

STP Background Volume
Attachment A

Los Alamos National Laboratory

Federal Facility Compliance Order

***Annual Site Treatment Plan Update
for Fiscal Year 2004***

Background Volume

LA-UR-05-1844

March 18, 2005

Los Alamos

NATIONAL LABORATORY

TABLE OF CONTENTS

TABLE OF CONTENTS I

LIST OF TABLES..... II

ACRONYMS.....III

1.0 INTRODUCTION 1

2.0 THE AMOUNT OF EACH COVERED WASTE STORED AT LANL 1

 2.1 MIXED LOW LEVEL WASTE (MLLW) INVENTORY 1

 2.2 MIXED TRANSURANIC (MTRU) INVENTORY SUMMARY 6

3.0 TREATMENT PROGRESS..... 8

 3.1 OFF-SITE TREATMENT 8

 3.2 OFF-SITE RECYCLING 10

 3.3 ON-SITE TREATMENT AND RECYCLING 11

 3.4 ON-SITE LEAD DECONTAMINATION 11

 3.5 TREATABILITY STUDIES 11

 3.6 ADMINISTRATIVE ADJUSTMENTS AND CORRECTIONS..... 11

 3.7 OTHER TYPES OF MIXED WASTE ACTIVITIES 12

4.0 TREATMENT TECHNOLOGY DEVELOPMENT 12

 4.1 TREATMENT TECHNOLOGIES BEING EVALUATED 12

 4.1.1 *Off-Site Commercial Treatment Facilities*..... 12

 4.1.2 *Off-Site DOE Treatment Facilities* 13

5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES 13

6.0 TREATMENT VARIANCES..... 14

 6.1 WIPP NO-MIGRATION VARIANCE PETITION/LANL WITHDRAWAL ACT AMENDMENTS 14

 6.2 OTHER TREATMENT VARIANCE (S) 15

7.0 WIPP FACILITY CAPABILITIES..... 16

 7.1 CHARACTERIZATION CAPABILITIES AT WIPP 16

 7.2 MTRU TREATMENT CAPABILITIES AND PLANS 16

8.0 REFERENCES 17

Appendix A: Reported STP MLLW Inventories 1995-1996

Appendix B: Reported STP MLLW Inventories 1997

Appendix C: Reported STP MLLW Inventories 1998 (through Revision 7.0)

Appendix D: Reported STP MLLW Inventories FY98 (through Revision 9.0)

Appendix E: Reported STP MLLW Inventories FY99 Update and Revision 10.0 Final

Appendix F: Reported STP MLLW Inventories FY00 Updated and Revision 11.0

**FY04 Annual STP Update
Background Volume**

Appendix G Reported STP MLLW Inventories FY01 Updated and Revision 12.0

Appendix H Reported STP MLLW Inventories FY02 Update and Revision 13.0

Appendix I Reported STP MLLW Inventories FY03 Update and Revision 14.0

LIST OF TABLES

TABLE 2.1-1: FY04 MLLW Inventory Summary

TABLE 2.1-2: FY04 MLLW Inventory Detailed Update by Treatability Group

TABLE 2.2-1: FY04 Covered MTRU Inventory Summary

TABLE 2.2-2: FY04 Estimated Covered MTRU Inventory by Treatability Group

TABLE 3.1-1: FY04 STP MLLW Off-Site Shipments for Treatment and/or Disposal

TABLE 3.2-1: FY04 STP MLLW Off-Site Shipments for Recycling

TABLE 3.3-1: FY04 STP MLLW On-Site Treatment

TABLE 3.4-1: FY04 STP MLLW On-Site Lead Decontamination

TABLE 3.5-1: FY04 STP MLLW Treatability Studies

TABLE 3.6-1: Administrative Adjustments and Corrections

1.0 INTRODUCTION

On October 4, 1995, the New Mexico Environment Department (NMED) issued a Federal Facility Compliance Order (FFCO) to the Department of Energy (DOE) and its management and operating contractor, the University of California (UC) Regents. The FFCO required Los Alamos National Laboratory (LANL) to implement the Site Treatment Plan (STP) for the treatment of mixed waste at LANL. The STP was written to address treatment capacities and technologies to treat all of LAN's mixed waste, regardless of the time it was generated. Section VII of the FFCO requires LANL to submit an Annual Site Treatment Plan Update to the NMED each year on or before March 31.

The STP contains two volumes, the Compliance Plan Volume (CPV) and the Background Volume (BV). The FFCO requires the Annual Update bring information in both volumes current to the end of the previous federal fiscal year (FY). The update to the BV provides the following information:

- The amount of each covered waste stored at LANL as follows: 1) the estimated volume in storage at the end of the previous fiscal year; and 2) the estimated volume anticipated to be placed in storage for the next five fiscal years;
- A progress report from the end of the previous federal fiscal year 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; and
- A progress report on characterization and/or treatment capabilities or plans for mixed transuranic waste (MTRU) related to the waste treatment standards, if any, for the DOE Waste Isolation Pilot Plant (WIPP) facility near Carlsbad, New Mexico.

This document constitutes the FY04 update to the BV.

