LANL-DOE/LANS~~ to submit an Annual STP Update to the NMED each year on or before March 31. The FFCO requires that the Annual Update bring the information in both the Background and the Compliance Plan (CP) current to the end of the previous federal fiscal year (FY). Part I of this Annual Update constitutes the update to the Background. Part II contains the changes that have occurred since the last Annual Update and also identifies proposed revisions and amendments to the CP. Part III incorporates the changes in Part II into the proposed CP revision (Revision 254.0).

PART I BACKGROUND UPDATE

1.0 INTRODUCTION

The Background (Part I) provides the following information.

- The estimated volume of covered waste in storage at the end of the previous FY and anticipated to be placed in storage for the next five FYs.
- A progress report from the end of the previous federal FY describing treatment progress and treatment technology development for each treatment facility and activity scheduled in the STP.
- A description, if applicable, of current or anticipated alternative treatment technology that is being evaluated for use instead of treatment technologies or capacities identified in the STP.
- A description of DOE's funding for STP-related activities and any funding issues that may affect the schedule.
- The status of the "No-Migration Variance Petition" or any treatability variances.
- A progress report on characterization and/or treatment capabilities or plans for mixed transuranic (MTRU) waste related to the waste treatment standards, if any, for the DOE Waste Isolation Pilot Plant (WIPP) facility near Carlsbad, New Mexico.

The STP-covered waste inventory is verified during quality control activities. Inconsistencies in treatability group or volume between the original inventory and the current inventory may exist. These inconsistencies are reconciled annually with the STP update.

2.0 AMOUNT OF EACH COVERED WASTE STORED AT LANL

2.1 Mixed Low-Level Waste (MLLW) Inventory

During FY143, STP-covered MLLW inventories decreased from approximately 100204 m³ to 14400 m³. The decrease was mainly due to the FY13 and FY14 budget augment that increased shipments of 10–100 nCi/g Waste along with the waste identified in the Framework Agreement being processed. During FY13, DOE/LANS worked off 553 out of 602 containers of 10–100 nCi/g Waste. In FY14, the reclassified waste inventory (201.4007 m³) was completed as of April 8, 2014 before the April 16, 2014 compliance date as proposed in the FY12 STP Annual Update. The remaining STP covered FY13 and FY14 MLLW inventory of FY13 (approximately 1497 m³) placed in storage is being readied for shipment and recharacterized during FY154. Table 2.1-1 summarizes changes to the estimated FY14 STP-covered MLLW inventory for FY13. Approximately 709140 m³ of covered MLLW was treated, recycled, disposed of, or otherwise deleted during FY143.

Appendix A provides the detailed changes to the FY143 covered MLLW inventory by treatability group, including the inventory at Technical Area (TA)-55 and the Chemistry and Metallurgy Research Building (CMR).[†] Appendix B (Table B-1) lists the FY13 MLLW shipments in FY13. Table B-2 identifies other deleted waste. If any, administrative adjustments to the MLLW inventory are shown in Appendix C (Table C-1). Detailed information about the administrative adjustments in Table C-1 are shown in Table C-2. The MLLW inventory reported in the FY132 Annual Update is included as Appendix D.

[†] No MLLW was stored at CMR or TA-55 in FY13.

Table 2.1-1 FY143 MLLW Inventory Summary

Contribution	Volume (m ³) ¹
Estimated MLLW Inventory Reported in FY132 Annual Update	100.381 203.9496
Proposed Revision 254.0	
New Covered Waste	0.2080.624
Administrative Adjustments ²	621.7214035.880
Offsite Treatment	-708.631-1440.073
Offsite Recycle	NA ³
Onsite Decontamination	NA
Treatability Study Use	NA
Estimated MLLW Inventory Reported in FY13 Annual Update	13.679100.381

¹ MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322

² Includes transfers of MTRU and other wastes into MLLW categories

³ NA = No Activity

2.2 Mixed Transuranic (MTRU) Inventory Summary

During FY143, STP-covered MTRU inventories decreased from approximately ~~2848-1312~~ m³ to ~~1124~~1312 m³.

Table 2.2-1 summarizes changes to the estimated ~~FY14~~ MTRU covered waste inventory ~~for FY13~~. The total volume of MTRU waste in Table 2.2-1 includes the CMR and TA-55 MTRU volumes, which are maintained in a separate inventory from the MTRU inventory at TA-54. ~~DOE/NNSA has committed to accelerating the rate of removal of above-ground transuranic waste (TRU) at TA-54, Area G as stated in the "Los Alamos National Laboratory Framework Agreement: Realignment of Environmental Priorities."~~ Appendix E contains additional detail for the MTRU inventory; Table E-1 covers the TA-54 inventory, and Table E-2 covers the inventory at CMR and TA-55. The volume of STP-covered MTRU waste that is part of the "non-cemented above-ground Environmental Management (EM) Legacy TRU" (MTRU waste only) has been summarized in Appendix E-1 and Section 4.0 of the Compliance Plan Volume. Appendix F (Table F-1) provides a summary of FY13 MTRU shipments to WIPP. In Appendix G, Tables G-1 and G-2 describe the administrative adjustments that were made to resolve differences in the TA-54 and the CMR/TA-55 MTRU inventory data, respectively. DOE/LANS anticipates STP-covered MTRU inventory increases because of the WIPP shutdown as of February 14, 2014.

Administrative adjustments typically represent the following types of activities:

- ~~LANS~~DOE/LANS may correct database entries so that waste items ~~not that~~ previously ~~were not~~ listed as STP waste are now identified as STP waste.
- ~~LANS~~DOE/LANS may correct waste data, such as volume or EPA codes, through quality control activities. ~~Under DOE standards, w~~Waste that was formerly classified as MTRU because it had radioactivity greater than 10 nCi/g has been reclassified to MLLW (LA-W935) if its activity is less than 100 nCi/g ~~under DOE standards~~.
- New analytical data may also require that waste streams previously managed as transuranic (TRU) waste should, as a prudent measure, be reclassified and managed as MTRU waste.

- During repacking or other quality control activities, TRU waste may be recharacterized as MTRU waste when previously unidentified hazardous contents, such as lead, are determined to be present.
- During repacking, treatability groups are frequently reassigned to be consistent with current management and shipping criteria.
- Containers of waste are occasionally determined not to belong to mixed waste streams and are reclassified as TRU waste; removal of WIPP-prohibited items, if they are the only hazardous constituent, will result in the remaining waste being classified as nonmixed.
- Addition or removal of 85-gallon overpacks changes the volume of waste in the inventory; rounding container volumes to three decimal places also changes the inventory volume.

Appendix G includes changes to the MTRU waste inventory that resulted from repacking activities. MTRU waste volumes in the STP inventory reflect the volume of the container rather than the volume of the contents. When containers are repacked, the STP inventory volume of any given treatability group may either increase or decrease. When a container is repacked, the contents are sometimes split into two or more new containers to meet shipping and waste acceptance criteria or to meet characterization criteria (e.g., nondestructive analysis calibration limits). In addition, the new containers may be assigned to different treatability groups depending on the contents of each drum. Therefore, the volume of a single drum may 'multiply' into more volume than the original container. For example, repacking one container of *Cemented Sludge* (0.208 m³) may result in one drum of *Combined Combustible-Noncombustible Waste* (0.208 m³) and one drum of *Noncombustible Waste* (0.208 m³). In addition, changes in the waste volume in the STP inventory occur when an 85-gallon 'overpack' is removed from, or added to, a 55-gallon drum during repackaging. Removal of overpacks decreases the volume of waste in the STP inventory. Adding an overpack to a 55-gallon drum increases the volume of waste shown in the STP inventory.

Table 2.2-1 Covered MTRU Inventory Summary

Description	Volume (m ³)
Covered MTRU Inventory Reported in FY132 (41,796,46.965 m ³ at CMR/TA-55 and 2806.434*1264.723 m ³ at TA-54) (*administrative adjustment addition error found after the submittal of second revision 2/10/2014)	2848.2301311.688
New Covered MTRU Waste at TA-54	9.4743.120
New Covered MTRU Waste at CMR/TA-55	6.0922.080
Covered MTRU Waste Shipped to WIPP in FY143	-217.262.823.216
Covered MTRU Waste Shipped to Waste Control Specialist, LLC, Texas in FY14	-155.718
Covered MTRU Waste Shipped to the Advanced Mixed Waste Treatment Plant (AMWTP) for DOE, Idaho in FY14	-22.892
Covered MTRU Waste Shipped in FY14 on hold per the NMED	395.872
Net Administrative Adjustments for TA-54 in FY143	-185.870.727.969
Net Administrative Adjustments for CMR/TA-55 in FY143	-10.7003.089
Covered MTRU Inventory at End of FY143	1124.3301311.688

3.0 TREATMENT PROGRESS

3.1 Offsite Treatment

During FY143, covered MLLW streams were shipped for treatment to the following offsite commercial treatment facilities: Perma-Fix in Gainesville, Florida; Perma-Fix/Material and Energy Corporation (M&EC) in Oak Ridge, Tennessee; and Perma-Fix Northwest in Richland, in the State of Washington; and Waste Control Specialist LLC (WCS) in Andrews, Texas.

Perma-Fix/Florida

Perma-Fix in Gainesville, Florida, is a RCRA-permitted facility with a Radioactive Materials License for processing scintillation cocktail vials and other mixed waste fluids for blending and shipment to an energy recovery facility. Perma-Fix services include the decommissioning of labpacks, thermal treatment of organics, stabilization and solidification of inorganics, and distillation of halogenated organics. The facility also performs chemical treatments such as solvent extraction, demulsification/precipitation/flocculation, chelation, oxidation-reduction, ion exchange, absorption/adsorption, amalgamation, and chemical decontamination.

Perma-Fix/Material and Energy Corporation (M&EC)

M&EC, located in the East Tennessee Technology Park in Oak Ridge, Tennessee, is a permitted treatment facility for low-level radioactive and MLLW mixed waste. The facility installed six treatment processes and has the capability for treating organic and inorganic mixed waste to meet the LDR criteria. These processes include stabilization/solidification, chemical extraction, chemical fixation, metals precipitation, neutralization, and debris treatment.

Perma-Fix Northwest

Perma-Fix Northwest, located in Richland, Washington, is a permitted treatment facility for the treatment of low-level radioactive and MLLW low level mixed waste. The site houses both a low-level radioactive waste treatment facility and a MLLW low level mixed waste treatment facility, ~~which are~~ licensed under Nuclear Regulatory Commission regulations (State of Washington licenses WN-I00393-1 and WN-I00508-1) and permitted under RCRA regulations through the State of Washington. The facility can perform thermal treatment, compaction, macroencapsulation, neutralization, and stabilization.

Waste Control Specialists LLC (WCS)

WCS, located in Andrews, Texas, is a permitted treatment facility for the treatment and disposal of low-level radioactive and MLLW. The site has regulatory authorization for industrial solid waste and hazardous waste storage, processing, and land disposal under RCRA permit # HW-50358 granted by the state of Texas. EPA has authorized the site for treatment, storage, and land disposal of Toxic Substances Control Act (TSCA) wastes (TXD988088464). -The facility can process waste that requires compaction, microencapsulation, macroencapsulation, neutralization, deactivation, chemical oxidation, chemical reduction and stabilization.

Appendix B summarizes LANL's offsite shipments for treatment and/or disposal of covered MLLW in FY143. Approximately 7091440 m³ of STP-covered MLLW was shipped offsite for treatment and/or disposal.

3.2 Offsite Recycling

LANL did not recycle any STP-covered MLLW offsite in FY143.

3.3 Onsite Treatment and Recycling

LANL did not treat or recycle any STP-covered MLLW onsite in FY143.

3.4 Onsite Lead Decontamination

No LANL STP-covered MLLW was decontaminated onsite during FY143.

3.5 Treatability Studies

LANL conducted no treatability studies in FY143.

3.6 Administrative Adjustments and Corrections

Administrative adjustments and corrections are due to discrepancies found during quality control activities related to preparing waste for treatment, inventory, and disposal or when preparing the STP Annual Update. A data quality review is conducted annually to compare shipment notifications and shipping manifests with database updates.

3.6.1 Adjustments to MLLW Inventory

Appendix C (Table C-1) details the administrative adjustments to the MLLW inventory. The principal adjustment reflects the transfer of MTRU waste to MLLW (LA-W935, 10–100 nCi/g). A substantial volume of LANL's STP-covered MTRU waste has been determined to no longer meet the criteria for TRU waste and has ~~thus~~ been reclassified as MLLW. If previously unidentified hazardous materials, such as lead, are revealed during repacking or other quality control activities, low-level waste may be recharacterized as MLLW. (Appendices C and G).

3.6.2 Adjustments to MTRU Inventory

During the preparation of the FY143 STP Annual Update, ~~LANL/DOE/LANS~~ identified a number of adjustments to the MTRU inventory volume (Appendix G, Tables G-1 and G-2), including additions of newly-identified STP-covered waste, recharacterization of waste, and reclassification of MTRU waste to MLLW. Other adjustments were needed to account for volume changes due to repacking of waste and transfers of waste from one treatability group to another or to correct database entries.

4.0 TREATMENT TECHNOLOGY DEVELOPMENT

During FY143, the availability of commercial and federal facility offsite treatment and disposal capacity for MLLW remained stable. As a result of DOE's increasing reliance on commercial treatment/disposal for mixed wastes, nearly all funding for onsite technology development has been prioritized to support offsite treatment and disposal of mixed wastes. DOE treatment technology development initiatives are generally limited to specific technologies or technology adaptations in response to specific needs that cannot be addressed through commercial facilities.

4.1 Treatment Technologies Being Evaluated

~~LANL/DOE/LANS~~ continues to monitor the development of other potential treatment technologies that may become available in the future. Some of these technologies are being developed at LANL and at other DOE sites. Numerous other commercially developed treatment processes exist ~~which that~~ have not been demonstrated on mixed wastes.

4.1.1 Offsite Commercial Treatment Facilities

~~LANL/DOE/LANS~~ continues to monitor the availability and capabilities of offsite commercial facilities for treatment technologies and permitting that are appropriate to LANL waste. These facilities are listed in Appendix H (Table H-1).

4.1.2 Offsite DOE Treatment Facilities

~~In the past, LANL staff considered Lawrence Livermore National Laboratory (LLNL) for treatability studies for MLLW gas cylinders. LANL has successfully shipped these wastes offsite for treatment, storage, and disposal. LLNL does not have treatment capabilities for treatment, storage, or disposal appropriate to any of LANL's remaining MLLW. During FY14, DOE/LANS received approval from NMED to ship approximately 18 corrugated metal boxes (CMBs) to Idaho National Laboratory (INL) for TRU waste remote handling and repackaging with final disposition at WIPP. These CMBs were packaged at the Waste Characterization, Reduction, and Repacking Facility in the early 1980s. INL Advanced Mixed Waste Treatment Plant (AMWTP) was the desired receiving facility for this work. The AMWTP is a 500 million dollar state-of-the-art repackaging facility that uses robotic equipment to size reduce metallic waste. Nine CMBs were successfully treated at AMWTP and shipped directly to WCS in November 2014 for storage until WIPP is re-opened to accept waste.~~

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5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES

Funding to implement the LANL STP for mixed waste during FY1~~43~~ was sufficient to meet all compliance dates as required by the STP issued on October 4, 1995. As stated in previous updates to the STP, funding is no longer available for development of mobile treatment units at LANL, but funding was provided in all years between FY98 and FY05 and between FY07 and FY1~~43~~ for shipment of mixed waste offsite for treatment and disposal at DOE and commercial facilities. Funding during FY1~~54~~ may be sufficient to meet all compliance dates established in the STP; however, FY1~~54~~ federal budget restrictions may impact LANL shipping schedules. Should funding reductions occur that would affect STP compliance dates, the DOE and LANS will so notify the NMED to address compliance schedules and activities.

~~The DOE Assistant Secretary for Environmental Management initiated a long range plan for DOE's cleanup and waste management activities, with a goal of accelerating cleanup progress as much as possible before 2006. The plan, Accelerating Cleanup: Paths to Closure, includes sections for the LANL site that address MLLW and TRU wastes that are currently in storage (legacy waste). Funding targets for waste management in the draft LANL Accelerating Cleanup: Paths to Closure plan should allow LANS staff at LANL to continue to meet all compliance dates in the STP; the plan assumes that MTRU waste is not required to be treated to meet LDR before shipment to WIPP for disposal, as provided for in the WIPP Land Withdrawal Act Amendments of 1996 (LWAA).~~

~~Beginning in FY99, all newly generated MLLW with a disposal path was planned to be treated and disposed of within one year if a treatment/disposal capability and capacity was available for the waste. MLLW placed into storage before FY99 was treated and disposed of before the end of FY09.~~

6.0 TREATMENT VARIANCES

RCRA allows certain case-by-case variances from LDR standards. Variances that may be sought under RCRA relate to requests for substitution of an alternative treatment technology in place of the LDR-required treatment technology. This section discusses any potential treatment variances related to LANL's covered waste, as described below.

6.1 WIPP No-Migration Variance Petition/Land Withdrawal Act Amendments

WIPP, located near Carlsbad, New Mexico, is a DOE repository for ~~the~~ TRU waste ~~that was~~ generated by the nation's defense-related activities. Some of the TRU waste contains hazardous waste constituents regulated under the RCRA.

The WIPP repository is considered to be a deep geologic repository rather than a shallow landfill. It is wholly sited 2,100 ft below the land surface in a salt bed. Because salt has the advantageous characteristic of slow plastic deformation, it is predicted that the salt will entomb the waste and seal it from the human environment, making potential release of hazardous constituents a low-probability event.

The WIPP Land Withdrawal Act Amendments of 1996 (LWAA) (PL 104-201, Section 3188) ~~exempted~~ waste designated by the Secretary of Energy for disposal at WIPP from RCRA's LDRs. Following passage of the LWAA, the EPA terminated its review of the No-Migration Variance Petition, submitted by DOE to EPA in May 1995. EPA formalized its withdrawal by letter to George Dials, DOE/Carlsbad Area Office ~~Manager~~, dated December 29, 1997.

On October 29, 1996, DOE submitted its Compliance Certification Application (CCA) to EPA. The CCA is intended to demonstrate to EPA that WIPP meets the requirements of Title 40 of the Code of Federal Regulations (40 CFR) Part 191 and 40 CFR Part 194. On October 23, 1997, EPA announced its proposed decision to issue a certification of compliance, subject to a number of specified conditions, and to a public comment period of 120 days. On May 18, 1998, EPA published in the Federal Register (63 FR 27354) its final rule certifying that WIPP will comply with the requirements of Subparts B and C of 40 CFR Part 191 and amending the WIPP compliance criteria in 40 CFR Part 194. The final rule became effective June 17, 1998. On March 25, 1999, WIPP received its first shipment of non-mixed (radioactive only) TRU waste from LANL Los Alamos. Other facilities have also shipped non-mixed TRU waste to WIPP. The NMED issued a hazardous waste permit for WIPP on October 27, 1999, authorizing the DOE to manage, store, and dispose of contact-handled MTRU waste at the facility.

6.2 Other Treatment Variance(s)

No treatment variances were requested or granted in FY1413.

7.0 WIPP FACILITY CAPABILITIES

As discussed above, ~~the~~ DOE is disposing of its defense TRU waste, both mixed and nonhazardous, in its deep geologic repository at the WIPP near Carlsbad, New Mexico. This facility is a receiving and disposal facility, without the capability of routinely opening and repackaging waste. TRU waste will already be containerized when received at the WIPP facility. The WIPP facility is not a generator of TRU waste, and, therefore, will receive all of the waste in shipments from offsite. On February 2014 the NMED received notice of a release at the WIPP nuclear waste repository. A LANL container sent to WIPP experienced an energetic chemical reaction which ultimately led to the release of radioactive material. The cause of the chemical reaction is still under investigation and the need for additional

remediation of these containers is unknown. In light of recent events, and the potential need to re-remediate all nitrate salt-bearing waste, the NMED has determined that the removal of MTRU from the STP will be deferred until more information becomes available and it is determined that waste currently stored at WCS and WIPP will not be returned to LANL. All shipments of MTRU covered waste inventory to WIPP were suspended in May 2014 due to the WIPP shutdown.

