

*Los Alamos National Laboratory*

*Federal Facility Compliance Order*

*Annual Site Treatment Plan Update  
for Fiscal Year 2008 - Revision 2*

*LA-UR-09-06263*

*September 30, 2009*

**Los Alamos**  
NATIONAL LABORATORY



**TABLE OF CONTENTS**

**LIST OF TABLES**..... v  
**ACRONYMS** ..... vi

**PART I. BACKGROUND UPDATE** ..... 1  
**1.0 INTRODUCTION** ..... 1  
**2.0 AMOUNT OF EACH COVERED WASTE STORED AT LANL** ..... 2  
     2.1 *MIXED LOW LEVEL WASTE (MLLW) INVENTORY*..... 2  
     2.2 *MIXED TRANSURANIC (MTRU) INVENTORY SUMMARY* ..... 6  
**3.0 TREATMENT PROGRESS** ..... 23  
     3.1 *OFF-SITE TREATMENT* ..... 23  
     3.2 *OFF-SITE RECYCLING*..... 24  
     3.3 *ON-SITE TREATMENT AND RECYCLING* ..... 24  
     3.4 *ON-SITE LEAD DECONTAMINATION*..... 25  
     3.5 *TREATABILITY STUDIES*..... 25  
     3.6 *ADMINISTRATIVE ADJUSTMENTS AND CORRECTIONS* ..... 25  
         3.6.1 *ADJUSTMENTS TO MLLW INVENTORY* ..... 25  
         3.6.2 *ADJUSTMENTS TO MTRU INVENTORY*..... 26  
     3.7 *OTHER TYPES OF MIXED WASTE ACTIVITIES* ..... 28  
**4.0 TREATMENT TECHNOLOGY DEVELOPMENT** ..... 28  
     4.1 *TREATMENT TECHNOLOGIES BEING EVALUATED*..... 29  
         4.1.1 *OFF-SITE COMMERCIAL TREATMENT FACILITIES* ..... 29  
         4.1.2 *OFF-SITE DOE TREATMENT FACILITIES*..... 29  
**5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES** ..... 29  
**6.0 TREATMENT VARIANCES**..... 30  
     6.1 *WIPP NO-MIGRATION VARIANCE PETITION/LAND WITHDRAWAL ACT AMENDMENTS* ..... 30  
     6.2 *OTHER TREATMENT VARIANCE (S)* ..... 30  
**7.0 WIPP FACILITY CAPABILITIES**..... 31  
     7.1 *CHARACTERIZATION CAPABILITIES AT WIPP*..... 31  
     7.2 *MTRU TREATMENT CAPABILITIES AND PLANS*..... 31  
**8.0 REFERENCES** ..... 31  
**PART I APPENDICES** ..... 33  
     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  
     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  
     APPENDIX J: REPORTED STP MLLW INVENTORIES FY04 UPDATE AND REVISION 15.0  
     APPENDIX K: REPORTED STP MLLW INVENTORIES FY05 UPDATE AND REVISION 16.0  
     APPENDIX L: REPORTED STP MLLW INVENTORIES FY06 UPDATE

AND REVISION 17.0  
APPENDIX M: REPORTED STP MLLW INVENTORIES FY07 UPDATE  
AND REVISION 18.0

<b>PART II. COMPLIANCE PLAN UPDATE .....</b>	<b>121</b>
<b>1.0 INTRODUCTION.....</b>	<b>121</b>
<b>2.0 CHANGES AND REVISIONS TO THE CP OCCURRING SINCE THE PREVIOUS ANNUAL UPDATE.....</b>	<b>122</b>
<b>2.1 ACTIVITIES COMPLETED DURING FY08 .....</b>	<b>122</b>
<b>2.2 EXPEDITED SHIPMENT LETTERS .....</b>	<b>122</b>
<b>2.3 CORRESPONDENCE .....</b>	<b>123</b>
<b>3.0 DESCRIPTION OF WASTE DELETED IN ACCORDANCE WITH THE REQUIREMENTS OF FFCO SECTION IX (DELETION OF WASTE).....</b>	<b>128</b>
<b>4.0 DOCUMENTATION OF NEW COVERED WASTE IN ACCORDANCE WITH THE REQUIREMENTS IN FFCO SECTION VIII (ADDITION OF NEW COVERED WASTE).....</b>	<b>128</b>
<b>5.0 PROPOSED CHANGES TO THE COMPLIANCE PLAN SCHEDULE.....</b>	<b>128</b>
<b>5.1 COMPRESSED GASES REQUIRING SCRUBBING, TREATABILITY GROUP LA-W917 (STP SECTION 3.1.8).....</b>	<b>130</b>
<b>5.2 COMPRESSED GASES REQUIRING OXIDATION, TREATABILITY GROUP LA-W918 (STP SECTION 3.1.9).....</b>	<b>133</b>
<b>6.0 FFCO SECTION X.C.2.A: DETAILED DESCRIPTION OF THE PROPOSED REVISION.....</b>	<b>135</b>
<b>6.1 ADDITION OF NEW COVERED WASTE .....</b>	<b>136</b>
6.1.1 MLLW WASTE ADDITIONS .....	136
6.1.2 MIXED TRANSURANIC (MTRU) WASTE ADDITIONS.....	136
<b>6.2 DELETION OF COVERED WASTE .....</b>	<b>136</b>
6.2.1 DELETION OF MLLW WASTE.....	137
6.2.2 DELETION OF MTRU WASTE.....	137
6.2.3 OTHER DELETIONS OF FY08 WASTE .....	138
<b>6.3 ADJUSTMENTS TO THE ORIGINAL (OCTOBER 4, 1995) MLLW STP COVERED WASTE INVENTORY .....</b>	<b>138</b>
<b>6.4 ADJUSTMENTS TO MTRU WASTE INVENTORY.....</b>	<b>139</b>
<b>6.5 EXTENSION OF MILESTONE ACTIVITY DATES.....</b>	<b>142</b>
<b>6.6 ADDITIONAL REVISIONS.....</b>	<b>143</b>
<b>7.0 FFCO SECTION X.C.2.B (RATIONALE FOR THE PROPOSED REVISION) .....</b>	<b>143</b>
<b>7.1 EXTENSION OF PROPOSED MILESTONES.....</b>	<b>143</b>
<b>7.2 ADDITION OF NEWLY COVERED WASTE.....</b>	<b>143</b>
<b>7.3 DELETION OF COVERED WASTE .....</b>	<b>144</b>
<b>7.4 ADJUSTMENTS TO THE ORIGINAL (OCTOBER 4, 1995) STP COVERED WASTE INVENTORY .....</b>	<b>144</b>
<b>8.0 FFCO SECTION X.C.2.C: ANTICIPATED LENGTH OF ANY DELAY IN PERFORMANCE .....</b>	<b>144</b>
<b>9.0 FFCO SECTION X.C.2.D: PLAN AND SCHEDULE FOR IMPLEMENTING ALL REASONABLE MEASURES.....</b>	<b>144</b>
<b>BIBLIOGRAPHY .....</b>	<b>144</b>
<b>PART III. COMPLIANCE PLAN – PROPOSED REVISION 19.....</b>	<b>147</b>
<b>1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN .....</b>	<b>147</b>
<b>1.1 INTRODUCTION.....</b>	<b>147</b>
<b>1.2 CONTENTS.....</b>	<b>148</b>
<b>1.3 STP REVISIONS AND AMENDMENTS.....</b>	<b>148</b>

<b>2.0 COMPLIANCE SCHEDULES .....</b>	<b>148</b>
<b>2.1 CATEGORIES OF ACTIVITIES FOR COMPLIANCE DATES .....</b>	<b>148</b>
2.1.1 <i>PLANS WHERE TREATMENT TECHNOLOGY EXISTS.....</i>	149
2.1.2 <i>PLANS WHERE TECHNOLOGY MUST BE DEVELOPED .....</i>	149
<b>2.2 PRIMARY PREFERRED TREATMENT.....</b>	<b>149</b>
<b>2.3 PLANS FOR MIXED WASTE TO BE SHIPPED OFF-SITE FOR TREATMENT. 150</b>	
2.3.1 <i>SPECIFIC SITE REQUIREMENTS FOR NON-COMMERCIAL TREATMENT FACILITIES.....</i>	150
<b>2.4 REQUIREMENTS PERTAINING TO RADIONUCLIDE SEPARATION .....</b>	<b>152</b>
<b>2.5 PLANS RELATED TO OTHER MIXED WASTE ACTIVITIES.....</b>	<b>153</b>
<b>2.6 RECYCLING/RE-USE .....</b>	<b>153</b>
<b>2.7 ON-SITE RADIOLOGICAL DECONTAMINATION .....</b>	<b>154</b>
<b>3.0 MIXED LOW-LEVEL WASTE STREAMS .....</b>	<b>155</b>
<b>3.1 MIXED WASTE STREAMS. ....</b>	<b>156</b>
3.1.1 <i>IPA WASTES AND SCINTILLATION FLUIDS .....</i>	156
3.1.2 <i>LEAD BLANKETS, SOIL WITH HEAVY METALS, ENVIRONMENTAL RESTORATION (ER) SOILS.....</i>	157
3.1.3 <i>AQUEOUS ORGANIC LIQUIDS .....</i>	158
3.1.4 <i>ORGANIC-CONTAMINATED COMBUSTIBLE SOLIDS.....</i>	160
3.1.5 <i>COMBUSTIBLE DEBRIS, ACTIVATED OR INSEPARABLE LEAD, NONCOMBUSTIBLE DEBRIS.....</i>	161
3.1.6 <i>AQUEOUS WASTES WITH HEAVY METALS, CORROSIVE SOLUTIONS, AQUEOUS CYANIDES, NITRATES. CHROMATES, AND ARSENATES.....</i>	163
3.1.7 <i>WATER-REACTIVE METALS .....</i>	164
3.1.8 <i>COMPRESSED GASES REQUIRING SCRUBBING.....</i>	166
3.1.9 <i>COMPRESSED GASES REQUIRING OXIDATION .....</i>	166
3.1.10 <i>ELEMENTAL MERCURY.....</i>	167
3.1.11 <i>HALOGENATED ORGANIC LIQUIDS, NONHALOGENATED ORGANIC LIQUIDS, BULK OILS, PCB WASTES WITH RCRA COMPONENTS, LIQUID AND SOLID OXIDIZERS.....</i>	169
<b>3.2 MIXED WASTE REQUIRING FURTHER CHARACTERIZATION OR FOR WHICH TECHNOLOGY ASSESSMENT HAS NOT BEEN DONE .....</b>	<b>171</b>
<b>3.3 PLANS FOR OTHER TYPES OF ACTIVITIES .....</b>	<b>174</b>
3.3.1 <i>LEAD DECONTAMINATION.....</i>	174
3.3.2 <i>SORTING, SURVEYING, AND DECONTAMINATION .....</i>	177
3.3.3 <i>LEAD REQUIRING SORTING.....</i>	181
3.3.4 <i>10–100 NCI/G WASTE .....</i>	182
<b>3.4 MANAGEMENT OF "MISSING" ITEMS.....</b>	<b>183</b>
<b>4.0 MIXED TRANSURANIC WASTE.....</b>	<b>186</b>
<b>PART III APPENDIX A. HISTORY OF STP REVISIONS AND AMENDMENT.....</b>	<b>187</b>

**LIST OF TABLES**

TABLE 2.1-1: FY08 MLLW Inventory Summary.....	2
TABLE 2.1-2: FY08 MLLW Inventory Detailed Update by Treatability Group.....	3
TABLE 2.2-1: Covered MTRU Inventory Summary .....	7
TABLE 2.2-2: Administrative Adjustments to MTRU Inventory for FY07 .....	11
TABLE 2.2-3: FY08 Estimated TA-54 Covered MTRU Inventory (by Treatability Group).....	12
TABLE 3.1-1: FY08 STP MLLW Off-Site Shipments for Treatment and/or Disposal .....	24
TABLE 3.2-1: FY08 STP MLLW Off-Site Shipments for Recycling .....	24
TABLE 3.3-1 FY08 STP MLLW On-Site Treatment .....	24
TABLE 3.5-1: FY08 STP MLLW Treatability Studies .....	25
TABLE 3.6-1: Administrative Adjustments and Corrections to MLLW Waste .....	26
TABLE 3.6-2: Administrative Adjustments to MTRU Inventory .....	26

***ACRONYMS***

AK	Acceptable Knowledge
CCA	Compliance Certification Application
CCP	Central Characterization Project
40 CFR	Title 40 of the Code of Federal Regulations
CMR	Chemistry and Metallurgy Research
CP	Compliance Plan
CPV	Compliance Plan Volume
DOE	Department of Energy
DSSI	Diversified Scientific Services, Inc.
EPA	Environmental Protection Agency
ER	Environmental Restoration
ESI	EnergySolutions, Inc.
FFCA	Federal Facility Compliance Act
FFCO	Federal Facility Compliance Order
FR	Federal Register
FY	Fiscal Year
HWA	Hazardous Waste Act
IES	Integrated Environmental Services
INL	Idaho National Laboratory
LANL	Los Alamos National Laboratory
LANS	Los Alamos National Security, LLC
LASO	Los Alamos Site Office
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
NNSA	National Nuclear Security Administration
NMED	New Mexico Environment Department
NFS	Nuclear Fuels Services
NRC	Nuclear Regulatory Commission
ORR	Oak Ridge Reservation
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
STP	Site Treatment Plan
TA	Technical Area
TBD	To be determined
TBV	To be verified
TRU	Transuranic
UC	University of California
WCS	Waste Control Specialists
WIPP	Waste Isolation Pilot Plant

## **PART I. BACKGROUND UPDATE**

### ***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 then 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 LANL'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. On June 1, 2006, Los Alamos National Security, LLC (LANS) replaced UC as operating contractor of LANL at which time LANS assumed responsibility for compliance with the FFCO.

The FFCO requires the Annual Update to bring information in the Background (Part I) and the Compliance Plan (Part II) current to the end of the previous federal fiscal year (FY). The FY08 update to Part I 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 FY; and 2) the estimated volume 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; and
- 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 Background Volume Update is Part I of this annual update. Part II contains the update to the Compliance Plan—changes and revisions occurring since the FY07 Annual Update and proposed revisions and amendments to the Compliance Plan. Part III contains the proposed Compliance Plan Revision 19.

**2.0 AMOUNT OF EACH COVERED WASTE STORED AT LANL**

**2.1 MIXED LOW LEVEL WASTE (MLLW) INVENTORY**

During FY08, STP-covered MLLW inventories increased slightly from approximately 56 m<sup>3</sup> to 59 m<sup>3</sup>. Table 2.1-1 summarizes changes to the estimated STP-covered MLLW inventory for FY08. A total of 1.2860 m<sup>3</sup> of newly generated waste became covered during FY08 and 31.1375 m<sup>3</sup> of covered MLLW waste was treated, recycled, or disposed of during the FY. Each item in the STP-covered MLLW 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: FY08 MLLW Inventory Summary<sup>1</sup>**

Contribution	Volume (m <sup>3</sup> )
<b>Estimated MLLW Inventory Reported in FY07 Annual Update</b>	<b>56.02<sup>2</sup></b>
<b>Proposed Revision 19.0</b>	
New Covered Waste (LA-W934) <sup>3</sup>	1.2860
Off-site Treatment	-31.1375
• -0.0015 – LA-W922	
• -0.0009 – LA-W908	
• -0.2082 – LA-W925	
• -14.8955 – LA-W934	
• -16.0314 – LA-W935	
Off-site Recycle	NA <sup>4</sup>
On-site Decontamination	NA
Treatability Study Use	NA
Administrative Adjustments	32.3835
<ul style="list-style-type: none"> <li>• 0.2082 m<sup>3</sup> - reclassified as LA-W919 from Chemistry and Metallurgy Research (CMR)/Technical Area (TA) 55 MTRU</li> <li>• 7.8167 m<sup>3</sup> - reclassified as LA-W934 from MTRU (<i>Cemented Sludge</i>)</li> <li>• 7.0788 m<sup>3</sup> - increased LA-W934 inventory through reclassification of waste from LA-W935</li> <li>• 23.5266 m<sup>3</sup> - reclassified as LA-W935 from MTRU (<i>Cemented Sludge</i>)</li> <li>• 0.8328 m<sup>3</sup> - returned to LA-W935 inventory in FY08 (not shipped)</li> <li>• -7.0788 m<sup>3</sup> - reduced LA-W935 inventory through reclassification of waste to LA-W934</li> <li>• -0.0008 m<sup>3</sup> - adjustment for rounding total FY07 inventory in Table 2.1-1 in the FY07 Annual Update to four decimal places<sup>5</sup></li> </ul>	

<b>Contribution</b>	<b>Volume (m<sup>3</sup>)</b>
<b>Proposed Deletion under FFCO Section V.B.</b>	NA
<b>Estimated MLLW Inventory Reported in FY08 Annual Update</b>	<b>58.5520</b>

<sup>1</sup> MLLW volumes are calculated using the conversion: 55 gallon container = 0.2082 m<sup>3</sup>

<sup>2</sup> Actual FY07 waste volume as reported in the FY07 Annual Update, Table 2.1-2, is 56.0192 m<sup>3</sup>; in the FY07 Update, the total from Table 2.1-2 was rounded to 56.02 m<sup>3</sup> for inclusion in Table 2.1-1

<sup>3</sup> Same as Table 2-1.2

<sup>4</sup> NA = No Activity

<sup>5</sup> This adjustment is applicable only to Table 2.1-1 because the FY07 inventory volume in Table 2.2-2 is already shown to four decimal places.

Table 2.1-2 below provides the detailed changes to the FY08 covered MLLW inventory by treatability group.

**TABLE 2.1-2: FY08 MLLW Inventory Detailed Update by Treatability Group**

<b>CP* Sec.</b>	<b>MWIR* Waste ID and Treatability Group/Category</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 19.0 (m<sup>3</sup>)<sup>1</sup></b>	<b>Comments<sup>2</sup></b>	<b>FY08 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY09-FY13 (m<sup>3</sup>)</b>
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	0.2082	Administrative Adjustment: reclassified from Covered MTRU Inventory at CMR/TA-55 to MLLW Inventory LA-W919	0.2082	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

**FY08 Annual Update – Revision 2**  
**Site Treatment Plan**  
**Federal Facility Compliance Order**

**September 30, 2009**

<b>CP* Sec.</b>	<b>MWIR* Waste ID and Treatability Group/Category</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 19.0 (m<sup>3</sup>)<sup>1</sup></b>	<b>Comments<sup>2</sup></b>	<b>FY08 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY09-FY13 (m<sup>3</sup>)</b>
3.1.5	LA-W922 <i>Noncombustible Debris</i>	0.0015	-0.0015	Shipped to Perma-Fix (FL) – 9/22/2008	0	2.0000
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	
3.1.8	LA-W917 <i>Compressed Gases Requiring Scrubbing</i>	0.0080	0		0.0080	0
3.1.9	LA-W918 <i>Compressed Gases Requiring Oxidation</i>	0.0602	0		0.0602	0
3.1.10	LA-W920 <i>Elemental Mercury</i>	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>	0.0009	-0.0009	Shipped to Perma-Fix (FL) – 9/22/2008	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	
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	
3.2	LA-W925 <i>Mercury Wastes – TBD</i>	0.6814	-0.2082	Shipped to M&EC – 3/17/2008	0.4732	1.5000

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CP* Sec.	MWIR* Waste ID and Treatability Group/Category	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> ) <sup>1</sup>	Comments <sup>2</sup>	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
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	
3.2	LA-W933 <i>Lab Packs</i>	0	0		0	2.0000
3.2	LA-W934 <i>High Activity Waste<sup>3</sup></i>	42.1506	7.8167 1.2860 7.0788 -14.8955 <sup>5</sup>	Administrative Adjustment (reclassified from Covered MTRU Inventory) New Covered <sup>4</sup>  Administrative Adjustment (reclassified from LA-W935 to LA- W934) Shipped to M&EC - 8/4/2008 (7.8167 m <sup>3</sup> reclassified from MTRU and 7.0788 reclassified from LA-W935; no existing waste shipped)	43.4366	0.1000
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<sup>3</sup></i>	13.1166	23.5266	Administrative Adjustment (reclassified from LA-W935 from Covered MTRU Inventory)	14.3658	251.0000
			-16.0314	Shipped to M&EC -4/14/2008 (11.6592 m <sup>3</sup> existing waste and 4.3722 m <sup>3</sup> waste reclassified from covered MTRU)		
			-7.0788	Administrative Adjustment (Decreased inventory through reclassification of waste as LA-W934 from LA-W935)		
			0.8328	Administrative Adjustment (Waste scheduled to ship in FY07 was returned to inventory in FY08)		
3.4	<i>Missing/ nonexistent/ TBV category</i>	0	0		0	N/A

CP* Sec.	MWIR* Waste ID and Treatability Group/Category	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> ) <sup>1</sup>	Comments <sup>2</sup>	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
	<b>TOTALS</b>	<b>56.0192<sup>6</sup></b>			<b>58.5520</b>	

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

<sup>1</sup> MLLW waste volumes are calculated using the conversion: 55 gallon container = 0.2082 m<sup>3</sup>

<sup>2</sup> Unless otherwise noted, shipment volumes refer to existing waste

<sup>3</sup> Some of the MTRU waste that was reclassified to MLLW in FY08 was assigned to LA-W934 because the status of LA-W935 had not been fully resolved by approval of the annual update. For the same reason, some waste that was initially reclassified as LA-935 was reassigned to LA-W934.

<sup>4</sup> New covered waste is mixed waste that was newly generated in the previous FY and became subject to the STP in the current FY.

<sup>5</sup> Shipped volume in the *Completion of Shipment* notice dated September 8, 2008 (ENV-RCRA-08-185) was reported as 14.78 m<sup>3</sup>, rather than 14.8955 m<sup>3</sup>; one container was actually 0.3215 m<sup>3</sup>, rather than the reported volume of 0.2082 m<sup>3</sup>

<sup>6</sup> Table 2.1-1 contains an adjustment of -0.0008 m<sup>3</sup>, which is not necessary in Table 2.1-2 because the total volume in Table 2.1-2 is already expressed to four decimal places.

## **2.2 MIXED TRANSURANIC (MTRU) INVENTORY SUMMARY**

The FY07 Annual Update (Table 2.2-2) reported the total volume of waste for FY08 as 3800 m<sup>3</sup>; the total volume should have been 3797.8 m<sup>3</sup>. An Administrative Adjustment has been made to correct the total volume. During FY08, therefore, MTRU covered inventories decreased from approximately 3798 m<sup>3</sup> to 3590 m<sup>3</sup>. Table 2.2-1 summarizes changes to the estimated MTRU covered waste inventory for FY08. 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, as well as the TA-54 MTRU inventory. The CMR/TA-55 inventory is not currently categorized by treatability group. Therefore, Table 2.2-3 contains only the MTRU inventory that is stored at TA-54 (which is categorized by treatability groups) for off-site treatment, storage, and disposal.

Corrections have been made to the inventory at the end of FY07 as it was reported in the FY07 Annual Update (Revision 18). Inventory volumes at the end of FY07 were adjusted to four decimal places. LANL also determined that the database query did not accurately calculate the volumes in all cases. Finally, LANL obtained new analytical data that indicated that 74 containers previously managed as TRU (not mixed) waste should, as a prudent measure, be reclassified and managed as MTRU waste (*Cemented Sludge*). Because these containers had been on-site before October 1, 2007, the calculation of the MTRU STP inventory at the beginning of FY08 included the volumes of these containers, thus creating a discrepancy with the volume reported at the end of FY07 in the FY07 Annual Update (Revision 18). These corrections to the FY07 inventory are shown in Table 2.2-2 and in the administrative adjustments noted in Table 2.2-3. The adjustments to both the FY07 inventory and the FY08 inventory are shown in Table 3.6-2.

Tables 2.2-1 and 2.2-3 both identify 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 27 containers of *Combustible Waste* (5.6160 m<sup>3</sup>) resulted in 28 drums of *Combined Combustible-Noncombustible Waste* (5.8240 m<sup>3</sup>) and six drums of *Noncombustible Waste* (1.2480 m<sup>3</sup>). Likewise, repacking eight drums of *Metallic Waste* (1.6640 m<sup>3</sup>) produced eight drums of *Combined Combustible-Noncombustible Waste* (1.6640 m<sup>3</sup>) and one drum of *Noncombustible Waste* (0.2080 m<sup>3</sup>). In addition, decreases in the waste volume in the STP inventory occur when an 85-gallon ‘overpack’ is removed from a 55-gallon drum during repackaging. Removal of overpacks would decrease the volume of waste in the STP inventory.