2.0 AMOUNT OF EACH COVERED WASTE STORED AT LANL

2.1 MIXED LOW LEVEL WASTE (MLLW) INVENTORY

During FY04, MLLW covered inventories decreased from approximately 16.39 m³ to 5.61 m³. Table 2.1-1 summarizes changes to the estimated MLLW covered waste inventory for FY04. A total of 1.21 m³ of newly generated waste became covered during FY04 and 7.05 m³ of covered waste was treated, recycled, or disposed during the fiscal year. Each item in the MLLW covered waste inventory is verified during quality control activities for individual shipments for treatment and disposal or recycling. Inconsistencies may exist in treatability groups between the original inventory reported when compared to actual shipments. These inconsistencies are reconciled annually, with the STP update, under Administrative Adjustments.

TABLE 2.1-1: FY04 MLLW Inventory Summary

Contribution	Volume (M3)
Estimated MLLW Inventory Reported in FY04 Annual Update	16.39
Proposed Revision 15.0	
Newly Generated Covered Waste	1.2124
Off-site Treatment	(7.0534)
Off-site Recycle	(0.00)
On-site Decontamination	(0.00)
Treatability Study Use	(0.00)
Administrative Adjustments	(4.9355)
Proposed Deletion under FFCO Section V.B.	0.00
Estimated MLLW Inventory Reported in FY04 Annual Update	5.61

Table 2.1-2 below provides the detailed FY04 covered MLLW inventory changes by treatability group. Newly generated waste is waste that was generated in FY03 and became covered waste in FY04.

TABLE 2.1-2: FY04 MLLW Inventory Detailed Update by Treatability Group

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY03 Annual Update (m3)	Proposed Revision 15.0 (m3)	Comments	FY04 Annual Update (m3)	Projection FY04-FY08 (m3)
3.1.1	LA-W901 IPA Wastes	0	0		0	0
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	0.0001	Newly Generated	0.0001	0
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	0	0		0	0

FY04 Annual STP Update
Background Volume

03/31/2005

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY03 Annual Update (m3)	Proposed Revision 15.0 (m3)	Comments	FY04 Annual Update (m3)	Projection FY04-FY08 (m3)
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	0.2610 (0.2610) 0.0255 (0.0255)	Expedited Shipment to Perma-Fix 1/26/04 Expedited Shipment to Envirocare 4/20/04	0	2
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	0	0		0	0
3.1.6	LA-W914 Corrosive Solutions	0	0.0814 (0.0814) 0.0005	Shipped to WCS 4/15/04 Administrative Adjustment	0.0005	0
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0	0		0	0
3.1.7	LA-W916 Water-Reactive Wastes	0.6	(0.2127) (0.3724) (0.017) (0.0007) 0.0028	Shipped to DSSI 6/24/04 Shipped to MEC 6/24/04 Shipped to Perma-Fix 1/26/04 Shipped to Perma-Fix 6/24/04 Administrative Adjustment	0	0.01
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.3	0		0.3	0

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY03 Annual Update (m3)	Proposed Revision 15.0 (m3)	Comments	FY04 Annual Update (m3)	Projection FY04-FY08 (m3)
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.81	0		0.81	0
3.1.10	LA-W920 Elemental Mercury	0.17	(0.1147) (0.0023)	Shipped to MEC 06/24/04 Administrative Adjustment	0.053	
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	0.2264	Newly Generated	0.2264	0
3.1.11	LA-W910 PCB Wastes with RCRA Components	4.96	(4.0538) (0.1136) 0.0023	Shipped to MEC 09/24/04 Shipped to Envirocare 09/30/04 Administrative Adjustment	0.7949	2.2
3.1.11	LA-W923 Liquid and Solid Oxidizers	0	0.0045 (0.0045)	Shipped to Perma-Fix 1/26/04	0	0
3.2	LA-W924 Lead Wastes – TBD	0	0.2082	Newly Generated	0.2082	
3.2	LA-W925 Mercury Wastes – TBD	2.38	0.3700 (0.3700) (0.0820) (0.3987) 0.0154 0.0943	Expedited Shipment to MEC 1/26/04 Shipped to MEC 1/26/04 Shipped to MEC 6/24/04 Newly Generated Administrative Adjustment	2.0090	1.5
3.2	LA-W926 Compressed Gases – TBD	0	0		0	0
3.2	LA-W927 Biochemical Laboratory Wastes	0	0		0	0

FY04 Annual STP Update
Background Volume

03/31/2005

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY03 Annual Update (m3)	Proposed Revision 15.0 (m3)	Comments	FY04 Annual Update (m3)	Projection FY04-FY08 (m3)
3.2	LA-W928 Dewatered Treatment Sludge	0	0		0	0
3.2	LA-W932 Explosives	0	0		0	
3.2	LA-W933 Lab Packs	0	(0.0002) 0.0199 (0.0199) 0.0002	Shipped to MEC 1/26/04 Shipped to Perma-Fix and DSS1 6/24/04 Administrative adjustment	0	2
3.2	LA-W934 High Activity Waste	7.15	(0.2120) (0.7133) (5.0133)	Shipped to Envirocare 12/8/03 Shipped to Envirocare 9/20/04 Administrative Adjustment	1.2114	0.1
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
3.4	Missing/ nonexistent/ TBV category	0.02	(0.02)	Administrative Adjustment	0	N/A
TOTALS		16.39	(10.7765)		5.6135	

2.2 MIXED TRANSURANIC (MTRU) INVENTORY SUMMARY

During FY04, MTRU covered inventories increased from approximately 4141.06 m³ to 4303.05 m³. Table 2.2-1 summarizes changes to the estimated MTRU covered waste inventory for FY04.