7.1 Characterization Capabilities at WIPP

Wastes proposed for shipment to WIPP are characterized and certified at LANL by the Central Characterization Project (CCP), a contractor to DOE's Carlsbad Field Office.

7.2 MTRU Treatment Capabilities and Plans

WIPP is not required to treat MTRU waste to meet the LDR standards. As described above, the LWAA exempted wastes designated by the Secretary of Energy for disposal at the WIPP from this requirement.

PART II COMPLIANCE PLAN UPDATE

1.0 INTRODUCTION

This update to the CP contains

- Changes to the CP occurring since the previous Annual Update, including
 - correspondence, including notices of shipments; and
 - new covered and deleted waste;
- Proposed revisions and amendments, including
 - compliance date changes;
 - description of waste deleted in accordance with the requirements in FFCO Section IX, *Deletion of Waste*;
 - documentation of new covered waste in accordance with the requirements in Section VIII, *Addition of New Covered Waste*; and
 - proposed changes to the overall schedule in the CP.

2.0 CHANGES AND REVISIONS TO THE CP OCCURRING SINCE THE PREVIOUS ANNUAL UPDATE

This section describes revisions, amendments, or other changes to the LANL CP.

2.1 Activities Completed During FY143

Proposed FY12 STP annual milestone schedules completed are shown in Table 2.1-1.

Table 2.1-1 FY12 FFCO and STP Milestones *Compilation {Table omitted}*

STP/CP Section	MWIR* Waste ID	Treatability Group	FY12 Milestone Net Volume	Compliance Date	Reference Letter
3.3.4	LA-W935	10-100 nCi/g Waste	201.4007	4-16-2014	WM-DO-14-030
3.1.5	LA-W922	Noncombustible Debris Waste	0.208	9-30-2014	WM-DO-14-046
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing	0.832	6-30-2014	WM-DO-14-049

*MWIR is Mixed Waste Inventory Report

2.2 Expedited Shipment Letters

Expedited shipment letter is listed in Appendix I, Table I-1. There were no expedited shipment letters in FY13.

2.3 Correspondence

Between ~~October 1, 2012~~ October 1, 2013, and ~~March 31, 2015~~ June 9, 2014, LANL/DOE/LANS communicated with ~~the~~ NMED on issues related to:

- ~~Revisions 23.0 and 24.0 of the Annual STP Update, and~~
- ~~FY143 and FY154 waste shipment notifications-~~
- ~~15-day notification, proposed deletion of waste~~

- ~~Proposed milestone extensions~~

This correspondence is listed in Appendix I (Table I-2). Correspondence previously listed in Appendix I, Table I-2 of Revision 243.0 of the STP is so noted in the appendix.

3.0 DESCRIPTION OF DELETED WASTE

A proposal for deletion of STP waste items is included with this update as Proposed Revision 254.0 in accordance with FFCO Section IX, *Deletion of Waste*. These deletions are proposed because the wastes ~~were~~ shipped offsite for treatment, disposal, or recycling or were otherwise determined not to be mixed wastes. These covered wastes are included in Appendix B, Appendix F, and Appendix G.

4.0 DOCUMENTATION OF NEW COVERED WASTE

A proposal for addition of STP waste items is included with this update in accordance with FFCO Section VIII, *Addition of Waste*. These additions consist of wastes ~~that were~~ placed in storage during FY132 and were proposed to become covered wastes in FY143. These covered wastes are included in Appendix E. Additional ~~of new covered and newly characterized as MTRU~~ waste to be added to the STP is identified in Section 6.1.

5.0 PROPOSED CHANGES TO THE COMPLIANCE PLAN SCHEDULE

DOE/LANS is proposing new milestones for *Compressed Gases Requiring Scrubbing (LA-W917) Activity 3.1.8(A) to "complete shipping of existing wastes to an offsite treatment facility or complete parallel option"; and 10-100 nCi/g Waste (LA-W935) Activity 3.3.4(A) to "complete radiological characterization" and Activity 3.3.4(B) "complete shipment of existing waste to offsite facility for treatment, or complete parallel options."* DOE/LANS expects to be able to complete shipping wastes by September 30, 2018.

I. Compliance Dates and Waste Description

LA-W917: This waste consists of pressurized pipe overpacks and aerosol cans removed from TRU waste containers during the repackaging process that were assayed and are considered MLLW.

Current proposed compliance date: September 30, 2015
Proposed Revision 25 compliance date: September 30, 2018

LA-W935: This waste consists of 10-100 nCi/g derived from TRU and MTRU covered inventory as a result of the repackaging process.

Current proposed compliance date (A): September 1, 2015, and (B): September 30, 2015
Proposed Revision 25 compliance date (A): September 1, 2018, and (B): September 30, 2018

II. Treatment Process

The preferred treatment process for LA-W917 and LA-W935 is shipment offsite for treatment to meet LDRs. These wastes may be treated by macroencapsulation and/or thermal treatment or other RCRA treatment methods according to the standards in 40 CFR 268.40 at an offsite commercial facility.

III. Availability of Commercial Facilities

DOE/LANS uses the facilities identified in Appendix H for treatment and disposal of MLLW. No additional facilities are needed to treat the current inventory of Compressed Gases Requiring Scrubbing (LA-W917) and 10-100 nCi/g Waste (LA-W935).

IV. Justification for Milestone

Since commercial treatment facilities are available, DOE/LANS does not anticipate any significant delays in shipping this waste offsite for treatment. Prior to shipment, LA-W917 (pressurized pipe overpacks and aerosol cans) need to be verified to be punctured via real-time radiography (RTR) or visual examination. There is no processing capability at TA-54 for containers of pressurized pipe overpack or aerosol cans components until processing lines become available. LA-W935, (MLLW containers that may be related to remediated TRU containers that contained nitrate salts) are restricted from being shipped during the investigation into the cause of the drum event at WIPP. Until a determination is made by DOE/LANS, these drums are to be stored at LANL until it is acceptable to ship.

No other changes to the schedule in the CP of the STP are proposed.

~~No changes to the compliance plan schedule are proposed.~~

6.0 DETAILED DESCRIPTION OF THE PROPOSED REVISION

The purpose of this revision request is to reflect changes in the STP inventories in the LANL CP of the STP in accordance with FFCO Section X.C.2.a. The changes proposed by this revision to the CP will allow the added covered wastes to be treated or otherwise managed in accordance with the Activities and Compliance Dates pertaining to each treatability group, as adopted or revised herein. The CP text changes are indicated in the redlined version provided to [the NMED](#).

~~LANL~~ [DOE/LANS](#) is proposing to revise the CP text to reflect the following change in STP-covered inventories:

- Increases and decreases in covered mixed waste inventories due to the addition of new covered waste and offsite shipments during FY1413 and other changes in the STP inventory.

The CP changes are proposed in accordance with the applicable requirements in the FFCO, as amended: Section VIII, *Addition of New Covered Waste*; Section X.B.4, *Revisions*; and Section XI, *Deletion of Waste*.

6.1 Addition of New Covered² Waste

~~LANL~~ [DOE/LANS](#) is requesting that the following waste be added to the STP as covered waste.

6.1.1 MLLW Additions

The volume of MLLW ~~that is~~ requested for addition is 0.208-0.416 m³ of new-covered² *Noncombustible Debris* (LA-W922) ~~and 0.208 Compressed Gases Requiring Scrubbing (LA-W917).~~

² Waste generated during the previous FY that was not shipped offsite within one year is termed new-covered STP waste.

Table 6.1.1-1 Proposed Addition of New Covered MLLW Waste

CP Section	MWIR ¹ Waste ID	Treatability Group	Volume (m ³) ²
3.1.5	LA-W922	Noncombustible Debris	0.208446
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing	0.208
Total			0.6240.208

¹MWIR is Mixed Waste Inventory Report.

²Corrections were made to the accumulation start date at time of shipment, waste accumulated in order to meet the offsite facility WAC for treatment.

6.1.2 MTRU Waste Additions

The volume of new covered MTRU waste that is requested for addition is 9.21241.554 m³ (Table 6.1.2-1). LANL-DOE/LANS also requests the addition of 5.8581.456 m³ of Combustible-Noncombustible Waste, 1.456 m³ of Noncombustible Waste that was previously managed in the TRU inventory (Appendix G, Table G-1). Table 6.1.2-2 identifies waste that is proposed for addition following activities that identified waste in the TRU inventory as MTRU either through review of waste characteristics or as a result of identifying potentially hazardous constituents during repacking TRU waste.

Table 6.1.2-1 Proposed Addition of New Covered¹ MTRU Waste

CP Section	Treatability Group	Volume (m ³)
4.0	Combustible-Noncombustible Waste	2.9123.536
4.0	Combustible Waste	0.0000.539
4.0	Solidified Inorganic and Organic Waste	0.2085.408
Total TA-54 New Covered		3.1209.474²
4.0	Combustible-Noncombustible Waste at CMR	3.8000.208
4.0	Combustible-Noncombustible Waste at TA-55	1.2520.208
4.0	Combustible Waste at TA-55	0.208
4.0	Noncombustible Waste at TA-55	0.8324.664
Total CMR/TA-55 New Covered		6.0922.080³
Total New Covered Waste		9.21241.554

¹New covered waste in Table 6.1.2-1 refers to waste generated in the previous FY.

²Confirmation of reassy to determine TRU or LLW concentration for containers to continue on a path for disposition.

³New covered waste at TA-55 was a result of radioactive assay problems, radioactive free liquids, and waste containers entrapped in the TA-55 safety pause that are not DOT-certified. New covered waste at CMR was a result of waste containers that have not been completely filled.

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Table 6.1.2-2 Proposed Addition of Waste Newly Characterized as MTRU

CP Section	Treatability Group	Volume (m ³)
4.0	Noncombustible Waste (from identification of potentially hazardous constituents during repacking of TRU waste)	1.456
4.0	Combustible-Noncombustible Waste (from identification of potentially hazardous constituents during repacking of TRU waste)	5.8581.456
Total Newly Characterized MTRU		5.8582.912

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6.2 Deletion of Covered Waste

Both MLLW and MTRU wastes were shipped offsite for treatment and disposal or recycling or are otherwise proposed as deleted waste.

6.2.1 Deletion of MLLW

LANL-DOE/LANS is requesting that covered MLLW identified in Appendix B be deleted from the STP. These covered wastes were shipped offsite for treatment and disposal or recycling. The total volume of covered MLLW that is requested for deletion under this Revision to the CP is ~~708.631~~440.073 m³ (Appendix B, Table B-1).

6.2.2 Deletion of MTRU Waste

LANL-DOE/LANS is requesting that a total of ~~185.870823~~216 m³ of covered MTRU waste be deleted from the STP. These covered wastes were administrative adjustments due to reclassification, repackaging, volume and treatability group changes. The NMED has determined that the removal of shipped MTRU from the STP will be deferred until more information becomes available and it is determined that the waste currently stored at the off-site facility will not be returned to LANL. ~~shipped offsite for disposal at WIPP.~~ Details of the administrative adjustments are given in Appendix G. Details of the offsite shipments are given in Appendix F.

6.2.3 Other Deletions of FY143 Waste

No waste is proposed for deletion due to recycling or onsite treatment in FY143. No waste was shipped offsite for treatability studies.

6.3 Adjustments to the Original (October 4, 1995) STP-Covered MLLW Inventory

LANL-DOE/LANS is requesting adjustments to the original (October 4, 1995) STP-covered MLLW inventory as listed in Appendix C (Table C-1). Most administrative adjustments are due to reclassification of MTRU waste to MLLW treatability groups and to quality control activities related to preparing waste for treatment and disposal. These adjustments may result in additions of newly-identified covered waste or transfers of waste to other treatability groups.

6.4 Adjustments to MTRU Waste Inventory

LANL-DOE/LANS is requesting adjustments (Appendix G, Tables G-1 and G-2) to the original (October 4, 1995) STP-covered MTRU waste inventory. Most administrative adjustments are due to reclassification of MTRU waste to MLLW treatability groups or to other MTRU treatability groups and to reclassification of TRU to MTRU as a result of quality control activities related to preparing waste for treatment and disposal. These adjustments may result in additions of newly-identified covered waste or transfers of waste to other treatability groups.

6.5 Establishment of New Milestone Activity Dates

LANL-DOE/LANS is not requesting any new compliance milestones.

6.6 Additional Revisions

No other revisions are requested.

7.0 RATIONALE FOR THE PROPOSED REVISION

This information is provided in accordance with FFCO Section X.C.2.a.

7.1 Establishment of New Proposed Milestone

No new milestones are proposed.

7.2 Addition of New Covered Waste

Waste that was newly generated in FY132, which was not treated within 12 months of generation, became new covered waste during FY143 (see Appendix E). In addition, TRU wastes, ~~which were~~ re-evaluated during repacking and quality control activities as having previously unidentified RCRA constituents, were also added to the STP inventory (Appendix G). Approval of these proposed additions to the STP inventory will allow the added covered wastes to be treated or otherwise managed in accordance with the activities and compliance dates pertaining to each treatability group, as adopted or revised herein.

7.3 Deletion of Covered Waste

Decreases in covered waste inventory reflect the treatment and disposal or recycling of covered waste at offsite commercial facilities during FY143. Deletion of this covered waste is proposed ~~in order~~ to more accurately reflect the LANL STP inventory as of the end of FY143.

7.4 Adjustments to the Original (October 4, 1995) STP-Covered Waste Inventory

Administrative adjustments result from quality control activities related to preparing waste for treatment and disposal. These adjustments result in additions of newly-identified covered waste and transfers of waste to other treatability groups. The adjustments to the original (October 4, 1995) STP-covered waste inventory are proposed ~~in order~~ to more accurately reflect the LANL STP inventory as of the end of FY143.

8.0 ANTICIPATED LENGTH OF ANY DELAY IN PERFORMANCE

In accordance with FFCO Section X.C.2.c, ~~LANL does not anticipate any delay in performance for any other proposals stated in this requested revision to the CP of the STP. DOE/LANS cannot confidently predict the anticipated delay in performance for shipping covered STP MTRU waste for which the only currently allowed deletion pathway is disposal at WIPP. All shipments of MTRU covered waste inventory to WIPP were suspended in May 2014 due to the WIPP shutdown. Off-site management of STP covered MLLW that may have been associated with or derived from processing MTRU nitrate salts containers has been placed on hold until a regulatory determination can be made confirming that such waste is acceptable for shipping offsite. At this time, DOE/LANS cannot confidently predict when the TA-54 processing lines will come back online for processing MTRU and/or MLLW covered waste.~~

9.0 PLAN AND SCHEDULE FOR IMPLEMENTING ALL REASONABLE MEASURES

All other measures proposed could be implemented within the framework of the existing plan and schedule for the STP (FFCO Section X.C.2.d).

PART III COMPLIANCE PLAN – PROPOSED REVISION 254.0

1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN

1.1 Introduction

Part III of this document identifies changes that require NMED approval as a revision under Section X, *Revisions*, or an amendment under Section XI, *Other Amendments to the STP*.

The CP includes a schedule for offsite transportation for treatment, or completion of parallel options as defined in each Treatability Group Section, and the treatment of mixed wastes in full compliance with the HWA and the implementing regulations at 20 NMAC 4.1, ~~which that~~ incorporates by reference 40 CFR Parts 260 through 270. Part I, Background, contains progress reports as required in the FFCO. Respondents shall carry out the activities described in the STP, including the CP, in accordance with the schedules and requirements set forth in the STP and the FFCO.

1.2 STP Revisions and Amendments

The STP CP has been modified several times since it was originally issued, in accordance with the provisions of Section X, *Revisions*, and Section XI, *Other Amendments to the STP*, of the October 4, 1995, FFCO, as amended and revised. The history of revisions is provided in Appendix J.

2.0 COMPLIANCE SCHEDULES

The STP provides overall schedules for achieving compliance with LDR storage and treatment requirements for mixed waste at LANL. The schedules include those activities required to process backlogged and currently generated waste and include schedules required to establish an overall timeframe for achieving compliance with the LDR requirements under the HWA and 20 NMAC 4.1.

2.1 Categories of Activities for Compliance Dates

The categories of activities for which compliance dates will be provided for different types of treatment approaches in the STP are listed in the tables below. The categories of activities are based on Section 3021(b)(1)(B)(i), (ii), and (iii) of the RCRA, to the extent appropriate.

2.1.1 Plans Where Treatment Technology Exists

For most of the mixed waste, treatment technologies have been identified and developed. For the waste that will be treated onsite, the categories of activities for compliance dates identified in Table 2.1.1-1 shall apply.

Table 2.1.1-1 Categories of Activities for Compliance for Mixed Waste with Existing Treatment Technologies

- | |
|---|
| <ul style="list-style-type: none">A. Submit permit applications to the NMED.B. Initiate construction as specified in the NMED permit.C. Complete system testing and commence operation.D. Begin treating mixed waste.E. Complete treatment of existing wastes to applicable regulatory standards. |
|---|

2.1.2 Plans Where Technology Must Be Developed

For some mixed waste, no treatment technologies have been identified and developed, or the treatment technology must be modified or adapted to apply to such waste. For the waste that will be treated onsite, the categories of activities for compliance dates are identified in Table 2.1.2-1 and shall apply.

Table 2.1.2-1 Categories of Activities for Compliance Dates for Mixed Waste Without Existing Treatment Technologies

- | | |
|----|--|
| A. | Identify and develop technology. |
| B. | Submit permit application to NMED; or |
| C. | Submit a Notification of Intent to perform treatability study to NMED a minimum of 45 days prior to commencement of the study. |
| D. | Initiate construction as specified in the NMED permit. |
| E. | Commence systems testing. |
| F. | Begin treating mixed waste. |
| G. | Complete treatment of existing wastes to applicable regulatory standards. |

2.2 Primary Preferred Treatment

Offsite treatment at a commercial or noncommercial mixed waste treatment facility is the primary preferred treatment option applicable to all mixed waste streams in the STP inventory unless otherwise indicated in the descriptions of individual waste treatability groups. DOE may also pursue parallel treatment options, such as recycling/re-use or radiological decontamination. Requirements for waste shipped offsite for recycling are discussed under Part III, Section 2.6. All activities and compliance dates related to the construction, permitting, and operation of onsite treatment skids were removed from this document. This change was due to the increased availability of offsite treatment and disposal capacity for mixed waste. Respondents will continue evaluating new commercial and DOE offsite treatment facilities as potential options for managing mixed waste, as they become available.

2.3 Plans for Mixed Waste to be Shipped Offsite for Treatment

Should DOE decide to treat or recycle waste at a commercial offsite facility (Table 2.3-1), DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the treatment/recycling facility.

Table 2.3-1 Activities for Offsite Shipment for Treatment or Recycling at a Commercial Facility

- | | |
|----|--|
| A. | Meet all regulatory requirements for shipment. |
| B. | Provide documentation to the NMED that waste has been received at an offsite facility for treatment or recycling within 45 working days of receipt of waste at the treatment facility. |

DOE shall notify the NMED Project Manager in writing as soon as possible if mixed waste is planned to be sent to a noncommercial facility. Notification should be made if possible when DOE is first

considering such an option to allow the NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed offsite noncommercial treatment option proposed by DOE prior to any shipment by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the treatment/recycling facility. Activities for mixed waste to be shipped offsite for treatment/recycling at a noncommercial facility are identified in Table 2.3-2.