**Table 2.2-1: Covered MTRU Inventory Summary**

Description	Volume (m <sup>3</sup> )
Covered MTRU Inventory Reported in FY07	3800 <sup>1</sup>
Covered MTRU Waste Shipped to WIPP	-315.3485
<ul style="list-style-type: none"> <li>• -216.1325 m<sup>3</sup> <i>Cemented Sludge</i></li> <li>• -59.6960 m<sup>3</sup> <i>Combined Combustible-Noncombustible</i></li> <li>• -35.1520 m<sup>3</sup> <i>Combustible</i></li> <li>• -0.4160 m<sup>3</sup> <i>Leaded Glovebox Waste</i></li> <li>• -3.120 m<sup>3</sup> <i>Metallic Waste</i></li> <li>• -0.2080 m<sup>3</sup> <i>Noncombustible Waste</i></li> <li>• -0.6240 m<sup>3</sup> <i>Solid Inorganic and Organic Waste</i></li> </ul>	
Administrative Adjustments to Covered MTRU Inventory Reported in FY07 (see Table 2.2-2 for details)	18.1112
Administrative Adjustments for FY08	-7.8390
<ul style="list-style-type: none"> <li>○ -31.3135 m<sup>3</sup> decrease due to reclassification of <i>Cemented Sludge</i> as MLLW (resulting in 7.8167 of LA-W934 and 23.5266 m<sup>3</sup> of LA-W935)</li> </ul>	
<ul style="list-style-type: none"> <li>○ 9.5680 m<sup>3</sup> increase due to reclassifying TRU waste as <i>Combined Combustible-Noncombustible Waste</i> based on new process knowledge obtained during repacking of TRU waste;</li> </ul>	

Description	Volume (m <sup>3</sup> )
<ul style="list-style-type: none"> <li>○ 3.3280 m<sup>3</sup> increase due to repacking into additional containers (that is, splitting the waste contents into multiple containers);</li> <li>○ 7.5720 m<sup>3</sup> increase from transfer of CMR/TA-55 covered MTRU inventory;</li> <li>○ -0.4160 m<sup>3</sup> decrease due to repacking of <i>Combined Combustible-Noncombustible</i> into <i>Noncombustible Waste</i>;</li> <li>○ 5.8240 m<sup>3</sup> increase from repacking <i>Combustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>;</li> <li>○ 0.2080 m<sup>3</sup> increase from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>;</li> <li>○ 6.0320 m<sup>3</sup> increase from repacking <i>Leaded Glovebox Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>;</li> <li>○ 1.6640 m<sup>3</sup> increase from repacking <i>Metallic Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>;</li> <li>○ 0.4160 m<sup>3</sup> increase due to repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>;</li> </ul>	
<p><i>Combustible Waste</i></p> <ul style="list-style-type: none"> <li>○ -5.6160 m<sup>3</sup> decrease from repacking <i>Combustible Waste</i> into           <ul style="list-style-type: none"> <li>▪ 5.8240 m<sup>3</sup> <i>Combined Combustible-Noncombustible</i> and</li> <li>▪ 1.2480 m<sup>3</sup> <i>Noncombustible Waste</i></li> </ul> </li> </ul>	
<p><i>Glass Waste</i></p> <ul style="list-style-type: none"> <li>○ -0.2080 m<sup>3</sup> decrease from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i></li> </ul>	
<p><i>Leaded Glovebox Waste</i></p> <ul style="list-style-type: none"> <li>○ -5.3135 m<sup>3</sup> decrease from repacking <i>Leaded Glovebox Waste</i> into 6.0320 m<sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i></li> </ul>	
<p><i>Metallic Waste</i></p> <ul style="list-style-type: none"> <li>○ -1.6640 m<sup>3</sup> decrease from repacking <i>Metallic Waste</i> into           <ul style="list-style-type: none"> <li>▪ 1.6640 m<sup>3</sup> <i>Combined Combustible-Noncombustible</i> and</li> <li>▪ 0.2080 m<sup>3</sup> <i>Noncombustible Waste</i>)</li> </ul> </li> </ul>	
<p><i>Noncombustible Waste</i></p>	

Description	Volume (m <sup>3</sup> )
<ul style="list-style-type: none"> <li>○ 0.2080 m<sup>3</sup> increase due to LANL reclassification of TRU waste as <i>Combined Combustible-Noncombustible</i> Waste treatability group based on new process knowledge obtained during repacking of TRU waste during repacking;</li> <li>○ -0.4160 m<sup>3</sup> decrease from repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i></li> <li>○ 0.4160 m<sup>3</sup> increase from repacking <i>Combined Combustible-Noncombustible Waste</i> into <i>Noncombustible Waste</i></li> <li>○ 1.2480 m<sup>3</sup> increase from repacking <i>Combustible Waste</i> into <i>Noncombustible Waste</i></li> <li>○ 0.2080 m<sup>3</sup> increase due to repacking <i>Noncombustible Waste</i> into another container</li> <li>○ 0.2080 m<sup>3</sup> increase from repacking <i>Metallic Waste</i> into <i>Noncombustible Waste</i></li> </ul>	
<p><i>Solid Inorganic and Organic Waste</i></p> <ul style="list-style-type: none"> <li>○ 0.2080 m<sup>3</sup> increase from transfer of CMR/TA-55 Covered Inventory to <i>Solid Inorganic and Organic Waste</i></li> </ul>	
<p>New Covered MTRU Waste</p>	<p>53.5960</p>
<p>40.4920 m<sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i> (including 0.6240 m<sup>3</sup> of new covered CMR/TA-55 MTRU inventory reclassified as TA-54 <i>Combined Combustible-Noncombustible</i> treatability group)</p>	
<p>13.1040 m<sup>3</sup> <i>Solidified Inorganic and Organic Waste</i> (including 0.4160 m<sup>3</sup> of new covered TA-55/CMR MTRU inventory reclassified as TA-54 <i>Solidified Inorganic and Organic Waste</i> treatability group)</p>	
<p>CMR and TA-55 Covered MTRU Waste Reported in FY07</p>	<p>45.5<sup>2</sup></p>
<p>Adjustments to CMR/TA-55 Covered MTRU Inventory</p>	<p>-4.1922</p>
<p>4.6278 m<sup>3</sup> – Increase in FY07 CMR/TA-55 Inventory at the end of FY07<sup>2</sup></p>	
<p>-7.5720 m<sup>3</sup> – Decrease from transfer of covered TA-55/CMR MTRU to TA-54 <i>Combined Combustible-Noncombustible</i> treatability group</p>	
<p>-0.2080 m<sup>3</sup> – Decrease from transfer of covered TA-55/CMR MTRU to TA-54 <i>Solidified Inorganic and Organic Waste</i> treatability group</p>	
<p>-0.4160 m<sup>3</sup> – New covered waste transferred to TA-54 <i>Solidified Inorganic and Organic Waste</i></p>	
<p>-0.6240 m<sup>3</sup> – New covered waste transferred to TA-54 <i>Combined Combustible-Noncombustible Waste</i></p>	

Description	Volume (m <sup>3</sup> )
<b>Covered MTRU Inventory At End of FY08</b>	<b>3589.8275<sup>3</sup></b>

<sup>1</sup> The FY07 STP Update, Tables 2.2-1 and 2.2-2, rounded up the reported inventory volume to 3800 m<sup>3</sup>. The sum of the individual treatability group volumes in the FY07 Annual Update (Table 2.2-2), however, equals 3797.8 m<sup>3</sup> rather than 3800 m<sup>3</sup>. An adjustment of -2.2000 m<sup>3</sup> has been made in Table 2.2-2 of this update and included in the Administrative Adjustments to Covered MTRU Inventory Reported in FY07 in the table above to adjust for this difference.

<sup>2</sup> The FY07 inventory volume was 50.1278 m<sup>3</sup>, rather than the 45.5 m<sup>3</sup> reported in the FY07 Annual Update, which was based on calendar year rather than fiscal year.

<sup>3</sup> The total inventory in Table 2-2.1 is larger than that in Table 2-2.3 because it includes the CMR/TA-55 inventory.

**Table 2.2-2. Administrative Adjustments to MTRU Inventory for FY07**

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
<i>Cemented Sludge</i>	16.6405	Based on new analytical data, LANL reevaluated and reclassified existing TRU waste as MTRU
	2.7230	Addition of containers not previously included due to search criteria <sup>1</sup>
	0.0092	Rounding to 4 decimal places
<i>Combined Combustible-Noncombustible Waste</i>	2.0257	Addition of containers not previously included due to search criteria <sup>1</sup>
	0.0427	Rounding to 4 decimal places
<i>Combustible Waste</i>	-1.0590	Removal of waste previously included due to search criteria
	-0.0518	Rounding to 4 decimal places
<i>Glass Waste</i>	-0.0360	Rounding to 4 decimal places
<i>Leaded Glovebox Waste</i>	0.0295	Rounding to 4 decimal places
<i>Metallic Waste</i>	0.0339	Rounding to 4 decimal places
<i>Noncombustible Waste</i>	-0.0170	Rounding to 4 decimal places
<i>Solidified Inorganic and Organic Waste</i>	-0.0295	Rounding to 4 decimal places
<i>Total Waste Volume</i> <sup>2</sup>	-2.2000	Rounding of totals in FY07 (Revision 18 Table 2.2-2)
<b>Total Adjustment</b>	<b>18.1112</b>	

<sup>1</sup> Corrected query has been used in preparing the FY08 update

<sup>2</sup> The FY08 inventory as shown in the FY07 Annual Report (Table 2.2-2) was rounded to 3800 m<sup>3</sup>; the correct waste total is 3797.8 m<sup>3</sup>.

The estimated covered MTRU waste inventory at TA-54 is described by treatability group in Table 2.2-3 below. Table 2.2-3 presents the estimated volume of covered MTRU waste for each treatability group at the end of FY07 and at the end of FY08.

**TABLE 2.2-3. FY08 Estimated TA-54 Covered MTRU Inventory  
 (by Treatability Group<sup>1,2</sup>)**

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
<i>Cemented Sludge</i>	<b>1550</b>	-1.2480	Shipped to WIPP 10/09/07	<b>1321.9267</b>	
		-1.4560	Shipped to WIPP 10/10/07		
		-1.4560	Shipped to WIPP 10/11/07		
		-1.4560	Shipped to WIPP 10/16/07		
		-1.4560	Shipped to WIPP 10/17/07		
		-1.4560	Shipped to WIPP 10/18/07		
		-1.4560	Shipped to WIPP 10/23/07		
		-1.4560	Shipped to WIPP 10/30/07		
		-2.9120	Shipped to WIPP 10/31/07		
		-1.4560	Shipped to WIPP 11/07/07		
		-1.4560	Shipped to WIPP 11/08/07		
		-1.4560	Shipped to WIPP 11/14/07		
		-1.4560	Shipped to WIPP 11/15/07		
		-1.4560	Shipped to WIPP 11/27/07		
		-1.4560	Shipped to WIPP 11/28/07		
		-1.4560	Shipped to WIPP 11/29/07		
		-1.4560	Shipped to WIPP 12/04/07		
		-1.4560	Shipped to WIPP 12/12/07		
		-1.4560	Shipped to WIPP 12/13/07		
		-1.4560	Shipped to WIPP 01/29/08		
		-1.4560	Shipped to WIPP 01/30/08		
		-3.0255	Shipped to WIPP 01/31/08		
		-2.9120	Shipped to WIPP 02/07/08		
		-4.9355	Shipped to WIPP 02/13/08		
		-6.0890	Shipped to WIPP 02/19/08		
		-6.1080	Shipped to WIPP 02/20/08		
		-6.1080	Shipped to WIPP 02/21/08		
		-4.7090	Shipped to WIPP 03/11/08		
		-1.6640	Shipped to WIPP 03/12/08		
		-5.7870	Shipped to WIPP 03/13/08		
		-4.5010	Shipped to WIPP 03/18/08		
		-8.0375	Shipped to WIPP 03/25/08		
		-8.5670	Shipped to WIPP 03/26/08		
-4.5010	Shipped to WIPP 03/27/08				
-4.5010	Shipped to WIPP 04/03/08				

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		-2.2505	Shipped to WIPP 04/07/08		
		-7.7160	Shipped to WIPP 04/08/08		
		-9.6070	Shipped to WIPP 04/16/08		
		-4.5010	Shipped to WIPP 04/17/08		
		-4.1795	Shipped to WIPP 04/22/08		
		-2.2505	Shipped to WIPP 04/25/08		
		-2.8935	Shipped to WIPP 04/26/08		
		-2.2315	Shipped to WIPP 05/20/08		
		-7.7160	Shipped to WIPP 05/21/08		
		-8.6805	Shipped to WIPP 05/22/08		
		-8.9260	Shipped to WIPP 07/30/08		
		-7.5075	Shipped to WIPP 07/31/08		
		-7.1485	Shipped to WIPP 09/02/08		
		-8.3020	Shipped to WIPP 09/03/08		
		-7.3565	Shipped to WIPP 09/10/08		
		-7.6400	Shipped to WIPP 09/15/08		
		-8.1130	Shipped to WIPP 09/16/08		
		-3.7065	Shipped to WIPP 09/24/08		
		-2.1370	Shipped to WIPP 09/30/08		
		<b>-216.1325</b>	<b>Total Shipped to WIPP</b>		
		<b>16.6405</b>	<b>FY07 Inventory Administrative Adjustment - addition of containers - based on new analytical data, LANL reevaluated and reclassified existing TRU waste to MTRU Cemented Sludge</b>		
		<b>0.0092</b>	<b>FY07 Inventory Administrative Adjustment (rounding to 4 decimal places)</b>		
		<b>2.7230</b>	<b>FY07 Inventory Administrative Adjustment - addition of containers not previously included due to search criteria</b>		

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
			<b>Administrative Adjustment: MTRU waste reclassified as MLLW (7.8167 m<sup>3</sup> of LA-W934 and 23.5266 m<sup>3</sup> of LA-W935)<sup>3</sup></b>		
		<b>-31.3135</b>			
<i>Combustible - Noncombustible Waste</i>	<b>1821</b>	-0.8320	Shipped to WIPP 10/02/07	<b>1838.0604</b>	
		-1.0400	Shipped to WIPP 10/03/07		
		-1.0400	Shipped to WIPP 10/04/07		
			New Covered		
		-0.2080	Shipped to WIPP 10/04/07		
		-0.6240	Shipped to WIPP 10/09/07		
		-0.6240	Shipped to WIPP 10/10/07		
		-1.0400	Shipped to WIPP 10/11/07		
		-0.8320	Shipped to WIPP 10/16/07		
		-0.4160	Shipped to WIPP 10/17/07		
		-1.8720	Shipped to WIPP 10/18/07		
		-1.2480	Shipped to WIPP 10/23/07		
		-0.4160	Shipped to WIPP 10/30/07		
		-0.8320	Shipped to WIPP 10/31/07		
			New Covered		
		-0.6240	Shipped to WIPP 11/07/07		
		-0.6240	Shipped to WIPP 11/14/07		
		-1.2480	Shipped to WIPP 11/15/07		
		-0.4160	Shipped to WIPP 11/27/07		
		-0.6240	Shipped to WIPP 11/28/07		
			New Covered		
		-0.2080	Shipped to WIPP 11/28/07		
		-0.2080	Shipped to WIPP 12/12/07		
		-1.0400	Shipped to WIPP 12/13/07		
			New Covered		
		-0.2080	Shipped to WIPP 12/13/07		
		-0.4160	Shipped to WIPP 12/18/07		
		-1.0400	Shipped to WIPP 12/19/07		
			New Covered		
		-0.2080	Shipped to WIPP 12/19/07		
		-0.4160	Shipped to WIPP 12/20/07		
		-1.4560	Shipped to WIPP 01/02/08		
		-0.6240	Shipped to WIPP 01/03/08		

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facility Compliance Order**

**September 30, 2009**

<b>Treatability Group</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 19.0 (m<sup>3</sup>)</b>	<b>Comments</b>	<b>FY08 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY09-FY13 (m<sup>3</sup>)</b>
		-1.2480	Shipped to WIPP 01/09/08		
		-0.6240	Shipped to WIPP 01/10/08		
		-0.2080	Shipped to WIPP 01/15/08		
		-1.0400	Shipped to WIPP 01/16/08		
		-1.2480	Shipped to WIPP 01/17/08		
		-0.6240	Shipped to WIPP 01/29/08		
		-0.8320	Shipped to WIPP 01/30/08		
		-0.6240	Shipped to WIPP 01/31/08		
		-0.4160	Shipped to WIPP 02/07/08		
			New Covered		
		-0.2080	Shipped to WIPP 02/07/08		
		-0.2080	Shipped to WIPP 02/12/08		
			New Covered		
		-0.2080	Shipped to WIPP 02/12/08		
		-0.2080	Shipped to WIPP 02/13/08		
		-0.4160	Shipped to WIPP 02/21/08		
			New Covered		
		-0.2080	Shipped to WIPP 02/21/08		
		-1.6640	Shipped to WIPP 02/26/08		
			New Covered		
		-0.2080	Shipped to WIPP 02/26/08		
		-1.0400	Shipped to WIPP 03/11/08		
		-0.6240	Shipped to WIPP 03/12/08		
		-0.8320	Shipped to WIPP 03/13/08		
		-0.2080	Shipped to WIPP 03/18/08		
		-0.4160	Shipped to WIPP 03/19/08		
		-0.4160	Shipped to WIPP 03/25/08		
		-1.0400	Shipped to WIPP 03/26/08		
		-0.6240	Shipped to WIPP 03/27/08		
		-2.0800	Shipped to WIPP 04/01/08		
		-1.0400	Shipped to WIPP 04/02/08		
		-0.4160	Shipped to WIPP 04/03/08		
		-1.2480	Shipped to WIPP 04/07/08		
		-0.4160	Shipped to WIPP 04/08/08		
		-0.2080	Shipped to WIPP 04/15/08		
			New Covered		
		-0.2080	Shipped to WIPP 04/15/08		

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facility Compliance Order**

**September 30, 2009**

<b>Treatability Group</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 19.0 (m<sup>3</sup>)</b>	<b>Comments</b>	<b>FY08 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY09-FY13 (m<sup>3</sup>)</b>
		-0.6240	Shipped to WIPP 04/17/08		
		-1.0400	Shipped to WIPP 04/22/08		
			New Covered		
		-0.2080	Shipped to WIPP 04/22/08		
		-1.6640	Shipped to WIPP 04/25/08		
		-1.8720	Shipped to WIPP 04/26/08		
		-0.8320	Shipped to WIPP 05/20/08		
			New Covered		
		-0.2080	Shipped to WIPP 05/20/08		
		-0.2080	Shipped to WIPP 05/21/08		
		-0.2080	Shipped to WIPP 05/22/08		
		-0.2080	Shipped to WIPP 07/30/08		
		-1.8720	Shipped to WIPP 09/02/08		
		-0.4160	Shipped to WIPP 09/03/08		
			New Covered		
		-0.4160	Shipped to WIPP 09/03/08		
			New Covered		
		-1.8720	Shipped to WIPP 09/09/08		
			New Covered		
		-0.6240	Shipped to WIPP 09/10/08		
		-0.8320	Shipped to WIPP 09/15/08		
		-1.0400	Shipped to WIPP 09/16/08		
		-0.2080	Shipped to WIPP 09/23/08		
			New Covered		
		-1.8720	Shipped to WIPP 09/23/08		
		-1.4560	Shipped to WIPP 09/24/08		
		-0.6240	Shipped to WIPP 09/30/08		
		<b>-59.6960</b>	<b>Total Shipped to WIPP</b>		
		<b>40.4920</b>	<b>New Covered (includes 0.6240 m<sup>3</sup> reclassified from TA-55/CMR Covered MTRU inventory to TA-54 Combined Combustible-Noncombustible Waste treatability group)</b>		
		<b>2.0257</b>	<b>FY07 Inventory Administrative Adjustment – addition of containers not previously reported due to search criteria</b>		

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		0.0427	FY07 Inventory Administrative Adjustment – rounding to 4 decimal places		
		9.5680	FY08 Administrative Adjustment – TRU waste reclassified as MTRU <i>Combined Combustible-Noncombustible Waste</i> treatability group based on new process information obtained during repacking of TRU waste		
		3.3280	FY08 Administrative Adjustment – increase resulting from repacking <i>Combined Combustible-Noncombustible</i> waste into additional containers		
		7.5720	FY08 Administrative Adjustment - reclassified from TA-55/CMR covered MTRU inventory into TA-54 <i>Combined Combustible-Noncombustible</i> treatability group		
		-0.4160	FY08 Administrative Adjustment - decrease due to repacking <i>Combined Combustible-Noncombustible</i> waste into the <i>Noncombustible</i> treatability group		
		5.8240	FY08 Administrative Adjustment - increase due to repacking waste from the <i>Combustible</i> treatability group into the <i>Combined Combustible-Noncombustible Waste</i>		

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		0.2080	FY08 Administrative Adjustment - increase due to repacking from <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>		
		6.0320	FY08 Administrative Adjustment - increase due to repacking <i>Leaded Glovebox Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>		
		1.6640	FY08 Administrative Adjustment - increase due to repacking <i>Metallic Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>		
		0.4160	FY08 Administrative Adjustment - increase due to repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>		
<i>Combustible Waste</i>	102	-0.2080 -1.0400 -0.6240 -1.0400 -1.4560 -0.8320 -1.4560 -2.4960 -0.2080 -1.0400 -1.6640 -0.2080 -1.4560 -0.4160 -1.2480 -1.2480 -3.9520 -2.7040 -0.6240	Shipped to WIPP 10/02/07 Shipped to WIPP 10/04/07 Shipped to WIPP 10/09/07 Shipped to WIPP 10/10/07 Shipped to WIPP 10/11/07 Shipped to WIPP 10/18/07 Shipped to WIPP 10/23/07 Shipped to WIPP 10/31/07 Shipped to WIPP 11/07/07 Shipped to WIPP 11/14/07 Shipped to WIPP 11/15/07 Shipped to WIPP 11/27/07 Shipped to WIPP 11/29/07 Shipped to WIPP 12/04/07 Shipped to WIPP 12/12/07 Shipped to WIPP 12/13/07 Shipped to WIPP 12/18/07 Shipped to WIPP 12/19/07 Shipped to WIPP 01/02/08	60.1212	

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		-0.8320	Shipped to WIPP 01/03/08		
		-1.6640	Shipped to WIPP 01/09/08		
		-0.4160	Shipped to WIPP 01/10/08		
		-1.0400	Shipped to WIPP 01/16/08		
		-0.4160	Shipped to WIPP 01/17/08		
		-1.4560	Shipped to WIPP 01/29/08		
		-0.2080	Shipped to WIPP 01/30/08		
		-1.6640	Shipped to WIPP 01/31/08		
		-0.2080	Shipped to WIPP 02/26/08		
		-0.2080	Shipped to WIPP 03/11/08		
		-0.2080	Shipped to WIPP 03/13/08		
		-0.4160	Shipped to WIPP 03/25/08		
		-0.2080	Shipped to WIPP 03/26/08		
		-0.2080	Shipped to WIPP 04/03/08		
		-0.6240	Shipped to WIPP 04/16/08		
		-0.2080	Shipped to WIPP 09/02/08		
		-0.6240	Shipped to WIPP 09/16/08		
		-0.2080	Shipped to WIPP 09/23/08		
		-0.4160	Shipped to WIPP 09/24/08		
		<b>-35.1520</b>	<b>Total Shipped to WIPP</b>		
		<b>-1.0590</b>	<b>FY07 Administrative Adjustment - decrease based on corrected query used for this report</b>		
		<b>-0.0518</b>	<b>FY07 Inventory Administrative Adjustment - rounding to 4 decimal places</b>		
		<b>-5.6160</b>	<b>FY08 Administrative Adjustment - decrease from repacking 5.6160 m<sup>3</sup> Combustible Waste into 5.8240 m<sup>3</sup> Combined Combustible-Noncombustible Waste and 1.2480 m<sup>3</sup> Noncombustible Waste</b>		
<i>Glass Waste</i>	<b>1.7</b>	<b>-0.0360</b>	<b>FY07 Inventory Administrative Adjustment - rounding to 4 decimal places</b>	<b>1.4560</b>	

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		-0.2080	<b>FY08 Administrative Adjustment - decrease from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i></b>		
<i>Leaded Glovebox</i>	<b>16.1</b>	-0.2080 -0.2080 <b>-0.4160</b>  <b>0.0295</b>  <b>-5.3135</b>	Shipped to WIPP 12/20/07 Shipped to WIPP 01/03/08  <b>Total Shipped to WIPP</b>  <b>FY07 Inventory Administrative Adjustment - rounding to 4 decimal places</b>  <b>FY08 Administrative Adjustment – decrease from repacking <i>Leaded Glovebox Waste</i> into 6.0320 m3 <i>Combined Combustible-Noncombustible Waste</i></b>	<b>10.4000</b>	
<i>Metallic waste</i>	<b>63.9</b>	-0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 -0.2080 <b>-3.1200</b>  <b>0.0339</b>	Shipped to WIPP 10/02/07 Shipped to WIPP 10/17/07 Shipped to WIPP 11/14/07 Shipped to WIPP 11/15/07 Shipped to WIPP 11/27/07 Shipped to WIPP 12/04/07 Shipped to WIPP 01/31/08 Shipped to WIPP 02/26/08 Shipped to WIPP 03/18/08 Shipped to WIPP 04/03/08 Shipped to WIPP 04/07/08 Shipped to WIPP 07/31/08 Shipped to WIPP 09/03/08 Shipped to WIPP 09/15/08 Shipped to WIPP 09/24/08  <b>Total shipped to WIPP</b>  <b>FY07 Inventory Administrative Adjustment - rounding to 4 decimal places</b>	<b>59.1499</b>	

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		1.6640	FY08 Administrative Adjustment – decrease from repacking <i>Metallic Waste</i> into 1.6640 m <sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i> and 0.2080 m <sup>3</sup> <i>Noncombustible Waste</i>		
<i>Non-combustible Waste</i>	81.6	-0.2080	Shipped to WIPP 03/11/08	83.2470	
		-0.0170	FY07 Inventory Administrative Adjustment - rounding to 4 decimal places		
		0.2080	FY08 Administrative Adjustment – TRU waste reclassified as MTRU <i>Noncombustible Waste</i> based on new process information obtained during repacking of TRU waste		
		-0.4160	FY08 Administrative Adjustment - decrease from repacking <i>Non-combustible waste</i> into 0.4160 m <sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i>		
		0.4160	FY08 Administrative Adjustment - increase from repacking <i>Combined Combustible-Noncombustible waste</i> into the <i>Noncombustible Waste</i>		
		1.2480	FY08 Administrative Adjustment – increase from repacking <i>Combustible Waste</i> into <i>Noncombustible Waste</i>		

Treatability Group	FY07 Annual Update (m <sup>3</sup> )	Proposed Revision 19.0 (m <sup>3</sup> )	Comments	FY08 Annual Update (m <sup>3</sup> )	Projection FY09-FY13 (m <sup>3</sup> )
		0.2080	FY08 Administrative Adjustment - increase from repacking <i>Noncombustible Waste</i> into additional container		
		0.2080	FY08 Administrative Adjustment - increase from repacking <i>Metallic Waste</i> into <i>Noncombustible Waste</i>		
<i>Solidified Inorganic and Organic Waste</i>	161.5	-0.2080 -0.4160 <b>-0.6240</b>	Shipped to WIPP 09/15/08 Shipped to WIPP 09/24/08 <b>Total Shipped to WIPP</b>	174.1585	
		-0.0295	FY07 Inventory Administrative Adjustment - rounding to 4 decimal places		
		0.2080	Administrative Adjustment (Covered MTRU waste reclassified as TA-54 <i>Solidified Inorganic and Organic Waste</i> from TA-55 Covered MTRU)		
		13.1040	New Covered (includes 0.4160 m <sup>3</sup> of new covered MTRU reclassified from CMR/TA-54 MTRU Inventory to <i>Solidified Inorganic and Organic Waste</i> )		
<b>TOTAL</b>	<b>3800<sup>4</sup></b>			<b>3548.5197<sup>5</sup></b>	

<sup>1</sup> MTRU waste volumes are calculated using the conversion: 55 gallon container = 0.2080 m<sup>3</sup>.