Table 2.2-1: Covered MTRU Inventory Summary

Description	Volume (M3)
Covered MTRU Inventory Reported in FY03	4141.06
New Covered MTRU Waste	161.99
Covered MTRU Inventory At End of FY04	4303.05

The estimated covered MTRU waste inventory at LANL is described by treatability group in Table 2.2-2 below. This table presents the estimated volume of covered MTRU waste for each treatability group, along with an estimate of projected future generation levels for the next 5 calendar years.

TABLE 2.2-2. FY04 Estimated Covered MTRU Inventory by Treatability Group

Waste Treatability Group	Environmental Protection Agency (EPA) Code	Estimated Covered Volume (m3) FY04	Projected Volume (m3) FY04-FY08
Solidified Inorganic and Organic Solids	D006, D007, D008, D009, D019, D021, D039, F001, F002, F003, F005	1571.18	0
Metallic Waste	D004, D006, D007, D008, D009, D019, D040	1566.67	25.0
Glass Waste	D008, D009, D019, D040	2.71	2.0
Non-Combustible Waste	D006, D007, D008, D009, D028, F001, F002, F005	243.26	8.0
Combined Combustible and Non-Combustible Waste	D008, F001, F002	483.10	20.0
Combustible Waste	D007, D008, D019, D040, F001, F002, F005, U080	259.88	20.0
Organic Liquid	D002, D003, D006, D008, D019, D022, F002, F003, F005	0.26	4.0
Cemented Process Sludge	D007, D008, D009, D019, F001, F002, F005	160.10	83.0
Leaded Glovebox Gloves	D008	15.94	5.0
Total		4303.10	

3.0 TREATMENT PROGRESS

3.1 OFF-SITE TREATMENT

During FY04, covered mixed waste streams were shipped for treatment to off-site commercial treatment facilities such as Envirocare of Clive, Utah; Waste Control Specialists (WCS) in Andrews, Texas; DSSI in Kingston, TN; Perma-fix in Gainesville, Florida and Material and Energy Corporation (M&EC) in Oak Ridge, Tennessee.

- **Envirocare**

Envirocare's Clive, Utah site is a Resource Conservation and Recovery Act (RCRA) facility that is licensed by the State of Utah and the Environmental Protection Agency (EPA) to receive, possess, use, treat, and dispose of mixed radioactive materials. Envirocare has a mixed waste treatment facility that incorporates treatment technologies designed to reduce the toxicity of waste materials prior to disposal. Current mixed waste treatment technologies used at Envirocare include stabilization, deactivation, neutralization, reduction/oxidation, chemical fixation, and polymer encapsulation. Disposal of the treated residue at Envirocare occurs after verification that the material meets applicable treatment standards.

- **Perma-Fix**

Perma-Fix of 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 labpaks, thermal treatment of organics, stabilization and solidification of inorganics, and distillation of halogenated organics. The facility also performs chemical treatments such as demulsification /precipitation/flocculation, solvent extraction, chelation, oxidation-reduction, ion exchange, absorption/adsorption, amalgamation, and chemical decontamination.

- **Material and Energy Corporation**

M&EC, located in the East Tennessee Technology Park in Oak Ridge, Tennessee, is a newly permitted treatment facility for low-level radioactive and mixed waste. The facility installed six treatment processes and has the capability of 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. M&EC became operational in September 2001.

- **Waste Control Specialists LLC**

WCS LLC is a Pasadena, Texas-based environmental services firm that manages radioactive and hazardous waste. WCS operates a facility in Andrews County, Texas, that has received permits for the treatment, storage, and disposal of radioactive, hazardous and toxic waste. WCS performs stabilization of waste forms for the purpose of meeting LDR treatment standards. WCS also conducts waste compaction, consolidation, and repackaging activities. The current hazardous waste treatment capabilities include consolidation, repackaging, thermal desorption, and stabilization for a wide variety of RCRA and Toxic Substances Control Act (TSCA) wastes. The TSCA permit allows the direct disposal of PCB contaminated materials and/or treatment, if necessary.

- **Diversified Scientific Services, Inc. (DSSI)**

Diversified Scientific Services, Inc., was acquired by Perma-Fix Environmental Services in September 2000. Waste delivered to DSSI is thermally treated and the residue is disposed of at an appropriately licensed and permitted disposal facility. Through beneficial recovery of thermal energy, the waste that would otherwise be stored produces a useful product (electricity) while accomplishing a substantial waste reduction. DSSI is located in Kingston, Tennessee.

Table 3.1-1 below is a summary of LANL's off-site shipments for treatment and/or disposal of covered MLLW in FY04. A total volume of 7.03 cubic meters of STP waste were shipped off-site for treatment and/or disposal.