Table 2.3-2 Activities for Shipment Offsite for Treatment or Recycling at a Noncommercial Facility

A.	Request necessary approval from <u>the</u> NMED for shipment of waste by category before shipping.
B.	Meet all regulatory requirements for offsite shipment.
C.	Provide documentation to <u>the</u> NMED of confirmation of shipment date within 14 working days prior to sending waste to an offsite facility for treatment, disposal, or recycling, or storage pending treatment, disposal, or recycling.
D.	Provide documentation to <u>the</u> NMED that waste has been received at an offsite facility for treatment within 45 working days of receipt of waste at the offsite facility.
E.	Meet all regulatory requirements to include RCRA Permit modifications for residual or newly-generated waste streams after treatment or recycling.
F.	Provide documentation to <u>the</u> NMED within 30 working days after receipt of residual or newly-generated waste streams upon return to LANL.

2.3.1 Specific Site Requirements for Noncommercial Treatment Facilities

Shipment to Idaho National Laboratory

Prior to shipment, ~~Idaho National Laboratory (INL)~~ and Idaho Division of Environmental Quality shall be notified of any pending shipments of waste should DOE ship MLLW to INL. Proper procedures including additional approvals (if necessary) and documentation shall be completed prior to the shipment of wastes to INL. Management of post-treatment waste residuals or newly-generated waste streams will be in accordance with the requirements of DOE, the State of Idaho, and that state where they will be disposed. A modification to LANL's RCRA permit providing for the return of such wastes and/or residues to LANL must be approved by the NMED prior to any such return of wastes and/or residuals to LANL. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 30 working days after receipt of shipment of treatment residuals or newly-generated waste streams from INL.

Shipments of MLLW to planned facilities (not yet existing) will occur only after ~~that~~ treatment and schedules are approved by DOE-ID and the State of Idaho. Upon approval of the planned treatment facilities, the applicable protocol from the paragraph above will be implemented for mixed wastes to be treated at planned facilities.

Shipment to Oak Ridge Reservation

~~In the case that~~if Oak Ridge Reservation may not dispose of mixed-waste residues or new waste streams generated from offsite treatment, and they cannot be sent to another facility for disposal, then the residues may return to LANL. Should residual or newly-generated waste streams be returned to LANL, the proper permits for the State of New Mexico must exist. DOE will notify the NMED Project Manager in writing

as soon as possible and in any event within 30 working days after receipt of shipment of treatment residuals or newly-generated waste streams from Oak Ridge Reservation.

2.4 Requirements Pertaining to Radionuclide Separation

The FFCA sets additional requirements in cases in which where DOE intends to conduct radionuclide separation of mixed waste. Should the-DOE determine to do radionuclide separation of such mixed waste, DOE will schedule specific compliance dates based on category activities identified in Table 2.4-1. "Radionuclide separation" shall mean segregating the radioactive portion of the mixed waste from the hazardous portion of the mixed waste.

Table 2.4-1 Activities for Radionuclide Separation

- | |
|--|
| <ul style="list-style-type: none">A. Complete an estimate of the volume of waste generated by each case of radionuclide separation.B. Complete an estimate of the volume of waste that would exist or be generated without radionuclide separation.C. Complete an estimate of the costs of waste treatment and disposal if radionuclide separation is used compared with the estimated costs if it is not used.D. Provide the assumptions underlying such estimates of waste volumes and cost estimates.E. Provide characterization methodologies for determining waste type.F. Submit a plan for treating or managing hazardous waste residues, accompanied by an NMED permit application. |
|--|

2.5 Plans Related to Other Mixed Waste Activities

Activities other than the types of activities specifically called for in the FFCA as requiring schedules are described in this STP. Some of these activities may be associated with schedules that may contain compliance dates related to treatment of the-DOE's mixed waste.

For mixed waste, which is not sufficiently characterized to allow identification of appropriate treatment, notification of the characterization of such waste shall be in accordance with the annual update process described in the FFCO. If such characterization results in the addition or deletion of a treatability group or an increase in volume in a treatability group, a revision would be required pursuant to Section X of the FFCO.

DOE will notify the NMED when offsite treatability studies are conducted on STP waste. Treatability studies are used to explore alternative treatment options that may be practical for any or all of the STP mixed waste streams. When preparing waste for shipment for an offsite treatability study, DOE will evaluate the potential for incidental waste treatment or secondary waste generation, which are often associated with treatability studies.

2.6 Recycling/Re-Use

Respondent will pursue onsite or offsite recycling/re-use as a parallel preferred option.

Should DOE elect to use recycling facilities in lieu of (or in combination with) treatment, it will follow requirements as if the waste were shipped offsite for treatment. Any and all requirements by the recycling facility and all state, federal, or other regulatory requirements applicable at the recycling site shall be met by Respondents.

DOE shall notify the NMED Project Manager in writing as soon as possible if mixed waste is planned to be sent to an offsite noncommercial recycling facility. Notification should be made if possible when DOE is first considering such an option to allow [the](#) NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed offsite noncommercial recycling option prior to any shipment by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within 45 working days of receipt of waste at the recycling facility. Activities for mixed waste to be recycled are identified in Table 2.6-1.

Table 2.6-1 Requirements for Recycling

- | |
|--|
| <ul style="list-style-type: none">A. Meet all regulatory requirements for recycling/re-use.B. Provide documentation to the NMED that waste has been received at recycling facility within 45 working days of receipt of waste at the recycling facility. |
|--|

Should DOE elect to use recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements as if the waste were shipped offsite for treatment. DOE will ~~provide submit~~ a notification letter to the NMED within 45 days, in place of documentation, that waste was received at a recycling facility.

2.7 Onsite Radiological Decontamination

DOE will pursue onsite radiological surface or external decontamination as a preferred option. No volumetric or internal decontamination processes will be considered or performed. Surface radiological decontamination includes activities such as sand blasting, hand-scrubbing, or electrolytic decontamination. These decontamination activities could result in reducing or removing the radiological contaminant from the waste such that the waste could be recycled in accordance with CP Section 2.6 (*Recycling/Re-Use*) or be proposed for deletion in accordance with Section IX (*Deletion of Waste*) of the FFCO.

Activities for mixed waste to be radiologically decontaminated are identified in Table 2.7-1.

Table 2.7-1 Activities for Radiological Decontamination

- | |
|---|
| <ul style="list-style-type: none">A. Meet all DOE requirements for radiological decontamination.B. Provide documentation to the NMED that waste has been received at recycling facility within 45 working days of receipt of waste at the recycling facility; orC. Propose waste for deletion in accordance with Section IX of the FFCO. |
|---|

3.0 MIXED LOW-LEVEL WASTE STREAMS

This section presents the preferred options to treat MLLW (~~formerly known as LLMW~~) at LANL. All preferred options not described below must be approved by [the](#) NMED in accordance with the revision process pursuant to the FFCO.

The original October 4, 1995, STP inventory in each MLLW treatability group has been modified through the revision process in the FFCO. The tables in the STP Background (Part I) Appendices A–M of the FY09 STP Annual Update provide a comprehensive summary of changes to the CP covered waste inventories (additions, deletions, and shifts of waste between treatability groups) occurring as of the date

of that revision. In Part III, the original STP inventory in each MLLW treatability group is denoted as subgroup 0 of that treatability group (e.g., the original volume of STP treatability group LA-W906 became LA-W906-0). Each revision that has since added volumes to individual treatability groups has resulted in creation of an additional subgroup, having the same number as the revision (e.g., LA-W906-4 was created in Revision 4.0, and LA-W906-5 was created in Revision 5.0).

In most subsections of this section, the subgroups of the treatability groups are not shown. In those cases, the Activities and Compliance Dates are applicable to the entire net volume of that treatability group. However, when subgroups of a treatability group have been assigned Activities and Compliance Dates unique to that subgroup, those subgroups are detailed in the text. Activities and Compliance Dates that have been met in previous years are not shown in this document.

3.1 Mixed Waste Streams

The following subsections summarize MLLW treatability groups.

3.1.1 IPA Wastes and Scintillation Fluids

Table 3.1.1-1 Treatability Groups for IPA Wastes and Scintillation Fluids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
IPA Wastes	LA-W901	D001, D009, F002, F003, F005	0.00
Scintillation Fluids	LA-W902	D001, F003, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: The waste will be treated at an offsite facility that combusts organic liquid waste.

3.1.2 Lead Blankets, Soil with Heavy Metals, Environmental Restoration (ER) Soils

Table 3.1.2-1 Treatability Groups for Lead Blankets, Soil with Heavy Metals, ER Soils

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Blankets	LA-W903	D007, D008	0.00
Soil With Heavy Metals	LA-W904	D004, D005, D006, D007, D008, D009, D010, D011	0.00
ER Soils	LA-W905	D028, D029, F001, F005 D010, D011	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: The waste will be treated at an offsite facility that stabilizes or macroencapsulates wastes.

3.1.3 Aqueous Organic Liquids

Table 3.1.3-1 Treatability Groups for Aqueous Organic Liquids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Organic Liquids	LA-W906-0 LA-W906-4 LA-W906-5	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.3-2 Additional Treatability Groups for Aqueous Organic Liquids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Organic Liquids	LA-W906-6 LA-W906-9 LA-W906-10 LA-W906-15	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.4 Organic-Contaminated Combustible Solids

Table 3.1.4-1 Treatability Groups for Organic-Contaminated Combustible Solids

Treatability Group	MWIR* Waste ID	RCRA codes	Net Volume (m ³)
Organic-Contaminated Combustible Solids	LA-W911	D001, D004, D008, D009, F001, F002, F003, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.4-2 Treatability Groups for Organic-Contaminated Noncombustible Solids

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Organic-Contaminated Noncombustible Solids	LA-W919	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D018, D019, D020, D022, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D042, D043, F001, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.5 Combustible Debris, Activated or Inseparable Lead, Noncombustible Debris

Table 3.1.5-1 Treatability Groups for Combustible Lead, Activated or Inseparable Lead, and Noncombustible Debris

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Combustible Debris	LA-W912	D001, D002, D003, D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005	0.00
Activated Or Inseparable Lead	LA-W921	D008	0.00
Noncombustible Debris	LA-W922 LA-W922-17 LA-W922-22 LA-W922-23 LA-W922-24 LA-W922-25	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011	0.6240.00
Totals			0.6240.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.5-2 Activities and Compliance Dates for Noncombustible Debris Activity	Compliance Dates
A. Complete shipping of existing wastes to an offsite treatment facility or complete parallel option	9-30-2015
B. Provide documentation to NMED that waste was received at offsite facility or provide notification of parallel option	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option

3.1.6 Aqueous Wastes with Heavy Metals, Corrosive Solutions, Aqueous Cyanides, Nitrates, Chromates, and Arsenates

Table 3.1.6-1 Treatability Groups for Aqueous Wastes with Heavy Metals, Corrosive Solutions, Aqueous Cyanides, Nitrates, Chromates, and Arsenates

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Aqueous Wastes With Heavy Metals	LA-W913	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011	0.00
Corrosive Solutions	LA-W914	D001, D002	0.00
Aqueous Cyanides, Nitrates, Chromates, and Arsenates	LA-W915	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F007, P029, P098	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.7 Water-Reactive Metal

Table 3.1.7-1 Treatability Groups for Water-Reactive Metal

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Water-Reactive Metal	LA-W916	D001, D003, D004, D005, D007, D008, D010, D011	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.8 Compressed Gases Requiring Scrubbing

Table 3.1.8-1 Treatability Groups for Compressed Gases Requiring Scrubbing

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Compressed Gases Requiring Scrubbing	LA-W917 LA-W917-21 LA-W917-24 LA-W917-25	D001, D002, D003, D008, D009, P056	0.8331-456
Totals			0.8331-456

*MWIR is Mixed Waste Inventory Report

Table 3.1.8-2 Activities and Compliance Dates for Compressed Gases Requiring Scrubbing

Activity	Compliance Dates
A. Complete shipping of existing wastes to an offsite treatment facility or complete parallel option.	September 30, 2018 30-2018 30-2015
B. Provide documentation to the NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option.

3.1.9 Compressed Gases Requiring Oxidation

Table 3.1.9-1 Treatability Groups for Compressed Gases Requiring Oxidation

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Compressed Gases Requiring Oxidation	LA-W918	D001, U226	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.10 Elemental Mercury

Table 3.1.10-1 Treatability Groups for Elemental Mercury

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Elemental Mercury	LA-W920 LA-W920-16	D006, D009, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.1.11 Halogenated Organic Liquids, Nonhalogenated Organic Liquids, Bulk Oils, Polychlorinated Biphenyl (PCB) Wastes with RCRA Components, Liquid and Solid Oxidizers

Table 3.1.11-1 Treatability Groups for Halogenated Organic Liquids, Nonhalogenated Organic Liquids, Bulk Oils, PCB Wastes with RCRA Components

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Halogenated Organic Liquids	LA-W907	D001, D002, D003, D007, D009, D010, D011, D018, D019, D022, D028, D029, D035, D043, F001, F002, F003, F004, F005, U077, U080, U226, U227, U228, U236	0.00
Nonhalogenated Organic Liquids	LA-W908 LA-W908-18	D001, D002, D003, D004, D007, D008, D009, D011, D018, D038, D040, F002, F003, F004, F005, U002, U019, U154, U169, U188, U220, U246	0.00
Bulk Oils	LA-W909 LA-W909-15 LA-W909-16 LA-W909-17	D002, D004, D005, D006, D007, D008, D009, D010, D011, D021, D027, D039, F001, F002, F003, F005	0.00

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
PCB Wastes With RCRA Components	LA-W910 LA-W910-16	D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D019, D027, D028, D030, D031, D032, D033, D034, D036, D039, D042, D043, F002, F003, F004, F005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.1.11-2 Additional Treatability Groups

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Liquid And Solid Oxidizers	LA-W923	D001, D003, D005	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

3.2 Mixed Waste Requiring Further Characterization or for Which Technology Assessment Has Not Been Done

Table 3.2-1 Treatability Groups for Waste Requiring Characterization or Assessment

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Wastes -- to be determined (TBD)	LA-W924	D003, D008	0.00
Mercury Wastes - TBD	LA-W925-0	D007, D008, D009, F001	0.00
Compressed Gases - TBD	LA-W926	D001, D007, D009, D022, P056, U080, U226	0.00
Biochemical Laboratory Wastes	LA-W927	D001, D003	0.00
Dewatered Treatment Sludge	LA-W928		0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Table 3.2-2 Additional Wastes Requiring Characterization or Assessment

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Wastes - TBD	LA-W924-15 LA-W924-16 LA-W924-17	D003, D008	0.00 0.00 0.00
Mercury Wastes - TBD	LA-W925-4 LA-W925-5 LA-W925-6 LA-W925-15 LA-W925-16 LA-W925-17 LA-W925-18	D003, D007, D008, D009 F001, F002, F005	0.00
Explosives	LA-W932	D003	0.00
Labpacks	LA-W933 LA-W933-17	D001, D002, D003, D004, D005, D006, D007, D008, D010, F003, F005, D011, P012, P029, P098, P106, P113, P120, U131, U144, U145, U188, U190, U204, U216, U219	0.00

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
High Activity Waste	LA-W934 LA-W934-16 LA-W934-19 LA-W934-20 LA-W934-24	D001, D003, D008, D009	1.301
Totals			1.301

*MWIR is Mixed Waste Inventory Report

Table 3.2-3 Activities and Compliance Dates for Wastes Requiring Characterization or Assessment

Activity	Compliance Dates
J. Complete shipping of wastes to an offsite treatment facility, or submit documentation assigning waste items to applicable treatability groups or complete parallel option.	6/30/2018 June 30, 2018
K. Provide documentation to <u>the</u> NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at offsite facility or within 45 days after completion of parallel option.

LANL's inventory of *High Activity Waste* ~~consists of five containers with a combined volume of 1.301~~ was approximately 1.5079 m³ at the time the milestone was extended to June 30, 2018. LANL's remaining inventory of *High Activity Waste* on February 11, 2013, consisted of five containers with a combined volume of 1.301 m³. Assuming that shipping issues can be resolved, LANL expects to meet the June 30, 2018, milestone for the remaining *High Activity Waste*.

DOE/LANS continues to diligently pursue all possible options to ship the waste offsite prior to the milestone for the remaining five containers (tritium traps with mercury contamination and the mole sieves and squib assemblies with very high tritium). ~~Since the submission of the FY13 Annual Update, DOE/LANS is still pursuing the 10-160B cask as an alternate shipping method. However, since confirming the receiving facility, DOE/LANS no longer needs to open and characterize the waste onsite. DOE/LANS has put into place a contract that would allow for LANL to ship the High Activity Waste offsite for treatment and disposal. PermaFix has been confirmed as the receiving commercial facility. This contract requires complete characterization, packaging, transportation, treatment and disposal for containers of the high activity waste. The characterization (evaluation including calculations and certification statement identifying all hazardous and radioactive characteristics of the waste) has been completed by PermaFix. The Contractor is in the process of preparing 1) a Transportation Plan that will address all aspects of Department of Transportation requirements to compliantly package and ship the waste; 2) Certificate of Compliance modifications for the selected Type B Cask (TRU Pac II) for transport to the commercial treatment facility; and 3) the Nuclear Regulatory Commission permit with the State of Tennessee for a tritium project-specific license required to handle the curie content in the High Activity Waste. are working to secure a DOT-compliant Type B shipping container capable of transporting this waste as soon as a receiving facility is confirmed. Currently only the 10-160B cask can handle the tritium content associated with the five STP waste items, and none are certified for flammable gases greater than 5 percent. If unable to ship the five containers to an offsite facilities in their current form, it will be necessary to open and characterize and/or repackage them onsite in order to render them acceptable for shipment and disposal. However, high activity mixed waste segregation activity is a special high hazard activity that is not part of the current Authorization Basis at existing LANL facilities.~~

~~The segregation activity for the LA-W934 (high activity) items will require a separate Authorization Basis approval once the necessary equipment has been designed and installed. A Temporary Authorization application cannot be accurately prepared until equipment has been installed, procedures are developed and the DOE/NNSA Authorization Basis modification process is well underway.~~

3.3 Plans for Other Types of Activities

The following subsection summarizes plans for other types of activities.

3.3.1 Lead Decontamination

Table 3.3.1-1 Treatability Groups for Lead Decontamination

Treatability Group	MWIR* Waste ID	First Category	Second Category	Totals
		Net Volume (m ³)	Net Volume (m ³)	Net Volume (m ³)
Lead For Surface Decontamination	LA-W930-0 LA-W930-5	0.00	0.00	0.00
Totals		0.00	0.00	0.00

*MWIR is Mixed Waste Inventory Report

Treatment: Any lead not acceptable for onsite or offsite lead decontamination, ~~plus and~~ any lead unsuccessfully decontaminated, will be designated in the following two categories: 1) for treatment and disposal at an offsite facility or 2) for recycle through an offsite capability, such as metal melting to create shielding blocks or a DOE lead bank. Non-conforming items will be reassigned to appropriate treatability groups in accordance with the FFCO.

Table 3.3.1-2 Additional Wastes for Lead Decontamination

Treatability Group	MWIR* Waste ID	First Category	Second Category	Totals
		Net Volume (m ³)	Net Volume (m ³)	Net Volume (m ³)
Lead For Surface Decontamination	LA-W930-6	0.00	0.00	0.00
Totals		0.00	0.00	0.00

*MWIR is Mixed Waste Inventory Report

3.3.2 Sorting, Surveying, and Decontamination

Table 3.3.2-1 Treatability Groups for Sorting, Surveying, and Decontamination

Treatability Group	MWIR* Waste ID	Net Volume (m ³)
Nonradioactive or Suspect Waste Items To Be Surveyed	LA-W929-0(1)	0.00
Nonradioactive or Suspect Waste Items To Receive RCRA and Radiological Characterization	LA-W929-0(2)	0.00
Nonradioactive or Suspect Waste Items That Cannot or Should Not Be Sampled	LA-W929-0(3)	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

Table 3.3.2-2 Additional Wastes for Sorting, Surveying, and Decontamination

Treatability Group	MWIR* Waste ID	Net Volume (m ³)
Nonradioactive or Suspect Waste Items	LA-W929-5	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

3.3.3 Lead Requiring Sorting

Table 3.3.3-1 Treatability Groups for Lead Requiring Sorting

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
Lead Requiring Sorting	LA-W931	D008	0.00
Totals			0.00

*MWIR is Mixed Waste Inventory Report

Treatment: Wastes in this treatability group will require different treatment processes. Drums will be opened, the contents removed, and the waste repackaged based on appropriate treatment requirements. Wastes in this treatability group are primarily lead pieces, lead shot, and lead-contaminated soils that have been packaged in the same drum.