<sup>2</sup> Unless otherwise noted, shipment volumes refer to existing waste.

<sup>3</sup> Differences between the volume of MTRU reclassified to MLLW and the resulting volume of reclassified MLLW are due to the different conversion factors used for MTRU and MLLW inventory calculations.

<sup>4</sup> The Total FY07 inventory reported in the FY07 Annual Update is 3800 m<sup>3</sup>, rather than 3797.8 m<sup>3</sup>. A correction of -2.2000 m<sup>3</sup> has been made in Table 2.2-2. The correction is included in the administrative adjustment for the FY07 inventory listed in Table 2.2-1 and was used to calculate the total FY08 inventory.

<sup>5</sup> The total inventory in Table 2.2-1 is larger than that in Table 2.2-3 because Table 2.2-1 includes the CMR/TA-55 inventory.

### **3.0 TREATMENT PROGRESS**

#### **3.1 OFF-SITE TREATMENT**

During FY08, covered MLLW streams were shipped for treatment to the following off-site commercial treatment facilities: Perma-Fix in Gainesville, Florida, and Perma-Fix/Material and Energy Corporation (M&EC) in Oak Ridge, Tennessee. Perma-Fix also owns Diversified Scientific Services, Inc. (DSSI) in Kingston, Tennessee, and Perma-Fix Northwest in the state of Washington.

- **Perma-Fix/Florida**

Perma-Fix in Gainesville, Florida, is a Resource Conservation and Recovery Act (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.

- **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 mixed waste. The facility installed six treatment processes and has the capability of treating organic and inorganic mixed waste to meet the Land Disposal Restrictions criteria. These processes include stabilization/solidification, chemical extraction, chemical fixation, metals precipitation, neutralization, and debris treatment. M&EC became operational in September 2001.

Table 3.1-1 is a summary of LANL's off-site shipments for treatment and/or disposal of covered MLLW in FY08. Approximately 31 m<sup>3</sup> of MLLW STP-covered waste was shipped off-site for treatment and/or disposal.

**TABLE 3.1-1: FY08 STP MLLW Off-Site Shipments for Treatment and/or Disposal**

Date Shipped	Destination	MWIR #	Treatability Group	Vol. (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
3/17/2008	M&EC	LA-W925	<i>Mercury Wastes – TBD</i>	0.2082	000365747JJK	4/3/2008	3.2
4/14/2008	M&EC	LA-W935	<i>10-100 nCi/g Waste</i>	16.0314	000365779JJK	5/21/2008	3.3.4
8/4/2008	M&EC	LA-W934	<i>High Activity Waste</i>	14.8955	000365882JJK	9/8/2008	3.2
9/22/2008	Perma-Fix FL	LA-W922	<i>Noncombustible Debris</i>	0.0015	00365944JJK	10/22/2008	3.1.3
9/22/2008	Perma-Fix FL	LA-W908	<i>Nonhalogenated Organic Liquids</i>	0.0009	00365944JJK	10/22/2008	3.1.11
<b><i>Total Volume</i></b>				31.1375			

**3.2 OFF-SITE RECYCLING**

In FY07, DOE and LANS conducted no off-site recycling.

**TABLE 3.2-1: FY08 STP MLLW Off-Site Shipments for Recycling**

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
<b><i>Total Volume</i></b>				<b>0</b>			

**3.3 ON-SITE TREATMENT AND RECYCLING**

In FY08, DOE and LANS conducted no on-site treatment or recycling.

**TABLE 3.3-1: FY08 STP MLLW On-Site Treatment**

MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Date NMED Notified	CP Section
<b><i>Total Volume</i></b>		<b>0</b>		

***3.4 ON-SITE LEAD DECONTAMINATION***

No LANL STP-covered MLLW was decontaminated on-site during FY08.

***3.5 TREATABILITY STUDIES***

DOE and LANS conducted no treatability studies in FY08.

**TABLE 3.5-1: FY08 STP MLLW Treatability Studies**

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
<i>Total Volume</i>				<b>0</b>			

***3.6 ADMINISTRATIVE ADJUSTMENTS AND CORRECTIONS***

***3.6.1 Adjustments to MLLW Inventory***

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. The MLLW adjustments in Table 3.6-1 reflect transfers of wastes from one MLLW treatability group to another or from MTRU inventory to MLLW inventory. The adjustments also reflect waste that was proposed to be shipped in FY07 but was returned to inventory in FY08 before LANL was required to notify NMED of the completion of shipment.

**TABLE 3.6-1: Administrative Adjustments and Corrections to MLLW Waste**

MWIR Waste ID	Treatability Group	Volume (m <sup>3</sup> )	Comments	CP Section
LA-W919	<i>Organic-Contaminated Noncombustible Solids</i>	0.2082	Reclassified from Covered MTRU Inventory at CMR/TA-55 to MLLW Inventory LA-W919	3.1.4
LA-W934	<i>High Activity Waste</i>	7.8167	Reclassified as LA-W934 from covered MTRU Inventory	3.2
LA-W934	<i>High Activity Waste</i>	7.0788	Reclassified as LA-W934 from LA-W935	3.2
LA-W935	<i>10 – 100 nCi/g Waste</i>	23.5266	Reclassified as LA-W935 from Covered MTRU Inventory	3.3.4
LA-W935	<i>10 – 100 nCi/g Waste</i>	-7.0788	Reclassified from LA-W935 to LA-W934	3.3.4
LA-W935	<i>10 – 100 nCi/g Waste</i>	0.8328	Waste scheduled to ship in FY07 was returned to inventory	3.3.4
<i>Net Total</i>		<b>32.3843<sup>1</sup></b>		

<sup>1</sup> The net administrative adjustment differs from that shown in Table 2.1-1. Because Table 2.1-1 rounded the FY07 inventory total to two decimal places, Table 2.1-1 requires an adjustment of -0.0008 for rounding to four decimal places that is not required elsewhere.

### 3.6.2 Adjustments to MTRU Inventory

During the preparation of the FY08 STP Annual Update, LANL identified a number of adjustments to the inventory volume at the end of FY07 (Table 3.6-2). These adjustments resulted from revised data queries, corrections of volumes to four decimal place accuracy, and additions of newly identified STP-covered waste. Other adjustments were needed to account for volume changes due to repacking of waste and transfers of waste from one treatability group to another.

**TABLE 3.6-2. Administrative Adjustments to MTRU Inventory<sup>1</sup>**

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
<i>Cemented Sludge</i>	16.6405	FY07 Inventory Adjustment - Based on new analytical data, LANL reevaluated and reclassified existing TRU waste as MTRU
	2.7230	FY07 Inventory Adjustment - Addition of containers not previously included due to search criteria <sup>1</sup>
	0.0092	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-31.3135	FY08 Adjustment - Reclassification of <i>Cemented Sludge</i> as MLLW (resulting in 7.8167 m <sup>3</sup> of LA-W934 and 23.5266 m <sup>3</sup> of LA-W935)
<i>Combined Combustible-Noncombustible Waste</i>	2.0257	FY07 Inventory Adjustment - Addition of containers not previously included due to search criteria <sup>1</sup>

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
	0.0427	FY07 Inventory Adjustment - Rounding to 4 decimal places
	9.5680	FY08 Adjustment - Increase due to reclassifying TRU waste as <i>Combined Combustible-Noncombustible Waste</i> based on new process knowledge obtained during repacking of TRU waste
	3.3280	FY08 Adjustment - Increase due to repacking in additional containers
	7.5720	FY08 Adjustment - Increase from transfer of CMR/TA-55 covered MTRU inventory
	-0.4160	FY08 Adjustment - Decrease due to repacking of <i>Combustible-Noncombustible</i> into <i>Noncombustible Waste</i>
	5.8240	FY08 Adjustment - Increase from repacking <i>Combustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	6.0320	FY08 Adjustment - Increase from repacking <i>Leaded Glovebox Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	1.6640	FY08 Adjustment - Increase from repacking <i>Metallic Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	0.4160	FY08 Adjustment - Increase due to repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
<i>Combustible Waste</i>	-1.0590	FY08 Adjustment - FY07 Inventory Adjustment - Removal of waste previously included due to search criteria
	-0.0518	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-5.6160	FY08 Adjustment - Decrease from repacking <i>Combustible Waste</i> into 5.8240 m <sup>3</sup> <i>Combined Combustible-Noncombustible</i> and 1.2480 m <sup>3</sup> <i>Noncombustible Waste</i>
<i>Glass Waste</i>	-0.0360	FY08 Adjustment - Rounding to 4 decimal places
	-0.2080	FY08 Adjustment - Decrease from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
<i>Leaded Glovebox Waste</i>	0.0295	FY07 Inventory Adjustment - Rounding to 4 decimal places

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
	-5.3135	FY08 Adjustment - Decrease from repacking <i>Leaded Glovebox Waste</i> into 6.032 m <sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i>
<i>Metallic Waste</i>	0.0339	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-1.6640	FY08 Adjustment - Decrease from repacking <i>Metallic Waste</i> into 1.664 m <sup>3</sup> <i>Combined Combustible-Noncombustible</i> and 0.2080 m <sup>3</sup> <i>Noncombustible Waste</i>
<i>Noncombustible Waste</i>	-0.0170	FY07 Inventory Adjustment - Rounding to 4 decimal places
	0.2080	FY08 Adjustment - Increase due to LANL reclassification of TRU waste as <i>Combined Combustible-Noncombustible Waste</i> treatability group based on new process knowledge obtained during repacking of TRU waste
	-0.4160	FY08 Adjustment - Decrease from repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	0.4160	FY08 Adjustment - Increase from repacking <i>Combined Combustible-Noncombustible Waste</i> into <i>Noncombustible Waste</i>
	1.2480	FY08 Adjustment - Increase from repacking <i>Combustible Waste</i> into <i>Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase from repacking <i>Metallic Waste</i> into <i>Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase due to repacking <i>Noncombustible Waste</i> into another container
<i>Solidified Inorganic and Organic Waste</i>	-0.0295	FY07 Inventory Adjustment - Rounding to 4 decimal places
	0.2080	FY08 Adjustment - Increase from transfer of CMR/TA-55 covered inventory to <i>Solidified Inorganic and Organic Waste</i>
<i>Total Waste Volume</i>	-2.2000	FY07 Inventory Adjustment - Rounding of totals in FY07 (Revision 17 Table 2.2-2)
<b><i>Total Adjustment</i></b>	<b>10.2722</b>	

<sup>1</sup> Includes adjustments to both FY07 and FY08 Inventories

### 3.7 OTHER TYPES OF MIXED WASTE ACTIVITIES

No other MLLW activities were performed.

### 4.0 TREATMENT TECHNOLOGY DEVELOPMENT

During FY08, 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 on-site 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 LANS 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 waste 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 MLLW treatment pending approval of a permit modification request.

##### ***4.1.2 Off-Site DOE Treatment Facilities***

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

#### ***5.0 DOE FUNDING FOR STP-RELATED ACTIVITIES***

Funding to implement the LANL STP for mixed waste during FY08 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, in FY07, and in FY08 for shipment of mixed waste off-site for treatment and disposal at DOE and commercial facilities. Funding during FY09 is also sufficient to meet all FY09 compliance dates established in the STP. 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 has initiated a long-range plan for its 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). Current 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.

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 is planned to be treated and disposed of before the end of FY13 if treatment/disposal capability and capacity is available.

## ***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/LAND 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, the Environmental Protection Agency (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 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 FY08.

## ***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 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***

Wastes proposed for shipment to WIPP are characterized and certified at LANL by the Central Characterization Project, 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.

## ***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)
17. *Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 15.0”* (March 2005)
18. *Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 16.0”* (March 2006)
19. *Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 17.0”* (March 2007)
20. *Los Alamos National Laboratory Federal Facility Compliance Order, Site Treatment Plan, Revision 18.0”* (November 2008)

**PART I APPENDICES  
Reported MLLW Inventories from Prior Years**



**Appendix A  
Reported STP MLLW Inventories 1995-1996**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

**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 <sup>3</sup> )	FY95 Changes Covered Waste (m <sup>3</sup> ) <sup>a</sup>	Explanation for FY95 Change	Covered Vol. End of FY95 (m <sup>3</sup> )	FY96 Changes Covered Waste (m <sup>3</sup> ) <sup>b</sup>	Comments	Covered Vol. End of FY96 (m <sup>3</sup> )	Projection FY97-FY01 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	15.89	NC		15.89	Increased 4.07 <sup>d</sup> 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 <sup>d</sup> Decreased 0.36 <sup>d</sup>	Waste volume incorrectly reported in original STP inventory Shipped off-site for treatment at commercial or DOE facilities during FY96	0.0038 <sup>e</sup>	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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group	CPV Vol. (m <sup>3</sup> )	FY95 Changes Covered Waste (m <sup>3</sup> ) <sup>a</sup>	Explanation for FY95 Change	Covered Vol. End of FY95 (m <sup>3</sup> )	FY96 Changes Covered Waste (m <sup>3</sup> ) <sup>b</sup>	Comments	Covered Vol. End of FY96 (m <sup>3</sup> )	Projection FY97-FY01 (m <sup>3</sup> )
				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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group	CPV Vol. (m <sup>3</sup> )	FY95 Changes Covered Waste (m <sup>3</sup> ) <sup>a</sup>	Explanation for FY95 Change	Covered Vol. End of FY95 (m <sup>3</sup> )	FY96 Changes Covered Waste (m <sup>3</sup> ) <sup>b</sup>	Comments	Covered Vol. End of FY96 (m <sup>3</sup> )	Projection FY97-FY01 (m <sup>3</sup> )
	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 <sup>d</sup>	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 <sup>e</sup>	LA-W932 Explosives	0.0	NC			NC		0.0	0.0
None <sup>e</sup>	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



**Site Treatment Plan  
Federal Facility Compliance Order**

**Appendix B  
Reported STP MLLW Inventories 1997**

**FY08 Annual Update – Revision 2**

**September 30, 2009**

**Site Treatment Plan  
Federal Facility Compliance Order**

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

**Table 2-1. FY97 MLLW Inventory Update Summary<sup>a</sup>**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m <sup>3</sup> )	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m <sup>3</sup> )	Projection FY98-FY02 (m <sup>3</sup> )
			Revision 5 (Other Changes) (m <sup>3</sup> )	Revision 6 (3/98 FY97 Annual Update Changes) <sup>b</sup> (m <sup>3</sup> )			
3.1.1	LA-W901 IPA Wastes	0.02	Decreased 0.005 <sup>e,m</sup>	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 <sup>d</sup>		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 <sup>e,m</sup> 0.1047 <sup>n</sup>	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 <sup>e,m</sup>  Increased 4.83 <sup>t</sup> 4.26 <sup>f,n</sup>	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 <sup>f</sup>	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 <sup>f</sup>	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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m <sup>3</sup> )	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m <sup>3</sup> )	Projection FY98-FY02 (m <sup>3</sup> )
			Revision 5 (Other Changes) (m <sup>3</sup> )	Revision 6 (3/98 FY97 Annual Update Changes) <sup>b</sup> (m <sup>3</sup> )			
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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m <sup>3</sup> )	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m <sup>3</sup> )	Projection FY98-FY02 (m <sup>3</sup> )
			Revision 5 (Other Changes) (m <sup>3</sup> )	Revision 6 (3/98 FY97 Annual Update Changes) <sup>b</sup> (m <sup>3</sup> )			
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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m <sup>3</sup> )	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m <sup>3</sup> )	Projection FY98-FY02 (m <sup>3</sup> )
			Revision 5 (Other Changes) (m <sup>3</sup> )	Revision 6 (3/98 FY97 Annual Update Changes) <sup>b</sup> (m <sup>3</sup> )			
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 <sup>g,m</sup>	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 <sup>h,m</sup>	Decreased 0.0076	Shipped for off-site treatment at commercial facility during FY97	14.23	0.0
None <sup>d</sup>	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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facility Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/96 Annual Update Volume (m <sup>3</sup> )	FY97 Changes in Covered Waste		Comments	3/98 Annual Update Volume (m <sup>3</sup> )	Projection FY98-FY02 (m <sup>3</sup> )
			Revision 5 (Other Changes) (m <sup>3</sup> )	Revision 6 (3/98 FY97 Annual Update Changes) <sup>b</sup> (m <sup>3</sup> )			
				Increased 0.02	Correction to Original STP Inventory as discussed in Revision 6.0		
None <sup>l</sup>	LA-W932 Explosives	0.00				0.00	0.0
None <sup>l</sup>	LA-W933 Lab Packs	0.13		Increased 0.003	Waste that was newly generated in FY96 that became covered waste in FY97	0.13	0.02
None	IPA Waste	0.00		Increased 0.0005 <sup>k</sup> Decreased 0.0005 <sup>k</sup>	Omitted from original STP inventory as discussed in Rev. 6.0 Shipped for off-site treatment at commercial facility during FY97	0.00	0.0
None <sup>l</sup>	Missing/ nonexistent/ TBV category	0.00	Increased 0.2082 <sup>e</sup> 0.1047 <sup>m n</sup> Increased 0.26 <sup>m</sup> Increased 8.34 <sup>m</sup>			0.00	Not Applicable

**NOTES TO TABLE**

- <sup>a</sup> The covered waste volumes reported in Appendix B of the proposed Revision 6.0 include the volume changes in Revisions 4.0 and 5.0, approved by NMED in FY98 (December 29, 1997). Therefore, the volume changes in Revision 4.0 and 5.0 are not reflected in the FY97 STP *Annual Update* and are not included in this table. Because of this, the volumes in this table cannot be compared to the volumes reported in Appendix B. Also refer to *Note to Reader* in Section 2.1.1.
- <sup>b</sup> These changes are the additional changes in FY 97 that were not previously reported in Rev. 5.0.
- <sup>c</sup> One item from treatability group LA-W901 (*IPA wastes*) transferred to LA-W906 (*Aqueous Organic Liquids*) treatability group in Rev. 5.0 (also see footnote m).
- <sup>d</sup> The final FY96 volume for most treatability groups is reported to two decimal places for consistency with the original STP inventory. The final FY96 LA-W902 volume is given as 0.0038m<sup>3</sup> (i.e., reported to four decimal places) in order to accurately report the presence of one small-volume waste item in this treatability group remaining in the LANL inventory at the end of FY96. This item was shipped off-site on December 18, 1996.
- <sup>e</sup> Items of LA-W904 waste transferred to the category of *Missing/Nonexistent/TBV* in Rev. 5.0 (also see footnotes m and n).
- <sup>f</sup> These are wastes that were generated in FY96 and became covered waste in FY97; they were included in the Revision 5 request to facilitate expedited treatment and disposal of these wastes.
- <sup>g</sup> Items of LA-W930 waste transferred to the category of *Missing/Nonexistent/TBV* in Rev. 5.0 (also see footnote m).
- <sup>h</sup> Items of LA-W929 waste transferred to the category of *Missing/Nonexistent/TBV* in Rev. 5.0 (also see footnote m).
- <sup>l</sup> This treatability group (LA-W931, *Lead Requiring Sorting*) is not listed in the *Compliance Plan Volume*; however, it is discussed in section 3.4.3 of the *Background Volume*.



**Site Treatment Plan  
Federal Facility Compliance Order**

**Appendix C  
Reported STP MLLW Inventories FY98  
(Through Revision 7.0)**

**FY08 Annual Update – Revision 2**

**September 30, 2009**

**Site Treatment Plan  
Federal Facility Compliance Order**

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)		
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	
3.1.1	IPA Wastes	LA-W901-0	7	0.02	Decrease 7	Decrease 0.02					0	0.00	0	0.00	
3.1.1	Scintillation Fluids	LA-W902-0	1	0.0038	Decrease 1	Decrease 0.0038					0	0.00	0	0.00	
3.1.2	Lead Blankets	LA-W903-0	0	0.00							0	0.00	0	0.00	
3.1.2	Soil with Heavy Metals	LA-W904-0	58	<del>10.33</del> 10.43 <sup>a</sup>	Decrease 6	Decrease 0.62 <sup>b</sup>					2	0.34			
		LA-W904-5	1	0.11							1	0.11	3	0.45	
3.1.2	ER Soils	LA-W905-0	0	0.00							0	0.00	0	0.00	
3.1.3	Aqueous Organic Liquids	LA-W906-0	45	1.65							45	1.65			
		LA-W906-4	27	0.36							27	0.36			
		LA-W906-5	101	<del>8.88</del> 8.31 <sup>d</sup>								101	8.31		
		LA-W906-6	0	0.00	Increase 88	Increase 5.74					88	5.74	261	16.06	
3.1.4	Organic-Contaminated Combustible Solids	LA-W911-0	305	28.10	Increase 2	Increase 0.42 <sup>c</sup>					307	28.52	382	36.07	

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
		LA-W911-4	33	0.68							33	0.68		
		LA-W911-5	40	6.87							40	6.87		
		LA-W911-6	0	0.00	Increase 1	Increase 0.0038					1	0.0038		
		LA-W911-7	0	0.00					Increase 1	Increase 0.001	1	0.001		
3.1.4	Organic-Contaminated Noncombustible Solids	LA-W919-0	79	7.71	Increase 1	Increase 0.11 <sup>e</sup>					80	7.82	227	
		LA-W919-4	9	0.38							9	0.38	231	
		LA-W919-5	89	10.53							89	10.53	23112	
		LA-W919-6	0	0.00	Increase 49	Increase 8.58					49	8.58		27.31
		LA-W919-7	0	0.00					Increase 4	Increase 0.002	4	0.002		
3.1.5	Combustible Debris	LA-W912-0	83	13.82							83	13.82		
		LA-W912-4	9	0.75							9	0.75		
		LA-W912-5	5	0.28							5	0.28		
		LA-W912-6	0	0.00	Increase 6	Increase 0.32					6	0.32		
		LA-W912-7	0	0.00					Increase 2	Increase 0.0004	2	0.0004	403	15.17
3.1.5	Activated or Inseparable Lead	LA-W921-0	14	4.77	Decrease 1	Decrease 0.06 <sup>f</sup>			Increase 1	Increase 0.208	14	2.99		
					Decrease 2	Decrease 1.72					12	3.20		

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
		LA-W921-5	18	3.35	Decrease 4	Decrease 0.83 <sup>f</sup>					14	2.52		
		LA-W921-6	0	0.00	Increase 9	Increase 1.58					9	1.58	34 35	7.09 7.30
3.15	Non-combustible Debris	LA-W922-0	41	5.62	Decrease 14	Decrease 2.915					27	2.71		
		LA-W922-4	53	2.83							53	2.83		
		LA-W922-5	63	22.29	Decrease 3	Decrease 0.62					60	21.67		
		LA-W922-6	0	0.00	Increase 51	Increase 9.25					51	9.25	191	36.46
3.1.6	Aqueous Wastes with Heavy Metals	LA-W913-0	83	1.50							83	1.50		
		LA-W913-4	25	0.40							25	0.40		
		LA-W913-5	11	0.15							11	0.15		
		LA-W913-6	0	0.00	Increase 20	Increase 1.02					20	1.02	139	3.07
3.1.6	Corrosive Solutions	LA-W914-0	60	0.69							60	0.69		
		LA-W914-4	90	0.36							90	0.36		
		LA-W914-5	39	0.12							39	0.12		
		LA-W914-6	0	0.00	Increase 8	Increase 0.04					8	0.04	197	1.21
3.1.6	Aqueous Cyanides, Nitrates, Chromates, and Arsenates	LA-W915-0	9	0.13							9	0.13		
		LA-W915-4	3	0.002							3	0.002		
		LA-W915-5	11	0.04							11	0.04	23	0.17
3.1.7	Water-Reactive Wastes	LA-W916-0	78	6.03							78	6.03		
		LA-W916-4	26	0.31							26	0.31		
		LA-W916-5	4	0.03							4	0.03		
		LA-W916-6	0	0.00	Increase 5	Increase 0.68					5	0.68	113	7.05
3.1.8	Compressed Gases	LA-W917-0	13	0.35							13	0.35		