TABLE 3.1-1: FY04 STP MLLW Off-Site Shipments for Treatment and/or Disposal

Date Shipped	Destination	MWIR #	Treatability Group	Vol. (m ³)	Shipping Manifest No.	Date NMED Notified	CPV Section
12/10/03	Envirocare	LA-W934	<i>High Activity</i>	0.21	02364	1/23/04	3.2
1/26/04	M&EC	LA-W925	<i>Mercury Wastes TBD</i>	0.45	04023	3/11/04	3.2
	M&EC	LA-W933	<i>Lab Packs</i>	.0002	04023		3.2
1/26/04	Perma-Fix	LA-W916	<i>Water Reactive</i>	0.020	4022	3/11/04	3.1.7
	Perma-Fix	LA-W922	<i>Non-combustible Debris</i>	0.260	4022		3.1.5
	Perma-Fix	LA-W923	<i>Liquid and Solid Oxidizers</i>	0.004	4022		3.1.11
4/15/04	WCS	LA-W914	<i>Corrosive Solutions</i>	0.081	04072	5/26/04	3.1.6
4/20/04	Envirocare	LA-W922	<i>Non-combustible Debris</i>	0.026	04092	5/26/04	3.1.5
6/24/04	M&EC	LA-W920	<i>Elemental Mercury</i>	0.115	04178	8/4/04	3.1.10
6/24/04	DSSI, M&EC, Perma-Fix	LA-W925	<i>Mercury Wastes TBD</i>	0.399	04178	8/4/04	3.2
	DSSI, M&EC, Perma-Fix	LA-W933	<i>Lab Packs</i>	0.02	04180, 04181	8/4/04	3.2
	DSSI, M&EC, Perma-Fix	LA-W916	<i>Water Reactive</i>	0.586	04179, 04180, 04194	8/4/04	3.1.7
9/20/04	Envirocare	LA-W934	<i>High Activity</i>	0.71	04275	10/25/04	3.2
9/24/04	M&EC	LA-W910	<i>PCB Wastes with RCRA components</i>	4.0538	04284	11/4/04	3.1.11
9/29/04	Envirocare	LA-W910	<i>PCB Wastes with RCRA components</i>	0.1136	04294	11/5/04	3.1.11
<i>Total Volume</i>				7.05			

3.2 OFF-SITE RECYCLING

In FY04, DOE and UC conducted no off-site recycling.

TABLE 3.2-1: FY04 STP MLLW Off-Site Shipments for Recycling

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m ³)	Shipping Manifest No.	Date NMED Notified	CPV Section
<i>Total Volume</i>				0.00			

3.3 ON-SITE TREATMENT AND RECYCLING

In FY04, DOE and UC conducted no on-site treatment or recycling.

TABLE 3.3-1: FY04 STP MLLW On-Site Treatment

MWIR #	Treatability Group	Vol (m ³)	Date NMED Notified	CPV Section
<i>Total Volume</i>		0.00		

3.4 ON-SITE LEAD DECONTAMINATION

No LANL covered MLLW was decontaminated on-site during FY04.

3.5 TREATABILITY STUDIES

In FY04, DOE and UC conducted no treatability studies.

TABLE 3.5-1: FY04 STP MLLW Treatability Studies

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m ³)	Shipping Manifest No.	Date NMED Notified	CPV Section
<i>Total Volume</i>				0.00			

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 for the STP Annual Update. These adjustments may result in additions of newly identified covered waste, transfers of waste to other treatability groups, or transfers of waste to the *missing/nonexistent/TBV category* of the STP. A thorough data quality review is conducted

annually to compare shipment notifications with shipping manifests against database updates. The discrepancies in the following table were discovered when preparing the FY04 Annual Update to the STP.

TABLE 3.6-1: Administrative Adjustments and Corrections

MWIR Waste ID	Treatability Group	Volume (m ³)	Comments	CPV Section
LA-W914	<i>Corrosive Solutions</i>	0.0005		3.1.6
LA-W916	<i>Water-Reactive Wastes</i>	0.0028		3.1.7
LA-W920	<i>Elemental Mercury</i>	(0.0023)		3.1.10
LA-W910	<i>PCB Waste with RCRA Components</i>	0.0023		3.1.11
LA-W925	<i>Mercury Wastes TBD</i>	0.0943		3.2
LA-W933	<i>Lab Packs</i>	0.0002		3.2
LA-W934	<i>High Activity</i>	(5.0133)		3.2
None	<i>Missing/Nonexistent/TBD</i>	(0.02)		3.4
	<i>Net Total</i>	(4.94)		

3.7 OTHER TYPES OF MIXED WASTE ACTIVITIES

No other MLLW activities were performed.

4.0 TREATMENT TECHNOLOGY DEVELOPMENT

During FY04, the availability of commercial and federal facility off-site 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 reprioritized to support off-site 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 and UC continue 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 have not been demonstrated on mixed wastes.

4.1.1 Off-Site Commercial Treatment Facilities

M&EC is licensed for a technology to treat mercury-contaminated waste using amalgamation. The treatment consists of mixing proprietary amalgamation agents with the waste until the process analysis shows that the mercury was fully reacted. When the amalgamation is complete, the wastes is stabilized and sampled. The resultant product is a waste form suitable for land

disposal. This mercury treatment process will be evaluated once it becomes available for low-level mixed waste treatment pending approval of a permit modification request.

4.1.2 Off-Site DOE Treatment Facilities

UC staff at LANL will continue to evaluate off-site DOE-operated treatment facilities for their appropriateness to treat LANL STP waste.