The wastes will be reclassified as the applicable treatability group after physical separation and repackaging. The wastes will be treated by appropriate technology.

3.3.4 10–100 nCi/g Waste

Table 3.3.4-1 Treatability Groups for 10–100 nCi/g Waste

Treatability Group	MWIR* Waste ID	RCRA Codes	Net Volume (m ³)
10-100 nCi/g	LA-W935 LA-W935-19 LA-W935-20 LA-W935-21 LA-W935-22 LA-W935-23 LA-W935-24 LA-W935-25	D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D026, D027, D028, D029, D030, D035, D036, D037, D038, D039, D040, D043, F001, F002, F004, F005, F006, F007, F009	11.54597.000
Totals			11.54597.000

*MWIR is Mixed Waste Inventory Report

Treatment: Wastes in this treatability group are a population of legacy drums packaged and managed as MTRU (> 100 nCi g) but, after assay, are determined to be MLLW (< 100 nCi g). Once confirmed, these drums are segregated from other TRU waste and stored in a designated MLLW storage area. Waste Profiles are prepared to allow acceptance into the low-level waste population, and drums are relabeled appropriately. A Chemical Waste Disposal Request is prepared to transfer the drums from the TRU database to the Chem Low Level (ChemLL) database. The drum is reclassified from TRU to MLLW in the database. TRU programs will be notified of the drums reclassified from TRU to MLLW for evaluation of possible other drums based on waste stream. CCP will be notified for removal of drums from Acceptable Knowledge.

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The drum numbers will be submitted to Production Control for retrieval and staging as MLLW prior to offsite disposal. The MLLW drums are prepared for treatment and disposal to an offsite facility using CCP-Acceptable Knowledge documentation and onsite and offsite profiles generated for debris or sludge drums.

Table 3.3.4-2 Activities and Compliance Dates for 10–100 nCi/g Waste

Activity	Compliance Dates
A. Complete radiological characterization.	9-1-2018 ⁴ September 1, 2018
B. Complete shipment of existing waste to offsite facility for treatment, or complete parallel options.	9-30-2018 ⁵ September 30, 2018
C. Provide documentation to <u>the</u> NMED that waste was received at offsite facility or provide notification of parallel option.	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option.

A substantial inventory of LA-W935 waste that resulted from reclassifying MTRU waste between FY07 and FY12 (a total of 201.4007 m³) was shipped offsite, ~~completing the proposed FY12 Annual Update milestone of April 16, 2014. LANL intends to complete radioactive assay and shipment of the remaining inventory from the legacy TRU waste generated in FY12 for the milestone of April 16, 2014.~~ As much waste as possible that ~~is was~~ reclassified in FY13 ~~and FY14~~ was shipped offsite ~~during FY14 prior to April 16, 2014. However, some waste produced in the latter part of 2013 was not able to be shipped prior to April 16, 2014 because of scheduling conflicts or restrictions at the receiving facilities. In that case, LANL would seek an additional milestone for those particular wastes.~~ These estimated waste volumes will be subtracted from the MTRU STP inventory and added to MLLW STP inventory as the waste is reclassified as MLLW. ~~Overall the STP inventory will have a zero net change.~~ However, because of the repacking process, the apparent volume of waste will reflect the number of additional containers needed to repack the waste into compliant configurations for transportation and disposal. Ongoing repackaging process for waste to be accepted at ~~an~~ offsite treatment and disposal facilities ~~and transported~~ will continue to produce 10-100 nCi/g Waste (LA-W935); therefore, ~~DOE/LANS will seek updates to additional milestone(s) annually.~~

3.4 Management of “Missing” Items

Table 3.4-1 Waste Category for “Missing Waste”

Category	MWIR* Waste ID	Net Volume (m ³)
Missing/Nonexistent/To be verified (TBV)	None	0.00
Totals		0.00

*MWIR is Mixed Waste Inventory Report

Treatment: During visual inspections and sampling activities in support of STP waste work-off, occasionally an item cannot be found, or it is not located in the ~~expected~~ containers ~~in which it is expected to be~~, according to the LANL data files for the waste item. In some instances, such items cannot be verified as having ~~ever~~ been received in storage at LANL, and follow-up investigations of the record files reveal that ~~although they were included in the original STP inventory, for various reasons,~~ the waste items were never ~~in fact~~ generated, ~~although on paper they were included in the original STP inventory.~~

Some waste items were determined not to exist after visual inspection and document review. When LANL-DOE/LANS determines that an STP-covered waste item does not exist, transfer of the item to the category called “*Missing/nonexistent/TBV* (to be verified)” is requested through the revision process associated with the next Annual Update.

DOE verified the absence of all “*Missing/nonexistent/TBV*” items container by container as each STP waste item was being sampled, repackaged, or otherwise prepared for onsite or offsite treatment. The final verification of all “*Missing/nonexistent/TBV*” items was completed by 2004. All missing or nonexistent items have been deleted from the STP. All remaining MLLW items in the original STP inventory have been treated and disposed of.

If, at any time, any of these items be is discovered in the inventory, the NMED would be notified, and approval would be requested for assignment of the rediscovered items to the appropriate treatability group. If necessary, they would be assigned new Activities and Compliance Dates, in accordance with the terms of the FFCO.

4.0 MIXED TRANSURANIC WASTE

Treatment Group(s): Assorted MTRU Waste

Offsite Disposal: MTRU waste at LANL will be shipped for disposal at WIPP, which is located in Carlsbad, New Mexico.

Disposal: Waste volumes listed above in Table 4.0-1 constitute there a remaining original population of the Framework Agreement of “non-cemented above-ground EM Legacy TRU” and “above-ground cemented EM Legacy TRU” that is MTRU waste only. Volume adjustments noted below are due to corrections of database entries, treatability group, EPA codes, overpacks removed/added, containers repacked and shipped/hold for waste items identified as the non-cemented and cemented above-ground EM Legacy TRU for MTRU STP waste. As stated in the “Los Alamos National Laboratory Framework Agreement: Realignment of Environmental Priorities,” DOE/NNSA commits to continue to accelerate the rate of removal of above ground transuranic waste (TRU) at TA-54, Area G and to focus its efforts to achieve disposition of this TRU waste at the earliest feasible time. There are competing priorities for the facilities between the Framework Agreement waste and the 10-100 nCi/g waste that needs to be processed.

Table 4.0-1 *Treatability Groups for The Framework Agreement MTRU Waste (remaining original containers)*

Treatability Group	CP Section	Volume (m³)			
<i>Cemented Sludge</i>	4.0	0.000			
<i>Combustible – Noncombustible Waste</i>	4.0	290.383			
<i>Combustible Waste</i>	4.0	0.208			
<i>Metallie Waste</i>	4.0	19.258			
<i>Noncombustible Waste</i>	4.0	1.248			
<i>Solidified Inorganic and Organic Waste</i>	4.0	29.172			
Totals		340.269			
Treatability Group	CP Section	FY13 Volume (m³)	FY14 Administrative Adjustments	FY14 Shipped (on hold)1*	FY14 Volume (m³)

<u>Cemented Sludge</u>	<u>4.0</u>	<u>0.000</u>	<u>0.416</u>	<u>0.416</u>	<u>0.416</u>
<u>Combustible – Noncombustible Waste</u>	<u>4.0</u>	<u>290.383</u>	<u>-216.621</u>	<u>28.045</u>	<u>73.762</u>
<u>Combustible Waste</u>	<u>4.0</u>	<u>0.208</u>	<u>0.530</u>	<u>0.530</u>	<u>0.738</u>
<u>Metallic Waste</u>	<u>4.0</u>	<u>19.258</u>	<u>-19.050</u>	<u>0.000</u>	<u>0.208</u>
<u>Noncombustible Waste</u>	<u>4.0</u>	<u>1.248</u>	<u>2.838</u>	<u>2.838</u>	<u>4.086</u>
<u>Solidified Inorganic and Organic Waste</u>	<u>4.0</u>	<u>29.172</u>	<u>-8.440</u>	<u>0.832</u>	<u>20.732</u>
Totals		340.269			99.942

*— Volume not to be subtracted from the STP inventory. Removal of waste from STP inventory is on hold until NMED approval is received.

Covered MTRU Inventory at TA-55: The FY14~~13~~ reported waste volume for STP-covered MTRU inventory at TA-55 and CMR is ~~42.35745.065~~ m³. In FY14, ~~3~~ approximately ~~2934~~ cubic meters³ of the ~~42 m³~~ of TA-55's STP waste is associated with the Confinement Vessel Disposition (CVD) Project (formerly referred to as the Bolas Grande Project), ~~which that started is scheduled to begin~~ in the summer of FY14. ~~Since T~~ this is still a relatively new process that has never been attempted before and because of the uncertainty of how long it will take to process each vessel, ~~the~~ project ending date is ~~expected anticipated to be of~~ September 30, 2017. ~~The remainder of the covered MTRU waste inventory at TA-55 TA-55 STP waste~~ consists of ~~1) radioactive-free liquids, requiring management at the Waste Characterization, Reduction, and Repacking Facility (WCRRF), 2) TA-55-PF-4 is under a safety pause that restricted the movement of MTRU waste within and out of the facility; and TA-54 is up-dating its Safety Basis documents that govern Material at Risk and TA-54's Composite Source Term Limits (amount of combustible waste that can be stored at TA-54). This up-dating process reduced the receipt of TA-55 TRU and MTRU waste at TA-54. MTRU waste containers that are not DOT certified, 3) MTRU waste needed new Visual Examination, 4) MTRU waste with radioactive assay problems, and 5) TA-55-PF-4 underwent a safety pause. The management of this waste involves the transfer of waste from not DOT certified drums into DOT certified containers. However, this waste transfer will need to be conducted inside a glovebox, because past experience with these not DOT certified containers revealed internal radioactive contamination. There are a set of MTRU waste containers because of their age requires a new set of Visual Examination by CCP personnel. Because of internal radioactive contamination and T-55 not having gloveboxes in its permitted waste storage units these drums need to be packaged into an SWB; which did not occur in FY13. Also there is another set of MTRU waste that was retained in FY13 due to radioactive assay problems, where Special Nuclear Material assay values varied outside of an acceptable range. In addition, on June 27, 2013, TA-55-PF-4 underwent a safety pause, to ensure operations in PF-4 are executing procedures and operational processes appropriately~~

Table 4.0-2 Activities and Compliance Dates for MTRU Inventory at TA-55 and CMR from Table E-2

Activity	Compliance Dates
A. Complete transfer of existing waste (excluding Metallic Waste) to TA-54 facility	9-30-2017 September 30, 2017
C. Complete transfer of Metallic Waste to CMR for material retrieval	9-30-2017 September 30, 2017

4.1 Management of “Missing” Items

Table 4.1-2 Waste Category for “Missing Waste”

Category	Treatability Groups	Net Volume (m ³)
Missing/Nonexistent/TBV	Cemented Sludge	47,0220.00
	Combustible-Noncombustible Waste	0.6240.000
	Combustible Waste	2.4960.000
Totals		50.1420.000

Treatment: During visual inspections in support of STP waste work-off, occasionally an item cannot be found, or it is not located in the expected containers in which it is expected to be, according to the LANL data files for the waste item. In some instances, such items cannot be verified as having ever been received in storage at LANL, and follow-up investigations of the record files reveal that although the items were included in the original STP inventory, for various reasons, the waste items were never in fact generated, although on paper they were included in the original STP inventory.

Some items were determined not to exist after visual inspection and document review. When LANL LANS determines that an STP-covered waste item does not exist, transfer of the item to the category called “Missing/nonexistent/TBV (to be verified)” is requested through this revision Annual Update.

If, at any time, any of these items be is discovered in the inventory, the NMED would be notified, and approval would be requested for assignment of the rediscovered items to the appropriate treatability group.

Table 4.1-2 Waste Category for “Missing Waste” – Detail [Table Omitted]

CP-SECTION	Treatability Groups	Container ID	Net Volume (m ³)
4.0	Cemented Sludge	S710036	46.700
4.0	Cemented Sludge	S860353	0.322
4.0	Combustible-Noncombustible Waste	S2109	0.208
4.0	Combustible-Noncombustible Waste	S2162	0.208
4.0	Combustible-Noncombustible Waste	S2333	0.208
4.0	Combustible Waste	S2047	0.208
4.0	Combustible Waste	S2114	0.208
4.0	Combustible Waste	S2410	0.208
4.0	Combustible Waste	S2878	0.208
4.0	Combustible Waste	S2896	0.208
4.0	Combustible Waste	S3211	0.208
4.0	Combustible Waste	S3217	0.208
4.0	Combustible Waste	S3565	0.208
4.0	Combustible Waste	S3658	0.208
4.0	Combustible Waste	S4129	0.208
4.0	Combustible Waste	S4174	0.208
4.0	Combustible Waste	S4409	0.208
Totals			50.142

APPENDICES

APPENDIX A CURRENT YEAR MLLW INVENTORY DETAIL

Table A-1 FY143 MLLW Inventory1 Detailed Update by Treatability Group

CP ²¹ Sec.	MWIR ²¹ Waste ID and Treatability Group/Category	FY132 Annual Update (m ³) ⁴²	Proposed Revision 254.0 (m ³)	Comments ²³	FY1432 Annual Update (m ³)	Projection FY154 - FY198 (m ³)
3.1.1	LA-W901 <i>IPA Wastes</i>	0	0		0	0
3.1.1	LA-W902 <i>Scintillation Fluids</i>	0	0		0	0
3.1.2	LA-W903 <i>Lead Blankets</i>	0	0		0	0
3.1.2	LA-W904 <i>Soil with Heavy Metals</i>	0	0		0	0
3.1.2	LA-W905 <i>ER Soils</i>	0	0		0	0
3.1.3	LA-W906 <i>Aqueous Organic Liquids</i>	0	0		0	0
3.1.4	LA-W911 <i>Organic-Contaminated Combustible Solids</i>	0	0		0	0
3.1.4	LA-W919 <i>Organic-Contaminated Noncombustible Solids</i>	0	0		0	0
3.1.5	LA-W912 <i>Combustible Debris</i>	0	0		0	0
3.1.5	LA-W921 <i>Activated or Inseparable Lead</i>	0	0		0	0
3.1.5	LA-W922 <i>Noncombustible Debris</i>	0.6240.2082	29.3750.416 -29.999-0.0002	Administrative Adjustment Shipped offsite for treatment/disposal-Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places	0.624	0
3.1.6	LA-W913 <i>Aqueous Wastes with Heavy Metals</i>	0	0		0	0
3.1.6	LA-W914 <i>Corrosive Solutions</i>	0	0		0	0
3.1.6	LA-W915 <i>Aqueous Cyanides, Nitrates, Chromates, and Arsenates</i>	0	0		0	0
3.1.7	LA-W916 <i>Water-Reactive Wastes</i>	0	0		0	0

CP ²¹ Sec.	MWIR ²¹ Waste ID and Treatability Group/Category	FY132 Annual Update (m ³) ²²	Proposed Revision 254.0 (m ³)	Comments ²³	FY1432 Annual Update (m ³)	Projection FY154 - FY198 (m ³)
3.1.8	LA-W917 ²⁴ <i>Compressed Gases Requiring Scrubbing</i>	1.4560.8328	0.624	Administrative Adjustment	0.8331.456	0
			1.249-0.0008	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
			-1.8720	Shipped offsite for treatment/disposal		
3.1.9	LA-W918 <i>Compressed Gases Requiring Oxidation</i>	0	0		0	0
3.1.10	LA-W920 <i>Elemental Mercury</i>	0	0		0	0
3.1.11	LA-W907 <i>Halogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W908 <i>Nonhalogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W909 <i>Bulk Oils</i>	0	0		0	0
3.1.11	LA-W910 <i>Polychlorinated Biphenyl (PCB) Wastes with Resource Conservation and Recovery Act (RCRA) Components</i>	0	0		0	0
3.1.11	LA-W923 <i>Liquid and Solid Oxidizers</i>	0	0		0	0
3.2	LA-W924 <i>Lead Wastes - TBD</i>	0	0		0	0
3.2	LA-W925 <i>Mercury Wastes - TBD</i>	0	0		0	0
3.2	LA-W926 <i>Compressed Gases - TBD</i>	0	0		0	0
3.2	LA-W927 <i>Biochemical Laboratory Wastes</i>	0	0		0	0
3.2	LA-W928 <i>Dewatered Treatment Sludge</i>	0	0		0	0
3.2	LA-W932 <i>Explosives</i>	0	0		0	0
3.2	LA-W933 <i>Labpacks</i>	0	0		0	0

CP ³¹ Sec.	MWIR ³¹ Waste ID and Treatability Group/Category	FY132 Annual Update (m ³) ³²	Proposed Revision 254.0 (m ³)	Comments ³³	FY1432 Annual Update (m ³)	Projection FY154 - FY198 (m ³)
3.2	LA-W934 <i>High Activity Waste</i>	1.3014.5079	0-0.208	Shipped offsite for treatment/disposal	1.301	0
			00.0011	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
3.3.1	LA-W930 <i>Lead for Surface Decontamination</i>	0	0		0	0
3.3.2	LA-W929 <i>Nonradioactive or Suspect Waste Items to be Surveyed</i>	0	0		0	0
3.3.3	LA-W931 <i>Lead Requiring Sorting</i>	0	0		0	0
3.3.4	LA-W935 <i>10-100 nCi/g Waste</i>	97.000201.4007	591.3054058.556 -23.0917	Administrative Adjustment Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places and removal or addition of overpack)	11.54597.000	50
			-676.76- 1139.865	Shipped offsite for treatment/disposal		
3.4	<i>Missing/ nonexistent/ TBV category</i>	0	0		0	N/A
TOTALS		100.381203.9496			13.679100.381	

³¹ CP is Compliance Plan; MWIR is Mixed Waste Inventory Report

³² MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³; however, due to FY13 changes in the way that the MTRU are process (repackaged) into several different containers and are no longer equal to those added to the MLLW inventory of LA-W935.

³³ Shipment details are in Appendix B; Administrative adjustments are in Appendix C.

³⁴ Items prohibited from shipment to WIPP are removed from MTRU STP containers and consolidated; some are MLLW and are included in Table A-1 as LA-W917 waste; others are MTRU waste and are considered *Combustible-Noncombustible Waste* in Table E-1.

⁴⁵ LANL anticipates that a volume of formerly TRU and MTRU waste will be retrieved over the next few years and will be reclassified to LA-W935. As a conservative measure, stored reclassified TRU waste may be assigned hazardous waste codes and managed as STP mixed waste.

