



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo Street
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



PETER MAGGIORE
SECRETARY

November 30, 1998

H. L. Plum
STP Project Manager
Office of Environments and Projects
Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, NM 87544

Kenneth Hargis
STP Project Manager
Los Alamos National Laboratory
Los Alamos, NM 87445

RE: Finalization of Revision 7.0 Request to FFCO STP CPV

Dear Mr. Plum and Mr. Hargis:

The request from you for Revision 7.0 to the Site Treatment Plan (STP) Compliance Plan Volume (CPV) of the Federal Facility Compliance Order (FFCO) has been considered by the Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department (NMED). According to the FFCO, revisions must undergo a public comment period of thirty days. One public comment was received. The draft Revision 7.0 was further revised upon consideration of the public comment and upon consideration by HRMB. The final draft was agreed to by HRMB, the Department of Energy, Los Alamos Operations Office, and Los Alamos National Laboratory University of California.

Please find enclosed the final version of Revision 7.0: a redline strikeout hard copy, a clean (no editing marks) hard copy, and electronic copies of the revision.

Please contact me at (505) 827-1867 if there are any questions relating to the FFCO.

Sincerely,

Janice Archuleta
Janice Archuleta,
FFCO Project Manager

ja

c(without enclosure): Benito Garcia, Chief, Hazardous and Radioactive Materials Bureau
Walter Medina, Environmental Specialist

c (with enclosure): Susan McMichael, NMED/OGC
FFCO file



1924

Read L.A.M.A. FFCO/98

72

EXHIBIT A

**LOS ALAMOS NATIONAL
LABORATORY**

MIXED WASTE SITE TREATMENT PLAN

COMPLIANCE PLAN VOLUME (CPV)

BACKGROUND VOLUME

Revision 7.0

November 1998

(Rev. 7.0 11/98)

1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN VOLUME.

1.1 Introduction.

On October 6, 1992, Congress passed the Federal Facility Compliance Act (FFC Act) 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 RCRA. The FFC Act 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 FFC Act 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 FFC Act 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 FFC Act, NMED determined to approve the draft STP with modifications as provided in this document.

The STP is intended to fulfill the requirements of the FFC Act and establish an enforceable framework to allow DOE and the Regents of the University of California (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 will be fully implemented by a Compliance Order issued by NMED on or before October 6, 1995.

1.2 Contents.

The STP contains two volumes and is intended to bring Respondents into compliance with LDR storage prohibitions under the HWA and RCRA. The Compliance Plan Volume of the STP provides overall schedules, including compliance dates, for achieving compliance with LDR

storage and treatment requirements for mixed waste at LANL. The Compliance Plan 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. The Background Volume of the STP contains progress reports as required in the Compliance Order. Respondents shall carry out the activities described in the STP, including the Compliance Plan Volume of the STP, in accordance with the schedules and requirements set forth in the STP and the Order.

1.3 STP Revisions and Amendments.

The STP Compliance Plan Volume (CPV) 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. Appendix A to the CPV provides a summary of these CPV 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 3-2 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.
- 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 CPV Section 2.6.

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.

Should DOE decide to treat or recycle waste at a commercial off-site facility, 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.

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 Engineering Laboratory.

Prior to shipment, Idaho National Engineering Laboratory 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 to INEL. Proper procedures including additional approvals (if necessary) and documentation shall be completed prior to the shipment of wastes to INEL. 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 INEL.

Shipments of low-level mixed wastes 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 FFC Act 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 FFC Act 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 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 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.

- A. Meet all regulatory requirements for recycling/re-use.
- 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.

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 CPV 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.

- A. Meet all DOE requirements for radiological decontamination..
- 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
- C. Propose waste for deletion in accordance with Section IX of the FFCO.

3.0 MIXED LOW-LEVEL WASTE STREAMS.

This Chapter presents the preferred options to treat mixed low-level waste streams (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 table in CPV Appendix B provides a comprehensive summary of changes to the CPV 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 Sections of this chapter, 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. For a complete listing of volumes by subgroup for all treatability groups, please refer to Appendix B.

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	Number of items	Net volume (m ³)
IPA wastes	LA-W901	D001, D009, F002, F003, F005	0	0.00
scintillation fluids	LA-W902	D001, F003, F005	0	0.00
Totals			0	0.00

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 transferred to Treatability Group LA-W906, in Revision 5.0, approved 12/29/97 by NMED.

3.1.2 Lead Blankets, Soil with Heavy Metals, ER Soils.

Treatability Group(s):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (M ³)
lead blankets	LA-W903	D007, D008	0	0.00
soil with heavy metals	LA-W904	D004, D005, D006, D007, D008, D009, D010, D011	3	0.45
ER soils	LA-W905	D028, D029, F001, F005 D010, D011	0	0.00
Totals			3	0.45

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	12/30/98
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):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
aqueous organic liquids	LA-W906-0 LA-W906-4 LA-W906-5	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	173	10.32
Totals			173	10.32

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 offsite facility.