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
	Requiring Scrubbing	LA-W917-7	0	0.00					Increase 12	Increase 0.28	12	0.28	13	0.35
3.1.9	Compressed Gases Requiring Oxidation	LA-W918-0	6	0.08							6	0.08	25	0.63
		LA-W918-4	168	1.23							168	1.23		
		LA-W918-5	2	0.01							2	0.01		
		LA-W918-6	0	0.00	Increase 1	Increase 0.0002					1	0.0002		
		LA-W918-7	0	0.00					Increase 15	Increase 0.46	15	0.46	177	1.32
												192	1.78	
3.1.10	Elemental Mercury	LA-W920-0	45	0.50							45	0.50		
		LA-W920-4	20	0.02							20	0.02		
		LA-W920-5	9	0.02							9	0.02		
		LA-W920-6	0	0.00	Increase 5	Increase 0.12					5	0.12	79	0.66
<del>3.2.1</del> 3.1.11	Halogenated Organic Liquids	LA-W907-0	384	16.58	Decrease 3	Decrease 0.0076					381	16.57		
		LA-W907-4	97	1.05							97	1.05		
		LA-W907-5	31	0.49							31	0.49		
		LA-W907-6	0	0.00	Increase 16	Increase 0.15					16	0.15		
		LA-W907-7	0	0.00					Increase 12	Increase 0.04	12	0.04	525	48.26
												537	18.30	
<del>3.2.1</del> 3.1.11	Nonhalogenated Organic Liquids	LA-W908-0	275	14.34	Increase 0 <sup>a</sup>	Increase 0.076					271	13.82		

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
					Decrease 4	Decrease 0.49								
					Decrease 0 <sup>b</sup>	Decrease 0.11								
		LA-W908-4	409	3.38							409	3.38		
		LA-W908-5	130	2.91							130	2.91		
		LA-W908-6	0	0.00	Increase 33	Increase 0.09					33	0.09		
		LA-W908-7							Increase 56	Increase 0.02	56	0.02	843 899	20.20 20.22
<del>3.2.1</del> 3.1.11	Bulk Oils	LA-W909-0	28	3.75	Increase 0 <sup>i</sup>	Increase 0.47					5	2.00		
		LA-W909-4	8	1.48							8	1.48		
		LA-W909-5	28	2.28							28	2.28		
		LA-W909-6	0	0.00	Increase 4	Increase 0.05					4	0.05	45	5.81
<del>3.2.1</del> 3.1.11	PCB Wastes with RCRA Components	LA-W910-0	4	0.74	Increase 6	Increase 0.62 <sup>b</sup>					10	1.36		
		LA-W910-6	0	0.00	Increase 30	Increase 1.39					30	1.39	40	2.75
<del>3.2.1</del> 3.1.11	Liquid and Solid Oxidizers	LA-W923-0	6	0.117							6	0.117		
		LA-W923-4	67	0.145							67	0.145		
		LA-W923-5	13	0.317							13	0.317		
		LA-W923-6	0	0.00	Increase 7	Increase 0.795					7	0.795	93	1.37
<del>3.3</del> 3.2	Lead Waste - TBD	LA-W924-0	129	40.16							129	40.16	129	40.16
<del>3.3</del>	Mercury	LA-W925-0	63	18.30							63	18.30		

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
3.2	Wastes - TBD	LA-W925-4	37	0.42							37	0.42		
		LA-W925-5	14	1.52							14	1.52		
		LA-W925-6	0	0.00	Increase 23	Increase 0.67					23	0.67	137	20.91
<del>3.3</del> 3.2	Compressed Gases - TBD	LA-W926-0	10	1.25							10	1.25	10	1.25
<del>3.3</del> 3.2	Biochemical Laboratory Wastes	LA-W927-0	9	1.34							9	1.34	9	1.34
<del>3.3</del> 3.2	Dewatered Treatment Sludge	LA-W928-0	61	12.71							61	12.71	61	12.71
<del>3.3</del> 3.2	Explosives	LA-W932-0	0	0.00							0	0.00		
		LA-W932-4	1	0.000001							1	0.000001	1	0.000001
<del>3.3</del> 3.2	Lab Packs	LA-W933-0	0	0.00							0	0.00		
		LA-W933-4	114	0.17							114	0.17		
		LA-W933-5	28	0.13							28	0.13		
		LA-W933-6	0	0.00	Increase 6	Increase 0.003	Increase 1	Increase 0.00002 <sup>j</sup>			7	0.003		
		LA-W933-7	0	0.00					Increase 4	Increase 0.002	4	0.002	449 153	0.30
<del>3.4.1</del> 3.3.1	Lead for Surface Decontamin-ation	LA-W930-0	36	33.43	Decrease 1	Decrease 0.11 <sup>k</sup>			Increase 0 <sup>o</sup> Decrease 1	Increase 0.095 De-crease 0.208	<del>23</del> 22	<del>26.27</del> 26.16		
					Decrease 4	Decrease 0.35 <sup>k</sup>								
					Decrease 6	Decrease 1.04								
					Decrease 2	Decrease 5.66								

**TABLE B-1. SUMMARY TABLE  
STP/CPV MLLW INVENTORY CHANGES FOR REVISION 7.0**

CPV Section	Treatability Group	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 7 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
		LA-W930-5	115	23.75	Decrease 1 Decrease 3	Decrease 0.21 <sup>k</sup> Decrease 0.62 <sup>k</sup>					111	22.92		
		LA-W930-6	0	0.00	Increase 14	Increase 12.06					14	12.06	148 147	<del>61.25</del> 61.14
3.4.2 3.3.2	Nonradioactive or Suspect Waste Items to be Surveyed	LA-W929-0	2	0.0076	Decrease 2	Decrease 0.0076					0	0.00		
		LA-W929-5	1	0.00002			Decrease 1	Decrease 0.00002 <sup>j</sup>			0	0.00	0	0.00
None <sup>l</sup> 3.3.3	Lead Requiring Sorting	LA-W931-0	23	4.76	Decrease 23 Increase 0 <sup>m</sup>	Decrease 4.78 Increase 0.02					0	0.00		
		LA-W931-5	8	0.44							8	0.44		
		LA-W931-6	0	0.00	Increase 4	Increase 0.64					4	0.64	12	1.08
None <sup>n</sup>	IPA	None	0	0.00	Increase 1 Decrease 1	Increase 0.0005 <sup>n</sup> Decrease 0.0005 <sup>n</sup>					0	0.00	0	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Section	Category	MWIR ID (by subgroup)	Net Covered Waste Inventory by Subgroup (reported in Rev. 4/5)		Revision 6 (3/98 FY97 Annual Update Changes)		Revision 6 (Other Changes)		Revision 7		Subtotal (by subgroup)		Net Covered Waste Inventory (including Rev. 6 changes)	
			Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )	Items	Volume (m <sup>3</sup> )
3-5 3.4	Missing/nonexistent/TBV	NONE (Revision 5)	48	8.81					0	Decrease 0.00095 <sup>p</sup>	48	8.81	48	8.81

**NOTES:**

- <sup>a</sup> This correction in LA-W904 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- <sup>b</sup> This transfer of LA-W904 waste to LA-W910 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- <sup>c</sup> This transfer of LA-W904 waste to LA-W911 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- <sup>d</sup> This correction in LA-W906 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- <sup>e</sup> The volume increase arises from the return of unused treatability study sample. It has been returned to the original inventory of LA-W919 (subgroup -0) consistent with the inventory subgroup from which the sample was removed.
- <sup>f</sup> These 5 items in subgroups LA-W921-0 and -5 (0.89 m<sup>3</sup> total) were shipped on December 9, 1996 as discussed in DOE's letter dated December 24, 1996.
- <sup>g</sup> This increase in LA-W908 volume arises from an error in the original STP inventory data as discussed in Revision 6.0.

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

- h** This decrease in LA-W908 volume arises from an error in the original STP inventory data as discussed in Revision 6.0.
- i** This correction in LA-W909 volume arises from an error in Appendix B in Revision 4/5 as discussed in Revision 6.0.
- j** This transfer of LA-W929 waste to LA-W933 is discussed in Revision 6.0.
- k** The shipment of 0.32 m<sup>3</sup>, as reported in the FY97 STP *Annual Update*, consisted of 1 item (0.11 m<sup>3</sup>) from subgroup LA-W930-0 and 1 item (0.21 m<sup>3</sup>) from subgroup -5. The shipment of 0.97 m<sup>3</sup>, as reported in the FY97 STP *Annual Update*, consisted of 4 items (0.35 m<sup>3</sup>) from subgroup -0 and 3 items (0.62 m<sup>3</sup>) from subgroup -5.
- ~~**l** This treatability group (LA-W931, *Lead Requiring Sorting*) is not listed in the CPV; however it is discussed in section 3.4.3 of the *Background Volume*.~~
- m** This increase in LA-W931 volume arises from an error in the original STP inventory data as discussed in Revision 6.0.
- n** This item of isopropyl alcohol waste was not included in the original STP inventory and it was shipped for treatment as discussed in DOE's letter dated January 9, 1997.
- o** The increase in volume without increasing the number of items results from an error in the original STP inventory data as discussed in Revision 7.0.
- p** Item found as discussed in Revision 7.0.



**Appendix D  
Reported STP MLLW Inventories FY98  
(Through Revision 9.0)**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**Table 2.1-2. FY98 MLLW Inventory Detailed Update by Treatability Group.**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	3/98 Annual Update (m <sup>3</sup> )	Revision 7.0 (m <sup>3</sup> )	Proposed Revision 9.0 (m <sup>3</sup> )	Comments	FY98 Annual Update (m <sup>3</sup> )	Projection FY99-FY03 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00	0.00			0.00	0.00
3.1.1	LA-W902 Scintillation Fluids	0.00	0.00			0.00	0.00
3.1.2	LA-W903 Lead Blankets	0.00	0.00			0.00	0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.55*	0.45			0.45	0.00
3.1.2	LA-W905 ER Soils	0.00	0.00			0.00	0.00
3.1.3	LA-W906 Aqueous Organic Liquids	15.70	16.06	(2.91) (3.92) 0.02 0.001	Shipped off-site for treatment Shipped off-site for treatment Newly generated Administrative adjustments	9.25	0.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	35.39	36.07	(3.54) (0.0001) 0.64 0.12	Shipped off-site for treatment Shipped off-site for treatment Newly generated Administrative adjustments	33.29	0.00
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	26.93	27.31	(6.45) 1.59	Shipped off-site for treatment Newly generated	22.45	0.00
3.1.5	LA-W912 Combustible Debris	14.42	15.17	(0.00005)	Shipped off-site for treatment	15.17	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	7.10	7.30	(0.21)** (0.32) 0.11	On-site Lead Decon Transferred to LA-W910 Administrative adjustments	6.88	0.00
3.1.5	LA-W922 Noncombustible Debris	33.63	36.46	(2.02) (0.008) 5.40 0.63	Treatability Study Treatability Study Newly generated Administrative adjustments	40.46	0.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	2.67	3.07	(0.004) 1.33	Shipped off-site for treatment Newly generated	4.40	0.00
3.1.6	LA-W914 Corrosive Solutions	0.85	1.21	(0.00003) 0.01 0.006	Treatability Study Newly generated Administrative adjustments	1.23	0.00
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.17	0.17	(0.14) 0.91	Treatability Study Newly generated	0.94	0.00
3.1.7	LA-W916 Water-Reactive Wastes	6.74	7.05	(5.70) (0.22) 0.05 0.42 (0.11)	Shipped off-site for treatment Shipped off-site for treatment Newly generated Administrative adjustments Transferred to LA-W908	1.49	0.00
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.35	0.63	(0.28)	Treatability Study	0.35	0.00
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.09	1.78	(0.05) 0.006	Treatability Study Administrative adjustments	1.74	0.00
3.1.10	LA-W920 Elemental Mercury	0.64	0.66	(0.02) 0.002	Treatability Study Newly generated	0.64	0.00
3.1.11	LA-W907 Halogenated Organic Liquids	17.21	18.30	(4.97) (6.94) 0.02 0.21	Shipped off-site for treatment Shipped off-site for treatment Newly generated Administrative adjustments	6.62	0.00
3.1.11	LA-W908 Nonhalogenated Organic Liquids	16.82	20.22	(1.87) (1.65) (0.71)	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment	16.56	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	3/98 Annual Update (m <sup>3</sup> )	Revision 7.0 (m <sup>3</sup> )	Proposed Revision 9.0 (m <sup>3</sup> )	Comments	FY98 Annual Update (m <sup>3</sup> )	Projection FY99-FY03 (m <sup>3</sup> )
				(0.001) 0.41 0.06 (0.01) 0.11	Treatability Study Newly generated Administrative adjustments Transferred to missing Transferred from LA-W916		
3.1.11	LA-W909 Bulk Oils	4.33	5.81	(1.08) 0.42	Shipped off-site for treatment Newly generated	5.15	0.00
3.1.11	LA-W910 PCB Wastes with RCRA Components	2.75	2.75	0.10 0.32 0.02	Newly generated Transferred from LA-W921 Transferred from LA-W924	3.19	20.00
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.23	1.37	(0.001)	Shipped off-site for treatment	1.37	0.00
3.2	LA-W924 Lead Wastes - TBD	40.16	40.16	(2.5) (10.54) (5.52) (0.003) (2.82) 0.10 (0.02)	Shipped off-site for treatment Shipped off-site for treatment Off-site Recycle On-site Decon Transferred to missing Administrative adjustments Transferred to LA-W910	18.86	0.00
3.2	LA-W925 Mercury Wastes - TBD	20.49	20.91	(14.49)	Shipped off-site for treatment	6.42	0.00
3.2	LA-W926 Compressed Gases – TBD	1.25	1.25	(1.06)	Treatability Study	0.19	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	1.34	1.34			1.34	0.00
3.2	LA-W928 Dewatered Treatment Sludge	12.71	12.71			12.71	0.00
3.2	LA-W932 Explosives	0.00	0.000001			0.000001	0.00
3.2	LA-W933 Lab Packs	0.13	0.30	(0.001) 0.009	Treatability Study Administrative adjustment	0.31	0.00
3.3.1	LA-W930 Lead for Surface Decontamination	69.38	61.14	(4.99) (6.66) (0.68) (0.09) (2.08) (4.58) (4.25)	Off-site Recycle Off-site Recycle On-site Decon On-site Decon On-site Decon On-site Decon On-site Decon	37.81	0.00
3.3.3	LA-W931 Lead Requiring Sorting	1.06	1.08			1.08	0.00
3.4	Missing/ nonexistent/ TBV category	0.00	8.81	0.01 2.82	Transferred from LA-W908 Transferred from LA-W924	11.64	Not Applicable

\*Volume was reported incorrectly as 0.00 cubic meters in FY97 Annual Update.

\*\*Item was successfully decontaminated on 8/23/95 in the on-site decontamination operation, but was not previously reported.

**Appendix E**

**Reported STP MLLW Inventories**

- (1) FY99 Update**
- (2) Revision 10.0 Final**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**(1) FY99 MLLW Inventory Detailed Update by Treatability Group.**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Comments	FY99 Annual Update (m <sup>3</sup> )	Projection FY99-FY03 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00			0.00	0.00
3.1.1	LA-W902 Scintillation Fluids	0.00			0.00	0.00
3.1.2	LA-W903 Lead Blankets	0.00			0.00	0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.45	(0.45) 0.68	Shipped off-site for treatment Newly generated	0.68	0.00
3.1.2	LA-W905 ER Soils	0.00			0.00	0.00
3.1.3	LA-W906 Aqueous Organic Liquids	9.25	(0.01) (1.09) (0.15) (2.18) (2.74) (0.95) (0.01) (0.0005) 0.34	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment SSD Project SSD Project Newly generated	2.46	1.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	33.29	(0.75) (0.004) (0.01) (0.001) (0.006) 0.75	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment SSD Project SSD Project Newly generated	33.27	3.20
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	22.45	(2.44) (0.95) (0.42) 4.92	Shipped off-site for treatment Shipped off-site for treatment SSD Project Newly generated	23.56	7.95
3.1.5	LA-W912 Combustible Debris	15.17	(0.003) 0.11 (0.11)	SSD Project Newly generated Transfer to LA-W916	15.17	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	6.88	(0.63) (0.23) (0.23) (2.6) 0.63	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for recycling Newly generated	3.82	0.00
3.1.5	LA-W922 Noncombustible Debris	40.46	(5.49) (4.79) (0.64) (0.11) (1.21) (1.003) (3.45) (2.75) (3.05) (0.0009) (0.21) (0.009) 2.25	Shipped off-site for treatment Shipped off-site for recycling SSD Project Transfer to Missing Transfer to LA-W917 Newly generated	20.00	27.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	4.40	(0.14) 0.98	SSD Project Newly generated	5.24	6.65
3.1.6	LA-W914 Corrosive Solutions	1.23	(0.008) (0.006) 0.03	SSD Project SSD Project Newly generated	1.25	0.05
3.1.6	LA-W915	0.94	0.0007	Newly generated	0.94	4.55

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Comments	FY99 Annual Update (m <sup>3</sup> )	Projection FY99- FY03 (m <sup>3</sup> )
	Aqueous Cyanides, Nitrates, Chromates, and Arsenates					
3.1.7	LA-W916 Water-Reactive Wastes	1.49	(0.0004) 0.52 0.11	SSD Project Newly generated Transferred from LA-W912	2.12	0.25
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.35	(0.07) 0.009 0.01	Treatability study Transferred from LA-W922 Newly generated	0.30	0.00
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.74	(0.03) (0.02) (0.005) 0.04	Treatability study SSD Project SSD Project Newly generated	1.73	0.00
3.1.10	LA-W920 Elemental Mercury	0.64	0.006 0.0000	Newly generated Transfer to Missing	0.65	0.01
3.1.11	LA-W907 Halogenated Organic Liquids	6.62	(3.21) (0.004) (0.72) (0.25) (0.99) (0.0005) 0.007	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for treatment SSD Project SSD Project Newly generated	1.45	0.1
3.1.11	LA-W908 Nonhalogenated Organic Liquids	16.56	(4.89) (0.56) (1.94) (0.99) (0.0005) (0.49) (0.5) (0.06) 0.49	Shipped off-site for treatment Shipped off-site for treatment SSD Project SSD Project Newly generated	7.62	2.05
3.1.11	LA-W909 Bulk Oils	5.15	(0.001) (0.83) 0.84	Shipped off-site for treatment SSD Project Newly generated	5.16	2.1
3.1.11	LA-W910 PCB Wastes with F Components	3.19	0.0003	Newly generated	3.19	0.5
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.37	(0.007) 0.01	SSD Project Newly generated	1.37	0.00
3.2	LA-W924 Lead Wastes – TBD	18.86	(0.62) (0.34)	Shipped off-site for treatment Shipped off-site for recycling	17.90	0.00
3.2	LA-W925 Mercury Wastes – TBD	6.42 2.61*	(0.007) (0.23) (0.003) 0.01 0.001	Treatability study Treatability study SSD Project Newly generated Transfer to Missing	6.19 2.61	1.4
3.2	LA-W926 Compressed Gases – TBD	0.19			0.19	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	1.34	(1.34)	Shipped off-site for treatment	0.00	0.00
3.2	LA-W928 Dewatered Treatment Sludge	12.71	(4.16)	Shipped off-site for treatment	8.55	0.00
3.2	LA-W932 Explosives	0.000001	0.000001	On-site Recycle	0.00	0.00
3.2	LA-W933	0.31	(0.03)	SSD Project	0.28	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Comments	FY99 Annual Update (m <sup>3</sup> )	Projection FY99-FY03 (m <sup>3</sup> )
	Lab Packs					
3.3.1	LA-W930 Lead for Surface Decontamination	37.81	(0.84) (1.74) (0.28) (3.23) (0.56) (10.76) (1.78) (2.29) (11.42) (0.66)	Shipped off-site for treatment Shipped off-site for treatment Shipped off-site for recycling Shipped off-site for recycling Shipped off-site for recycling Shipped off-site for recycling On-Site lead decon On-Site lead decon Approved for transfer to MTRU (Amendment 3.0) Administrative Adjustment	4.25	0.00
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00			0.00	0.00
3.3.3	LA-W931 Lead Requiring Sorting	1.08			1.08	0.00
3.4	Missing/ nonexistent/ TBV category	11.64	0.21 0.001 0.0000	Transferred from LA-W922 Transferred from LA-W925 Transferred from LA-W920	11.85	Not Applicable
	<b>TOTALS</b>	<b>261.99 2.61*</b>	<b>(81.74)</b>		<b>182.88</b>	

**(2) Revision 10.0 Final**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	FY99 Annual Update (m <sup>3</sup> )	FINAL Revision 10.0 (m <sup>3</sup> )	Totals after FINAL Rev 10
3.1.1	LA-W901 IPA Wastes	0.00		0.00		0.00
3.1.1	LA-W902 Scintillation Fluids	0.00		0.00		0.00
3.1.2	LA-W903 Lead Blankets	0.00		0.00		0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.45	(0.45) 0.68	0.68		0.68
3.1.2	LA-W905 ER Soils	0.00		0.00		0.00
3.1.3	LA-W906 Aqueous Organic Liquids	9.25	(0.01) (1.09) (0.15) (2.18) (2.74)	2.46		2.46

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	FY99 Annual Update (m <sup>3</sup> )	FINAL Revision 10.0 (m <sup>3</sup> )	Totals after FINAL Rev 10
			(0.95) (0.01)  (0.0005) 0.34			
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	33.29	(0.75) (0.004) (0.01) (0.001) (0.006) 0.75	33.27	(0.2) 0.11  (0.11)  0.4	33.47
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	22.45	(2.44) (0.95) (0.42) 4.92	23.56	0.08 (0.08)	23.56
3.1.5	LA-W912 Combustible Debris	15.17	(0.003) 0.11	15.28		15.28
3.1.5	LA-W921 Activated or Inseparable Lead	6.88	(0.63) (0.23) (0.23) (2.6) 0.63	3.82		3.82

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	FY99 Annual Update (m <sup>3</sup> )	FINAL Revision 10.0 (m <sup>3</sup> )	Totals after FINAL Rev 10
3.1.5	LA-W922 Noncombustible Debris	40.46	(5.49) (4.79) (0.64) (0.11) (1.21) (1.003) (3.45) (2.75) (3.05) (0.0009) (0.21) (0.009) 2.25	20.00	(0.34) (0.00004) (0.001) (0.01) (0.11)	19.54
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	4.40	(0.14) 0.98	5.24		5.24
3.1.6	LA-W914 Corrosive Solutions	1.23	(0.008) (0.006)  0.03	1.25		1.25
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.94	0.0007	0.94	0.00004	0.94
3.1.7	LA-W916 Water-Reactive Wastes	1.49	(0.0004) 0.52	2.01	0.34	2.35
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.35	(0.07) 0.009 0.01	0.30		0.30
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.74	(0.03) (0.02) (0.005) 0.04	1.73		1.73
3.1.10	LA-W920 Elemental Mercury	0.64	0.006	0.65		0.65

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	FY99 Annual Update (m <sup>3</sup> )	FINAL Revision 10.0 (m <sup>3</sup> )	Totals after FINAL Rev 10
3.1.11	LA-W907 Halogenated Organic Liquids	6.62	(3.21) (0.004) (0.72) (0.25) (0.99) (0.0005) 0.007	1.45	0.59  (0.59) 0.02 (0.2)	1.45
3.1.11	LA-W908 Nonhalogenated Organic Liquids	16.56	(4.89) (0.56) (1.94) (0.99) (0.0005) (0.49) (0.5) (0.06) 0.49	7.62	0.11  (0.11)	7.62
3.1.11	LA-W909 Bulk Oils	5.15	(0.001) (0.83) 0.84	5.16	0.28 (0.28)  0.38	5.54
3.1.11	LA-W910 PCB Wastes with RCRA Components	3.19	0.0003	3.19		3.19
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.37	(0.007) 0.01	1.37	(.05)	1.32
3.2	LA-W924 Lead Wastes – TBD	18.86	(0.62) (0.34)	17.90	(4.79)	13.11
3.2	LA-W925 Mercury Wastes – TBD	6.42 2.61*	(0.007) (0.23) (0.003) 0.01	6.19 2.61	0.01	6.19 2.62
3.2	LA-W926 Compressed Gases – TBD	0.19		0.19	(0.19)	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	1.34	(1.34)	0.00		0.00

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY98 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	FY99 Annual Update (m <sup>3</sup> )	FINAL Revision 10.0 (m <sup>3</sup> )	Totals after FINAL Rev 10
3.2	LA-W928 Dewatered Treatment Sludge	12.71	(4.16)	8.55		8.55
3.2	LA-W932 Explosives	0.000001	0.000001	0.00		0.00
3.2	LA-W933 Lab Packs	0.31	(0.03)	0.28	0.001 0.05	0.33
3.2	LA-W934 High Activity Waste				0.11 4.79 0.19 0.01	5.1
3.3.1	LA-W930 Lead for Surface Decontamination	37.81	(0.84) (1.74) (0.28) (3.23) (0.56) (10.76) (1.78) (2.29) (11.42)  (0.66)	4.25		4.25
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00		0.00		0.00
3.3.3	LA-W931 Lead Requiring Sorting	1.08		1.08	(0.11)	0.97
3.4	Missing/ nonexistent/ TBV category	11.64	0.21	11.85	0.2 0.11	12.16
	<b>TOTALS</b>	<b>261.99 2.61*</b>	<b>(81.74)</b>	<b>182.88</b>		<b>183.67</b>

\*Omitted from FY98 Update by mistake.