APPENDIX B CURRENT YEAR MLLW SHIPMENT DETAIL

Table B-1 MLLW Shipped Offsite for Treatment and Disposal in FY1413

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.2	LA-W934	High Activity Waste	007050125JJK	PermaFix NW	02/11/2013	03/22/2013 (ENV-EDA-13-003)	0.208
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing Waste	006640143FLE	PermaFix FL	6/19/2014	7/9/2014 (WM-DO-14-049)	0.416
			006640108FLE	PermaFix FL	5/19/2014	3/24/2015 (WM-DO-15-006)	1.456
LA-W917 Total							1.872
3.1.5	LA-W922	Noncombustible Debris	006639997FLE	PermaFix FL	2/27/2014	4/15/2014 (WM-DO-14-027)	0.416
			006640116FLE	PermaFix NW	5/19/2014	7/3/2014 (wm-do-14-046)	0.416
			006640140FLE	Waste Control Specialists LLC	6/24/2014	8/7/2014 (WM-DO-14-051)	4.800
			006640141FLE	Waste Control Specialists LLC	6/24/2014	8/7/2014 (WM-DO-14-051)	24.367
LA-W92234 Total							29,9990.208
3.3.4	LA-W935	10-100 nCi/g Waste	007050091JJK	Bear-Creek Operations, TN	12/17/2012	01/24/2013 (ENV-EDA-13-01)	28.070
3.3.4	LA-W935	10-100 nCi/g Waste	007050093JJK	Bear-Creek Operations, TN	12/17/2012	01/24/2013 (ENV-EDA-13-01)	13.840
3.3.4	LA-W935	10-100 nCi/g Waste	007050130JJK	Bear-Creek Operations, TN	02/20/2013	04/05/2013 (ENV-EDA-13-005)	15.280
3.3.4	LA-W935	10-100 nCi/g Waste	007050155JJK	PermaFix NW	03/14/2013	04/22/2013 (WM-DO-13-0003)	48.484
3.3.4	LA-W935	10-100 nCi/g Waste	007050156JJK	PermaFix NW	03/21/2013	04/22/2013 (WM-DO-13-0003)	3.804
3.3.4	LA-W935	10-100 nCi/g Waste	007050154JJK	PermaFix NW	03/28/2013	04/22/2013 (WM-DO-13-0003)	35.170
3.3.4	LA-W935	10-100 nCi/g Waste	006639676FLE	Waste Control Specialists LLC	05/21/2013	07/02/2013 (WM-DO-13-0030)	5.120
3.3.4	LA-W935	10-100 nCi/g Waste	006639672FLE	Waste Control Specialists LLC	05/22/2013	07/02/2013 (WM-DO-13-0030)	33.240
3.3.4	LA-W935	10-100 nCi/g Waste	006639678FLE	Waste Control Specialists LLC	06/05/2013	07/18/2013 (WM-DO-13-0036)	9.500
3.3.4	LA-W935	10-100 nCi/g Waste	006639680FLE	Waste Control Specialists LLC	06/05/2013	07/18/2013 (WM-DO-13-0036)	11.890
3.3.4	LA-W935	10-100 nCi/g Waste	006639682FLE	Waste Control Specialists LLC	06/06/2013	07/18/2013 (WM-DO-13-0036)	0.416
3.3.4	LA-W935	10-100 nCi/g Waste	006639683FLE	Waste Control Specialists LLC	06/06/2013	07/18/2013 (WM-DO-13-0036)	20.030

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CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.3.4	LA-W935	10-100-nCi/g Waste	006639684FLE	Waste Control Specialists LLC	06/06/2013	07/18/2013 (WM_DO-13-0036)	7.440
3.3.4	LA-W935	10-100-nCi/g Waste	006639695FLE	Waste Control Specialists LLC	06/12/2013	07/18/2013 (WM_DO-13-0036)	26.600
3.3.4	LA-W935	10-100-nCi/g Waste	006639696FLE	Waste Control Specialists LLC	06/12/2013	07/18/2013 (WM_DO-13-0036)	32.270
3.3.4	LA-W935	10-100-nCi/g Waste	006639704FLE	Waste Control Specialists LLC	06/19/2013	09/03/2013 (WM_DO-13-0038)	8.800
3.3.4	LA-W935	10-100-nCi/g Waste	006639705FLE	Waste Control Specialists LLC	06/19/2013	09/03/2013 (WM_DO-13-0038)	25.600
3.3.4	LA-W935	10-100-nCi/g Waste	006639706FLE	Waste Control Specialists LLC	06/26/2013	08/02/2013 (WM_DO-13-0043)	13.300
3.3.4	LA-W935	10-100-nCi/g Waste	006639707FLE	Waste Control Specialists LLC	06/26/2013	08/02/2013 (WM_DO-13-0043)	0.322
3.3.4	LA-W935	10-100-nCi/g Waste	006639708FLE	Waste Control Specialists LLC	06/26/2013	08/02/2013 (WM_DO-13-0043)	32.300
3.3.4	LA-W935	10-100-nCi/g Waste	006639709FLE	Waste Control Specialists LLC	06/26/2013	08/02/2013 (WM_DO-13-0043)	14.930
3.3.4	LA-W935	10-100-nCi/g Waste	006639737FLE	Waste Control Specialists LLC	07/31/2013	09/06/2013 (WM_DO-13-0052)	23.404
3.3.4	LA-W935	10-100-nCi/g Waste	006639738FLE	Waste Control Specialists LLC	07/31/2013	09/06/2013 (WM_DO-13-0052)	35.613
3.3.4	LA-W935	10-100-nCi/g Waste	006639745FLE	Waste Control Specialists LLC	07/24/2013	09/06/2013 (WM_DO-13-0052)	23.108
3.3.4	LA-W935	10-100-nCi/g Waste	007050446JJK	Waste Control Specialists LLC	07/24/2013	09/06/2013 (WM_DO-13-0052)	48.025
3.3.4	LA-W935	10-100-nCi/g Waste	006639748FLE	Material & Energy Corporation	07/30/2013	09/12/2013 (WM_DO-13-0055)	18.484
3.3.4	LA-W935	10-100-nCi/g Waste	006639783FLE	Material & Energy Corporation	08/13/2013	09/12/2013 (WM_DO-13-0055)	8.816
3.3.4	LA-W935	10-100-nCi/g Waste	006639778FLE	PermaFix NW	08/14/2013	09/20/2013 (WM_DO-13-0058)	8.112
3.3.4	LA-W935	10-100-nCi/g Waste	007050452JJK	PermaFix NW	08/05/2013	09/20/2013 (WM_DO-13-0058)	17.686
3.3.4	LA-W935	10-100-nCi/g Waste	006639758FLE	Waste Control Specialists LLC	08/07/2013	09/20/2013 (WM_DO-13-059)	36.246
3.3.4	LA-W935	10-100-nCi/g Waste	006639770FLE	Waste Control Specialists LLC	08/14/2013	09/20/2013 (WM_DO-13-059)	8.038
3.3.4	LA-W935	10-100-nCi/g Waste	006639772FLE	Waste Control Specialists LLC	08/14/2013	09/20/2013 (WM_DO-13-059)	22.785
3.3.4	LA-W935	10-100-nCi/g Waste	007050453JJK	Waste Control Specialists LLC	08/07/2013	09/20/2013 (WM_DO-13-059)	17.008
3.3.4	LA-W935	10-100-nCi/g Waste	006639781FLE	PermaFix NW	08/29/2013	10/03/2013 (WM_DO-13-0062)	9.829

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
3.3.4	LA-W935	10-100 nCi/g Waste	006639792FLE	PermaFix NW	08/20/2013	10/03/2013 (WM-DO-13-0062)	12.902
3.3.4	LA-W935	10-100 nCi/g Waste	006639798FLE	PermaFix NW	08/29/2013	10/03/2013 (WM-DO-13-0062)	1.900
3.3.4	LA-W935	10-100 nCi/g Waste	006639773FLE	Waste Control Specialists LLC	08/21/2013	10/03/2013 (WM-DO-13-0063)	66.174
3.3.4	LA-W935	10-100 nCi/g Waste	006639774FLE	Waste Control Specialists LLC	08/21/2013	10/03/2013 (WM-DO-13-0063)	14.334
3.3.4	LA-W935	10-100 nCi/g Waste	006639775FLE	Waste Control Specialists LLC	08/28/2013	10/03/2013 (WM-DO-13-0063)	38.511
3.3.4	LA-W935	10-100 nCi/g Waste	006639797FLE	Waste Control Specialists LLC	08/28/2013	10/03/2013 (WM-DO-13-0063)	15.737
3.3.4	LA-W935	10-100 nCi/g Waste	006639806FLE	Material & Energy Corporation	09/10/2013	10/08/2013 (WM-DO-13-0070)	18.886
3.3.4	LA-W935	10-100 nCi/g Waste	007050464JJK	Material & Energy Corporation	08/22/2013	10/08/2013 (WM-DO-13-0070)	6.770
3.3.4	LA-W935	10-100 nCi/g Waste	007050485JJK	Material & Energy Corporation	09/03/2013	10/08/2013 (WM-DO-13-0070)	19.490
3.3.4	LA-W935	10-100 nCi/g Waste	006639776FLE	Waste Control Specialists LLC	09/11/2013	10/14/2013 (WM-DO-13-0072)	66.714
3.3.4	LA-W935	10-100 nCi/g Waste	006639796FLE	Waste Control Specialists LLC	09/04/2013	10/14/2013 (WM-DO-13-0072)	28.944
3.3.4	LA-W935	10-100 nCi/g Waste	006639799FLE	Waste Control Specialists LLC	09/04/2013	10/14/2013 (WM-DO-13-0072)	22.506
3.3.4	LA-W935	10-100 nCi/g Waste	006639801FLE	Waste Control Specialists LLC	09/18/2013	10/14/2013 (WM-DO-13-0072)	28.545
3.3.4	LA-W935	10-100 nCi/g Waste	006639802FLE	Waste Control Specialists LLC	09/11/2013	10/14/2013 (WM-DO-13-0072)	45.534
3.3.4	LA-W935	10-100 nCi/g Waste	006639803FLE	Waste Control Specialists LLC	09/18/2013	10/14/2013 (WM-DO-13-0072)	37.001
3.3.4	LA-W935	10-100 nCi/g Waste	006639829FLE	Waste Control Specialists LLC	09/25/2013	10/14/2013 (WM-DO-13-0072)	1.900
3.3.4	LA-W935	10-100 nCi/g Waste	006639837FLE	Waste Control Specialists LLC	09/25/2013	10/14/2013 (WM-DO-13-0072)	27.083
3.3.4	LA-W935	10-100 nCi/g Waste	006639822FLE	Material & Energy Corporation	09/17/2013	11/01/2013 (WM-DO-13-0077)	17.074
3.3.4	LA-W935	10-100 nCi/g Waste	006639840FLE	Material & Energy Corporation	09/24/2013	11/01/2013 (WM-DO-13-0077)	2.650
3.3.4	LA-W935	10-100 nCi/g Waste	006639842FLE	PermaFix NW	09/24/2013	10/03/2013 (WM-DO-13-0062)	3.650
3.3.4	LA-W935	10-100 nCi/g Waste	006639825FLE	Waste Control Specialists LLC	11/20/2013	1/2/2014 (WM-DO-13-0092)	46.931

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
			006639830FLE	Waste Control Specialists LLC	11/20/2013	1/2/2014 (WM-DO-13-0092)	39.999
			006639881FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	2.560
			006639890FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	29.227
			006639891FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	14.494
			006639892FLE	Waste Control Specialists LLC	12/4/2013	1/15/2014 (WM-DO-14-004)	19.322
			006639912FLE	Material & Energy Corporation	12/10/2013	1/23/2014 (WM-DO-14-015)	3.972
			006639904FLE	Waste Control Specialists LLC	12/12/2013	1/23/2014 (WM-DO-14-015)	13.540
			006639906FLE	Waste Control Specialists LLC	12/12/2013	1/23/2014 (WM-DO-14-015)	6.662
			006639922FLE	Waste Control Specialists LLC	12/13/2013	1/23/2014 (WM-DO-14-015)	23.207
			006639882FLE	PermaFix NW	12/12/2013	1/23/2014 (WM-DO-14-015)	2.560
			006639903FLE	PermaFix NW	12/12/2013	1/23/2014 (WM-DO-14-015)	1.684
3.3.4	LA-W935	10-100 nCi/g Waste	006639921FLE	Waste Control Specialists LLC	1/28/2014	2/28/2014 (WM DO-14-019)	8.903
			006639945FLE	Waste Control Specialists LLC	1/21/2014	2/28/2014 (WM DO-14-019)	6.058
			006639968FLE	Waste Control Specialists LLC	2/11/2014	2/28/2014 (WM DO-14-019)	2.496
			006639969FLE	Waste Control Specialists LLC	2/11/2014	2/28/2014 (WM DO-14-019)	3.314
			006639930FLE	Waste Control Specialists LLC	2/18/2014	4/2/2014 (WM-DO-14-021)	18.663
			006639988FLE	Waste Control Specialists LLC	2/18/2014	4/2/2014 (WM-DO-14-021)	1.900
			006639996FLE	Waste Control Specialists LLC	2/25/2014	4/2/2014 (WM-DO-14-021)	40.776
			006639998FLE	Waste Control Specialists LLC	3/11/2014	4/2/2014 (WM-DO-14-021)	54.198
			006640007FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	48.437
			006640010FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	11.091
			006640012FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	11.485

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
			006640013FLE	Waste Control Specialists LLC	3/18/2014	4/15/2014 (WM-DO-14-026)	6.100
			006640024FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	17.766
			006640028FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	13.573
			006640033FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	15.722
			006640034FLE	Waste Control Specialists LLC	4/1/2014	4/15/2014 (WM-DO-14-026)	28.455
			006639999FLE	Waste Control Specialists LLC	3/4/2014	4/16/2014 (WM-DO-14-028)	17.179
			006640051FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	10.328
			006640052FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	15.555
			006640050FLE	Waste Control Specialists LLC	4/8/2014	4/24/2014 (WM-DO-14-030)	32.103
			006640011FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	11.840
			006640022FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	7.646
3.3.4	LA-W935	10-100 nCi/g Waste	006640023FLE	Waste Control Specialists LLC	3/25/2014	5/9/2014 (WM-DO-14-037)	32.353
			006640062FLE	PermaFix NW	4/15/2014	5/9/2014 (WM-DO-14-037)	3.120
			006640063FLE	Material & Energy Corporation	4/16/2014	5/9/2014 (WM-DO-14-037)	3.536
			006640067FLE	Material & Energy Corporation	4/16/2014	5/9/2014 (WM-DO-14-037)	0.208
			006640073FLE	PermaFix NW	4/23/2014	6/9/2014 (WM-DO-14-045)	9.500
			006640086FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	21.061
			006640088FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	4.560
			006640091FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	2.081
			006640092FLE	Waste Control Specialists LLC	4/30/2014	6/9/2014 (WM-DO-14-045)	6.554
			006640113FLE	PermaFix NW	5/19/2014	7/3/2014 (WM-DO-14-047)	6.022
			006640194FLE	PermaFix FL	7/29/2014	9/9/2014 (WM-DO-14-054)	0.019

CP Section	MWIR* No.	Treatability Group	Manifest Number	Destination	Date Shipped	Date NMED Notified	Volume (m ³)
						LA-W935 Total	676.7604 139.865
						Grand Total	708.6314 140.073

*MWIR is Mixed Waste Inventory Report.

APPENDIX C CURRENT YEAR MLLW ADMINISTRATIVE ADJUSTMENTS

Table C-1 Administrative Adjustments

CP Section	MWIR* Number	Administrative Adjustment	Volume (m ³)
3.3.4	LA-W935	Transferred into LA-W935 from TA-55 MTRU/TRU STP Inventory	0.01960.999
		Added as a result of reconciliation of inconsistencies in the current inventory	42.964
		Transferred into LA-W935 from repackaging of TRU/MTRU STP Inventory	458.185
		Transferred into LA-W935 from (RTR) recharacterization process	2.576
		Transferred into LA-W935 from reclassification	8.518
		Transferred into LA-W935 from reclassification of TRU waste	90.423
		Removed from LA-W935 as a result of not being STP--covered waste. This waste was declared hazardous waste for reduced worker exposures (improve worker safety – as low as reasonably achievable) and efficiency of waste handling (putting this waste in the same transportainer with other STP waste)	-5.650
		Removed from LA-W935 as a result of reclassifying back to TRU/MTRU waste	-5.730
Total Net Adjustments for LA-W935			591.30560.999
3.1.8	LA-W917	Transferred into LA-W917 from TRU/MTRU repackaging	1.665
		Re-assayed to TRU waste	-0.416
Total Net Adjustments for LA-W917			1.249
3.1.5	LA-W922	Transferred into LA-W922 from LLW	29.167
Total Net Adjustments for LA-W922			29.167
Total Net Adjustments			621.72160.999

*MWIR is Mixed Waste Inventory Report

Table C-2 Administrative Adjustment – Detail

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
3.3.4	LA-W935	10-100 nCi/g	Reclassified / Repackaged MTRU STP and TRU inventory to MLLW STP inventory	0.01960.999			Transferred into LA-W935 from TA-55 Less than 100 nCi/g. Derived from combustible/noncombustible MTRU inventory
					W8207851-13226782	0.3220.019	Parent MTRU Container 100957758860038.0.019-0.322 m ³
		10-100 nCi/g	Reclassified/ Repackaged MTRU STP and TRU inventory to MLLW STP inventory	42.964			Added as a result of reconciliation of inconsistencies in the current inventory
					W7969335-2314	39.9994.900	Parent MTRU Container 52314, 1.900 m ³
					W797136- W52887	0.2082.560	Parent MTRU Container 53887, 2.560 m ³ Volume included
					C07194641- W788396	0.2080.208	Parent MTRU Container 91794, 0.208 m ³
					W729563- W796932	2.54946.934	Parent MTRU Container 8794028, 55.97 m ³
		10-100 nCi/g	Reclassified/ Repackaged MTRU STP and TRU inventory to MLLW STP inventory	458.185			Transferred into LA-W935 from combustible-noncombustible MTRU inventory as a result of repackaging process
					W797136	0.000	Parent MTRU Container 8792016, 10.730 m ³
					W793121	1.900	Parent MTRU Container 3439, 5 m ³
					W792816	1.900	Parent MTRU Container 3439, 5 m ³
					W792817	1.900	Parent MTRU Container 3439, 5 m ³
					W792840	1.900	Parent MTRU Container 53878, 2.56 m ³
					W798410	6.662	Parent MTRU Container 62189, 10.95 m ³
					W801243	28.455	Parent MTRU Container 62450, 26.63 m ³
					W801331	15.722	Parent MTRU Container 8792118, 14.16 m ³
					W798129	13.54	Parent MTRU Container 8792123, 14.16 m ³
					W798967	40.776	Parent MTRU Container 8792124, 23.59 m ³
					W797904	14.494	Parent MTRU Container 8792125, 15.09 m ³

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					W797945	19.322	Parent MTRU Container S794030, 32.26 m³
					W800557	11.485	Parent MTRU Container S794036, 22.73 m³
					W800558	11.84	Parent MTRU Container S794036, 22.73 m³
					W793391	1.9	Parent MTRU Container S794037, 28.34 m³
3.3.4	LA-W935				W800161	48.437	Parent MTRU Container S794037, 28.34 m³
					W800787	11.091	Parent MTRU Container S794038, 16.3 m³
					W800803	6.1	Parent MTRU Container S794038, 16.3 m³
					W799643	17.179	Parent MTRU Container S794071, 27.187 m³
					W793384	1.9	Parent MTRU Container S794071, 27.187 m³
					W799353	54.198	Parent MTRU Container S794075, 35.75 m³
					W801244	13.573	Parent MTRU Container S794076, 13.594 m³
					W801094	32.353	Parent MTRU Container S794125, 33.84 m³
					W793400	1.9	Parent MTRU Container S794125, 33.84 m³
					W798053	18.663	Parent MTRU Container S794128, 23.11 m³
					W797833	29.227	Parent MTRU Container S803221, 30.84 m³
					W798628	23.207	Parent MTRU Container S803222, 8.82 m³
					W798581	8.903	Parent MTRU Container S813232, 11.894 m³
							Transferred into LA-W935 from metallic MTRU inventory as a result of repackaging process
					W801162	17.766	Parent MTRU Container 56066, 19.05 m³
							Transferred into LA-W935 from noncombustible MTRU inventory as a result of repackaging process
					W798825	0.322	Parent MTRU Container 56103, 0.322 m³
							Transferred into LA-W935 from solidified inorganic and organic MTRU inventory as a result of repackaging process