Advanced Mixed Waste Treatment Project (AMWTP)

The Advanced Mixed Waste Treatment Project is located at the DOE Idaho National Engineering and Environmental Laboratory (INEEL). A contract was awarded to British Nuclear Fuels Limited, Inc. in December, 1996, for the treatment and supporting services for 65,000 cubic meters of alpha and MTRU waste. The project scope is to treat INEEL alpha and MTRU waste, as well as other DOE mixed wastes in the DOE complex. The AMWTP is expected to include waste vitrification, high force compaction, macroencapsulation, and mercury amalgamation

- **Hanford Site Solid Waste Program**

The Hanford Site, located in Richland, Washington, operates waste treatment, storage and disposal facilities for the various types of radioactive waste. The site has lined RCRA Subtitle C land disposal units for mixed waste (referred to as the Mixed Waste Disposal Units, or Mixed Waste Trenches) and a number of unlined disposal units for non-mixed radioactive waste (referred to as the unlined Low-Level Burial Grounds). The Hanford site does not currently accept mixed waste from other DOE sites pending completion of Hanford's Solid Waste Environmental Impact Statement. However, the facility submitted a permit application in November 2001 but does not anticipate approval before FY04. The facility will be evaluated once it becomes available for mixed low-level waste disposal.

5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES

Funding to implement the LANL STP for mixed waste during FY04 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 during FY98, FY99, FY00, FY01, FY02, FY03 and FY04 for shipment of mixed waste offsite for treatment and disposal at DOE and commercial facilities. Funding during FY04 is also sufficient to meet all compliance dates established in the STP for FY04. Should funding reductions occur that would affect STP compliance dates, the DOE and UC will so notify the NMED to address compliance schedules and activities.

The DOE Assistant Secretary for Environmental Management has initiated a long-range plan for its cleanup and waste management activities, with a goal of accelerating clean-up progress as much as possible before 2006. The plan, *Accelerating Cleanup: Paths to Closure*, includes sections for the LANL site that address MLLW and Transuranic (TRU) wastes that are currently in storage (legacy waste). Current funding targets for waste management in the draft *LANL Accelerating Cleanup: Paths to Closure* plan should allow UC Staff at LANL to continue to meet all compliance dates in the STP, but assume 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.

Beginning in FY99, all newly generated MLLW with a disposal path was planned to be treated and disposed within one year if a treatment/disposal capability was available for the waste. All MLLW placed into storage before FY99 is planned to be treated and disposed before the end of FY04.

6.0 TREATMENT VARIANCES

The RCRA allows certain case-by-case variances from LDR standards. Variances that may be sought under the 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/LANL WITHDRAWAL ACT AMENDMENTS

The WIPP is a DOE facility located near Carlsbad, New Mexico, as a 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 Land Withdrawal Act Amendments of 1996 (LWAA) (PL 104-201, Section 3188) exempts waste designated by the Secretary of Energy for disposal at WIPP from RCRA's LDRs. Following passage of the LWAA, 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 Los Alamos. Other facilities have also shipped non-mixed TRU waste to WIPP. The New Mexico Environment Department issued a hazardous waste permit for WIPP on October 27, 1999, authorizing the DOE to manage, store, and dispose of contact-handled TRU mixed waste at the facility.

6.2 OTHER TREATMENT VARIANCE (S)

No treatment variances were requested or granted in FY04.

7.0 WIPP FACILITY CAPABILITIES

As discussed above, the DOE is planning to dispose of its defense TRU waste, both mixed and nonhazardous, in its deep geologic depository 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 off-site.

7.1 CHARACTERIZATION CAPABILITIES AT WIPP

No capabilities for characterization of TRU waste or hazardous waste constituents regulated by the RCRA were developed at the WIPP facility. During the present fiscal year, DOE is planning to resubmit permit modification requests that would lay the groundwork to accelerate cleanup at sites with small quantities of TRU waste (6,000 drums or less). Under this plan, generator/storage sites would characterize their waste. The DOE originally submitted this permit modification in July 2000. After hearing stakeholder concerns, the DOE withdrew the modification request and has subsequently resubmitted in FY02.

7.2 MTRU TREATMENT CAPABILITIES AND PLANS

No capabilities for treatment of MTRU to meet the LDR standards were developed at the WIPP facility. As described above, the LWAA exempted wastes designated by the Secretary of Energy for disposal at the WIPP from this requirement.

8.0 REFERENCES

1. "Federal Facility Compliance Order (Los Alamos National Laboratory)" New Mexico Environment Department (October 4, 1995)
2. "Hazardous Waste Report for Los Alamos National Laboratory" Volumes I and II, ESH-19, Los Alamos National Laboratory (February 1996)
3. "Transuranic Waste Baseline Inventory Report Revision 3", US Department of Energy, Carlsbad Area Office (December 1995)
4. "AL Mixed Waste Treatment Plan", Los Alamos National Laboratory (March 1994)
5. 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)
6. "Los Alamos National Laboratory Federal Facility Compliance Order Annual Site Treatment Plan Update for Fiscal Year 1995" (March 1996).
7. "Los Alamos National Laboratory Federal Facility Compliance Order Annual Site Treatment Plan Update for Fiscal Year 1996" (March 1997).
8. "Los Alamos National Laboratory Federal Facility Compliance Order Annual Site Treatment Plan Update for Fiscal Year 1997" (March 1998).
9. "Los Alamos National Laboratory Federal Facility Compliance Order Annual Site Treatment Plan Update for Fiscal Year 1998" (March 1999).
10. "Los Alamos National Laboratory Federal Facility Compliance Order Annual Site Treatment Plan Update for Fiscal Year 1999" (December 1999).
11. "Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 10.0" (August 2000).
12. "Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 11.0" (April 2001)
13. 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)
14. "Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 12.0" (March 2002)
15. Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 13.0" (March 2003)
16. Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 14.0" (March 2004)