**Appendix F  
Reported STP MLLW Inventories  
FY00 Update**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**FY00 MLLW Inventory Detailed Update by Treatability Group**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY99 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Proposed Revision 11.0 (m <sup>3</sup> )	Comments	FY00 Annual Update (m <sup>3</sup> )	Projection FY00-FY04 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00	0.00				0.00
3.1.1	LA-W902 Scintillation Fluids	0.00	0.00				0.00
3.1.2	LA-W903 Lead Blankets	0.00	0.00				0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.68	0.68			0.68	0.00
3.1.2	LA-W905 ER Soils	0.00	0.00				0.00
3.1.3	LA-W906 Aqueous Organic Liquids	2.46	2.46	(0.33) (0.02) (0.21) (0.42) (0.21) (0.59)	Shipped to DSSI 12/17/99 Shipped to DSSI 12/17/99 Shipped to WCS 1/25/00 Shipped to DSSI 3/28/00 Shipped to DSSI 6/27/00 Shipped to Perma-Fix 7/25/00	0.68	1.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	33.27	33.47	(0.38) (0.21) (0.04) (0.62) (0.11) (2.08) 0.11 0.11	Shipped to Perma-Fix 2/25/00 Shipped to ATG 3/31/00 Shipped to DSSI 6/27/00 Shipped to Perma-Fix 7/25/00 Shipped to Perma-Fix 7/25/00 Shipped to ATG 7/26/00 Administrative Adjustment Newly Generated	30.25	0.00
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	23.56	23.56	(0.00) (0.001) (0.08) 0.08	Shipped to DSSI 12/17/99 Shipped to DSSI 3/28/00 Shipped to ATG 5/31/00 Administrative Adjustment	23.56	0.00
3.1.5	LA-W912 Combustible Debris	15.17	15.28	(0.002) (13.49) (0.23) (1.34) (0.11) (0.11)	Shipped to DSSI 12/17/99 Shipped to ATG 3/31/00 Shipped to ATG 5/31/00 Shipped to Envirocare 6/27/00 Shipped to ATG 7/26/00 Administrative Adjustment	0.00	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	3.82	3.82	(0.74) (0.63) (2.61) (0.0006) 0.16	Shipped to ATG 5/31/00 Shipped to Envirocare 6/27/00 Shipped to Envirocare 6/27/00 Shipped to ATG 7/26/00 Administrative Adjustment	0.00	0.00
3.1.5	LA-W922 Noncombustible Debris	20.00	19.54	(1.19) (2.03) (13.95) (0.22) (0.80) (0.70) (0.0002) (0.65)	Shipped to ATG 5/31/00 Shipped to Envirocare 6/27/00 Shipped to Envirocare 6/27/00 Shipped to ATG 7/26/00 Shipped to ATG 7/26/00 Shipped to GTS 8/1/00 Shipped to GTS 8/1/00 Administrative Adjustment	0.00	0.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	5.24	5.24	(0.0002) (0.005) (0.09) (0.83) (2.20) (0.37) (0.14)	Shipped to DSSI 12/17/99 Shipped to WCS 1/25/00 Shipped to DSSI 3/28/00 Shipped to DSSI 6/27/00 Shipped to DSSI 6/27/00 Shipped to Perma-Fix 9/14/00 Administrative Adjustment	1.60	0.00
3.1.6	LA-W914 Corrosive Solutions	1.25	1.25	(0.0004) (0.29)	Shipped to WCS 1/25/00 Shipped to DSSI 3/28/00	0.62	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY99 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Proposed Revision 11.0 (m <sup>3</sup> )	Comments	FY00 Annual Update (m <sup>3</sup> )	Projection FY00-FY04 (m <sup>3</sup> )
				(0.00)	Shipped to DSSI 3/28/00		
				(0.11) (0.23) (0.002)	Shipped to DSSI 6/27/00 Shipped to Perma-Fix 9/14/00 Administrative Adjustment		
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.94	0.94	(0.002) (0.48)	Shipped to Perma-Fix 9/14/00 Administrative Adjustment	0.46	0.00
3.1.7	LA-W916 Water-Reactive Wastes	2.12	2.35	(0.00) 0.11 0.0005	Shipped to ATG 7/26/00 Administrative Adjustment Newly Generated	2.44	0.00
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.30	0.30			0.30	0.00
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.73	1.73			1.73	0.00
3.1.10	LA-W920 Elemental Mercury	0.65	0.65	(0.21) (0.002) (0.05)	Shipped to ATG 7/26/00 Shipped to BNL 9/25/00 Shipped to BNL 9/25/00	0.39	0.01
3.1.11	LA-W907 Halogenated Organic Liquids	6.62	1.45	(0.60) (0.08) (0.02) (0.0001) (0.02) 0.02 (0.02)	Shipped to DSSI 12/17/99 Shipped to Perma-Fix 2/25/00 Shipped to Perma-Fix 2/25/00 Shipped to DSSI 3/28/00 Shipped to DSSI 6/27/00 Administrative Adjustment Administrative Adjustment	0.73	0.1
3.1.11	LA-W908 Nonhalogenated Organic Liquids	16.56	7.62	(0.46) (0.005) (0.04) (0.34) (0.08) (0.11) (0.05) (0.12) (0.90) 0.11	Shipped to DSSI 12/17/99 Shipped to Perma-Fix 2/25/00 Shipped to Perma-Fix 2/25/00 Shipped to DSSI 3/28/00 Shipped to DSSI 6/27/00 Shipped to DSSI 6/27/00 Shipped to Perma-Fix 7/25/00 Shipped to Perma-Fix 7/25/00 Shipped to Perma-Fix 9/14/00 Administrative Adjustment	5.62	0.00
3.1.11	LA-W909 Bulk Oils	5.15	5.54	(1.11) (0.40) (0.25) (0.83) (0.62) 0.25 0.21	Shipped to DSSI 12/17/99 Shipped to DSSI 3/28/00 Shipped to DSSI 3/28/00 Shipped to DSSI 6/27/00 Shipped to DSSI 6/27/00 Administrative Adjustment Newly Generated	2.79	0.00
3.1.11	LA-W910 PCB Wastes with RCRA Components	3.19	3.19	(0.06) 0.02 0.81	Shipped to DSSI 3/28/00 Newly generated Administrative Adjustment	3.96	0.5
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.37	1.32	(0.0007)	Shipped to Perma-Fix 9/14/00	1.32	0.00
3.2	LA-W924 Lead Wastes – TBD	18.86	13.11	(8.52) 0.66	Shipped to GTS 9/19/00 Newly Generated	5.25	0.00
3.2	LA-W925 Mercury Wastes – TBD	6.42 2.61*	6.19 2.62	(0.01) (2.61)	Shipped to BNL 9/25/00 Administrative Adjustment	6.19	1.4
3.2	LA-W926 Compressed Gases – TBD	0.19	0.00			0.00	0.00
3.2	LA-W927	1.34	0.00			0.00	0.00

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY99 Annual Update (m <sup>3</sup> )	Proposed Revision 10.0 (m <sup>3</sup> )	Proposed Revision 11.0 (m <sup>3</sup> )	Comments	FY00 Annual Update (m <sup>3</sup> )	Projection FY00-FY04 (m <sup>3</sup> )
	Biochemical Laboratory Wastes						
3.2	LA-W928 Dewatered Treatment Sludge	12.71	8.55	(8.55)	Proposed for Deletion	0.00	0.00
3.2	LA-W932 Explosives	0.000001	0.00	0.004	Newly Generated	0.004	0.00
3.2	LA-W933 Lab Packs	0.31	0.33	(0.001) (0.02) (0.0001) (0.003) (0.00001) 0.21 0.48	Shipped to DSSI 12/17/99 Shipped to ATG 3/31/00 Shipped to ATG 7/26/00 Shipped to Perma-Fix 9/14/00 Administrative Adjustment Newly Generated Administrative Adjustment	1.00	0.00
3.2	LA-W934 High Activity Waste	0.00	5.1			5.1	
3.3.1	LA-W930 Lead for Surface Decontamination	37.81	4.25	(4.25)	Shipped to TA-50 11/15/99	0.00	0.00
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00	0.00			0.00	0.00
3.3.3	LA-W931 Lead Requiring Sorting	1.08	0.97	(0.02)	Shipped to ATG 3/31/00	0.95	0.00
3.4	Missing/ nonexistent/ TBV category	11.85	12.16	(0.0002) (0.0005) (0.14)	Shipped to DSSI 3/28/00 Shipped to ATG 3/31/00 Shipped to Perma-Fix 9/14/00	12.02	N/A
<b>TOTALS</b>		<b>182.88</b>	<b>183.67</b>	<b>(76.01)</b>		<b>107.66</b>	



**Appendix G  
Reported STP MLLW Inventories  
FY01 Update**



**Appendix G. Reported MLLW Inventories – FY01 Update**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY00 Annual Update (m <sup>3</sup> )	Proposed Revision 12.0 (m <sup>3</sup> )	Comments	FY01 Annual Update (m <sup>3</sup> )	Projection FY01-FY05 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00				0.00
3.1.1	LA-W902 Scintillation Fluids	0.00				0.00
3.1.2	LA-W903 Lead Blankets	0.00				0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.68	(0.68)	Shipped to WCS 6/25/01	0.00	0.00
3.1.2	LA-W905 ER Soils	0.00				0.00
3.1.3	LA-W906 Aqueous Organic Liquids	0.68			0.68	1.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	30.25	(8.52) (2.66) (1.38) (3.65) (1.92) 5.01	Shipped to ATG 10/31/00 Shipped to ATG 2/12/01 Shipped to DSSI 3/1/01 Shipped to Perma-Fix 7/31/01 Shipped to Perma-Fix 9/27/01 Administrative Adjustment	17.13	0.00
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	23.56	(2.72) (1.27) (6.05) (0.85)	Shipped to WCS 7/30/01 Shipped to Perma-Fix 9/12/01 Shipped to Perma-Fix 9/27/01 Administrative Adjustment	12.67	0.00
3.1.5	LA-W912 Combustible Debris	0.00			0.00	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	0.00			0.00	0.00
3.1.5	LA-W922 Noncombustible Debris	0.00	(0.21) 0.21 1.31	Shipped to WCS 6/25/01 Administrative Adjustment Newly Generated	1.31	2.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	1.60	(0.002) (1.42) (0.18)	Shipped to Envirocare 4/14/01 Shipped to WCS 5/7/01 Administrative Adjustment	0.00	0.00
3.1.6	LA-W914 Corrosive Solutions	0.62	(0.38) (0.24)	Shipped to WCS 5/7/01 Administrative Adjustment	0.00	0.00
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.46	(0.92) 0.46	Shipped to WCS 5/7/01 Administrative Adjustment	0.00	0.00
3.1.7	LA-W916 Water-Reactive Wastes	2.44	(0.00001) 0.25 0.0047	Shipped to WCS 5/7/01 Administrative Adjustment Newly Generated	2.69	0.01
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.30			0.30	0.00
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.73	0.21	Administrative Adjustment	1.94	0.00
3.1.10	LA-W920 Elemental Mercury	0.39	0.05	Administrative Adjustment	0.44	0.01

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY00 Annual Update (m <sup>3</sup> )	Proposed Revision 12.0 (m <sup>3</sup> )	Comments	FY01 Annual Update (m <sup>3</sup> )	Projection FY01-FY05 (m <sup>3</sup> )
3.1.11	LA-W907 Halogenated Organic Liquids	0.73	(0.55)	Administrative Adjustment	0.18	0.00
3.1.11	LA-W908 Nonhalogenated Organic Liquids	5.62	(0.19) (4.49)	Shipped to Perma-Fix 7/31/01 Administrative Adjustment	0.94	0.00
3.1.11	LA-W909 Bulk Oils	2.79	0.36 (1.07)	Newly Generated Administrative Adjustment	2.08	0.00
3.1.11	LA-W910 PCB Wastes with RCRA Components	3.96	1.85	Administrative Adjustment	5.81	2.0
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.32	(0.08)	Administrative Adjustment	1.24	0.00
3.2	LA-W924 Lead Wastes – TBD	5.25	(3.06) (1.51)	Shipped to GTS 12/12/00 Shipped to Envirocare 12/12/00	0.68	0.00
3.2	LA-W925 Mercury Wastes – TBD	6.19	(2.70) 3.24 0.38	Shipped to GTS 7/27.01 Administrative Adjustment Newly Generated	7.11	1.5
3.2	LA-W926 Compressed Gases – TBD	0.00			0.00	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	0.00			0.00	0.00
3.2	LA-W928 Dewatered Treatment Sludge	0.00			0.00	0.00
3.2	LA-W932 Explosives	0.004	0.0002	Administrative Adjustment	0.0042	0.00
3.2	LA-W933 Lab Packs	1.00	1.65 0.043	Administrative Adjustment Newly Generated	2.7	2.00
3.2	LA-W934 High Activity Waste	5.1	0.112	Administrative Adjustment	5.21	0.1
3.3.1	LA-W930 Lead for Surface Decontamination	0.00	0.00		0.00	0.00
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00	0.00		0.00	0.00
3.3.3	LA-W931 Lead Requiring Sorting	0.95	(0.83) (0.12)	Shipped to Envirocare 12/12/01 Administrative Adjustment	0.00	0.00
3.4	Missing/ nonexistent/ TBV category	12.02	0.01	Administrative Adjustment	12.03	N/A
	<b>TOTALS</b>	<b>107.64</b>	<b>(32.5)</b>		<b>75.14</b>	

**Appendix H  
Reported STP MLLW Inventories  
FY02 Update**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY01 Annual Update (m <sup>3</sup> )	Proposed Revision 13.0 (m <sup>3</sup> )	Comments	FY02 Annual Update (m <sup>3</sup> )	Projection FY02-FY06 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00				0.00
3.1.1	LA-W902 Scintillation Fluids	0.00				0.00
3.1.2	LA-W903 Lead Blankets	0.00				0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.00			0.00	0.00
3.1.2	LA-W905 ER Soils	0.00				0.00
3.1.3	LA-W906 Aqueous Organic Liquids	0.68	(0.32) (0.95) 0.58	Shipped to Perma-Fix 6/18/02 Shipped to WCS 9/27/02 Administrative Adjustment	0.00	0.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	17.13	(0.44) (0.22) (0.47) Rec (0.17) (4.94) (8.52) (0.91) (1.22) (0.11) (0.13)	Shipped to Perma-Fix 1/31/02 Shipped to Perma-Fix 1/31/02 Shipped to Duratek 1/30/02 Shipped to M&EC 2/14/02 Shipped to Perma-Fix 2/13/02 Shipped to Perma-Fix 2/13/02 Shipped to Perma-Fix 2/14/02 Shipped to Perma-Fix 2/14/02 Shipped to Perma-Fix 6/18/02t Administrative Adjustment	0.00	0.00
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	12.67	(0.00) (1.30) (0.02) (4.88) (0.39) (3.94) (2.12) (0.02)	Shipped 1/31/02 to DSSI Shipped to Perma-Fix 1/31/02 Shipped to Perma-Fix 1/31/02 Shipped to M&EC 2/14/02 Shipped to Perma-Fix 2/14/02 Shipped to Perma-Fix 2/14/02 Shipped to Perma-Fix 2/14/02 Administrative Adjustment	0.00	0.00
3.1.5	LA-W912 Combustible Debris	0.00			0.00	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	0.00			0.00	0.00
3.1.5	LA-W922 Noncombustible Debris	1.31	(0.13) (0.74) (0.84) 0.40	Shipped to Perma-Fix 6/18/02 Shipped to Perma-Fix 7/23/02 Shipped to Envirocare 8/27/02 Administrative Adjustment	0.00	2.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	0.00			0.00	0.00
3.1.6	LA-W914 Corrosive Solutions	0.00			0.00	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY01 Annual Update (m <sup>3</sup> )	Proposed Revision 13.0 (m <sup>3</sup> )	Comments	FY02 Annual Update (m <sup>3</sup> )	Projection FY02-FY06 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00				0.00
3.1.1	LA-W902 Scintillation Fluids	0.00				0.00
3.1.2	LA-W903 Lead Blankets	0.00				0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.00			0.00	0.00
3.1.2	LA-W905 ER Soils	0.00				0.00
3.1.3	LA-W906 Aqueous Organic Liquids	0.68	(0.32) (0.95) 0.58	Shipped to Perma-Fix 6/18/02 Shipped to WCS 9/27/02 Administrative Adjustment	0.00	0.00
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.00			0.00	0.00
3.1.7	LA-W916 Water-Reactive Wastes	2.69	(0.00) (0.00)	Shipped to Perma-Fix 2/14/02 Shipped to M&EC 8/26/02	2.69	0.01
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.30			0.30	0.00
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.94	(0.53) Rec (0.00)	On-site Recycling 6/6/02 Shipped to Perma-Fix 8/26/02	1.41	0.00
3.1.10	LA-W920 Elemental Mercury	0.44	(0.26)	Shipped to M&EC 4/24/02*	0.18	
3.1.11	LA-W907 Halogenated Organic Liquids	00.18	(0.00) (0.07) (0.11) (0.20) Rec 0.20	Shipped 1/31/02 to DSSI Shipped to Perma-Fix 1/31/02 Shipped to Perma-Fix 2/13/02 On-site Recycling Administrative Adjustment	0.00	0.00
3.1.11	LA-W908 Nonhalogenated Organic Liquids	0.94	(0.01) (0.93) (0.00) Rec	Shipped 1/31/02 to DSSI Shipped to Perma-Fix 1/31/02 On-site Recycling 6/6/02	0.00	0.00
3.1.11	LA-W909 Bulk Oils	2.08	(1.49) Rec (1.20) 0.61	Shipped to Duratek 1/30/02 Shipped to Perma-Fix 7/23/02 Administrative Adjustment	0.00	0.00
3.1.11	LA-W910					2.2

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY01 Annual Update (m <sup>3</sup> )	Proposed Revision 13.0 (m <sup>3</sup> )	Comments	FY02 Annual Update (m <sup>3</sup> )	Projection FY02-FY06 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00				0.00
3.1.1	LA-W902 Scintillation Fluids	0.00				0.00
3.1.2	LA-W903 Lead Blankets	0.00				0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.00			0.00	0.00
3.1.2	LA-W905 ER Soils	0.00				0.00
3.1.3	LA-W906 Aqueous Organic Liquids	0.68	(0.32) (0.95) 0.58	Shipped to Perma-Fix 6/18/02 Shipped to WCS 9/27/02 Administrative Adjustment	0.00	0.00
	PCB Wastes with RCRA Components	5.81	(0.25) Trt 0.02	Shipped to Shaw 9/26/02 Newly Covered	5.58	
3.1.11	LA-W923 Liquid and Solid Oxidizers	1.24	(0.80) (0.00) (0.23) (0.45) 0.24	Shipped to WCS 1/30/02 Shipped 1/31/02 to DSSI Shipped to Perma-Fix 1/31/02 Shipped to Perma-Fix 1/31/02 Administrative Adjustment	0.00	0.00
3.2	LA-W924 Lead Wastes – TBD	0.68	(0.68)	Administrative Adjustment	0.00	
3.2	LA-W925 Mercury Wastes – TBD	7.11	(0.00)* (0.26)	Shipped to M&EC 4/24/02 Shipped to WCS 6/4/02	6.85	1.5
3.2	LA-W926 Compressed Gases – TBD	0.00			0.00	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	0.00			0.00	0.00
3.2	LA-W928 Dewatered Treatment Sludge	0.00			0.00	0.00
3.2	LA-W932 Explosives					

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY01 Annual Update (m <sup>3</sup> )	Proposed Revision 13.0 (m <sup>3</sup> )	Comments	FY02 Annual Update (m <sup>3</sup> )	Projection FY02-FY06 (m <sup>3</sup> )
3.2	LA-W933 Lab Packs	2.7	(0.00) (0.04) (0.26) (0.05) (0.96)	Shipped to WCS 6/4/02 Shipped to Perma-Fix 6/18/02 Shipped to Perma-Fix 8/26/02 Shipped to M&EC 8/26/02 Shipped to Perma-Fix 9/26/02	1.39	2.00
3.2	LA-W934 High Activity Waste	5.21			5.21	0.1
3.3.1	LA-W930 Lead for Surface Decontamination	0.00	0.00		0.00	0.00
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00	0.00		0.00	0.00
3.3.3	LA-W931 Lead Requiring Sorting	0.00			0.00	0.00
3.4	Missing/ nonexistent/ TBV category	12.03	(0.00)	Administrative Adjustment	12.03	N/A
	<b>TOTALS</b>	<b>75.14</b>	<b>(39.54)</b>		<b>35.62</b>	

\*Correspondence RRES/WD:02-020 inadvertently listed the incorrect volumes for these shipments. The volumes shown are correct.

**Appendix I  
Reported STP MLLW Inventories  
FY03 Update**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**Appendix I. Reported MLLW Inventories – FY03 Update**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY02 Annual Update (m <sup>3</sup> )	Proposed Revision 14.0 (m <sup>3</sup> )	Comments	FY03 Annual Update (m <sup>3</sup> )	Projection FY03-FY07 (m <sup>3</sup> )
3.1.1	LA-W901 IPA Wastes	0.00			0.00	0.00
3.1.1	LA-W902 Scintillation Fluids	0.00			0.00	0.00
3.1.2	LA-W903 Lead Blankets	0.00			0.00	0.00
3.1.2	LA-W904 Soil with Heavy Metals	0.00			0.00	0.00
3.1.2	LA-W905 ER Soils	0.00			0.00	0.00
3.1.3	LA-W906 Aqueous Organic Liquids	0.00			0.00	0.00
3.1.4	LA-W911 Organic-Contaminated Combustible Solids	0.00			0.00	0.00
3.1.4	LA-W919 Organic-Contaminated Noncombustible Solids	0.00			0.00	0.00
3.1.5	LA-W912 Combustible Debris	0.00			0.00	0.00
3.1.5	LA-W921 Activated or Inseparable Lead	0.00	0.92 (0.92)	Expedited Ship Request 4/11/03 Shipped to Envirocare 4/30/03	0.00	0.00
3.1.5	LA-W922 Noncombustible Debris	0.00			0.00	2.00
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	0.00			0.00	0.00
3.1.6	LA-W914 Corrosive Solutions	0.00			0.00	0.00
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0.00			0.00	0.00
3.1.7	LA-W916 Water-Reactive Wastes	2.69	(1.19) (0.9)	Shipped to WCS 09/3/2003 Administrative Adjustment	0.60	0.01
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.30			0.30	0.00

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY02 Annual Update (m <sup>3</sup> )	Proposed Revision 14.0 (m <sup>3</sup> )	Comments	FY03 Annual Update (m <sup>3</sup> )	Projection FY03-FY07 (m <sup>3</sup> )
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	1.41	(0.60)	Administrative Adjustment	0.81	0.00
3.1.10	LA-W920 Elemental Mercury	0.18	(0.01)	Administrative Adjustment	0.17	
3.1.11	LA-W907 Halogenated Organic Liquids	0.00			0.00	0.00
3.1.11	LA-W908 Nonhalogenated Organic Liquids	0.00			0.00	0.00
3.1.11	LA-W909 Bulk Oils	0.00	0.73 (0.73)	2/14/03 Expedited Shipment Request Shipped to DSSI 2/20/03	0.00	0.00
3.1.11	LA-W910 PCB Wastes with RCRA Components	5.58	(0.62)	Administrative Adjustment	4.96	2.2
3.1.11	LA-W923 Liquid and Solid Oxidizers	0.00	(0.00)	Shipped to Perma Fix 11/21/02	0.00	0.00
3.2	LA-W924 Lead Wastes – TBD	0.00			0.00	
3.2	LA-W925 Mercury Wastes – TBD	6.85	(3.99) (0.59) 0.11	Shipped to Envirocare 12/18/2002 Shipped to WCS 9/3/2003 Administrative Adjustment	2.38	1.5
3.2	LA-W926 Compressed Gases – TBD	0.00			0.00	0.00
3.2	LA-W927 Biochemical Laboratory Wastes	0.00			0.00	0.00
3.2	LA-W928 Dewatered Treatment Sludge	0.00			0.00	0.00
3.2	LA-W932 Explosives					
3.2	LA-W933 Lab Packs	1.39	(0.18) (0.02) (0.21) (0.98)	Shipped to Perma Fix 11/21/02 Shipped to Perma Fix 4/4/03 Shipped to DSSI, M&EC, and Perma Fix 8/21/03 Administrative adjustment	0.00	2.00
3.2	LA-W934 High Activity Waste	5.21	(4.08) 6.02	Shipped to Duratek 8/26/03 Administrative Adjustment	7.15	0.1
3.3.1	LA-W930 Lead for Surface Decontamination	0.00	0.00		0.00	0.00
3.3.2	LA-W929 Nonradioactive or Suspect Waste Items to be Surveyed	0.00	0.00		0.00	0.00
3.3.3	LA-W931 Lead Requiring Sorting	0.00			0.00	0.00

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/ Category	FY02 Annual Update (m <sup>3</sup> )	Proposed Revision 14.0 (m <sup>3</sup> )	Comments	FY03 Annual Update (m <sup>3</sup> )	Projection FY03-FY07 (m <sup>3</sup> )
3.4	Missing/ non-existent/ TBV category	12.03	(12.01)	Administrative Adjustment	0.02	N/A
	<b>TOTALS</b>	<b>35.64</b>	<b>(19.25)</b>		<b>16.39</b>	



**Appendix J  
Reported STP MLLW Inventories  
FY04 Update**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**Appendix J. Reported MLLW Inventories – FY04 Update**