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					W801972	0.322	Parent MTRU Container S870333, 0.416 m³
					W793049	0.208	Parent MTRU Container S803996, 0.208 m³
					W796350	0.208	Parent MTRU Container S814063, 0.208 m³
					W793052	0.208	Parent MTRU Container S833677, 0.208 m³
3.3.4	LA-W935				W793042	0.208	Parent MTRU Container S834144, 0.208 m³
					W798019	0.208	Parent MTRU Container S841588, 0.208 m³
					W793046	0.208	Parent MTRU Container S841594, 0.208 m³
		10-100 nCi/g	Reclassified/Repackaged MTRU STP and TRU inventory to MLLW STP inventory	2.576			Transferred into LA-W935 from solidified inorganic and organic MTRU inventory as a result of RTR recharacterization process
					W93890	0.322	Repackaged from MTRU S860196, 0.208 m³
					W790710	0.322	Repackaged from MTRU S802765, 0.208 m³
					W791177	0.322	Repackaged from MTRU S834721, 0.208 m³
					W791350	0.322	Repackaged from MTRU S813357, 0.208 m³
					W93893	0.322	Repackaged from MTRU S861827, 0.208 m³
					W93939	0.322	Repackaged from MTRU S822945, 0.208 m³
					W93481	0.322	Repackaged from MTRU S813442, 0.208 m³
					W93567	0.322	Repackaged from MTRU S815139, 0.208 m³
		10-100 nCi/g	Reclassified/Repackaged MTRU STP and TRU inventory to MLLW STP inventory	8.518			Less than 100 nCi/g; Derived from combustible-noncombustible MTRU inventory
					W793140	0.644	Parent MTRU Container 69409, 0.322 m³ & 68692, 0.322 m³
					W53888	2.56	Parent MTRU Container 53888, 2.56 m³
					W60595	0.322	Parent MTRU Container 60595, 0.322 m³
					W21495	0.208	Parent MTRU Container 65382, 0.208 m³

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					W20823	0.208	Parent MTRU Container 65620, 0.208 m ³
					W22600	0.208	Parent MTRU Container 65649, 0.208 m ³
					W20833	0.208	Parent MTRU Container 65653, 0.208 m ³
					W22202	0.208	Parent MTRU Container 65789, 0.208 m ³
3.3.4	LA-W935				W22918	0.208	Parent MTRU Container 65917, 0.208 m ³
					W22771	0.208	Parent MTRU Container 66074, 0.208 m ³
					W66083	0.208	Parent MTRU Container 66083, 0.208 m ³
					W782593	0.208	Parent MTRU Container 86239, 0.208 m ³
					W780908	0.208	Parent MTRU Container 86330, 0.208 m ³
					W86840	0.208	Parent MTRU Container 86840, 0.208 m ³
					W784722	0.208	Parent MTRU Container 87171, 0.208 m ³
					W785495	0.208	Parent MTRU Container 87275, 0.322 m ³
					W784268	0.208	Parent MTRU Container 88464, 0.208 m ³
					W78542	0.208	Parent MTRU Container 88486, 0.208 m ³
					W784265	0.208	Parent MTRU Container 88601, 0.208 m ³
					W784311	0.208	Parent MTRU Container 88666, 0.208 m ³
					W789710	0.208	Parent MTRU Container 91804, 1.9 m ³
					W773037	0.416	Parent MTRU Container S821866, 0.416 m ³
							Less than 100 nCi/g; Derived from cemented sludge MTRU inventory
					W748153	0.208	Parent MTRU Container S834124, 0.208 m ³
					W766258	0.208	Parent MTRU Container S850595, 0.208 m ³
					W755795	0.208	Parent MTRU Container S870647, 0.208 m ³
							Less than 100 nCi/g; Derived from noncombustible MTRU inventory
					W760768	0.208	Parent MTRU Container S830719, 0.208 m ³

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
							Less than 100 nCi/g; Derived from solidified organic and inorganic MTRU inventory
					W789426	0.322	Parent MTRU Container S813443, 0.208 m3
					W790095	0.208	Parent MTRU Containers 55106, 56723, 59675, 1.900 m ³
					W790731	0.322	Parent MTRU Container S801682, 0.208 m3
					W790858	0.322	Parent MTRU Container S811829, 0.208
					W93053	0.322	Parent MTRU Container S793454, 0.208 m3
					W93264	0.322	Parent MTRU Container S803203, 0.208 m3
					W93351	0.322	Parent MTRU Container S811831, 0.208 m3
					W93457	0.322	Parent MTRU Container S803102, 0.208 m3
					W93975	0.322	Parent MTRU Container S802970, 0.208 m3
					W94002	0.322	Parent MTRU Container S813470, 0.322 m3
		10-100 nCi/g	Reclassified/Repacked MTRU STP and TRU inventory to MLLW STP inventory	90.423			Less than 100 nCi/g; Derived from TRU inventory
					W57984L1-2226676	0.2083-750	
					W61852L1-2226738	0.2081-900	
					W797204 W91843	0.322	
3.3.4	LA- W935				W797953	0.322	
					W798794	0.322	
					L12226561	0.322	
					W799584	0.322	
					W757586	0.322	
					W748685	0.208	
					W750224	0.322	
					W753340	0.322	
					W751268	0.322	
					W757751	0.322	
					W756151	0.322	
					W751605	0.322	
					W747639	0.322	

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					W747719	0.208	
					W749149	0.322	
					W756853	0.322	
					W750293	0.416	
					W755853	0.322	
					W753023	0.322	
					W754606	0.322	
					W754979	0.208	
					W750689	0.208	
					W750370	0.208	
					W756866	0.208	
					W749993	0.208	
					W776678	0.208	
					W766109	0.208	
					W789341	0.208	
					W765123	0.208	
					W776584	0.208	
					W763305	0.208	
					W772237	0.208	
					W759859	0.208	
					W771281	0.208	
					W772174	0.208	
					W762503	0.208	
					W772541	0.322	
					W773041	0.322	
					W760345	0.322	
					W759973	0.322	
					W759622	0.322	
3.3.4	LA-W935				W776406	0.322	
					W758917	0.322	
					W764642	0.322	
					W759067	0.322	
					W801650	32.103	
					W799923	7.646	
					W13995	0.208	
					W21309	0.208	
					W782169	0.208	
					W760466	0.208	
					W14233	0.208	
					W756715	0.208	
					L05179877	21.061	

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					L05179878	4.56	
					L05180415	2.081	
					W801888	6.554	
					W792852	1.9	
		10-100 nCi/g	Reclassified/Repackaged MTRU STP and TRU inventory to MLLW STP inventory	-5.650			Removed from LA-W935 as a result of not being STP covered waste. This waste was declared hazardous waste for reduced worker exposures and efficiency of waste handling
					L12226676	-3.750	
					L12226738	-1.9	
		10-100 nCi/g	Reclassified/Repackaged MLLW STP inventory to TRU and MTRU STP inventory	-5.730			Removed from LA-W935 as a result of reclassifying back to combustible-noncombustible MTRU inventory
					C07194649	-0.208	Parent MTRU Container S860214, 0.208 m³
					C08196360	-0.208	Parent MTRU Container S824352, 0.208 m³
					C09207712	-0.208	Parent MTRU Container S860330, 0.208 m³
					C09207715	-0.208	Parent MTRU Container S860340, 0.208 m³
					C10211008	-0.208	Parent MTRU Container S816064, 0.208 m³
					C10211021	-0.208	Parent MTRU Container S841090, 0.208 m³
					C10211030	-0.208	Parent MTRU Container S846515, 0.208 m³
					C10211032	-0.208	Parent MTRU Container S850048, 0.208 m³
3.3.4	LA-W935				C10211041	-0.208	Parent MTRU Container S860206, 0.208 m³
					C10211042	-0.208	Parent MTRU Container S860207, 0.208 m³
					C10211055	-0.208	Parent MTRU Container S880973, 0.208 m³
					C10211056	-0.208	Parent MTRU Container S880976, 0.208 m³
					C10211370	-0.208	Parent MTRU Container S860304, 0.208 m³
					C10211674	-0.208	Parent MTRU Container 52370, 0.208 m³
							Removed from LA-W935 as a result of reclassifying back to combustible MTRU inventory
					C09207693	-0.208	Parent MTRU Container 55719, 0.208 m³

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					C10211362	-0.208	Parent MTRU Container 55092, 0.208 m ³
					C10211363	-0.208	Parent MTRU Container 55736, 0.208 m ³
							Removed from LA-W935 as a result of reclassifying back to solidified inorganic and organic MTRU inventory
					C10211000	-0.322	Parent MTRU Container S800683, 0.322 m ³
					C10211001	-0.208	Parent MTRU Container S803810, 0.208 m ³
							Removed from LA-W935 as a result of reclassifying back to TRU waste
					C08200663	-0.208	Parent TRU Container
					C08200664	-0.208	Parent TRU Container
					C09201754	-0.208	Parent TRU Container
					C09207694	-0.208	Parent TRU Container
					C07207695	-0.208	Parent TRU Container
					C09207700	-0.208	Parent TRU Container
					C09207701	-0.208	Parent TRU Container
					C10211153	-0.208	Parent TRU Container
3.1.8	LA-W917	Compressed Gases Requiring Scrubbing Waste	Repackaged MTRU STP and TRU inventory to MLLW STP inventory	1.665			Transferred into LA-W917 from combustible-noncombustible MTRU inventory as a result of repackaging process
					W801216	0.001	Parent MTRU Containers S794076, 13.594 m ³
					W801210	0.208	Parent MTRU Container S824498, 0.208 m ³
3.1.8	LA-W917				W799653	0.208	Parent MTRU Container 65201, 0.208 m ³
							Transferred into LA-W917 from solidified Inorganic and Organic MTRU inventory as a result of repackaging process
					W793056	0.208	Parent MTRU Container S834064, 0.208 m ³
					W793135	0.208	Parent MTRU Container S821620, 0.208 m ³
					W802320	0.208	Parent MTRU Container S821620, 0.208 m ³
							Transferred into LA-W917 from TRU inventory as a result of repackaging process
					W800054	0.208	Parent TRU Container
					W801570	0.208	Parent TRU Container

CP Section	MWIR*	Treatability Group	Type of Adjustment	Cumulative Volume Adjustment (m3)	Item or Container Number	MLLW Container Volume (m3)	Reason for Administrative Adjustment
					W800746	0.208	Parent TRU Container
		Compressed Gases Requiring Scrubbing Waste	Reclassified/ Repackaged MLLW STP inventory to TRU and MTRU STP inventory	-0.416			Removed from LA-W917 as a result of reclassifying back to TRU/MTRU waste
					65216	-0.208	
					65211	-0.208	
3.1.5	LA-W922	Non-combustible Debris	Reclassified/ Repackaged LLW inventory to MLLW STP inventory	29.167			Transferred into LA-W922 as a result of reclassifying LLW (glovebox) inventory
					W499644	4.8	
					W801575	24.367	
Subtotal MLLW Volume						60.999 621.72	1

*MWIR is Mixed Waste Inventory Report

APPENDIX D PREVIOUS YEAR MLLW INVENTORY DETAIL

Table D-1 FY13 MLLW Inventory1 Detailed Update by Treatability Group

<u>CP#¹</u> <u>Sec.</u>	<u>MWIR#¹</u> <u>Waste ID</u> <u>and Treatability</u> <u>Group/Category</u>	<u>FY12</u> <u>Annual Update</u> <u>(m³)^{1,2}</u>	<u>Proposed Revision</u> <u>24.0</u> <u>(m³)</u>	<u>Comments</u> ³	<u>FY13 Annual</u> <u>Update</u> <u>(m³)</u>	<u>Projection FY14-</u> <u>FY18 (m³)</u>
3.1.1	LA-W901 <i>IPA Wastes</i>	0	0	-	0	0
3.1.1	LA-W902 <i>Scintillation Fluids</i>	0	0	-	0	0
3.1.2	LA-W903 <i>Lead Blankets</i>	0	0	-	0	0
3.1.2	LA-W904 <i>Soil with Heavy Metals</i>	0	0	-	0	0
3.1.2	LA-W905 <i>ER Soils</i>	0	0	-	0	0
3.1.3	LA-W906 <i>Aqueous Organic Liquids</i>	0	0		0	0
3.1.4	LA-W911 <i>Organic-Contaminated Combustible Solids</i>	0	0		0	0
3.1.4	LA-W919 <i>Organic-Contaminated Noncombustible Solids</i>	0	0		0	0
3.1.5	LA-W912 <i>Combustible Debris</i>	0	0		0	0
3.1.5	LA-W921 <i>Activated or Inseparable Lead</i>	0	0	-	0	0
3.1.5	LA-W922 <i>Noncombustible Debris</i>	0.2082	0.416	Administrative Adjustment	0.624	0
			-0.0002	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
3.1.6	LA-W913 <i>Aqueous Wastes with Heavy Metals</i>	0	0		0	0
3.1.6	LA-W914 <i>Corrosive Solutions</i>	0	0		0	0
3.1.6	LA-W915 <i>Aqueous Cyanides, Nitrates, Chromates, and Arsenates</i>	0	0	-	0	0
3.1.7	LA-W916 <i>Water-Reactive Wastes</i>	0	0		0	0

<u>CP#1</u> <u>Sec.</u>	<u>MWIR#1</u> <u>Waste ID</u> <u>and Treatability</u> <u>Group/Category</u>	<u>FY12</u> <u>Annual Update</u> <u>(m³)#2</u>	<u>Proposed Revision</u> <u>24.0</u> <u>(m³)</u>	<u>Comments</u> #3	<u>FY13 Annual</u> <u>Update</u> <u>(m³)</u>	<u>Projection FY14 –</u> <u>FY18 (m³)</u>
3.1.8	LA-W917#4 <i>Compressed Gases Requiring Scrubbing</i>	0.8328	0.624	Administrative Adjustment	1.456	0
			-0.0008	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
			0	Shipped offsite for treatment/disposal		
3.1.9	LA-W918 <i>Compressed Gases Requiring Oxidation</i>	0	0		0	0
3.1.10	LA-W920 <i>Elemental Mercury</i>	0	0		0	0
3.1.11	LA-W907 <i>Halogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W908 <i>Nonhalogenated Organic Liquids</i>	0	0		0	0
3.1.11	LA-W909 <i>Bulk Oils</i>	0	0		0	0
3.1.11	LA-W910 <i>Polychlorinated Biphenyl (PCB) Wastes with Resource Conservation and Recovery Act (RCRA) Components</i>	0	0		0	0
3.1.11	LA-W923 <i>Liquid and Solid Oxidizers</i>	0	0		0	0
3.2	LA-W924 <i>Lead Wastes – TBD</i>	0	0		0	0
3.2	LA-W925 <i>Mercury Wastes – TBD</i>	0	0		0	0
3.2	LA-W926 <i>Compressed Gases – TBD</i>	0	0		0	0
3.2	LA-W927 <i>Biochemical Laboratory Wastes</i>	0	0		0	0
3.2	LA-W928 <i>Dewatered Treatment Sludge</i>	0	0		0	0
3.2	LA-W932 <i>Explosives</i>	0	0		0	0
3.2	LA-W933 <i>Labpacks</i>	0	0		0	0

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CP ¹ Sec.	MWIR ² Waste ID and Treatability Group/Category	FY12 Annual Update (m ³) ⁴	Proposed Revision 24.0 (m ³)	Comments ³	FY13 Annual Update (m ³)	Projection FY14- FY18 (m ³)
3.2	LA-W934 <i>High Activity Waste</i>	1,5079	-0.208	Shipped offsite for treatment/disposal	1,301	0
			0.0011	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places)		
3.3.1	LA-W930 <i>Lead for Surface Decontamination</i>	0	0		0	0
3.3.2	LA-W929 <i>Nonradioactive or Suspect Waste Items to be Surveyed</i>	0	0		0	0
3.3.3	LA-W931 <i>Lead Requiring Sorting</i>	0	0		0	0
3.3.4	LA-W935 <i>10-100 nCi/g Waste</i>	201,4007	1058,556	Administrative Adjustment	97,000	50
			-23,0917	Administrative Adjustment (rounding corrections due to converting from 4 to 3 decimal places and removal or addition of overpack)		
			-1139,865	Shipped offsite for treatment/disposal		
3.4	<i>Missing/ nonexistent/ TBV category</i>	0	0		0	N/A
	TOTALS	203,9496			100,381	

¹- CP is Compliance Plan; MWIR is Mixed Waste Inventory Report

²- MLLW volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³; however, due to FY13 changes in the way that the MTRU are processed (repackaged) into several different containers, volumes are no longer equal to those added to the MLLW inventory of LA-W935.

³- Shipment details are in Appendix B; Administrative adjustments are in Appendix C.

⁴- Items prohibited from shipment to WIPP are removed from MTRU STP containers and consolidated; some are MLLW and are included in Table A-1 as LA-W917 waste; others are MTRU waste and are considered *Combustible-Noncombustible Waste* in Table E-1.

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Table D-1 FY 12 MLLW Inventory- Detailed Update by Treatability Group ² Sec.	MWIR ² Waste ID and Treatability Group/Category	FY11 Annual Update (m ³) ¹	Proposed Revision 23.0 (m ³)	Comments ³	FY12 Annual Update (m ³)	Projection FY13-FY17 (m ³)
3.1.1	LA-W904 <i>IPA Wastes</i>	0	0	-	0	0

Table D-1 FY 12 MLLW Inventory Detailed Update by Treatability Group Sec.	MWIR* Waste ID and Treatability Group/Category	FY11 Annual Update (m3) ¹	Proposed Revision 23.0 (m3)	Comments ²	FY12 Annual Update (m3)	Projection FY13-FY17 (m3)
3.1.1	LA-W902 Scintillation Fluids	0	0	-	0	0
3.1.2	LA-W903 Lead Blankets	0	0	-	0	0
3.1.2	LA-W904 Soil with Heavy Metals	0	0	-	0	0
3.1.2	LA-W905 ER Soils	0	0	-	0	0
3.1.3	LA-W906 Aqueous Organic Liquids	0	0		0	0
3.1.4	LA-W911 Organic Contaminated Combustible Solids	0	0		0	0
3.1.4	LA-W919 Organic Contaminated Noncombustible Solids	0	0		0	0
3.1.5	LA-W912 Combustible Debris	0	0		0	0
3.1.5	LA-W921 Activated or Inseparable Lead	0	0	-	0	0
3.1.5	LA-W922 Noncombustible Debris	0	0.2082		0.2082	0
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	0	0		0	0
3.1.6	LA-W914 Corrosive Solutions	0	0		0	0
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0	0	-	0	0
3.1.7	LA-W916 Water Reactive Wastes	0	0		0	0
3.1.8	LA-W9173 Compressed Gases Requiring Scrubbing	1.2492	0	Administrative Adjustment	0.8328	0
			-0.4164	Shipped offsite for treatment/disposal		
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0	0		0	0
3.1.10	LA-W920 Elemental Mercury	0	0		0	0
3.1.11	LA-W907 Halogenated Organic Liquids	0	0		0	0
3.1.11	LA-W908 Nonhalogenated Organic Liquids	0	0		0	0
3.1.11	LA-W909 Bulk Oils	0	0		0	0
3.1.11	LA-W910 Polychlorinated Biphenyl (PCB) Wastes with Resource Conservation and Recovery Act (RCRA) Components	0	0		0	0

Table D-1 FY 12 MLLW Inventory Detailed Update by Treatability Group CP* Sec.	MWIR* Waste ID and Treatability Group/Category	FY11 Annual Update (m3) ¹	Proposed Revision 23.0 (m3)	Comments ²	FY12 Annual Update (m3)	Projection FY13-FY17 (m3)
3.1.11	LA-W923 Liquid and Solid Oxidizers	0	0		0	0
3.2	LA-W924 Lead Wastes—TBD	0	0		0	0
3.2	LA-W925 Mercury Wastes—TBD	0	0		0	0
3.2	LA-W926 Compressed Gases—TBD	0	0		0	0
3.2	LA-W927 Biochemical Laboratory Wastes	0	0		0	0
3.2	LA-W928 Dewatered Treatment Sludge	0	0		0	0
3.2	LA-W932 Explosives	0	0		0	0
3.2	LA-W933 Labpacks	0	0		0	0
3.2	LA-W934 High-Activity Waste	1,5079	0	Shipped offsite for treatment/disposal	1,5079	0
3.3.1	LA-W930 Lead for Surface Decontamination	0	0		0	0
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0	0		0	0
3.3.3	LA-W931 Lead Requiring Sorting	0	0		0	0
3.3.4	LA-W935 10-100 nCi/g Waste	173,1039	90,2360	Administrative Adjustment	201,4007	50
			-61,9392	Shipped offsite for treatment/disposal		
3.4	Missing/ nonexistent/ TBV category	0	0		0	N/A
-	TOTALS	175,8610		-	203,9496	

*CP is Compliance Plan; MWIR is Mixed Waste Inventory Report

¹ MLLW volumes are calculated using the conversion: 55-gallon container = 0.2082 m³; 85-gallon container = 0.3218 m³; however, due to FY12 changes in the way that the MTRU and MLLW databases record volumes for newly reclassified LA-W935 waste, the volumes removed from the MTRU database for containers reclassified in FY12 equal those added to the MLLW inventory of LA-W935 waste.