Appendix A
Reported STP MLLW Inventories 1995-1996

FY01 Annual STP Update
Background Volume
3/31/05

Appendix A – Reported Inventories, 1995 – 1996 (from Table 2-1, LANL FY96 Annual Update)

CPV Sec.	MWIR Waste ID and Treatability Group	CPV Vol. (m ³)	FY95 Changes Covered Waste (m ³) ^a	Explanation for FY95 Change	Covered Vol. End of FY95 (m ³)	FY96 Changes Covered Waste (m ³) ^b	Comments	Covered Vol. End of FY96 (m ³)	Projection FY97-FY01 (m ³)
3.1.1	LA-W901 IPA Wastes	15.89	NC		15.89	Increased 4.07 ^d Decreased 19.98	Waste volume incorrectly reported in original STP inventory Shipped off-site for treatment at commercial or DOE facilities during FY96	0.02	0.0
3.1.1	LA-W902 Scintillation Fluids	2.47	Decreased 2.24	Commercially treated in FY95	0.23	Increased 0.13 ^d Decreased 0.36 ^d	Waste volume incorrectly reported in original STP inventory Shipped off-site for treatment at commercial or DOE facilities during FY96	0.0038 ^e	0.0
3.1.2	LA-W903 Lead Blankets	0.74	NC		0.74	Decreased 0.74	Shipped off-site for treatment at commercial facility during FY96	0.00	0.0
3.1.2	LA-W904 Soil with Heavy Metals	10.53	NC		10.53	Increased 0.11	Waste that was newly generated in FY95 that became covered waste in FY96	10.64	0.5
3.1.2	LA-W905 ER Soils	39.32	NC		39.32	Decreased 39.32	Shipped off-site for treatment or disposal at commercial facility during FY96	0.00	0.0
3.1.3	LA-W906 Aqueous Organic Liquids	1.65	Increased 0.43	Inadvertently omitted from STP	2.08	Increased 3.62	Waste that was newly generated in FY95 that became covered waste in FY96	5.70	18.1
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	28.32	Decreased 0.11 Increased 0.17	Treated in treatability study in FY95 Inadvertently omitted from STP	28.38	Increased 5.24 Decreased 0.11	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for treatment in on-site treatability study during FY96	33.51	26.2
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	7.82	Decreased 0.11 Increased 0.001	Treated in treatability study in FY95 Inadvertently omitted from STP	7.71	Increased 9.58	Waste that was newly generated in FY95 that became covered waste in FY96	17.29	47.9
3.1.5	LA-W912 Combustible Debris	13.82	NC		13.82	Increased 0.28	Waste that was newly generated in FY95 that became covered waste in FY96	14.10	1.4
3.1.5	LA-W921 Activated or Inseparable Lead	15.60	Decreased 7.42 Increased 10.11	Decontaminated and released in FY95 Received from LD200 effort	18.29	Increased 2.29 Decreased 12.45	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for off-site treatment at commercial facility during FY96	8.13	11.5
3.1.5	LA-W922 Noncombustible Debris	5.62	Decreased 0.0002 Increased 1.25	Treated in treatability study in FY95 Inadvertently	6.87	Increased 21.04	Waste that was newly generated in FY95 that became covered waste in FY96	27.91	105.2

FY01 Annual STP Update
Background Volume
3/31/05

CPV Sec.	MWIR Waste ID and Treatability Group	CPV Vol. (m ³)	FY95 Changes Covered Waste (m ³) ^a	Explanation for FY95 Change	Covered Vol. End of FY95 (m ³)	FY96 Changes Covered Waste (m ³) ^b	Comments	Covered Vol. End of FY96 (m ³)	Projection FY97-FY01 (m ³)
				omitted from STP					
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	1.85	NC		1.85	Increased 0.15 Decreased 0.030 Decreased 0.32	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for treatment in on-site treatability study during FY95 Shipped for treatment in on-site treatability study during FY96	1.65	0.8
3.1.6	LA-W914 Corrosive Solutions	1.36	Increased 0.04	Inadvertently omitted from STP	1.40	Increased 0.08 Decreased 0.67	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for treatment in on-site treatability study during FY96	0.81	0.4
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.13	Decreased 0.0003 Increased 0.02	Treated in treatability study in FY95 Inadvertently omitted from STP	0.15	Increased 0.02 Decreased 0.0002 Decreased 0.0031	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for treatment in on-site treatability study during FY95 Shipped for treatment in on-site treatability study during FY96	0.17	0.1
3.1.7	LA-W916 Water-Reactive Wastes	6.03	Increased 0.02	Inadvertently omitted from STP	6.05	Increased 0.01	Waste that was newly generated in FY95 that became covered waste in FY96	6.06	0.05
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.35	NC		0.35	NC		0.35	0.0
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.08	NC		0.08	Increased 0.01	Waste that was newly generated in FY95 that became covered waste in FY96	0.09	0.0
3.1.10	LA-W920 Elemental Mercury	0.50	NC		0.50	Increased 0.02	Waste that was newly generated in FY95 that became covered waste in FY96	0.52	0.1
3.2.1	LA-W907 Halogenated Organic Liquids	16.58	Increased 0.04	Inadvertently omitted from STP	16.62	Increased 0.45 Decreased 0.0025	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for treatment in on-site treatability study during FY96	17.07	2.3
3.2.1	LA-W908 Nonhalogenated Organic Liquids	14.34	Increased 0.08	Inadvertently omitted from STP	14.42	Increased 2.83	Waste that was newly generated in FY95 that became covered waste in FY96	17.25	14.2
3.2.1	LA-W909 Bulk Oils	3.75	NC		3.75	Increased 2.28	Waste that was newly generated in FY95 that became covered waste in FY96	6.03	11.4
3.2.1	LA-W910	0.74	NC		0.74	NC		0.74	0.0