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
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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

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)
3.1.6	LA-W914 Corrosive Solutions	0	0.0814 (0.0814)	Shipped to WCS 4/15/04	0.0005	0
			0.0005	Administrative Adjustment		
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
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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

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)
3.1.11	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
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 DSSI 6/24/04  Administrative adjustment	0	2

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>CPV Sec.</b>	<b>MWIR Waste ID and Treatability Group/Category</b>	<b>FY03 Annual Update (m3)</b>	<b>Proposed Revision 15.0 (m3)</b>	<b>Comments</b>	<b>FY04 Annual Update (m3)</b>	<b>Projection FY04-FY08 (m3)</b>
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
<b>TOTALS</b>		<b>16.39</b>	<b>(10.7765)</b>		<b>5.6135</b>	

**Appendix K  
Reported STP MLLW Inventories  
FY05 Update**



**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

**Appendix K. Reported MLLW Inventories – FY05 Update**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY04 Annual Update (m3)	Proposed Revision 16.0 (m3)	Comments	FY05 Annual Update (m3)	Projection FY05-FY10 (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	0.0001	-0.0001	Shipment to MEC 11/9/04	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		0	2
3.1.6	LA-W913 Aqueous Wastes with Heavy Metals	0	0		0	0
3.1.6	LA-W914 Corrosive Solutions	0.0005	-0.0005	Shipped to Perma-Fix 11/9/04	0	0
3.1.6	LA-W915 Aqueous Cyanides, Nitrates, Chromates, and Arsenates	0	0		0	0

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY04 Annual Update (m3)	Proposed Revision 16.0 (m3)	Comments	FY05 Annual Update (m3)	Projection FY05-FY10 (m3)
3.1.7	LA-W916 Water-Reactive Wastes	0	0		0	
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.3015	-0.1561 -0.1374	Shipped to Onyx 03/25/05 Shipped to Clean Harbors 03/25/05	0.0080	0
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.8130	-0.2557 -0.3792 -0.0004 -0.1170 0.0080 -0.0005	Shipped to MEC 02/23/05 Shipped to Onyx 03/25/05 Shipped to PECOS 5/23/05 Shipped to Clean Harbors 03/24/05 Newly Generated Administrative Adjustment	0.0682	0
3.1.10	LA-W920 Elemental Mercury	0.053	-0.053 0.0009	Shipped to Envirocare 11/9/04 Newly Generated	0.0009	
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	0.2264	-0.2264 0.2801 -0.2801 0.212	Shipped to Perma-Fix 12/13/04 Shipped to Perma-Fix 12/13/04 Newly Generated	0.2120	0
3.1.11	LA-W910 PCB Wastes with RCRA Components	0.7949	-0.4550 -0.1060 -0.3217 0.6322 0.0879	Shipped to MEC 11/9/04 Shipped to MEC 11/9/04 Shipped to MEC 09/26/05 Newly Generated Administrative Adjustment	0.6322	2.2

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY04 Annual Update (m3)	Proposed Revision 16.0 (m3)	Comments	FY05 Annual Update (m3)	Projection FY05-FY10 (m3)
3.1.11	LA-W923 Liquid and Solid Oxidizers	0	0	0	0	0
3.2	LA-W924 Lead Wastes – TBD	0.2082	-0.2082 0.0151 -0.0151 0.6245 -0.6245 0.2100	Shipped to Envirocare 9/21/05 Shipped to Envirocare 2/8/05 Shipped to Envirocare 9/21/05 Newly Generated	0.2100	
3.2	LA-W925 Mercury Wastes – TBD	2.0090	-0.6184 -0.0160 -1.0410 -0.0002 0.3426 0.1019	Shipped to MEC 11/9/04 Shipped to MEC 11/9/04 Shipped to Envirocare 2/8/05 Shipped to MEC 09/26/05 Newly Generated Administrative Adjustment	0.7779	1.5
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	
3.2	LA-W933 Lab Packs	0	0.0508 -0.0508  0.2120 -0.2120	Shipped to Perma-Fix 11/9/04  Shipped to Perma-Fix 5/9/05	0	2
3.2	LA-W934 High Activity Waste	1.2114	-0.0065 -0.0530 -0.0198	Shipped to Perma-Fix 3/28/05 Shipped to MEC 3/28/05 Shipped to Duratek 8/23/05	1.7378	0.1

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>CPV Sec.</b>	<b>MWIR Waste ID and Treatability Group/Category</b>	<b>FY04 Annual Update (m3)</b>	<b>Proposed Revision 16.0 (m3)</b>	<b>Comments</b>	<b>FY05 Annual Update (m3)</b>	<b>Projection FY05-FY10 (m3)</b>
			-0.0189 -0.2082 0.8328	Shipped to ARS for Lab Analysis Reclassified as MTRU  Newly Generated		
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	0		0	N/A
	<b>TOTALS</b>	<b>5.6180</b>	<b>-1.9708</b>		<b>3.6473</b>	

**Appendix L  
Reported STP MLLW Inventories  
FY06 Update**



**TABLE 2.1-2: FY06 MLLW Inventory Detailed Update by Treatability Group**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY05 Annual Update (m3)	Proposed Revision 17.0 (m3)	Comments	FY06 Annual Update (m3)	Projection FY06-FY10 (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		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	0.0015	Newly generated	0.0015	2
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

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY05 Annual Update (m3)	Proposed Revision 17.0 (m3)	Comments	FY06 Annual Update (m3)	Projection FY06-FY10 (m3)
3.1.7	LA-W916 Water-Reactive Wastes	0	0		0	
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.0080	0		0.0080	0
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.0682	-0.0038 0.0114	Shipped to M&EC 5/22/06 Newly Generated	0.0758	0
3.1.10	LA-W920 Elemental Mercury	0.0009	0		0.0009	
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	0.2120	-0.2120 0.1060 -0.1060 0.0568	Shipped to DSSI 5/3/06 Newly Generated shipped to DSSI 5/3/06 Newly Generated	0.0568	0
3.1.11	LA-W910 PCB Wastes with RCRA Components	0.6322	-0.6322	Shipped to M&EC 12/03/05	0	2.2
3.1.11	LA-W923 Liquid and Solid Oxidizers	0	0	0	0	0
3.2	LA-W924 Lead Wastes – TBD	0.2100	0.6435 -0.1532	Newly Generated Administrative Adjustment	0.7003	
3.2	LA-W925 Mercury Wastes – TBD	0.7779	-0.0028 0.5480	Shipped to M&EC 5/3/06 Newly Generated	1.3231	1.5
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

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>CPV Sec.</b>	<b>MWIR Waste ID and Treatability Group/Category</b>	<b>FY05 Annual Update (m3)</b>	<b>Proposed Revision 17.0 (m3)</b>	<b>Comments</b>	<b>FY06 Annual Update (m3)</b>	<b>Projection FY06-FY10 (m3)</b>
3.2	LA-W932 Explosives	0	0		0	
3.2	LA-W933 Lab Packs	0	0.0946 -0.0946  0.4164	Newly Generated shipped to Perma-Fix 5/22/06  Newly Generated	0.4164	2
3.2	LA-W934 High Activity Waste	1.7378	-0.2082	Shipped to ESI 7/17/06	1.5296	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	0		0	N/A
	<b>TOTALS</b>	<b>3.6470</b>	<b>0.4654</b>		<b>4.1124</b>	



Appendix M  
Reported STP MLL Inventories  
FY07 Update



**FY08 Annual Update – Revision 2**  
**Site Treatment Plan**  
**Federal Facilities Compliance Order**

**September 30, 2009**

**Appendix M: Reported STP MLL Inventories – FY07 Update (from Table 2.1-2: FY07 MLL Inventory Detailed Update by Treatability Group)**

<b>CPV Sec.</b>	<b>MWIR Waste ID and Treatability Group/Category</b>	<b>FY06 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 17.0 (m<sup>3</sup>)</b>	<b>Comments</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY08-FY13 (m<sup>3</sup>)</b>
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		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	0.0015	0		0.0015	2
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,	0	0		0	0

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

CPV Sec.	MWIR Waste ID and Treatability Group/Category	FY06 Annual Update (m <sup>3</sup> )	Proposed Revision 17.0 (m <sup>3</sup> )	Comments	FY07 Annual Update (m <sup>3</sup> )	Projection FY08-FY13 (m <sup>3</sup> )
	Chromates, and Arsenates					
3.1.7	LA-W916 Water-Reactive Wastes	0	0		0	
3.1.8	LA-W917 Compressed Gases Requiring Scrubbing	0.0080	0		0.0080	0
3.1.9	LA-W918 Compressed Gases Requiring Oxidation	0.0758	-0.0152 -0.0004	Shipped to M&EC 5/21/07 Administrative Adjustment	0.0602	0
3.1.10	LA-W920 Elemental Mercury	0.0009	-0.0009	Shipped to M&EC 3/5/07	0	
3.1.11	LA-W907 Halogenated Organic Liquids	0	0		0	0
3.1.11	LA-W908 Nonhalogenated Organic Liquids	0	0.0009	Newly Generated	.0009	0
3.1.11	LA-W909 Bulk Oils	0.0568	-0.0568	Shipped to PermaFix 3/5/07	0	0
3.1.11	LA-W910 PCB Wastes with RCRA Components	0	0		0	
3.1.11	LA-W923 Liquid and Solid Oxidizers	0	0		0	0
3.2	LA-W924 Lead Wastes – TBD	0.7003	-0.2271 -0.4732 0.4164 -0.4164	Shipped to ESI 12/18/06 Shipped to ESI 6/4/07 Newly Generated Newly Generated Shipped to ESI 6/4/07	0	
3.2	LA-W925 Mercury Wastes – TBD	1.3231	-0.3398 0.0379 -0.3398	Shipped to M&EC 3/5/07 Newly Generated Administrative Adjustment	0.6814	1.5
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	0	0		0	0

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

<b>CPV Sec.</b>	<b>MWIR Waste ID and Treatability Group/Category</b>	<b>FY06 Annual Update (m<sup>3</sup>)</b>	<b>Proposed Revision 17.0 (m<sup>3</sup>)</b>	<b>Comments</b>	<b>FY07 Annual Update (m<sup>3</sup>)</b>	<b>Projection FY08-FY13 (m<sup>3</sup>)</b>
	Dewatered Treatment Sludge					
3.2	LA-W932 Explosives	0	0		0	
3.2	LA-W933 Lab Packs	0.4164	-0.2082  -0.2082	Shipped to Perma-Fix 5/21/07  Shipped to DSSI 5/21/07	0	2
3.2	LA-W934 High Activity Waste	1.5296	0.4164  40.2046  85.5702  -4.3722  -16.656  -51.4254  -13.1166	Administrative Adjustment (Transfer from covered MTRU Inventory)  Newly Generated  Administrative Adjustment (Transfer from covered MTRU Inventory)  Shipped to M&EC 6/20/07  Shipped to M&EC 9/25/07  Shipped to M&EC 9/27/07  Administrative Adjustment (Transfer to LA-W935)	42.1506	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
3.3.4	LA-W935 10-100 nCi/g waste	NA	13.1166	Administrative Adjustment (Transfer from LA-W934)	13.1166	251
3.4	Missing/ nonexistent/ TBV category	0	0		0	N/A
	<b>TOTALS</b>	<b>4.1124</b>	<b>51.9068</b>		<b>56.0192</b>	



## **PART II. COMPLIANCE PLAN UPDATE**

### **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 then management and operating contractor, the University of California (UC) Regents. The FFCO requires 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 LANL'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 (Update)* to the NMED each year on or before March 31. On June 1, 2006, Los Alamos National Security, LLC (LANS) replaced UC as operating contractor of LANL at which time LANS assumed responsibility for compliance with the FFCO.

Part I of this annual update constitutes the FY08 update to the Background. Part II contains the update to the Compliance Plan (CP) – changes and revisions occurring since the FY07 Annual Update and proposed revisions and amendments to the CP. Part III contains the proposed CP Revision 19. The FFCO requires that the Annual Update bring the information in both Part I and Part II current to the end of the previous federal fiscal year (FY).

This update to the CP contains

- changes and revisions to the CP occurring since the previous Annual Update, including
  - milestones completed in FY08;
  - notices of expedited shipments and correspondence; 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.

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).

**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 FY08**

During FY08, DOE and LANS completed the required CP Activities on or before their required Compliance Dates as described in Table 2.1.

**TABLE 2.1. FY08 FFCO AND STP MILESTONES**

STP or FFCO	STP/FFCO Reference	Title/Text	Treatability Group	Compliance Date	Reference
STP	3.1.5 (A)	Complete shipping of existing waste to an off-site treatment facility or complete parallel option	LA-W922	12/31/2008	ENV-RCRA-08-197
STP	3.1.11 (A)	Complete shipping of existing waste to an off-site treatment facility or complete parallel option	LA-W908	12/31/2008	ENV-RCRA-08-197

**2.2 Expedited Shipment Letters**

LANL requested expedited shipment for items in two waste treatability groups. Table 2.2 below summarizes the requests.

**TABLE 2.2. EXPEDITED SHIPMENT LETTERS**

Request for Expedited Shipment Letter Date	STP Section	MWIR* Waste ID	Treatability Group	Volume Proposed to be Shipped (m <sup>3</sup> )	Reference
8/25/2008	3.1.11	LA-W908	<i>Nonhalogenated Organic Liquids</i>	0.0009	ENV-RCRA-08-171
8/25/2008	3.2	LA-W934	<i>High Activity Waste</i>	39.1278	ENV-RCRA-08-171

\*MWIR is Mixed Waste Inventory Report

LANL requested expedited shipment of *Nonhalogenated Organic Liquids* (LA-W908) waste items that would be included in Revision 19 of the STP in a letter dated August 25, 2008 (ENV-RCRA-08-171). LANL also requested expedited shipment of *High Activity Waste* (LA-W934) items that would be included in Revision 19 in the same letter. However, LANS reprioritized shipments so that the *High Activity Waste* was not shipped as planned. The *High Activity Waste* referenced in the letter was included in the FY07 inventory of *High Activity Waste* in Revisions 18 and 19.

**2.3 Correspondence**

Between October 1, 2007, and October 9, 2009, LANL communicated with NMED on issues related to

- Revisions 17 and 18 of the Annual STP Update,
- Correspondence with NMED for previous FYs,
- FY08 waste shipments, and
- Proposed changes to Revision 19 of the Annual STP Update.

This correspondence is listed in Table 2.3. Correspondence previously listed in Revision 18 of the STP (Table 2.1 B) is so noted in the table below.

**TABLE 2.3. CORRESPONDENCE**

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
10/2/2007	FY06 Site Treatment Plan, Revision 17 Milestone Date Extension Request	ENV-RCRA-07-235	Revision 17	No
11/2/2007	Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan Volume, STP, LANL	ENV-RCRA-07-254	Revision 18	No
11/13/2007	Response to the October 5, 2007, Notice of Disapproval of the FY06 STP	ENV-RCRA-07-256	Revision 17	No
12/11/2007	Request for Extension for LANL's STP	ENV-RCRA-07-273	Revisions 17 and 18	Yes

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
1/23/2008	Response to the NMED November 16, 2007, Addendum to the October 5, 2007, Notice of Disapproval of the LANL FY06 STP, Revision 17	ENV-RCRA-08-009	Revision 17	No
1/28/2008	LANL STP Mixed TRU Waste Tracking	ENV-RCRA-08-021	Revision 17	No
2/21/2008	Request for Information on the STP FY 2003-2007 Updates and Revisions 13.0-17.0	ENV-RCRA-08-036	Revisions 13-18	No
3/11/2008	LANL STP Proposed 10-100nCi/g Treatability Group	ENV-RCRA-08-055	Revision 18	Yes
3/20/2008	Correction on the ENV-RCRA-07-177 July 25, 2007, Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan, STP	ENV-RCRA-08-061	Revision 18	Yes
3/20/2008	Correction on the ENV-RCRA-07-013 July 25, 2007, Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan, STP	ENV-RCRA-08-062	Revision 18	Yes
3/20/2008	Correction on the April 20, 2007, Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan, STP	ENV-RCRA-08-063	Revision 18	Yes
4/3/2008	Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-071	Revision 19	No

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
4/10/2008	Response to the NMED Letter Dated March 13, 2008	ENV-RCRA-08-074	Revision 17	No
4/18/2008	Response to the NMED Notice of Disapproval of LANL STP Mixed TRU Waste Tracking, January 28, 2008 (HWB-LANL-07-019) Dated March 5, 2008	ENV-RCRA-08-077	Revision 17	Yes
4/21/2008	Request for Extension for LANL's STP	ENV-RCRA-08-079	Revision 18	Yes
4/23/2008	Proposed Administrative Adjustments for the FY07 STP, Revision 18	ENV-RCRA-08-084	Revision 18	Yes
4/25/2008	STP FY07 Update and Revision 18 Proposal, LANL FFCO, October 4, 1995	ENV-RCRA-08-087	Revision 18	No
5/8/2008	Response to (1) NMED May 1, 2008 Notice of Noncompliance of Milestone Activity Completion Notification, LANL STP, and (2) NMED's May 2, 2008, Letter Regarding Milestone Activity Dates	ENV-RCRA-08-091	Revision 18	Yes
5/21/2008	Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-103	Revision 19	No
6/23/2008	Request for Extensions of Milestone Activity Compliance Dates in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-118	Revision 18	Yes

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
6/30/2008	Notice of Returned STP-covered Mixed TRU Waste Drums from WIPP to LANL	ENV-RCRA-08-125	Revision 19	No
7/8/2008	LANL STP Fiscal Year 2007 Revision 18 Modified Pages	ENV-RCRA-08-141	Revision 18	Yes
7/24/2008	Notice of Completion of Off-Site Waste Shipment Activity 4.0 in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-150	Revision 19	No
8/25/2008	Notice of Expedited Shipment	ENV-RCRA-08-0171	Revision 19	No
8/28/2008	Response to the NMED August 8, 2008, Notice of Disapproval of STP FY07 Update and Revision 18	ENV-RCRA-08-177	Revision 18	No
9/2/2008	Correction Tables 2 & 3 of ENV-RCRA-07-254 11-5-07 Notice of Completion of Off-Site Waste Shipment Activities, CP, STP	ENV-RCRA-08-182	Revision 18	No
9/8/2008	Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-185	Revision 19	No
9/25/2008	Notice of Completion of Milestone Activities 3.1.5(A) and 3.1.11(A) in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-197	Revision 19	No
10/20/2008	Information Requested at the October 14, 2008, Meeting by NMED on LANL's STP FY07 Update and Revision 18	ENV-RCRA-08-207	Revision 18	No

**FY08 Annual Update – Revision 2  
Site Treatment Plan  
Federal Facilities Compliance Order**

**September 30, 2009**

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
10/22/2008	Notice of Completion of Off-Site Waste Shipment Activities in the Compliance Plan Volume, STP, LANL	ENV-RCRA-08-216	Revision 19	No
10/27/2008	Response to NMED's October 23, 2008, Disapproval of the LANL FY07 STP Annual Update	ENV-RCRA-08-220	Revision 18	No
11/10/2008	Notice of Completion of Off-Site Waste Shipment Activity 4.0 in the Compliance Plan Volume, STP, LANL, FY08 4 <sup>th</sup> Q WIPP Shipment	ENV-RCRA-08-222	Revision 19	No
11/21/2008	Request for Withdrawal of Proposed Extension Date for Milestone Activity 3.1.5(A) in the LANL FY07 Compliance Plan Volume, STP	ENV-RCRA-08-234	Revision 18	Yes
3/25/2009	Request for Extension of Compliance Dates for Milestone Activities (3.1.8 and 3.1.9), LANL, FFCO, STP (Revision 18)	ENV-RRO-09-017	Revision 19	No
3/26/2009	Proposed Administrative Adjustments for the FY08 STP, Revision 19	ENV-RRO-09-015	Revision 19	No
3/30/2009	Submittal of STP FY08 Update, LANL, FFCO, October 4, 1995	ENV-RRO-09-018	Revision 19	No
4/3/2009	Correction of Information in the Proposed Extension of Milestones in the STP, FFCO, LANL, Letter Dated March 13, 2008 (ENV-RCRA-08-213)	ENV-RRO-09-021	Revision 18	No

<b>Letter Date</b>	<b>Description</b>	<b>Letter number</b>	<b>Revision Reference</b>	<b>Listed in Rev 18 (Table 2.1 B)</b>
4/30/2009	Correction of FY08 Q3 and 4 MTRU shipments	ENV-RRO-09-020	Revision 19	No
5/20/2009	Correction of Information in Letters ENV-RCRA-08-103, ENV-RCRA-08-185, ENV-RCRA-08-197	ENV-RRO-09-034	Revision 18	No
5/20/2009	Correction of Information in RRO Letter (ENV-RRO-09-017)	ENV-RRO-09-036	Revision 19	No
5/20/2009	Certification for Previous Correspondence	ENV-RRO-09-037	Revision 18 and 19	No
5/20/2009	Resubmittal of FY08 Annual STP Update	ENV-RRO-09-038	Revision 19	No
10/9/2009	Submittal of Revision 2 of FY08 Annual STP Update	ENV-RRO-09-069	Revision 19	No

**3.0 DESCRIPTION OF WASTE DELETED IN ACCORDANCE WITH THE REQUIREMENTS OF FFCO SECTION IX (DELETION OF WASTE)**

A proposal for deletion of STP waste items is included with this update as Proposed Revision 18.0. These deletions are proposed because the waste was shipped off-site for treatment, disposal, or recycling. A detailed description of these covered wastes is provided in Part I and Part III.

**4.0 DOCUMENTATION OF NEW COVERED WASTE IN ACCORDANCE WITH THE REQUIREMENTS IN FFCO SECTION VIII (ADDITION OF NEW COVERED WASTE)**

A proposal for addition of STP waste items is included with this update. These additions consist of waste that was placed in storage during FY06 and were proposed to become covered waste in FY07. A detailed description of these covered wastes and associated extension of milestones required to treat and dispose of a portion of this new covered waste is included with this update in Part I and Part III.

**5.0 PROPOSED CHANGES TO THE COMPLIANCE PLAN SCHEDULE**

DOE and LANS are requesting that a compliance date be established for the newly reclassified LA-W919 waste (0.2082 m<sup>3</sup>) for completing shipment of this existing waste to an off-site treatment facility. The proposed compliance date for off-site shipment is December 31, 2010.

DOE and LANS are also requesting extensions of milestone activities 3.1.8 and 3.1.9 because off-site treatment technologies for radioactively contaminated compressed gas cylinders are unavailable. LANL contacted the following commercial facilities (Table 5.1) requesting acceptance and treatment of the compressed gas cylinders.

**Table 5.1 Commercial Facilities Contacted for Waste Treatment**

<b>Commercial Facility<sup>1,2</sup></b>	<b>Location</b>	<b>Contact Name</b>	<b>Contact telephone number</b>
Perma-Fix (including Material & Energy Corporation in TN; Diversified Scientific Services, Inc. in TN; and Perma-Fix North West in WA)	Florida	Stacey McNamara Tammy Monday	865-599-0211 865-813-1309
Waste Control Specialists	Texas	Sherrod Reavis	972-488-1495
EnergySolutions of Utah (including Bear Creek Operations)	Utah	Jose Jerez	801-243-3506
Bear Creek Operations	Tennessee	Jose Jerez	801-243-3506
Nuclear Fuel Services (NFS)	Tennessee	Norm Jacobs	423-743-2503
Lawrence Livermore National Laboratory	California	Charley Hunt	925-422-3813
Integrated Environmental Services	Tennessee	Jeff Gold	404-863-8175
NSSI	Texas	Bob Gallagher	713-641-0391

<sup>1</sup> LANL also consulted with commercial and DOE facilities that have had previous successes with treating LANL waste including: the Idaho National Laboratory’s Waste Experimental Reduction facility, the Toxic Substances Control Act Incinerator at Oak Ridge, researchers here at LANL, American Radiation Services, Catholic University’s Vitreous State Laboratory, Colorado Minerals Research Institute, NFS, and Pacific Eco Solutions.

<sup>2</sup> LANL also sought advice on treatment options from commercial and DOE facilities including: Oak Ridge National Laboratory, Nevada Test Site, Sandia National Laboratories, Hazen Research, StataG, Argonne/Chicago Office, and Portsmouth DOE Facility.

**5.1 COMPRESSED GASES REQUIRING SCRUBBING, TREATABILITY GROUP LA-W917 (STP SECTION 3.1.8)**

Activity 3.1.8 (A) “*Complete shipping of existing wastes to an off- site treatment facility or complete parallel option.*”

Current approved compliance date: August 28, 2009.

Proposed Revision 19 compliance date: August 28, 2012.

This waste consists of gas cylinders with internal radioactive contamination. It is associated with the Environmental Protection Agency (EPA) hazardous waste number D001. The treatment process for the waste stream consisting of gas cylinders with internal radioactive contamination involves scrubbing or oxidation of the cylinder and/or a reaction to strip and recycle tritium. The following containers are currently in storage:

Container	Volume (m <sup>3</sup> )
C98100432	0.0020
C98100433	0.0030
C98100434	0.0030

LANL contacted commercial facilities to determine their ability and willingness to accept the LANL LA-W917 waste:

- a) **Perma-Fix, Florida:** Perma-Fix has declined to accept LANS waste because treatment options would involve building a special facility. Perma-Fix stated they are not interested in pursuing the necessary exceptions or changes to their Resource Conservation and Recovery Act (RCRA) Permit or Nuclear Regulatory Commission (NRC) license.