² Shipment details are in Appendix B; Administrative adjustments are in Appendix C.

³ Items prohibited from shipment to WIPP are removed from MTRU/STP containers and consolidated; some are MLLW and are included in Table A-1 as LA-W917 waste; others are MTRU waste and are considered *Combustible-Noncombustible Waste* in Table E-1.

⁴ LANL anticipates that a volume of formerly TRU and MTRU waste will be retrieved over the next few years and will be reclassified to LA-W935. As a conservative measure, stored reclassified TRU waste may be assigned hazardous waste codes and managed as STP mixed waste.

APPENDIX E CURRENT MTRU INVENTORY DETAIL

Table E-1 TA-54 MTRU Covered Inventory (by Treatability Group)

Treatability Group	FY134 Annual Update (m ³)	Proposed Revision 253.0 (m ³) ^{1,2}	Comments ³	FY142 Annual Update (m ³)	Projection FY153-FY197 (m ³)
Cemented Sludge	78.146596.088				
		(0.416) ⁴	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-8.882)-81.378	Shipped Offsite <u>on Hold</u> ⁵		
		-11.388-436.564	Administrative Adjustments		
		FY142 Subtotal Cemented Sludge		66.75878.146	0
Combustible – Noncombustible Waste	694.9354811.252				
		(73.762299.383)⁴⁵	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		2.9123.536	New Covered		
		(-303.388)-643.840	Shipped Offsite <u>on Hold</u> ⁵		
		-74.417-476.013	Administrative Adjustments		
		FY142 Subtotal Combustible-Noncombustible Waste		623.430694.935	100
Combustible Waste	3.29412.272				
		(0.7380.208)⁴⁵	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0.0000.530	New Covered		
		(-0.530)-0.416	Shipped Offsite <u>on Hold</u> ⁵		
		1.7049.092	Administrative Adjustments		
		FY142 Subtotal Combustible Waste		4.9983.294	0
Glass Waste	0				
		(0) ⁴⁵	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		0	Shipped Offsite		
		0	Administrative Adjustments		
		FY142 Subtotal Glass Waste		0	0
Leaded Glovebox Waste	0				
		(0) ⁴⁵	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		0	Shipped Offsite		

Treatability Group	FY134 Annual Update (m ³)	Proposed Revision 253.0 (m ³) ^{1,2}	Comments ³	FY142 Annual Update (m ³)	Projection FY153-FY197 (m ³)
		0	Administrative Adjustments		
			FY142 Subtotal Leaded Glovebox Waste	0	0
Metallic Waste	20,506,110,346				
		(0.20819.258) ^{4,5}	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-0.208)-2,524	Shipped Offsite <u>on Hold</u> ⁵		
		-17,157-87,316	Administrative Adjustments		
			FY142 Subtotal Metallic Waste	3,349,20,506	0
Noncombustible Waste	35,400,125,760				
		(4.0861.248) ^{4,5}	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0	New Covered		
		(-44,344)-80,552	Shipped Offsite <u>on Hold</u> ⁵		
		29,136-9,808	Administrative Adjustments		
			FY142 Subtotal Noncombustible Waste	64,536,35,400	100
Solidified Inorganic and Organic Waste	432,442,150,716				
		(20,73229,472) ^{4,5}	3706 Non-cemented Above-ground EM Legacy TRU (MTRU waste only)		
		0,2085,408	New Covered		
		(-38,520)-14,506	Shipped Offsite <u>on Hold</u> ⁵		
		-113,748290,824	Administrative Adjustments		
			FY142 Subtotal Solidified Inorganic and Organic Waste	318,902,432,442	10
TOTAL FY134:	1264,7232806,434		Total FY142 Inventory:	1081,9734264,723	210

¹ MTRU waste volumes are calculated using the conversion: 55-gallon container = 0.208 m³; 85-gallon container = 0.322 m³.

² Volumes are represented to three decimal places.

³ Shipping details are found in Appendix F, and Administrative Adjustments are found in Appendix G.

⁴ Depending on the rounding method (rounding of totals or of individual volumes), minor differences in the total inventory may be obtained. This report adjusts the end-of-the-year inventory with individual drum volumes rounded to three decimal places.

⁵ Amount already included in the MTRU STP covered inventory.

⁶ NMED has determined that the removal of MTRU from the STP will be deferred until more information becomes available and it is determined that the waste currently stored at the off-site facility will not be returned to LANL.

Table E-2 MTRU Inventory at TA-55 and CMR

Location	FY134 MTRU Inventory (m ³) ¹	Treatability Group	Proposed Revision 253.0 (m ³)	Comments ¹	FY142 MTRU Inventory (m ³)
CMR	1.92 1.08	Combustible-Noncombustible Waste	3.800 0.208	New Covered	
			0.000 0.416	Administrative Adjustment	
Total FY142 CMR Inventory					5.719
TA-55	3.254	Combustible-Noncombustible Waste	1.252 0.208	New Covered	
			-1.475 0.208	Administrative Adjustment	
FY142 TA-55 Combustible-Noncombustible Waste Inventory					3.0313.254
TA-55	0.019	Combustible Waste	0.208	<u>New Covered</u>	
			-0.208	<u>Administrative Adjustment</u>	
FY142 TA-55 Combustible Waste Inventory					0.019
TA-55	31.987	Metallic Waste	-3.196	<u>Administrative Adjustment</u>	
FY142 TA-55 Metallic Waste Inventory					28.79131.987
TA-55	9.597 4.220	Noncombustible Waste	0.832 1.664	New Covered	
			-5.821 3.713	Administrative Adjustment	
FY142 TA-55 Noncombustible Waste Inventory					4.6089.597
TA-55	0.208	Solid Ino Organic and Ino Organic Waste			
FY142 TA-55 Solidified InoOrganic and InoOrganic Waste Inventory					0.208
Total FY142 TA-55 Inventory					45.06536.657
Total FY142 CMR/TA-55 Inventory					42.35746.965

¹ Shipping details are found in Appendix F and Administrative Adjustments are found in Appendix G. Since all waste is shipped from TA-54, there are no shipping data for CMR/TA-55, only transfers to TA-54, which are included in the Appendix G.

APPENDIX F FY143 MTRU WASTE SHIPMENTS TO WIPP

Table F-1 FY143 MTRU Shipments to WIPP

FY142 Quarter	Treatability Group	Existing FY142 Inventory Volume (m ³)	New Covered Volume (m ³)	Total Removed from Inventory (m ³)	Total Volume Shipped (m ³) ¹
Q1	Cemented Sludge Total	7,594 6,928	0	7,594 6,928	5,200 6,046
	Combustible-Noncombustible Waste Total	106,888 77,732	0	106,888 77,732	122,408 77,732
	Combustible Waste Total	0,530 0,208	0	0,530 0,208	0,416 0,208
	Metallic Waste Total	2,108	0	2,108	2,108
	Noncombustible Waste Total	24,886 7,932	0	24,886 7,932	24,544 7,932
	Solidified Inorganic and Organic Waste Total	8,548 2,080	0,208 0	8,756 2,080	8,528 2,080
	Q1 Total	148,446 106,988	0,208 0	148,654 106,988	161,096 106,076
Q2	Cemented Sludge Total	1,288 38,600	0	1,288 38,600	0,832 37,232
	Combustible-Noncombustible Waste Total	52,344 78,508	0	52,344 78,508	52,116 78,508
	Noncombustible Waste Total	5,408 2,108	0	5,408 2,108	5,408 2,108
	Solidified Inorganic and Organic Waste Total	9,568 1,778	0,208 0	9,568 1,986	9,568 1,872
	Q2 Total	68,608 120,994	0,208 0	68,608 121,202	67,924 119,720
Q3	Cemented Sludge Total	21,046	0	21,046	17,056
	Combustible-Noncombustible Waste Total	260,432	1,040	261,472	261,472
	Combustible Waste Total	0,208	0	0,208	0,208
	Metallic Waste Total	0,416	0	0,416	0,416
	Noncombustible Waste Total	44,304	0	44,304	44,304
	Solidified Inorganic and Organic Waste Total	4,824	0,832	5,656	5,200
Q3 Total	0,331 23	0,187 2	0,333 102	0,328 656	
Q4	Cemented Sludge Total	4,804	0	4,804	4,576
	Combustible-Noncombustible Waste Total	225,088	1,04	226,128	255,228
	Noncombustible Waste Total	26,208	0	26,208	26,208
	Solidified Inorganic and Organic Waste Total	2,496	2,288	4,784	4,784
Q4 Total	0,258 596	0,332 8	0,261 924	0,290 796	
Grand Total		217,054 17,808	0,208 5,408	217,262 23,216	229,020 45,248

¹ Volumes shipped may be lower than volumes removed from the STP inventory due to the removal of overpacks before shipping.

Table F-2 FY14 MTRU Shipments to WCS

<u>FY14 Quarter</u>	<u>Treatability Group</u>	<u>Existing FY14 Inventory Volume (m³)</u>	<u>New Covered Volume (m³)</u>	<u>Total Removed from Inventory (m³)</u>	<u>Total Volume Shipped (m³)¹</u>
Q3	<u>Combustible-Noncombustible Waste Total</u>	<u>120.848</u>	<u>0.416</u>	<u>121.264</u>	<u>121.264</u>
	<u>Metallic Waste Total</u>	<u>0.208</u>	<u>0</u>	<u>0.208</u>	<u>0.208</u>
	<u>Noncombustible Waste Total</u>	<u>14.050</u>	<u>0</u>	<u>14.050</u>	<u>13.936</u>
	<u>Solidified Inorganic and Organic Waste Total</u>	<u>20.196</u>	<u>0</u>	<u>20.196</u>	<u>19.968</u>
	<u>Grand Total</u>	<u>155.302</u>	<u>0.416</u>	<u>155.718</u>	<u>155.376</u>

Table F-3 FY14 MTRU Shipments to AMWTP (INL)

<u>FY14 Quarter</u>	<u>Treatability Group</u>	<u>Existing FY14 Inventory Volume (m³)</u>	<u>New Covered Volume (m³)</u>	<u>Total Removed from Inventory (m³)</u>	<u>Total Volume Shipped (m³)¹</u>
Q1	<u>Combustible-Noncombustible Waste Total</u>	<u>5.049</u>	<u>0</u>	<u>5.049</u>	<u>5.049</u>
Q2	<u>Combustible-Noncombustible Waste Total</u>	<u>15.294</u>	<u>0</u>	<u>15.294</u>	<u>15.294</u>
Q3	<u>Combustible-Noncombustible Waste Total</u>	<u>2.549</u>	<u>0</u>	<u>2.549</u>	<u>2.549</u>
	<u>Grand Total</u>	<u>22.892</u>	<u>0.416</u>	<u>22.892</u>	<u>22.892</u>

APPENDIX G CURRENT YEAR MTRU INVENTORY – ADMINISTRATIVE ADJUSTMENTS

Table G-1 FY143 MTRU Administrative Adjustments to TA-54 Inventory

Treatability Group	Administrative Adjustment	Volume (m ³)
Cemented Sludge	Reclassified as MLLW (LA-W935) Repacked into 5,700 m ³ Combustible-Nonecombustible Waste and 0.208 m ³ Solidified Organic and Inorganic Waste	-0.624 0.832
	Double counted volume for both reassigned treatability groups and volume changes in FY13.	-10.442
	FY12 omitted administrative adjustments— Volume changes due to addition or removal of 85-gallon overpacks	0.114
	Volume changes due to addition or removal of overpacks (85 or or 110 gallon)	0.114 0.764
	S811822 counted as a reassigned treatability group but was not changed in FY13	0.208
	S811812 was reassigned treatability group but was not changed in FY13	-0.208
	Removed as a result of shipped in FY10; not reported in FY10 because containers were overpacked and not in query.	-1.476
	Removed as a result of recharacterizing inventory as nonhazardous waste	-0.530
	STP containers from Cemented Sludge treatability groups were reassigned to 0.64433.622 m ³ Combustible Noncombustible Waste and 373.436 m ³ Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	-0.644 -396.938
	STP containers from Solidified Organic and Inorganic treatability groups were reassigned to 0.208 m ³ Cemented Sludge Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	0.208
	Reclassified as MLLW (LA-W935)	-0.644
	Missing items from the STP inventory. These containers could not be located. See section 4.1 for details	-47.022
	Cemented Sludge Net Adjustment	
Combustible-Noncombustible Waste	Reclassified as MLLW (LA-W935)	-7.572 -141.948
	S793723 inadvertently mistaken for the wrong treatability group in FY13	-0.322
	S811822 counted as a reassigned treatability group but was not changed in FY13	-0.208
	91908 volume increased due to addition of overpacks (496 gallon) in FY13	1.692
	FY12 omitted administrative adjustments. Noncombustible Waste transferred from TA-55 covered inventory and assigned to Combustible Noncombustible Waste at TA-54	0.832
	FY12 omitted administrative adjustments double counted container 65207 and volume change rounding error.	-0.206
	Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the minimum detectable activities for undetected radionuclides.	2.912
	Removed as a result of CCP RTR pre-scan confirms no pressurized containers present	-2.108
	Removed as a result of repackaging/remediation	-423.387
	Added as a result of repackaging/remediation	420.052
	Removed as a result of repackaging and recharacterizing inventory as nonhazardous waste	-0.946
	Removed as a result of historical remediation; in that re-packaging activities were overlooked and not properly recorded. Clerical errors related to conversion from paper to database inventory.	-84.650

Treatability Group	Administrative Adjustment	Volume (m ³)
	Removed as a result not STP; shipped within 1 year of accumulation start date	-0.208
	63037, 87121, and 87122 counted twice in repacked and reclassified in FY13	2.316
	S822849 inadvertently reassigned to the wrong treatability group in FY13	0.208
	Corrections due to rounding or database volume correction	-0.055
	Two glove bags were added as a result of repack in FY13	0.416
	92302 was counted three times. Removed 2x the volume in FY13	-3.800
	Volume changes due to addition or removal of overpacks (85 gallon or SWB)	5.076-1.692
	94166, 94161, 94139, 94138 counted twice in Repacking in FY13	-0.832
	64741 counted twice in transfer and New Covered in FY13	-0.208
	STP containers from <u>Combustible-Noncombustible Waste Cemented Sludge</u> treatability groups were reassigned to 0.53033.622 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. <u>V</u> and volume changes are also include in this table.	-0.53033.622
	STP containers from Combustible Waste treatability groups were reassigned to 4.966 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	4.966
	STP containers from Metallic Waste treatability groups were reassigned to 66.504 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	66.504
	STP containers from Noncombustible Waste treatability groups were reassigned to 0.852 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	0.852
	STP containers from Solidified Inorganic and Organic Waste treatability groups were reassigned to 1.1740.446 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. <u>V</u> and volume changes are also include in this table.	1.1740.446
	Added as a result from reconciliation of inconsistencies in the current inventory	0.208
	Added as a result of recharacterizing TRU inventory as MTRU during repacking	5.8584.456
	Repacked into 424.624 m ³ Combustible-Noncombustible Waste and 7.904 ³ Noncombustible Waste	-1054.448
	Additional covered inventory transferred from TA-55 covered inventory	7.3885.908
	Additional covered inventory transferred from CMR covered inventory	0.416
	Added as a result of repacking Cemented Sludge waste	5.700
	Added as a result of repacking Combustible-Noncombustible Waste	424.624
	Added as a result of repacking Metallic Waste	3.800
	Added as a result of repacking Noncombustible Waste	52.212
	Added as a result of repacking Solidified Inorganic and Organic Waste	124.706
	Missing items from the STP inventory. These containers could not be located. See section 4.1 for details	-0.624
	Combustible-Noncombustible Net Adjustment	-74.417-476.013
Combustible Waste	Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the minimum detectable activities for undetected radionuclides.	0.624
	Removed as a result of recharacterizing inventory	-0.53
	Double counted volume for both reassigned treatability groups and volume changes	0.550

Treatability Group	Administrative Adjustment	Volume (m ³)
	<u>in FY13.</u>	
	<u>Volume changes due to addition or removal of overpacks (85 or 110 gallon)</u>	<u>-0.55</u>
	<u>Missing items from the STP inventory. These containers could not be located. See section 4.1 for details</u>	<u>-2.496</u>
	<u>STP containers from Combustible/Noncombustible Waste treatability groups were reassigned to 0.5304966 m³ Combustible/Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. Volume changes are also include in this table.</u>	<u>0.5304966</u>
	Combustible Waste Net Adjustment	<u>1.7049092</u>
<i>Metallic Waste</i>	<u>Removed as a result of repackaging/remediation/Reclassified as MLLW (LA-W935)</u>	<u>-19.05017.170</u>
	<u>Added as a result of repackaging/remediation</u>	<u>1.893</u>
	<u>Repacked into 3.800 m³ Combustible/Noncombustible Waste</u>	<u>-3.320</u>
	<u>STP containers from Metallic Waste treatability groups were reassigned to 66.504 m³ Combustible/Noncombustible Waste and 0.322 m³ Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.</u>	<u>-66.826</u>
	Metallic Waste Net Adjustment	<u>-17.15787.316</u>
<i>Noncombustible Waste</i>	<u>Reclassified as MLLW (LA-W935) Repacked into 52.212 m³ Combustible/Noncombustible Waste and 4.160 m³ Noncombustible Waste</u>	<u>-0.20881.132</u>
	<u>Added as a result of recharacterizing TRU inventory as MTRU during repacking</u>	<u>1.456</u>
	<u>Removed as a result of repackaging/remediation</u>	<u>-0.322</u>
	<u>Added as a result of repackaging/remediation</u>	<u>29.666</u>
	<u>STP containers from Noncombustible Waste treatability groups were reassigned to 0.852 m³ Combustible/Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.</u>	<u>-0.852</u>
	<u>Added as a result of repacking Combustible/Noncombustible Waste</u>	<u>7.904</u>
	<u>Added as a result of repacking Noncombustible Waste</u>	<u>4.160</u>
	<u>Added as result of repacking Solidified Inorganic and Organic Waste</u>	<u>59.488</u>
	<u>FY12 omitted administrative adjustments transferred from TA 55 covered inventory and assigned to Combustible/Noncombustible Waste at TA 54</u>	<u>-0.832</u>
	Noncombustible Waste Net Adjustment	<u>29.1369.808</u>
<i>Solidified Inorganic and Organic Waste</i>	<u>Additional covered inventory transferred from TA-55 covered inventory/Repacked into 124.706 m³ Combustible/Noncombustible Waste, 59.488 m³ Noncombustible Waste, and 2.348 m³ Solidified Organic and Inorganic</u>	<u>0.41685.550</u>
	<u>Added as result of repacking Solidified Inorganic and Organic Waste</u>	<u>2.348</u>
	<u>S793723 inadvertently mistaken for the wrong treatability group in FY13</u>	<u>0.322</u>
	<u>Added as a result of repacking Cemented Sludge waste</u>	<u>0.208</u>
	<u>Shipped in FY12; not reported in FY12 because containers were overpacked and the query did not identify them.</u>	<u>-0.208</u>
	<u>Added as a result from reconciliation of inconsistencies in the current inventory</u>	<u>0.208</u>
	<u>S843646 was reassigned a treatability group however, it was not added into that group in FY13</u>	<u>0.322</u>
	<u>Removed as a result of repackaging/remediation</u>	<u>-130.280</u>
	<u>Added as a result of repackaging/remediation</u>	<u>16.022</u>
	<u>Added as a result of a review of the initial radioactive assay which determined that these containers were originally reclassified to LLW without consideration of the</u>	<u>0.530</u>