Activity	Date
A. <input type="checkbox"/> Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	02/09/00
B. <input type="checkbox"/> 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.

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

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
aqueous organic liquids	LA-W906-6	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	88	5.74
Totals			88	5.74

Activities for wastes belonging to this treatability subgroup.

Activity	Compliance Dates
C. Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	02/09/03
D. 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

3.1.4 Organic-Contaminated Combustible Solids.

Treatability Group(s):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
organic-contaminated combustible solids	LA-W911	D001, D004, D008, D009, F001, F002, F003, F005	382	36.07
Totals			382	36.07

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
organic-contaminated noncombustible solids	LA-W919	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D018, D019, D020, D022, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D042, D043, F001, F002, F003, F004, F005	231	27.31
Totals			231	27.31

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	02/14/02
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	Number of items	Net volume (m ³)
combustible debris	LA-W912	D001, D002, D003, D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005	105	15.17
Totals			105	15.17

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
activated or inseparable lead	LA-W921	D008	35	7.30
noncombustible debris	LA-W922	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011	191	36.46
Totals			226	43.76

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	08/25/00
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):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
aqueous wastes with heavy metals	LA-W913	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011	139	3.07
corrosive solutions	LA-W914	D001, D002	197	1.21
aqueous cyanides, nitrates, chromates, and arsenates	LA-W915	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F007, P029, P098	23	0.17
Totals			359	4.45

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 offsite facility.

Activity	Compliance Dates
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 Metals.

Treatability Group(s):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
water-reactive wastes	LA-W916	D001, D003, D004, D005, D007, D008, D010, D011	113	7.05
Totals			113	7.05

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	04/21/04
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):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
compressed gases requiring scrubbing	LA-W917	D001, D002, P056	25	0.63
Totals			25	0.63

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off- site treatment facility or complete parallel option	08/28/03
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	Number of items	Net volume (m ³)
compressed gases requiring oxidation	LA-W918	D001, U226	192	1.78
Totals			192	1.78

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	08/28/03
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	Number of items	Net volume (m ³)
elemental mercury	LA-W920	D006, D009, F005	79	0.66
Totals			79	0.66

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	11/15/00
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):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
halogenated organic liquids	LA-W907	D001, D002, D003, D007, D009, D010, D011, D018, D019, D022, D028, D029, D035, D043, F001, F002, F003, F004, F005, U077, U080, U226, U227, U228, U236	537	18.30
nonhalogenated organic liquids	LA-W908	D001, D002, D003, D004, D007, D008, D009, D011, D018, D038, D040, F002, F003, F004, F005, U002, U019, U154, U169, U188, U220, U246	899	20.22
bulk oils	LA-W909	D002, D004, D005, D006, D007, D008, D009, D010, D011, D021, D027, D039, F001, F002, F003, F005	45	5.81
PCB wastes with RCRA components	LA-W910	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	40	2.75
Totals			1453	47.02

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
Liquid and solid oxidizers	LA-W923	D001, D003, D005	93	1.37
Totals			93	1.37

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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	02/01/02
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	Number of items	Net volume (m ³)
lead wastes - TBD	LA-W924	D003, D008	129	40.16
mercury wastes - TBD	LA-W925-0	D007, D008, D009, F001	63	18.30
compressed gases - TBD	LA-W926	D001, D007, D009, D022, P056, U080, U226	10	1.25
biochemical laboratory wastes	LA-W927	D001, D003	9	1.34
dewatered treatment sludge	LA-W928	see Subsection 3.3 in the Background Volume	61	12.71
Totals			272	73.76

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.

Activity	Compliance Dates
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	12/20/00
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.

Treatability group	MWIR waste ID	RCRA Codes	Number of items	Net volume (m3)
mercury wastes-TBD	LA-W925-4 LA-W925-5 LA-W925-6	D003, D007, D008, D009, F001, F002, F005	74	2.61
explosives	LA-W932	D003	1	0.000001
labpacks	LA-W933	D001, D002, D003, D004, D005, D006, D007, D008, D010, F003, F005, D011, P012, P029, P098, P106, P113, P120, U131, U144, U145, U188, U190, U204, U216, U219	153	0.30
Totals			228	2.91

Activities for wastes belonging to these treatability groups and subgroups.