- b) **Waste Control Specialists (WCS), Texas:** WCS has declined to accept LANL waste because doing so would require building a special facility to treat LANL waste and would require permit modifications and exceptions to its RCRA Permit or NRC license.
- c) **EnergySolutions of Utah:** EnergySolutions declined to accept LANL waste because doing so would require building a special facility to treat LANL waste and would require permit modifications and exceptions to its RCRA Permit or NRC license.
- d) **Bear Creek Operations in Tennessee (owned by EnergySolutions):** Although Bear Creek Operations has recently obtained a new RCRA Permit that allows them to treat wastes, Bear Creek has determined that a permit modification would be necessary to treat the LANL waste, and therefore, they decline to treat LANL waste.
- e) **NFS, Tennessee:** NFS has declined to accept LANL waste because the waste is not compatible with their RCRA Permit (gas cylinders are not part of the RCRA Permit) or NRC license.
- f) **Lawrence Livermore National Laboratory (LLNL), California:** LLNL has renewed its decision that they are unable to accept any LANL waste at this time. They will reconsider this decision in mid-2009.
- g) **Integrated Environmental Services (IES), Tennessee:** IES does not have a RCRA Permit and has not been audited or approved by the DOE Consolidated Audit Program. IES has indicated that it may possibly collaborate and conduct a treatability study by working through Perma-Fix. If no other treatment options are available (with facilities that are permitted and the capability in place), LANL will explore the use of IES once they are approved to accept DOE waste.

h) **NSSI, Texas:** NSSI has shown interest in this waste stream. However, no waste has been shipped from LANL to NSSI in over ten years, and an approved audit of the facility would have to be performed to meet the requirements of DOE Order 435.1, which governs management of DOE radioactive waste. Possible treatment/recycle options have been under discussion. These are contingent upon NSSI obtaining the proper NRC license and permit modifications. The DOE/National Nuclear Security Agency (NNSA) Los Alamos Site Office (LASO) has indicated that this is a viable option, but has not yet conducted an audit. The DOE Consolidated Audit Program has no current plans for an audit. LANS will explore assembling an audit team and performing an audit. If NSSI is granted an approval from a LASO audit, they would then need to invest in the necessary equipment to process this waste. This could take an additional year or two before the LANL waste could be shipped for treatment. The earliest possible date for shipping this waste to NSSI would be FY12.

**Justification for extension of Activity 3.1.8 (A).**

DOE/NNSA and LANS request that the activity date be extended to August 28, 2012. LANL had developed an option for a treatability study with LLNL in California. This study would have consumed LANL's entire LA-W917 inventory. Before the cylinders could be shipped, LLNL management put all non-essential projects on hold indefinitely. LLNL will reconsider this request again in mid-2009.

In July 2008, LANS learned of a new option developed at EnergySolutions of Tennessee that could have treated LANL's remaining LA-W917 waste inventory. EnergySolutions thought that their new RCRA Permit would allow them to accept and treat LANL's LA-W917 mixed low-level waste (MLLW). LANL was moving forward with plans to ship the waste to EnergySolutions in August 2008. However, in early August, EnergySolutions informed LANS they could not accept the waste because an accidental tritium release at their facility resulted in a temporary cessation of operations. LANS has continued to pursue a treatment solution with EnergySolutions. In late October 2008, LANS learned the regulator for EnergySolutions determined that their current permit would not provide for treatment of this LA-W917 waste. EnergySolutions informed LANS that they are working with their regulator to obtain a permit modification to accommodate treatment of LANL's waste, but does not anticipate being able to accept this waste until at least 2011.

Currently no permitted treatment facilities are available to accept this waste. DOE/NNSA and LANS will continue to seek treatment options by contacting waste facilities that may be able to treat this waste type. During FY09, LANS will contact all the facilities listed in Table 5.1 above to determine if they can treat the LA-W917 waste. LANS will also continue in FY09 to seek and contact any newly permitted MLLW facilities to determine if there are additional treatments

available. Until such a treatment option is identified and secured, the only option is to continue on-site storage of the waste.

## 5.2. COMPRESSED GASES REQUIRING OXIDATION. TREATABILITY GROUP LA-W918 (STP SECTION 3.1.9)

**Activity 3.1.9 (A)** *“Complete shipping of existing wastes to an off site treatment facility or complete parallel option.”*

Current approved compliance date: August 28, 2009.

Proposed Revision 19 compliance date: August 28, 2012.

This waste consists of gas cylinders with internal radioactive contamination. It is associated with EPA hazardous waste number D001. The treatment process involves scrubbing or oxidation of the container and/or a reaction to strip and recycle tritium (or other radioactive component). There is one container of this waste currently in storage: C94042517 (0.602 m<sup>3</sup>).

LANL contacted the commercial facilities identified in Table 5.1 to determine their ability and willingness to accept the LANL LA-W917 waste.

- a) **Perma-Fix, Florida:** Perma-Fix has declined to accept LANS waste because treatment options would involve building a special facility. Perma-Fix stated they are not interested in pursuing the necessary exceptions or changes to their RCRA Permit or NRC license.
- b) **WCS, Texas:** WCS has declined to accept LANL waste because doing so would require building a special facility to treat LANL waste and would require permit modifications and exceptions to its RCRA Permit or NRC license.
- c) **EnergySolutions of Utah:** EnergySolutions declined to accept LANL waste because doing so would require building a special facility to treat LANL waste and would require permit modifications and exceptions to its RCRA Permit or NRC license.
- d) **Bear Creek Operations in Tennessee (owned by EnergySolutions):** Although Bear Creek Operations has recently obtained a new RCRA Permit that allows them to treat wastes, Bear Creek has determined that a permit modification would be necessary to treat the LANL waste, and therefore, they decline to treat LANL waste.
- e) **NFS, Tennessee:** NFS has declined to accept LANL waste because the waste is not compatible with their RCRA Permit (gas cylinders are not part of the RCRA Permit) or

NRC license.

f) **LLNL, California:** LLNL has renewed its decision that they are unable to accept any LANL waste at this time. They will reconsider this decision in mid-2009.

g) **IES, Tennessee:** IES does not have a RCRA Permit and has not been audited or approved by the DOE Consolidated Audit Program. IES has indicated that it may possibly collaborate and conduct a treatability study by working through Perma-Fix. If no other treatment options are available (with facilities that are permitted and the capability in place), LANL will explore the use of IES once they are approved to accept DOE waste.

h) **NSSI, Texas:** NSSI has shown interest in this waste stream. However, no waste has been shipped from LANL to NSSI in over ten years, and an approved audit of the facility would have to be performed to meet the requirements of DOE Order 435.1, which governs management of DOE radioactive waste. Possible treatment/recycle options have been under discussion. These are contingent upon NSSI obtaining the proper NRC license and permit modifications. The DOE/NNSA LASO has indicated that this is a viable option, but has not yet conducted an audit. The DOE Consolidated Audit Program has no current plans for an audit. LANS will explore assembling an audit team and performing an audit. If NSSI is granted an approval from a LASO audit, they would then need to invest in the necessary equipment to process this waste. This could take an additional year or two before the LANL waste could be shipped for treatment. The earliest possible date for shipping this waste to NSSI would be FY12.

**Justification for extension of Activity 3.1.9 (A).**

DOE/NNSA and LANS request that the activity date be extended to August 28, 2012. An option had been developed with LLNL to perform a treatability study. Arrangements were in progress, however, before the cylinder could be shipped, LLNL management stopped the project. The LLNL transition to a new Prime Contractor put all non-essential projects on hold. LLNL has not determined if this project will be re-started. LLNL will reconsider this decision again in mid-2009.

In July 2008, LANS learned of a new option developed at EnergySolutions of Tennessee that could have treated LANL's remaining LA-W918 waste inventory. Under this option, EnergySolutions understood their new RCRA Permit would allow them to accept and treat LANL's LA-W918 MLLW. LANS was moving forward with plans to ship the waste in August 2008. However, in early August, EnergySolutions informed LANS they could not accept the waste because an accidental tritium release at their facility resulted in a temporary cessation of operations. LANS continued to pursue a treatment solution with EnergySolutions. In late

October 2008, LANS learned the regulator for EnergySolutions determined that their current permit would not allow treatment of LANL's LA-W918 waste. EnergySolutions informed LANS personnel they are working with their regulator to obtain a permit modification to accommodate LANL's waste, but does not anticipate being able to accept this waste until at least 2011.

Currently no permitted treatment facilities are available to accept this waste. DOE/NNSA/LANS will continue to seek treatment options by contacting waste facilities that may be able to treat this waste type. During FY09, LANS will contact all the facilities listed above to determine if they can treat the LA-W918 waste. LANS will also continue in FY09 to seek and contact any newly permitted MLLW facilities to determine if there are new options available. Until such a treatment option is secured, the only option is continued on-site storage of the waste.

There were no other changes to the schedule in the CP of the STP.

## **6.0 FFCO SECTION X.C.2.A: DETAILED DESCRIPTION OF THE PROPOSED REVISION**

The purpose of this revision request is to reflect changes in the MLLW inventories in the LANL CP of the STP. 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 redline/strikeout version provided to NMED.

The DOE and LANS are proposing to revise the CP text to reflect the following changes in STP-covered MLLW inventories:

- Increases and decreases in covered mixed waste inventories due to the addition of new covered waste and off-site shipments during FY08;
- Extensions of Milestone Activity dates for two mixed waste treatability groups (LA-W917 and LA-W918)
- Addition of activity dates for two waste treatability groups (LA-W919 and LA-W935).

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 Covered Waste

DOE and LANS are requesting that the following waste be added to the STP as covered waste, as described also in the FY07 STP Annual Update.

#### 6.1.1 MLLW Waste Additions

The total volume of covered MLLW waste that is requested for addition is 1.2860 m<sup>3</sup> (Table X.C.2.a-1).

**Table X.C.2.a-1: Proposed Addition of New Covered MLLW Waste**

CP Section	MWIR Waste ID	Treatability Group	Volume (m <sup>3</sup> )
3.2	LA-W934	<i>High Activity Waste</i>	1.2860
		<b>Total</b>	<b>1.2860</b>

#### 6.1.2 Mixed Transuranic (MTRU) Waste Additions

The total volume of new covered MTRU waste that is requested for addition is 53.5960 m<sup>3</sup> (Table X.C.2.a-2).

**Table X.C.2.a-2: Proposed Addition of New Covered MTRU Waste**

CP Section	Treatability Group	Volume (m <sup>3</sup> )
4.0	<i>Combined Combustible-Noncombustible Waste</i>	40.4920
4.0	<i>Solidified Inorganic and Organic Waste</i>	13.1040
	<b>Total</b>	<b>53.5960</b>

### 6.2 Deletion of Covered Waste

Both MLLW and MTRU wastes were shipped off-site for treatment and disposal or recycling.

*6.2.1 Deletion of MLLW Waste*

DOE and LANS are requesting that the following covered MLLW waste be deleted from the STP. These covered wastes were shipped off-site for treatment and disposal or recycling. The total volume of covered MLLW waste that is requested for deletion under this Revision to the CP is 31.1375 m<sup>3</sup> (Table X.C.2.a-3).

**Table X.C.2.a-3: FY08 STP MLLW Off-Site Shipments for Treatment**

Date Shipped	Destination	MWIR #	Treatability Group	Vol. (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
3/17/2008	M&EC	LA-W925	<i>Mercury Wastes – TBD</i>	0.2082	000365747JJK	4/3/2008	3.2
4/14/2008	M&EC	LA-W935	<i>10-100 nCi/g waste</i>	16.0314	000365779JJK	5/21/2008	3.3.4
8/4/2008	M&EC	LA-W934	<i>High Activity Waste</i>	14.8955	000365882JJK	9/8/2008	3.2
9/22/2008	Perma-Fix	LA-W922	<i>Noncombustible Debris</i>	0.0015	000365944JJK	10/22/2008	3.1.5
9/22/2008	Perma-Fix	LA-W908	<i>Nonhalogenated Organic Liquid</i>	0.0009	000365944JJK	10/22/2008	3.1.11
<b>Total Volume</b>				<b>31.1375</b>			

*6.2.2 Deletion of MTRU Waste*

DOE and LANS are requesting that a total of 315.3485 m<sup>3</sup> of covered MTRU waste be deleted from the STP (Table X.C.2.a-4). These covered wastes were shipped off-site for disposal at WIPP. Details of these shipments are given in Part I (Table 2.2-3).

**Table X.C.2.a-4: FY08 MTRU Off-Site Waste Shipments for Disposal at WIPP**

Treatability Group	Volume (m <sup>3</sup> ) Proposed for Deletion from Covered MTRU Inventory
<i>Cemented Sludge</i>	216.1325
<i>Combined Combustible-Noncombustible Waste</i>	59.6960
<i>Combustible Waste</i>	35.1520
<i>Leaded Glovebox Waste</i>	0.4160
<i>Metallic Waste</i>	3.1200
<i>Non-combustible waste</i>	0.2080

<i>Solidified Inorganic and Organic Waste</i>	0.6240
<b><i>Total Volume</i></b>	<b>315.3485</b>

**6.2.3 Other Deletions of FY08 Waste**

No waste is proposed for deletion due to recycling or on-site treatment in FY08. No waste was shipped off-site for treatability studies.

**Table X.C.2.a-5: FY07 STP MLLW Off-Site Shipments for Recycling**

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
<b><i>Total Volume</i></b>				<b>0</b>			

**Table X.C.2.a-6: FY07STP MLLW On-Site Treatment**

MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Date NMED Notified	CP Section
<b><i>Total Volume</i></b>		<b>0</b>		

**Table X.C.2.a-7: FY06 STP MLLW Off-Site Shipments for Treatability Studies.**

Date Shipped	Destination	MWIR #	Treatability Group	Vol (m <sup>3</sup> )	Shipping Manifest No.	Date NMED Notified	CP Section
<b><i>Total Volume</i></b>				<b>0</b>			

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

DOE and LANS are requesting adjustments to the original (October 4, 1995) STP-covered MLLW inventory (Table X.C.2.a-8). Most administrative adjustments are due to reclassification of MTRU waste to MLLW treatability groups and to some extent to discrepancies found during 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.

**Table X.C.2.a-8: Proposed MLLW Administrative Adjustments**

MWIR Waste ID	Treatability Group	Volume (m <sup>3</sup> )	Comments	CP Section
LA-W919	<i>Organic-Contaminated Noncombustible Solids</i>	0.2082	Reclassified from Covered MTRU Inventory at CMR/TA-55* to MLLW Inventory; Assigned to Treatability Group LA-W919	3.1.4
LA-W934	<i>High Activity Waste</i>	7.8167  7.0788	Reclassified as <i>High Activity Waste</i> (LA-W934) from Covered MTRU Inventory  Reclassified as <i>High Activity Waste</i> (LA-W934) from LA-W935	3.2
LA-W935	<i>10 – 100 nCi/g Waste</i>	23.5266  0.8328  -7.0788	Reclassified as LA-W935 from Covered MTRU Inventory  Waste scheduled to ship in FY07 was returned to inventory in FY08 <sup>1</sup>  Decreased inventory through transfer of waste to LA-W934 from LA-W935	3.3.4
<b>Net Total</b>		<b>32.3843<sup>2</sup></b>		

<sup>1</sup> The return of 0.8328 m<sup>3</sup> of LA-935 waste to inventory affects the inventory volumes for MLLW but not the notices of completed shipments that LANL provided to NMED; these containers of MLLW were not listed on the completed shipment notices.

<sup>2</sup> The total administrative adjustment is 32.3843 m<sup>3</sup>, rather than 32.3835 m<sup>3</sup> as shown in Part I (Table 2.1-1) because an administrative adjustment of -0.0008 for rounding is only applicable to Table 2.1-1.

#### 6.4 Adjustments to MTRU Waste Inventory

DOE and LANS are requesting adjustments (Table X.C.2.a-9) 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 some extent to discrepancies found during 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.

**Table X.C.2.a-9: Proposed MTRU Waste Administrative Adjustments**

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
<i>Cemented Sludge</i>	16.6405	FY07 Inventory Adjustment - Based on new analytical data, LANL reevaluated and reclassified existing TRU waste as MTRU
	2.7230	FY07 Inventory Adjustment - Addition of containers not previously included due to search criteria <sup>1</sup>
	0.0092	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-31.3135	FY08 Adjustment - Reclassification of <i>Cemented Sludge</i> as MLLW (resulting in 7.8167 m <sup>3</sup> of LA-W934 and 23.5266 m <sup>3</sup> of LA-W935)
<i>Combined Combustible-Noncombustible Waste</i>	2.0257	FY07 Inventory Adjustment - Addition of containers not previously included due to search criteria <sup>1</sup>
	0.0427	FY07 Inventory Adjustment - Rounding to 4 decimal places
	9.5680	FY08 Adjustment - Increase due to reclassifying TRU waste as <i>Combined Combustible-Noncombustible Waste</i> based on new process knowledge obtained during repacking of TRU waste;
	3.3280	FY08 Adjustment - Increase due to repacking in additional containers
	7.5720	FY08 Adjustment - Increase from transfer of CMR/TA-55 covered MTRU inventory
	-0.4160	FY08 Adjustment - Decrease due to repacking of <i>Combustible-Noncombustible</i> into <i>Noncombustible Waste</i>
	5.8240	FY08 Adjustment - Increase from repacking <i>Combustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	6.0320	FY08 Adjustment - Increase from repacking <i>Leaded Glovebox Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
	1.6640	FY08 Adjustment - Increase from repacking <i>Metallic Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
	0.4160	FY08 Adjustment - Increase due to repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
<i>Combustible Waste</i>	-1.0590	FY07 Inventory Adjustment - Removal of waste previously included due to search criteria
	-0.0518	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-5.6160	FY08 Adjustment - Decrease from repacking <i>Combustible Waste</i> into 5.824 m <sup>3</sup> <i>Combined Combustible-Noncombustible</i> and 1.2480 m <sup>3</sup> <i>Noncombustible Waste</i>
<i>Glass Waste</i>	-0.0360	FY08 Adjustment - Rounding to 4 decimal places
	-0.2080	FY08 Adjustment - Decrease from repacking <i>Glass Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>
<i>Leaded Glovebox Waste</i>	0.0295	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-5.3135	FY08 Adjustment - Decrease from repacking <i>Leaded Glovebox Waste</i> into 6.032 m <sup>3</sup> <i>Combined Combustible-Noncombustible Waste</i>
<i>Metallic Waste</i>	0.0339	FY07 Inventory Adjustment - Rounding to 4 decimal places
	-1.6640	FY08 Adjustment - Decrease from repacking <i>Metallic Waste</i> into 1.664 m <sup>3</sup> <i>Combined Combustible-Noncombustible</i> and 0.2080 m <sup>3</sup> <i>Noncombustible Waste</i>
<i>Noncombustible Waste</i>	-0.0170	FY07 Inventory Adjustment - Rounding to 4 decimal places
	0.2080	FY08 Adjustment - Increase due to LANL reclassification of TRU waste as <i>Combined Combustible-Noncombustible Waste</i> treatability group based on new process knowledge obtained during repacking of TRU waste during repacking
	-0.4160	FY08 Adjustment - Decrease from repacking <i>Noncombustible Waste</i> into <i>Combined Combustible-Noncombustible Waste</i>

Treatability Group	Volume Change (m <sup>3</sup> )	Reason for Correction
	0.4160	FY08 Adjustment - Increase from repacking <i>Combined Combustible-Noncombustible Waste</i> into <i>Noncombustible Waste</i>
	1.2480	FY08 Adjustment - Increase from repacking <i>Combustible Waste</i> into <i>Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase from repacking <i>Metallic Waste</i> into <i>Noncombustible Waste</i>
	0.2080	FY08 Adjustment - Increase due to repacking <i>Noncombustible Waste</i> into another container
<i>Solidified Inorganic and Organic Waste</i>	-0.0295	FY07 Inventory Adjustment - Rounding to 4 decimal places
	0.2080	FY08 Adjustment - Increase from transfer of CMR/TA-55 covered inventory to <i>Solidified Inorganic and Organic Waste</i>
<i>Total Waste Volume</i>	-2.2000	FY07 Inventory Adjustment - Rounding of totals in FY07 (Revision 17 Table 2.2-2)
<b><i>Total Adjustment</i></b>	<b>10.2722</b>	

### **6.5 Extension of Milestone Activity Dates**

Because treatment options are not available for two waste streams (LA-W917 and LA-W918), DOE and LANS are requesting extensions of the compliance milestones for these wastes (Table X.C.2.a-10).

**Table X.C.2.a-10: Proposed Extensions of Milestone Activity Compliance Dates**

Milestone Activity	Treatability Group	Revision 17 Compliance Date	Proposed Extended Compliance Date	Rationale For Proposed Extension
3.1.8(a)	<i>LA-W917 Compressed Gases Requiring Scrubbing</i>	08/28/2009	08/28/2012	An extension of this compliance date is requested because there is no path forward at this time for this waste stream.
3.1.9(a)	<i>LA-W918 Compressed Gases Requiring Oxidation</i>	08/28/2009	08/28/2012	An extension of this compliance date is requested because there is no path forward at this time for this waste stream.

## 6.6 Additional Revisions

DOE and LANS request the addition of the following milestone activities and compliance dates (Table X.C.2.a-11) for two treatability groups: LA-W919 (*Organic-Contaminated Noncombustible Waste*) and LA-W935 (*10-100 nCi/g Waste*).

**Table X.C.2.a-11. Proposed Additional Milestones and Compliance Dates**

CP Section	MWIR Waste ID/ Treatability Group	Activity	Compliance Date
3.1.4	LA-W919  <i>Organic-contaminated noncombustible waste</i>	Complete shipping of existing waste <sup>1</sup> to an off-site treatment facility or complete parallel option	12/31/2010
3.3.4	LA-W935  <i>10-100 nCi/g Waste</i>	Provide documentation to NMED that waste was received at off-site 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

<sup>1</sup> Previously covered STP MTRU waste recently reclassified as MLLW

## 7.0 FFCO SECTION X.C.2.B (RATIONALE FOR THE PROPOSED REVISION)

### 7.1 Extension of Proposed Milestones

DOE and LANS are requesting extensions of milestones for two waste streams (LA-W917 and LA-W918) due to the lack of treatment facilities that could treat and dispose of these wastes. Section 5.0 of Part II contains a detailed justification for the extensions.

### 7.2 Addition of Newly Covered Waste

The increases in covered waste inventory as of the end of FY08 are attributed primarily to waste that was newly generated in FY07 which was not treated within 12 months of generation, thereby becoming covered waste during FY08. 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**

The decreases in covered waste inventory reflect the treatment and disposal or recycling of covered waste at off-site commercial facilities during FY08. Deletion of this covered waste is proposed in order to more accurately reflect the LANL STP inventory as of the end of FY08.

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

Administrative adjustments are due to discrepancies found during 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 FY08.

### **8.0 FFCO SECTION X.C.2.C: ANTICIPATED LENGTH OF ANY DELAY IN PERFORMANCE**

No delay in performance is anticipated for any other proposals stated in this requested revision to the CP of the STP.

### **9.0 FFCO SECTION X.C.2.D: 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.

### ***BIBLIOGRAPHY***

1. *Federal Facility Compliance Order, Los Alamos National Laboratory*” New Mexico Environment Department (October 4, 1995)
2. “*Site Treatment Plan (STP), Fiscal Year 2006 update and Revision 17.0 Proposal, Los Alamos National Laboratory (LANL) Federal Facility Compliance Order (FFCO), October 4, 1995,*” Albert Dye, STP Project Manager to Ms. Lee Winn, Environmental Specialist, March 13, 2007

**FY08 Annual Update – Revision 2**  
**Site Treatment Plan**  
**Federal Facilities Compliance Order**

**September 30, 2009**

3. *“Revision 18.0, Annual Update to Site Treatment Plan, Federal Facilities Compliance Order Los Alamos National Laboratory EPA ID #NM0890010515 HWB-LANL-FFCO” Approval Letter, John Keiling, New Mexico Environment Department, Hazardous Waste Bureau, Permits Management Program Manager to Albert Dye, Los Alamos National Security, LLC, STP Project Manager and Dave D. Stewart, Department of Energy LASO Interim Waste Management Program Manager, January 14, 2009*



## **PART III. COMPLIANCE PLAN – PROPOSED REVISION 19**

### **1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN**

#### **1.1 Introduction**

On October 6, 1992, Congress passed the Federal Facility Compliance Act (FFCA) to address compliance by the United States 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 the 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, NMED is required by the FFCA to provide public notice, consider public comments, consult with the Environmental Protection Agency (EPA) and any other state in which a facility affected by the STP is located.

On March 31, 1995, DOE submitted its proposed STP to NMED for the treatment of mixed waste at the Los Alamos National Laboratory (LANL). On April 17, 1995, the public was given notice of and an opportunity to comment to NMED on the draft STP submitted by DOE. After considering public comment and otherwise complying with the FFCA, NMED determined to approve the draft STP with modifications as provided in this document.

The STP is intended to fulfill the requirements of the FFCA and establish an enforceable framework to allow DOE and Los Alamos National Security, LLC (Respondents) to achieve full compliance with LDR requirements under the New Mexico Hazardous Waste Act (HWA) and RCRA. The compliance dates set forth herein 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. The STP was fully implemented by a Compliance Order issued by NMED on October 6, 1995.

## **1.2 Contents**

The STP contains a Background Volume, Part I of this Annual Update, and a Compliance Plan (CP) Volume (Part III of this Annual Update) and is intended to bring Respondents into compliance with LDR storage prohibitions under the HWA and RCRA. The CP of the STP provides overall schedules, including compliance dates, for achieving compliance with LDR storage and treatment requirements for mixed waste at LANL.