**FY01 Annual STP Update
Background Volume
3/31/05**

CPV Sec.	MWIR Waste ID and Treatability Group	CPV Vol. (m ³)	FY95 Changes Covered Waste (m ³) ^a	Explanation for FY95 Change	Covered Vol. End of FY95 (m ³)	FY96 Changes Covered Waste (m ³) ^b	Comments	Covered Vol. End of FY96 (m ³)	Projection FY97-FY01 (m ³)
	PCB Wastes with RCRA Components								
3.2.1	LA-W923 Inorganic Solid Oxidizers	0.20	Increased 0.32	Inadvertently omitted from STP	0.52	Decreased 0.087	Shipped for treatment in off-site treatability study during FY96	0.43	0.2
3.3	LA-W924 Lead Wastes - TBD	51.44	Decreased 11.28	Decontaminated and released in FY95	40.16	NC		40.16	0.0
3.3	LA-W925 Mercury Wastes - TBD	18.30	NC		18.30	Increased 1.52	Waste that was newly generated in FY95 that became covered waste in FY96	19.82	7.6
3.3	LA-W926 Compressed Gases - TBD	1.25	NC		1.25	NC		1.25	0.0
3.3	LA-W927 Biochemical Laboratory Wastes	1.34	NC		1.34	NC		1.34	0.0
3.3	LA-W928 Dewatered Treatment Sludge	268.17	NC		268.17	NC		268.17	0.0
3.4.1	LA-W930 Lead for Surface Decontamination	56.20	Decreased 14.64 Increased 22.50	Decontaminated and released in FY95 Received from LD200 effort	64.06	Increased 1.25	Waste that was newly generated in FY95 that became covered waste in FY96	65.31	6.3
3.4.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	14.24	Decreased 0.002 Increased 0.00002	Decontaminated and released in FY95 Inadvertently omitted from STP	14.24	Decreased 0.00094 Decreased 0.0029	Shipped for treatment in on-site treatability study during FY95 Shipped for treatment in on-site treatability study during FY96	14.24	0.0
None ^d	LA-W931 Lead Requiring Sorting	9.97	Decreased 4.58 Increased 5.73	Decontaminated and released in FY95 Received from LD200 effort	11.12	Increased 0.44 Decreased 6.36	Waste that was newly generated in FY95 that became covered waste in FY96 Shipped for off-site treatment at commercial facility during FY96	5.20	2.2
None ^e	LA-W932 Explosives	0.0	NC			NC		0.0	0.0
None ^e	LA-W933 Lab Packs	0.0	NC			Increased 0.13	Waste that was newly generated in FY95 that became covered waste in FY96	0.13	0.8

**Appendix B
Reported STP MLLW Inventories 1997**

**FY01 Annual STP Update
Background Volume
03/31/05**

Table 2-1. FY97 MLLW Inventory Update Summary^a

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m ³)	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m ³)	Projection FY98-FY02 (m ³)
			Revision 5 (Other Changes) (m ³)	Revision 6 (3/98 FY97 Annual Update Changes) ^b (m ³)			
3.1.1	LA-W901 IPA Wastes	0.02	Decreased 0.005 ^{e,m}	Decreased 0.02	Shipped off-site for treatment at commercial facility during FY97	0.00	0.0
3.1.1	LA-W902 Scintillation Fluids	0.0038 ^d		Decreased 0.0038	Shipped off-site for treatment at commercial facility during FY97	0.00	0.0
3.1.2	LA-W903 Lead Blankets	0.00				0.00	0.0
3.1.2	LA-W904 Soil with Heavy Metals	10.64	Decreased 0.2082 ^{e,m} 0.1047 ⁿ	Decreased 0.62 Decreased 0.42 Decreased 8.91 Decreased 0.14	Transferred to LA-W910 (approved by NMED 9/18/97) Transferred to LA-W911 (approved by NMED 9/18/97) Shipped off-site for treatment at commercial or DOE facilities during FY97 Shipped off-site for treatment at commercial or DOE facilities during FY97	0.55	0.00
3.1.2	LA-W905 ER Soils	0.00				0.00	0.0
3.1.3	LA-W906 Aqueous Organic Liquids	5.70	Increased 0.0005 ^{e,m} Increased 4.83 ^f 4.26 ⁿ	Increased 5.74	Waste that was newly generated in FY96 that became covered waste in FY97	15.70	50.0
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	33.51	Increased 1.46 ^f	Increased 0.0038 Increased 0.42	Waste that was newly generated in FY96 that became covered waste in FY97 Transferred from LA-W904 (approved by NMED 9/18/97)	35.39	7.3
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	17.29	Increased 0.95 ^f	Increased 8.58 Increased 0.11	Waste that was newly generated in FY96 that became covered waste in FY97 Unused Treatability Study sample returned from off-site facility in FY97	26.93	47.6