Treatability Group	Administrative Adjustment	Volume (m ³)
	<u>minimum detectable activities for undetected radionuclides.</u>	
	Volume changes due to addition or removal of overpacks (85 or 110 gallon)	-0.134 0.476
	S822849 inadvertently reassigned to the wrong treatability group in FY13	-0.208
	S811812 was reassigned treatability group but was not changed in FY13	0.208
	93667 counted twice in repacking in FY13	-0.208
	STP containers from Cemented Sludge treatability groups were reassigned to 0.644 373.436 m ³ Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. V and + volume changes are also include in this table.	0.644 373.436
	STP containers from Solidified Inorganic and Organic Metallic Waste treatability groups were reassigned to 0.208 0.322 m ³ Cemented Sludge Solidified Organic and Inorganic Waste treatability groups consistent with current categorization of waste types for shipment to WIPP and volume changes are also include in this table.	-0.208 0.322
	STP containers from Solidified Inorganic and Organic Waste treatability groups were reassigned to 1.174 0.416 m ³ Combustible-Noncombustible Waste treatability groups consistent with current categorization of waste types for shipment to WIPP. V and + volume changes are also include in this table.	-1.174 0.416
Solidified Inorganic and Organic Waste Net Adjustment		113.748 290.824
Total Net TA-54 Adjustment		-185.870 727.969

Table G-2 FY143 MTRU Administrative Adjustments for CMR and TA-55 Inventory

Location	Treatability Group	Administrative Adjustment	Volume (m ³)
CMR	Combustible-Noncombustible Waste	Transferred to TA-54 and assigned to Combustible-Noncombustible Waste in the TA-54 inventory	0.000 0.416
Net Adjustment CMR Inventory			0.000 0.416
TA-55	Combustible-Noncombustible Waste	Container was reassayed and removed as a result of recharacterizing to MLLW in FY13.	-0.019 0.208
		Containers was reassay and removed as a result of recharacterizing to LLW	-0.624
		Transferred to TA-54 and assigned to Combustible-Noncombustible Waste in the TA-54 inventory	-0.832 0.208
		Removing from TA-55 inventory, container already reported shipped to WIPP in FY12	-0.208
		Added as a result of inadvertently was not included in the inventory for the end of FY12	0.416
Net Adjustment TA-55 Combustible-Noncombustible Waste			-1.475 0.208
TA-55	Combustible Waste	Transferred to TA-54 and assigned to Combustible-Noncombustible Waste in the TA-54 inventory.	-0.208
Net Adjustment TA-55 Combustible Waste			-0.208
TA-55	Metallic Waste	Transferred to CMR for Material Retrieval	-3.199
		Volume corrections due to rounding to three decimal places.	0.003
Net Adjustment TA-55 Metallic Waste			-3.196
TA-55	Noncombustible Waste	Transferred to TA-54 and assigned to Combustible-Noncombustible Waste in the TA-54 inventory	-5.405 -7.700

Location	Treatability Group	Administrative Adjustment	Volume (m ³)
		Transferred to TA-54 and assigned to Solidified Inorganic and Organic Waste	-0.416
		Volume data entry correction of inventory (containers reported as 0.208 m3 but reconciliation of inventory shows much larger than 0.208 m3)	4.781
		Volume changes due to addition of overpacks.	4.632
Net Adjustment TA-55 Noncombustible Waste			-5,8213.713
Net Adjustment TA-55 Inventory			-10,7003.505
Total Net TA-55/CMR Adjustment			-10,7003.089

Table G-3 MTRU Administrative Adjustments – TA-54 Volume Adjustments [Table omitted]

Table G-4 MTRU Administrative Adjustments – TA-54 Containers Added [Table omitted]

APPENDIX H MLLW TREATMENT FACILITIES

Table H-1 Commercial Facilities Contacted for Waste Treatment Capabilities

Commercial Facility	Location
Perma-Fix (including Material & Energy Corporation in Tennessee (TN) ; Diversified Scientific Services, Inc. in Tennessee TN ; and Perma-Fix North West in Washington)	Florida
Waste Control Specialists	Texas
EnergySolutions of Utah (including Bear Creek Operations in Tennessee TN)	Utah
Nuclear Fuel Services	Tennessee
Integrated Environmental Services	Tennessee
NSSI	Texas

APPENDIX I CORRESPONDENCE

Table I-1 Expedited Shipment Letters

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 243.0 (Appendix I)
4-15-2014	Notice of Completion of Expedited Offsite Waste Shipment Activity 3.1.5	WM-DO-14-027	254	Yes/No

Table I-2 Correspondence

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 243.0 (Appendix I)
10-22-2012	Response to the 9-18-2012 Notice of Disapproval of the FY11 STP Annual Report and Proposed Revision 22.0	WM-DO-12-0002	22	Yes
11-6-2012	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-12-0004	23	Yes
11-6-2012	Notice of Completion of Offsite Waste Shipment Activities 3.1.8 and 3.3.4	WM-DO-12-0005	23	Yes
11-6-2012	Notice of Completion of Offsite Waste Shipment Activity 4.0, FY12 Q4	WM-DO-12-0006	23	Yes
3-22-2013	Correction of Offsite Shipment Reports, FY12 Q1, Q3, and Q4, Activity 4.0	ENV-EDA-13-04	23	Yes
3-29-2013	Submittal of FY12 Annual Update and Proposal 23.0	ENV-EDA-13-06	23	Yes
1-24-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	ENV-EDA-13-01	24	No
2-14-2013	Notice of Completion of Offsite Waste Shipment, FY13 Q1, Activity 4.0	ENV-EDA-13-02	24	No
3-22-2013	Notice of Completion of Offsite Waste Shipment Activity 3.2	ENV-EDA-13-003	24	No
4-5-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	ENV-EDA-13-005	24	No
4-22-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0003	24	No
5-9-2013	Notice of Completion of Offsite Waste Shipment, FY13 Q2, Activity 4.0	WM-DO-13-0004	24	No
6-18-2013	Response to the May 10, 2013 Review Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0007	24	No
7-2-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0030	24	No
7-18-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0036	24	No
7-24-2013	Notice of Completion of Offsite Waste Shipment, FY13 Q3, Activity 4.0	WM-DO-13-0037	24	No
8-2-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0043	24	No
9-3-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0038	24	No
9-4-2013	Proposed Extension of Compliance Dates for Activity 3.2	WM-DO-13-0045	22	No
9-6-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0052	24	No

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 243.0 (Appendix I)
9-12-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0055	24	No
9-20-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0058	24	No
9-20-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-059	24	No
10-3-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0062	24	Yes No
10-3-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0063	24	Yes No
10-8-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0070	24	Yes No
10-10-2013	Notification of Force Majeure and Lapse of Appropriations	ADESH-13-0056	22	Yes No
10-14-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0072	24	Yes No
11-1-2013	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0077	24	Yes No
11-7-2013	Update to the October 10, 2013 Notice of Force Majeure	ADESH-13-060	22	Yes No
11-14-2013	Notification of Activity 4.0 Waste Shipment Offsite for Treatment or Recycling at a Noncommercial Facility	WM-DO-13-0080	25	Yes No
11-14-2013	Notice of Completion of Offsite Waste Shipment, FY13, Q4, Activity 4.0	WM-DO-13-0079	24	Yes No
11-19-2013	Notification of Activity 4.0 Waste Shipment Offsite for Treatment or Recycling at a Noncommercial Facility – Supplemental Information	WM-DO-13-0082	25	Yes No
12-20-2013	Request for Extension for the Los Alamos National Laboratory's Site Treatment Plan FY12 and FY13 Annual Updates	WM-DO-13-0094	23	Yes No
12-20-2013	Request to Extend Compliance Plan Milestone for Activity 3.2	WM-DO-13-0096	22	Yes No
12-20-2013	Request for Amendment to Extend STP Compliance Milestone for Activity 3.3.4	WM-DO-13-0095	25	Yes No
1-2-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-13-0093	25	Yes No
1-2-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-13-0092	25	Yes No
1-16-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-004	25	Yes No
1-23-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-014	25	Yes No
1-23-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-015	25	Yes No

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 243.0 (Appendix I)
2-10-2014	Response to the 12-9-2013 Notice of Disapproval of the FY12 STP Annual Report and Proposed Revision 23.0	WM-DO-14-017	23	Yes No
2-13-2014	Notice of Completion of Offsite Waste Shipment, FY14, Q1, Activity 4.0	WM-DO-14-018	25	Yes No
2-27-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-019	25	Yes No
4-2-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-022	25	Yes No
4-2-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-021	25	Yes No
4-15-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-026	25	Yes No
4-15-2014	45-Day Notification, Proposed Deletion of Waste	WM-DO-14-023	25	Yes No
4-15-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-025	25	Yes No
4-16-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-028	25	Yes No
4-24-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-030	25	Yes No
5-8-2014	Notice of Completion of Offsite Waste Shipment Activity 3.3.4	WM-DO-14-037	25	Yes No
5-8-2014	Notice of Completion of Offsite Waste Shipment for Treatment or Recycling at a Noncommercial Facility, Activity 2.3-2	WM-DO-14-036	25	Yes No
5-8-2014	Notice of Completion of Offsite Waste Shipment, FY14 Q2, Activity 4.0	WM-DO-14-038	25	Yes No
5-8-2014	Deletion of Covered Waste Under the STP	WM-DO-14-035	25	Yes No
5-14-2014	Amendment to the Proposed FY12 Annual Update	WM-DO-14-034	23	Yes No
5-14-2014	Notice of Completion of Offsite Waste Shipment for Storage Pending Disposal, Activity 4.0	WM-DO-14-039	25	Yes No
5-21-2014	Correction of Off-Site Waste Shipment Notifications, FY13, Activity 3.3.4	WM-DO-14-040	24	Yes No
5-21-2014	15-Day Notification, Proposed Deletion of Waste	WM-DO-14-042	25	Yes No
5-22-2014	Correction of Off-Site Waste Shipment Notification, FY13, Activity 4.0	WM-DO-14-041	24	Yes No
5-28-2014	Notice of Completion of Offsite Waste Shipment for Storage Pending Disposal, Activity 4.0	WM-DO-14-043	25	Yes No
6-9-2014	Submittal of FY13 Annual Update and Proposed 24.0	WM-DO-14-044	24	Yes No
6-9-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-045	25	No
7-2-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.1.5	WM-DO-14-046	25	No

Letter Date	Description	Letter Number	Revision Reference	Listed in Revision 243.0 (Appendix I)
7-2-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-047	25	No
7-9-2014	Notice of Completion of Off-Site Shipment Activity 3.1.8	WM-DO-14-049	25	No
8-7-2014	Notice of Completion of Off-Site Waste Shipment Activity 3.1.5	WM-DO-14-051	25	No
8-13-2014	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY14 Q3	WM-DO-14-052	25	No
9-8-14	Notice of Completion of Off-Site Waste Shipment Activity 3.3.4	WM-DO-14-054	25	No
11-12-2014	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY14 Q4	WM-DO-14-063	25	No
1-12-2015	15-Day Notification, Proposed Deletion of Waste	WM-DO-15-001	25	No
2-4-2015	Notice of Completion of Off-Site Waste Shipment Activity 4.0, FY15, Q1	WM-DO-15-002	25	No
3-24-2015	Corrections of Off-Site Waste Shipment Notification, FY14, Activity 3.3.4 and 3.1.5	WM-DO-15-007	25	No
3-24-2015	Corrections of Off-Site Waste Shipment Notifications, FY14, Activity 4.0	WM-DO-15-003	25	No
3-24-2015	Notice of Completion of Off-Site Waste Shipment Activity 3.1.8	WM-DO-15-006	25	No
3-30-2015	Submittal of FY14 Annual Update and Proposed 25.0	WM-DO-15-008	25	No

APPENDIX J HISTORY OF CHANGES TO THE CP AND FFCO

As discussed in Part III (CP), Section 1.2, the STP CP has been modified several times since it was originally issued, in accordance with the provisions of Section X, “Revisions,” and Section XI, “Other Amendments to the STP,” of the October 4, 1995, FFCO, as amended and revised. This Appendix provides a summary of these CP changes and of modifications to the FFCO since its issuance.

To date, there have been 253 revisions and three amendments to the CP. In addition, the FFCO was amended once on May 20, 1997. The following Table J-1 provides a summary of these changes. More detailed descriptions can be found in the CP Update portion of each year’s STP Annual Update and the original correspondence requesting each change.

Table J-1 Summary of Changes to the CP and the FFCO

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 1.0	STP/CP	6/12/96	Added offsite treatment as a parallel preferred option for most MLLW treatability groups.
Rev. 2.0	STP/CP	12/9/96	Reduced volume of LA-W928 by approving reclassification of sludges as LLW.
Amendment 1.0	STP/CP	10/30/96	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates.
Rev. 3.0	STP/CP	1/27/97	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates.
Amendment 1.0	FFCO	5/20/97	Modified FFCO Sections IV, V, IX, and X to streamline waste transfers and deletions.
Amendment 2.0	STP/CP	9/4/97	Extended CP Activity 3.1.2B Compliance Date to 12/29/97.
Rev. 4.0	STP/CP	12/29/97	Transferred original volume of LA-W929 from three subgroups to other treatability groups, added treatability groups, and deleted treated items.
Rev. 5.0	STP/CP	12/29/97	Added volumes reported in FY95 and FY96 Annual Updates (and certain other items) to several treatability groups, added Activities and Compliance Dates, added CP Appendices, and deleted treated items.
Rev. 6.0	STP/CP	7/31/98	Added volumes reported in FY97 Annual Update to several treatability groups, added certain Activities and Compliance Dates, adjusted several original inventory volumes, transferred one LA-W929 item to a new treatability group, and deleted treated items.
Rev. 7.0	STP/CP	11/30/98	Removed onsite treatment skids, added STP inventory items, added onsite recycling/re-use and radiological decontamination, added notification for offsite treatability studies.
Rev. 8.0	STP/CP	12/3/98	Extended compliance dates for treatment of MTRU waste.
Rev. 9.0	STP/CP	6/7/00	Added and deleted volumes reported in FY98 Annual Update to certain treatability groups.
Amendment 3.0	STP/CP	8/30/99	Transferred three items to MTRU, transferred one item to subgroup within same treatability group.
Rev. 10.0	STP/CP	12/18/00	Added and deleted volumes reported in FY99 Annual Update to certain treatability groups.
Rev. 11.0	STP/CP	4/18/01	Added and deleted volumes reported in FY00 Annual Update.

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 12.0	STP/CP	3/13/02	Added and deleted volumes reported in FY01 Annual Update. Extended CP Activity 3.1.5A Compliance Date to 8/25/03. Extended CP Activity 3.1.11A to 2/01/04. Removed the requirement to develop treatment technologies and the associated compliance schedule in CP Activity 4.0 and added language specifying that MTRU waste would be shipped offsite to WIPP for disposal.
Rev 13.0	STP/CP	7/14/03	Added and deleted volumes reported in FY02 Annual Update.
Rev 14.0	STP/CP	1/5/05	Added and deleted volumes reported in FY03 Annual Update.
Rev 15.0	STP/CP	8/16/05	Added and deleted volumes reported in FY04 Annual Update.
Rev 16.0	STP/CP	12/12/06	Added and deleted volumes reported in FY05 Annual Update. Extended CP Activity 3.1.8(A) Compliance Date to 8/09/07. Extended CP Activity 3.1.9(A) Compliance Date to 8/09/07. Extended CP Activity 3.1.10(A) Compliance Date to 8/31/07. Extended CP Activity 3.1.11(A) Compliance Date to 12/31/07. Extended CP Activity 3.2(J) Compliance Date to 12/31/07. Reclassified 0.2082 m ³ of LA-W934 High Activity MLLW waste to MTRU waste.
Rev 17.0	STP/CP	6/26/08	Added and deleted volumes reported in FY06 Annual Update. Extended CP Activity 3.1.5(A) Compliance Date to 12/31/08. Extended CPV Activity 3.1.8(A) Compliance Date to 8/28/08. Extended CP Activity 3.1.9(A) Compliance Date to 8/28/08. Extended CP Activity 3.2(J) Compliance Date to 12/31/08.
Rev 18.0	STP/CP	1/9/09	Added and deleted volumes reported in FY07 Annual Update. Extended CP Activity 3.1.8(A) Compliance Date to 8/28/09. Extended CP Activity 3.1.9(A) Compliance Date to 8/28/09. Proposed a new Section 3.3.4 for Treatability Group, LA-W935 "10-100 nCi/g Waste" with new CP Activity 3.3.4 (A) Compliance Date 12/01/13 and CP Activity 3.3.4 (B) Compliance Date 12/31/13. Extended CP Activity 3.2(J) Compliance Date to 12/31/10.
Rev 19.0	STP/CP	2/5/10	Added and deleted volumes reported in FY08 Annual Update. Extended compliance date for CP Activities 3.1.8(A) and 3.1.9(A) to 8/28/12. Proposed a new milestone of 12/31/2010 for 3.1.4(A) and a new milestone 3.3.4(C) for 10-100 nCi/g Waste.
Rev 20.0	STP/CP	11/8/10	Added and deleted volumes reported in FY09 Annual Update. Proposed an extended compliance date for CP Activity 3.2(J).
Rev 21.0	STP/CP	3/21/12	Added and deleted volumes reported in FY10 Annual Update. Proposed new compliance date for CP Activity 3.1.8(A).
Rev 22.0	STP/CP	12/10/12	Added and deleted volumes reported in FY11 Annual Update.
Rev 23.0	STP/CP	TBD	Added and deleted volumes reported in FY12 Annual Update Added Table 4.0-1 Treatability Groups for the Framework Agreement MTRU Waste
Rev 24.0	STP/CP	TBD	Added and deleted volumes reported in FY13 Annual Update Proposed compliance date for CP Activity 3.1.5(A) Proposed compliance date for CP Activity 3.1.8(A) Extended CP Activity 3.2(J) Compliance Date to 6/30/2018 Proposed compliance date for CP Activity 3.3.4 (A and B)

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev 25.0	STP/CP	TBD	Added and deleted volumes reported in FY14 Annual Update On Hold volumes reported shipped in FY14 Annual Update Proposed compliance date for CP Activity 3.1.8(A) Proposed compliance date for CP Activity 3.3.4 (A and B)

REFERENCES

1. *Federal Facility Compliance Order (Los Alamos National Laboratory)*, New Mexico Environment Department (October 4, 1995).
2. Congress, 1996. Text of Public Law 104-201, Congressional Record dated September 23, 1996, Amendment to Public Law 102-579, 1992 *Waste Isolation Pilot Plant Land Withdrawal Act* (106 Stat. 4777).
3. 40 CFR Part 194, Criteria for the Certification of the Waste Isolation Pilot Plant’s Compliance with the 40 CFR Part 191 Disposal Regulations: Certification Decision; Proposed Rule (Federal Register V.62, No. 210, Oct. 30, 1997, pp. 58792–58838).