The CP includes a schedule for off-site 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 incorporates by reference 40 CFR Parts 260 through 270. Part I, Background, contains progress reports as required in the Compliance Order. 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 Order.

## **1.3 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, Federal Facility Compliance Order (FFCO), as amended and revised. Part III Appendix A of this Annual Update provides a summary of these CP changes, and of modifications to the FFCO since its issuance.

## **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 time frame 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 on-site, the categories of activities for compliance dates identified in Table I shall apply.

**Table I. Categories of Activities for Compliance for Mixed Waste with Existing Treatment Technologies.**

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 on-site, the categories of activities for compliance dates are identified in Table II and shall apply. Compliance dates for the activities identified in Table II may be found in Section 3.1.

**Table II. 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**

Off-site treatment is the primary preferred treatment option applicable to all mixed waste streams in the STP inventory. All activities and compliance dates related to the construction, permitting, and operation of on-site treatment skids have been removed from this volume. This

change is due to the increased availability of off-site treatment and disposal capacity for mixed waste. Respondents will continue evaluating new commercial and DOE off-site treatment facilities as potential options for managing mixed waste, as they become available.

### **2.3 Plans for Mixed Waste to be Shipped Off-Site for Treatment**

The preferred alternative for DOE to treat mixed waste is at an off-site facility (at a commercial or non-commercial mixed waste treatment facility), or DOE may pursue parallel treatment options such as recycling/re-use or radiological decontamination. Requirements for waste shipped off-site for recycling are discussed under Section 2.6.

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

DOE shall notify the NMED Project Manager in writing as soon as possible if mixed waste is planned to be sent to a non-commercial facility. Notification should be made if possible when DOE is first considering such an option to allow NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed off-site non-commercial 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 forty-five (45) working days of receipt of waste at the treatment/recycling facility. Activities for mixed waste to be shipped off-site for treatment/recycling at a non-commercial facility are identified in Table IV.

**Table III. Activities for Mixed Waste to be Shipped Off-Site for Treatment or Recycling at a Commercial Facility.**

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

*2.3.1 Specific Site Requirements for Non-commercial 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 prior to shipment should DOE ship mixed low-level waste (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 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 thirty (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 Oak Ridge Reservation (ORR) may not dispose of mixed-waste residues or new waste streams generated from off-site 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 thirty (30) working days after receipt of shipment of treatment residuals or newly generated waste streams from ORR.

**Table IV. Activities for Mixed Waste to be Shipped Off-Site for Treatment or Recycling at a Non-commercial facility.**

- |    |   |
|----|---|
| A. | Request necessary approval from NMED for shipment of waste by category before shipping. |
|----|---|

- |    |   |
|----|---|
| B. | Meet all regulatory requirements for off-site shipment.   |
| C. | Provide documentation to NMED of confirmation of shipment date within 14 working days prior to sending waste to an off-site facility for treatment, disposal, or recycling, or storage pending treatment, disposal, or recycling. |
| D. | Provide documentation to NMED that waste has been received at an off-site facility for treatment within 45 working days of receipt of waste at the off-site 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 NMED within 30 working days after receipt of residual or newly generated waste streams upon return to LANL.  |

#### **2.4 Requirements Pertaining to Radionuclide Separation**

The FFCA sets additional requirements in cases in which 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 V. “Radionuclide separation” shall mean segregating the radioactive portion of the mixed waste from the hazardous portion of the mixed waste.

**Table V. Categories of Activities for Compliance Dates for Radionuclide Separation of Mixed Waste.**

- |    |   |
|----|---|
| 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 a NMED permit application.  |

## **2.5 Plans Related to Other Mixed Waste Activities**

1. 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 which may contain compliance dates related to treatment of the DOE's mixed waste.
2. 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 Compliance Order. 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 Compliance Order.
3. DOE will notify the NMED when off-site 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 off-site 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 on-site or off-site 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 off-site for treatment. Any and all requirements by the recycling facility and state regulatory, federal regulatory, 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 off-site non-commercial recycling facility. Notification should be made if possible when DOE is first considering such an option to allow NMED and the state to address any state issues or concerns with other states. The NMED Project Manager shall approve in writing the proposed off-site non-commercial 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 forty five (45) working days of receipt of waste at the recycling facility. Activities for mixed waste to be recycled are identified in Table VI.

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 off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation, that waste was received at a recycling facility.

**Table VI. Activities for Mixed Waste to be Recycled.**

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

## **2.7 On-Site Radiological Decontamination**

DOE will pursue on-site 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 VII.

**Table VII. Activities for Mixed Waste to be Radiologically Decontaminated.**

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

### **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 NMED in accordance with the revision process pursuant to the Compliance Order.

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 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 this revision. In Appendix B, 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.

**3.1 Mixed Waste Streams**

The following subsections summarize MLLW treatability groups.

**3.1.1 IPA Wastes and Scintillation Fluids**

**Treatability Group(s):**

Treatability group	MWIR* waste ID	RCRA codes	Net volume (m <sup>3</sup> )
IPA wastes	LA-W901	D001, D009, F002, F003, F005	0.00
Scintillation fluids	LA-W902	D001, F003, F005	0.00
<b>Totals</b>			<b>0.00</b>

\*MWIR is Mixed Waste Inventory Report

**Treatment:**

The waste will be treated at an off-site facility that combusts organic liquid waste. Should DOE decide to treat waste at an off-site non-commercial facility, the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Activity	Compliance Dates
A. Complete shipping waste	12/30/96*
B. Provide documentation to NMED that waste was received at off-site 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

\* This activity date refers to the applicable waste in the original treatability group. Please note that one of the items in the original Treatability Group LA-W901 was reclassified as Treatability Group LA-W906, in Revision 5.0, approved 12/29/97 by NMED.

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

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Lead Blankets</i>	LA-W903	D007, D008	0.00
<i>Soil With Heavy Metals</i>	LA-W904	D004, D005, D006, D007, D008, D009, D010, D011	0.00
<i>ER Soils</i>	LA-W905	D028, D029, F001, F005 D010, D011	0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

The waste will be treated at an off-site facility that stabilizes or macroencapsulates wastes. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility, the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Activity	Compliance Dates
A. Complete shipping waste or complete parallel option	12/30/01
B. Provide documentation to NMED that waste was received at off-site 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

3.1.3 *Aqueous Organic Liquids*

**Treatability Group(s):**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Aqueous Organic Liquids</i>	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
<b>Totals</b>			<b>0.00</b>

Note: See below for additional wastes in this treatability group

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site treatment facility (commercial or non-commercial) and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	02/09/00
B. Provide documentation to NMED that waste was received at off-site facility or provided notification of parallel option	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option

**Additional wastes.**

The following additional wastes will require management in this category, according to the Activities and Compliance Dates listed below.

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Aqueous Organic Liquids</i>	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
<b>Totals</b>			<b>0.00</b>

<b>Activity</b>	<b>Compliance Dates</b>
C. Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	10/1/05
D. Provide documentation to NMED that waste was received at off-site facility or provided notification of parallel option	Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option

3.1.4 *Organic-Contaminated Combustible Solids*

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Organic-Contaminated Combustible Solids</i>	LA-W911	D001, D004, D008, D009, F001, F002, F003, F005	0.00
<b>Totals</b>			<b>0.00</b>

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Organic-Contaminated Noncombustible Solids</i>	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	0.2082 <sup>1</sup>
<b>Totals</b>			<b>0.2082</b>

<sup>1</sup> This waste was previously covered mixed transuranic (MTRU) waste in the Chemistry and Metallurgy Research/Technical Area 55 Inventory; it was reclassified as MLLW.

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	12/31/10
B. Provide documentation to NMED that waste was received at off-site 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

**3.1.5 Combustible Debris, Activated or Inseparable Lead, Noncombustible Debris**

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Combustible Debris</i>	LA-W912	D001, D002, D003, D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005	0.00
<b>Totals</b>			<b>0.00</b>

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Activated Or Inseparable Lead</i>	LA-W921	D008	0.00
<i>Noncombustible Debris</i>	LA-W922 LA-W922-17	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011	0.00 0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipping of newly generated wastes to an off-site treatment facility or complete parallel option	12/31/08
B. Provide documentation to NMED that waste was received at off-site 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**

**Treatability Group(s):**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Aqueous Wastes With Heavy Metals</i>	LA-W913	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011	0.00
<i>Corrosive Solutions</i>	LA-W914	D001, D002	0.00
<i>Aqueous Cyanides, Nitrates, Chromates, And Arsenates</i>	LA-W915	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F007, P029, P098	0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	05/08/01
B. Provide documentation to NMED that waste was received at off-site 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

**3.1.7 Water-Reactive Metal**

**Treatability Group(s):**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Water-Reactive Wastes</i>	LA-W916	D001, D003, D004, D005, D007, D008, D010, D011	0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	12/21/06
B. Provide documentation to NMED that waste was received at off-site 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

**3.1.8 Compressed Gases Requiring Scrubbing**

**Treatability Group(s):**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Compressed Gases Requiring Scrubbing</i>	LA-W917	D001, D002, P056	0.0080
<b>Totals</b>			<b>0.0080</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off- site treatment facility or complete parallel option	8/28/12
B. Provide documentation to NMED that waste was received at off-site 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**

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Compressed Gases Requiring Oxidation</i>	LA-W918	D001, U226	0.0602
<b>Totals</b>			<b>0.0602</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility, the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	8/28/12
B. Provide documentation to NMED that waste was received at off-site 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

**3.1.10 Elemental Mercury**

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Elemental Mercury</i>	LA-W920 LA-W920-16	D006, D009, F005	0.00 0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	8/31/07
B. Provide documentation to NMED that waste was received at off-site 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

**3.1.11 Halogenated Organic Liquids, Nonhalogenated Organic Liquids, Bulk Oils, PCB Wastes with RCRA Components, Liquid and Solid Oxidizers**

**Treatability Group(s):**

<b>Treatability Group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Halogenated Organic Liquids</i>	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
<i>Nonhalogenated Organic Liquids</i>	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
<i>Bulk Oils</i>	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 0.00 0.00 0.00
<i>PCB Wastes With RCRA Components</i>	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 0.00
<b>Totals</b>			<b>0.00</b>

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Liquid And Solid Oxidizers</i>	LA-W923	D001, D003, D005	0.00
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Shipment off-site for treatment is the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Off-site shipments must be completed by February 2002.

Should DOE decide to treat waste at an off-site non-commercial facility the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility.

The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment facility.

Should DOE elect to use on-site recycling/re-use facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in Section 2.3, as if the waste were shipped off-site for treatment. DOE will provide a notification letter to the NMED within forty-five days, in place of documentation that waste was received at an off-site facility.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	12/31/09
B. Provide documentation to NMED that waste was received at off-site 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

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

**Treatability Group(s):**

Treatability group	MWIR waste ID	RCRA codes	Net volume (m <sup>3</sup> )
<i>Lead Wastes - TBD</i>	LA-W924	D003, D008	0.00
<i>Mercury Wastes - TBD</i>	LA-W925-0	D007, D008, D009, F001	0.00
<i>Compressed Gases - TBD</i>	LA-W926	D001, D007, D009, D022, P056, U080, U226	0.00
<i>Biochemical Laboratory Wastes</i>	LA-W927	D001, D003	0.00
<i>Dewatered Treatment Sludge</i>	LA-W928	see Subsection 3.3 in the Background Volume	0.00
<b>Totals</b>			<b>0.00</b>

Note: See below for additional wastes in some of these treatability groups

**Treatment:**

The following steps will be taken to properly characterize this waste:

- Conduct additional generator interviews
- Prepare a sampling plan for waste not adequately characterized
- Conduct sampling and analysis
- Determine treatment options

Activities for wastes originally belonging to these treatability groups as listed above.

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete generator interviews	10/30/95
B. Complete sampling and analysis plan	1/30/96
C. Complete sampling and analysis	9/30/98
D. Complete determination of treatment options	12/20/98
E. Complete shipping of existing wastes to an off-site treatment facility, or submit documentation assigning waste items to applicable treatability groups or complete parallel option	12/20/01
F. Provide documentation to NMED that waste was received at off-site 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

**Additional wastes and treatability groups:**

The following additional wastes will require management in this category, according to the Activities and Compliance Dates listed below.

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>RCRA codes</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Lead Wastes - TBD</i>	LA-W924-15	D003, D008	0.00
	LA-W924-16		0.00
	LA-W924-17		0.00
<i>Mercury Wastes - TBD</i>	LA-W925-4	D003, D007, D008, D009 F001, F002, F005	0.4732
	LA-W925-5		
	LA-W925-6		
	LA-W925-15		
	LA-W925-16		
	LA-W925-17		
	LA-W925-18		
<i>Explosives</i>	LA-W932	D003	0.00
<i>Labpacks</i>	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
<i>High Activity Waste</i>	LA-W934 LA-W934-16 LA-W934-19	D001, D003, D008, D009	43.4366
<b>Totals</b>			<b>43.9098</b>

Activities for wastes belonging to these treatability groups and subgroups.

<i>Activity</i>	<i>Compliance Dates</i>
G. Complete sampling and analysis plan	1/30/99
H. Complete sampling and analysis	9/30/01

I. Complete determination of treatment options	12/20/01
J. Complete shipping of wastes to an off-site treatment facility, or submit documentation assigning waste items to applicable treatability groups or complete parallel option	12/31/10
K. Provide documentation to NMED that waste was received at off-site facility or provide notification of parallel option	Within 45 days of receipt of waste at off-site facility or within 45 days after completion of parallel option

**3.3 Plans for Other Types of Activities**

The following subsection summarizes plans for other types of activities.

**3.3.1 Lead Decontamination**

**Treatability Group(s):**

Treatability group	MWIR waste ID	First Category	Second Category	Totals
		Net volume (m <sup>3</sup> )	Net volume (m <sup>3</sup> )	Net volume (m <sup>3</sup> )
<i>Lead For Surface Decontamination</i>	LA-W930-0 LA-W930-5	0.00	0.00	0.00
<b>Totals</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Note: See below for additional wastes in this treatability group

**Treatment:**

Any lead not acceptable for on-site or off-site lead decontamination, plus any lead unsuccessfully decontaminated, will be designated for treatment and disposal at an off-site facility, or for recycle through an off-site 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.

Should DOE decide to treat or recycle waste at an off-site non-commercial facility in lieu of plans to treat or recycle such waste on-site, the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment/recycle option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment/recycling facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment/recycling site shall be met by DOE. DOE will notify the NMED Project Manager in writing as soon as possible and in any event within forty-five (45) working days of receipt of waste at the treatment/recycling facility.

Lead shapes and forms in the first category.

Activity	Compliance Dates
A. Complete lead decontamination	09/30/97

Lead shapes and forms in the second category.

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>Activity</b>	<b>Compliance Dates</b>
A. Provide schedule for development of lead processing techniques and options	06/30/96
B. Segregate lead waste into decontamination groupings	07/31/97
C. Complete shipment of wastes to decontamination operations, or	12/02/98
D. Determine treatment/disposal or other recycle options for lead waste not acceptable for decontamination	12/02/98
E. Complete treatment/disposal operations or other recycle operations for lead waste not acceptable for decontamination	07/31/99
F. Provide documentation to NMED that waste was received at off-site facility	Within 45 days of receipt of waste at treatment facility

**Additional wastes.**

The following additional wastes will require management in the second category, according to the Activities and Compliance Dates listed below.

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>First Category</b>	<b>Second Category</b>	<b>Totals</b>
		<b>Net volume (m<sup>3</sup>)</b>	<b>Net volume (m<sup>3</sup>)</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Lead For Surface Decontamination</i>	LA-W930-6	0.00	0.00	0.00
<b>Totals</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Activities for wastes belonging to this treatability subgroup.

<b>Activity</b>	<b>Compliance Dates</b>
G. Complete shipment of wastes to decontamination operations, or	12/02/99
H. Determine treatment/disposal or other recycle operations for lead waste not acceptable for decontamination	12/02/99
I. Complete treatment/disposal operations or other recycle operations for lead waste not acceptable for decontamination	07/13/00
J. Provide documentation to NMED that waste was received at off-site facility	Within 45 days of receipt of waste at treatment facility

**3.3.2 Sorting, Surveying, and Decontamination**

**Treatability Group(s):**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Nonradioactive Or Suspect Waste Items To Be Surveyed</i>	LA-W929-0(1)	0.00
<i>Nonradioactive Or Suspect Waste Items To Receive RCRA And Radiological Characterization</i>	LA-W929-0(2)	0.00
<i>Nonradioactive Or Suspect Waste Items That Cannot Or Should Not Be Sampled</i>	LA-W929-0(3)	0.00
<b>Totals</b>		<b>0.00</b>

Note: See below for additional wastes in this treatability group.

**Treatment:**

The waste items in part 1 of the original volume in this treatability group will be surveyed using a field operation that will survey waste suspected of radioactive contamination to determine whether it is radioactively contaminated. The work will be done on-site with equipment and staffing provided by LANL or another DOE site. Waste determined not to be radioactively contaminated will be treated using commercial facilities permitted to treat hazardous waste; waste determined to be radioactively contaminated wastes will be assigned to applicable treatability groups and/or sent to off-site facilities for appropriate treatment.

Waste items in part 2 of this treatability group will be surveyed using complete RCRA and radiological sampling and characterization. Waste sampled under this alternative will be treated and disposed as MLLW; the waste will be assigned to applicable treatability groups and/or sent to off-site facilities for appropriate treatment based on the results of this characterization.

Sampling for this characterization alternative will be conducted in accordance with RCRA SW-846 methods. To ensure an adequate volume of waste material is available for sampling and to maximize the cost effectiveness of the sampling activities, some lab packed and other waste items may be bulked into larger volume containers; all RCRA waste codes will be reclassified as the bulked wastes to ensure correct RCRA categorization is maintained. It may be found, when preparing a given drum for sampling (for example, solid small volume waste items that cannot be sampled in accordance with EPA SW-846 methods), it in fact may not be amenable to sampling and should have been included in the item count for Group 3. If visual inspection so indicates, these waste items will be reclassified as Group 3 and assigned to applicable treatability groups based on existing knowledge.

Waste items in part 3 of this treatability group which are confirmed not amenable to sampling (e.g., lead-acid batteries, spray paint cans) will be assigned to applicable treatability groups based on existing knowledge. It may be found, when inspecting a given drum, that some items can in fact be sampled in accordance with EPA SW-846 methods and should have been included in the item count for Group 2. If visual inspection so indicates, these waste items will be reclassified as Group 2 and sampled accordingly.

Additional compliance dates will be proposed for any waste items in this treatability group found not to have available treatment/disposal options following a complete review of all survey, analytical, or visual inspection data obtained through these processes.

For all waste items in this treatability group, shipment off-site for treatment is a parallel preferred option.

Should DOE decide to treat waste at an off-site non-commercial facility in lieu of plans to treat such waste on-site, the DOE shall notify the NMED Project Manager in writing as soon as possible and in any event within fourteen (14) working days after confirmation of a shipment date with the affected off-site facility. The NMED Project Manager shall approve in writing the off-site non-commercial treatment option proposed by DOE prior to any shipment by DOE.

Any and all requirements imposed by the off-site (commercial or non-commercial) treatment facility and state regulatory, federal regulatory, or other regulatory requirements applicable at the treatment site shall be met 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 facility.

Activities for waste items in part 1 of this treatability group.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete field survey	10/30/96
B. Submit documentation declaring waste items as nonradioactive, or submit documentation assigning waste items to applicable treatability groups	02/28/97
C. Propose additional compliance dates if necessary	4/30/97

Activities for waste items in part 2 of this treatability group.

**FY08 Annual Update – Revision 2  
 Site Treatment Plan  
 Federal Facilities Compliance Order**

**September 30, 2009**

<b>Activity</b>	<b>Compliance Dates</b>
D. Complete RCRA and radiological sampling	01/28/97
E. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipments dates	02/28/97
F. Propose additional compliance dates if necessary	4/30/97

Activities for waste items in part 3 of this treatability group.

<b>Activity</b>	<b>Compliance Dates</b>
G. Complete visual verification	01/28/97
H. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipments dates	06/30/97
I. Propose additional compliance dates if necessary	09/30/97

**Additional wastes:**

<b>Treatability group</b>	<b>MWIR waste ID</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Nonradioactive Or Suspect Waste Items</i>	LA-W929-5	0.00
<b>Totals</b>		<b>0.00</b>

Activities for items added as subgroup 5 of this treatability group.

Activity	Compliance Dates
J. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipment dates	03/31/98
K. Propose additional Compliance Dates if necessary	3/31/98

**3.3.3 Lead Requiring Sorting**

**Treatability Group(s):**

Treatability Group	MWIR waste ID	RCRA Codes	Net Volume (m <sup>3</sup> )
<i>Lead Requiring Sorting</i>	LA-W931	D008	<b>0.00</b>
<b>Totals</b>			<b>0.00</b>

**Treatment:**

Wastes in this treatability group are generally heterogeneous and 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.

Activities for waste items in this treatability group.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete sorting	06/01/01
B. Submit documentation assigning waste items to applicable treatability groups. Propose additional compliance dates, if necessary, or	06/01/03
C. Complete shipment of existing waste to off-site facility for treatment, or complete parallel options.	06/01/03

**3.3.4 10 – 100 nCi/g Waste**

**Treatability Group(s):**

<b>Treatability Group</b>	<b>MWIR waste ID</b>	<b>RCRA Codes</b>	<b>Net Volume (m<sup>3</sup>)</b>
<i>10-100 nCi/g</i>	LA-W935	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	<b>14.3658</b>
<b>Totals</b>			<b>14.3658</b>

**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 ChemLL database. TRU programs

will be notified of the drums reclassified from TRU to MLLW for evaluation of possible other drums based on waste stream. Central Characterization Project (CCP) will be notified for removal of drums from Acceptable Knowledge (AK).

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-AK documentation and on-site and off-site profiles generated for debris or sludge drums.

Activities for waste items in this treatability group.

<b>Activity</b>	<b>Compliance Dates</b>
A. Complete assaying	12/01/13
B. Complete shipment of existing waste to off-site facility for treatment, or complete parallel options.	12/31/13
C. Provide documentation to NMED that waste was received at off-site 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

**3.4 Management of “Missing” Items**

**Waste Category:**

<b>Category</b>	<b>MWIR waste ID</b>	<b>Net volume (m<sup>3</sup>)</b>
<i>Missing/Nonexistent/TBV</i>	None	0.00
<b>Totals</b>		<b>0.00</b>

**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 containers in which it is expected to be, according to the LANL data files for the waste item. In some instances, such items could not be verified as having ever been received in storage at LANL, and follow-up investigations of the record files revealed that for various reasons, the waste items were never in fact generated, although on paper they were included in the original STP inventory.

Some items have been determined not to exist after visual inspection and document review. When DOE and Los Alamos National Security, LLC determine 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 will verify the absence of all “*Missing nonexistent/TBV*” items container-by-container, as each STP waste item is being sampled, repackaged, or otherwise prepared for on- or off-site treatment. The final verification of all “*Missing/ nonexistent/TBV*” items will be completed by April 21, 2004, at which time all remaining MLLW items in the original STP inventory will have been treated. At that time, LANL will request deletion of all missing or non-existent items from the STP.

At any time during the re-verification process, should any of these items be discovered to exist, NMED will be notified, and approval will be requested for assignment of the rediscovered items to the appropriate treatability group. If necessary, they will be assigned new Activities and Compliance Dates, in accordance with the terms of the FFCO.

The following steps will be taken to verify presence or absence of this waste:

Activity	Compliance Dates
A. Initiate re-verification process on a shipment-by-shipment basis	01/03/98
B. Complete re-verification process	04/21/04
C. Re-assign any existing	04/21/04

**FY08 Annual Update – Revision 2**  
**Site Treatment Plan**  
**Federal Facilities Compliance Order**

**September 30, 2009**

items to appropriate treatability groups	
D. Complete treatment of existing wastes to applicable regulatory standards, or	10/30/04
E. Complete shipping of existing wastes to an off-site treatment facility	10/30/04
F. Provide documentation to NMED that waste was received at off-site facility	Within 45 days of receipt of waste at treatment facility

#### **4.0 MIXED TRANSURANIC WASTE**

**Treatment Group(s):**

Assorted Mixed Transuranic Waste

**Off-Site Disposal:**

MTRU waste at LANL will be shipped for disposal at the Waste Isolation Pilot Plant (WIPP) located in Carlsbad, New Mexico. The schedule for characterization and subsequent off-site shipment to WIPP will be dependent on the annual DOE budget allocation specific to this activity.

**Part III APPENDIX A.**

**HISTORY OF STP REVISIONS AND AMENDMENT.**

As discussed in Part III (CP) Section 1.3, the STP Compliance Plan 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 18 revisions and three amendments to the CP. In addition, the FFCO was amended once, on May 20, 1997. The following Table A-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 A-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 off-site 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 on-site treatment skids, added STP inventory items, added on-site recycling/re-use and radiological decontamination, added notification for off-site treatability studies,
Rev. 8.0	STP/CP	12/3/98	Extended compliance dates for treatment of MTRU waste.

<b>Action</b>	<b>Document Modified</b>	<b>Effective Date</b>	<b>Effect on FFCO/STP</b>
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> .
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 off-site 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 <sup>3</sup> of LA-W934 High Activity MLLW waste to MTRU waste.

<b>Action</b>	<b>Document Modified</b>	<b>Effective Date</b>	<b>Effect on FFCO/STP</b>
Rev 17.0	STP/CP	6/26/2008	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	1/9/2009	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	TBD	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