FY01 Annual STP Update
Background Volume
03/31/05

Waste Management
 Department
 201/200

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m ³)	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m ³)	Projection FY98-FY02 (m ³)
			Revision 5 (Other Changes) (m ³)	Revision 6 (3/98 FY97 Annual Update Changes) ^b (m ³)			
3.1.5	LA-W912 Combustible Debris	14.10		Increased 0.32	Waste that was newly generated in FY96 that became covered waste in FY97	14.42	1.6
3.1.5	LA-W921 Activated or Inseparable Lead	8.13		Increased 1.58 Decreased 0.89 Decreased 1.72	Waste that was newly generated in FY96 that became covered waste in FY97 Shipped for off-site treatment at commercial facility during FY97 Shipped off-site for recycle at commercial facility in FY97	7.10	7.9
3.1.5	LA-W922 Noncombustible Debris	27.91		Increased 9.25 Decreased 2.915 Decreased 0.62	Waste that was newly generated in FY96 that became covered waste in FY97 Shipped for off-site treatment at commercial facility during FY97 Shipped for off-site treatment at commercial facility during FY97	33.63	46.2
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	1.65		Increased 1.02	Waste that was newly generated in FY96 that became covered waste in FY97	2.67	5.1
3.1.6	LA-W914 Corrosive Solutions	0.81		Increased 0.04	Waste that was newly generated in FY96 that became covered waste in FY97	0.85	0.2
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.17				0.17	0.0
3.1.7	LA-W916 Water-Reactive Wastes	6.06		Increased 0.68	Waste that was newly generated in FY96 that became covered waste in FY97	6.74	3.4
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.35				0.35	0.0

**FY01 Annual STP Update
Background Volume
03/31/05**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m ³)	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m ³)	Projection FY98-FY02 (m ³)
			Revision 5 (Other Changes) (m ³)	Revision 6 (3/98 FY97 Annual Update Changes) ^b (m ³)			
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.09		Increased 0.0002	Waste that was newly generated in FY96 that became covered waste in FY97	0.09	0.001
3.1.10	LA-W920 Elemental Mercury	0.52		Increased 0.12	Waste that was newly generated in FY96 that became covered waste in FY97	0.64	0.6
3.2.1	LA-W907 Halogenated Organic Liquids	17.07		Increased 0.15 Decreased 0.0076	Waste that was newly generated in FY96 that became covered waste in FY97 Shipped for off-site treatment at commercial facility during FY97	17.21	0.8
3.2.1	LA-W908 Nonhalogenated Organic Liquids	17.25		Increased 0.09 Increased 0.076 Decreased 0.49 Decreased 0.11	Waste that was newly generated in FY96 that became covered waste in FY97 Correction to volume reported in original STP inventory which was in error Shipped for off-site treatment at commercial facility during FY97 Correction to volume reported in original STP inventory which was in error	16.82	0.4
3.2.1	LA-W909 Bulk Oils	6.03		Increased 0.05 Increased 0.47 Decreased 2.22	Waste that was newly generated in FY96 that became covered waste in FY97 Correction to volume reported in original STP inventory which was in error Shipped for off-site treatment at commercial facility during FY97	4.33	0.2
3.2.1	LA-W910 PCB Wastes with RCRA Components	0.74		Increased 1.39 Increased 0.62	Waste that was newly generated in FY96 that became covered waste in FY97 Transferred from LA-W904 (Approved by NMED 9/18/97)	2.75	0.4
3.2.1	LA-W923 Liquid and Solid Oxidizers	0.43		Increased 0.795	Waste that was newly generated in FY96 that became covered waste in FY97	1.23	4.0

FY01 Annual STP Update
Background Volume
03/31/05

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m ³)	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m ³)	Projection FY98-FY02 (m ³)
			Revision 5 (Other Changes) (m ³)	Revision 6 (3/98 FY97 Annual Update Changes) ^b (m ³)			
3.3	LA-W924 Lead Wastes - TBD	40.16				40.16	0.0
3.3	LA-W925 Mercury Wastes - TBD	19.82		Increased 0.67	Waste that was newly generated in FY96 that became covered waste in FY97	20.49	3.4
3.3	LA-W926 Compressed Gases - TBD	1.25				1.25	0.0
3.3	LA-W927 Biochemical Laboratory Wastes	1.34				1.34	0.0
3.3	LA-W928 Dewatered Treatment Sludge	268.17		Decreased 255.46	Approved by NMED 9/18/97 as Rev. 2.0 to the STP	12.71	0.0
3.4.1	LA-W930 Lead for Surface Decontamination	65.31	Decreased 8.34 ^a m ³	Increased 12.06 Decreased 0.32 Decreased 0.97 Decreased 1.04 Decreased 5.66	Waste that was newly generated in FY96 that became covered waste in FY97 Shipped for decontamination and recycle at on-site facility in F Y97 Shipped for decontamination and recycle at on-site facility in F Y97 Shipped for decontamination and recycle at on-site facility in F Y97 Shipped for decontamination and recycle at on-site facility in F Y97	69.38	60.3
3.4.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	14.24	Decreased 0.26 ^b m ³	Decreased 0.0076	Shipped for off-site treatment at commercial facility during FY97	14.23	0.0
None ^c	LA-W931 Lead Requiring Sorting	5.20		Increased 0.64 Decreased 4.78	Waste that was newly generated in FY96 that became covered waste in FY97 Shipped for off-site treatment at commercial facility during FY97	1.06	3.2