Activity	Compliance Dates
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	12/20/03
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		Total	
		No. Items	Net volume (m ³)	No. Items	Net volume (m ³)	No. Items	Net volume (m ³)
lead for surface contamination	LA-W930-0 LA-W930-5	0	0.00	134	49.19	133	49.08
Totals		0	0.00	134	49.19	133	49.08

Note: See below for additional wastes in this treatability group

Treatment:

This treatability group contains two categories of lead for decontamination:

- The first category is lead in the original LA-W930-0 inventory that is amenable to decontamination in the on-site lead decontamination trailer, which was designed to decontaminate simple lead shapes, such as lead bricks, of certain physical dimensions. The trailer is on-site and has operated, but needs an upgrade for prolonged operation.
- The lead in the second category is lead in the original LA-W930-0 inventory that is not amenable to decontamination in the on-site lead decontamination trailer, plus subsequent additions to the original inventory shown in Appendix B. This lead will be processed using other on-site decontamination processes, such as dry sandblasting or hand-scrubbing, or sent to off-site lead decontamination services.

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 Date
A. Complete lead decontamination	09/30/97

Lead shapes and forms in the second category.

Activity	Compliance Date
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.

Treatability group	MWIR waste ID	First category		Second category		Total	
		No. Items	Net volume (m ³)	No. Items	Net volume (m ³)	No. Items	Net volume (m ³)
lead for surface contamination	LA-W930-6	0	0.00	14	12.06	14	12.06
Totals		0	0.00	14	12.06	14	12.06

Activities for wastes belonging to this treatability subgroup.

Activity	Compliance Date
G. Complete shipment of wastes to decontamination operations, or	12/02/99
H. Determine treatment/disposal or other recycle options 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	07/31/00
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):

Treatability group	MWIR waste ID	Number of items	Net volume (m ³)
nonradioactive or suspect waste items to be surveyed	LA-W929-0(1)	0	0.0
nonradioactive or suspect waste items to receive RCRA and radiological characterization	LA-W929-0(2)	0	0.00
nonradioactive or suspect waste items that cannot or should not be sampled	LA-W929-0(3)	0	0.0
Totals		0	0.00

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 suspect 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 will be assigned to applicable treatability groups and/or sent to offsite 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 low-level mixed waste; 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 transferred to 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) are in fact not 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 transferred to 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 transferred to 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.

Activity	Compliance Dates
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	2/28/97
C. Propose additional compliance dates if necessary	4/30/97

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

Activity	Compliance Dates
D. Complete RCRA and radiological sampling	1/28/97
E. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipment dates	2/28/97
F. Propose additional compliance dates if necessary	4/30/97

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

Activity	Compliance Dates
G. Complete visual verification	1/28/97
H. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipment dates	6/30/97
I. Propose additional compliance dates if necessary	9/30/97

Additional wastes:

Treatability group	MWIR waste ID	Number of items	Net volume (m ³)
Nonradioactive or suspect waste items	LA-W929-5	0	0.00
Totals		0	0.00

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	3/31/98
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	Number of Items	Net Volume (m ³)
Lead requiring sorting	LA-W931	D008	12	1.08
Totals			12	1.08

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 to 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.

Activity	Compliance Dates
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

3.4 Management of "Missing" Items.

Waste Category:

Category	MWIR waste ID	No. Items	Net volume (m ³)
Missing/nonexistent/TB V	None	48	8.81
Totals		48	8.81

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 further 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.

In these instances, DOE and UC, and their contractors, perform a thorough inspection of both the physical inventories and the data files. When DOE and UC 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 and UC will re-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 that all "*Missing/ nonexistent/TBV*" items do not in fact exist 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, DOE and UC will request deletion of all items having been fully verified as missing or nonexistent.

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 TG. 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 items to appropriate treatability groups	04/21/04
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

Treatment Technology:

Respondents are required to develop treatment technologies and treat mixed transuranic (MTRU) waste at LANL according to the schedule set forth below:

Activity	Compliance Date
A. Development of treatment technologies	June 30, 1999
B. Submit permit application amendment or modification to NMED for treatment of MTRU	December 31, 1999
C. Begin treating MTRU	Six (6) months after NMED permit issuance
D. Complete treatment of existing MTRU to applicable regulatory standards	December 31, 2010

The above schedule is not based on the assumption that WIPP will be a disposal option or that DOE will receive a variance from treatment standards for land disposal of MTRU waste to be disposed at WIPP. All revisions to compliance dates shall be in accordance with the procedures set forth in the compliance order.

**CPV APPENDIX A.
HISTORY OF STP REVISIONS AND AMENDMENT.**

As discussed in CPV Section 1.3, the STP Compliance Plan Volume 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, as amended and revised. This Appendix provides a summary of these CPV changes, and of modifications to the FFCO since its issuance.

To date, there have been seven revisions and two amendments to the CPV. 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 CPV Update portion of each year's STP *Annual Update*, and the original correspondence requesting each change.

Table A-1. SUMMARY OF CHANGES TO THE CPV AND THE FFCO.

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 1.0	STP/CPV	6/12/96	Added off-site treatment as a parallel preferred option for most MLLW treatability groups
Rev. 2.0	STP/CPV	12/9/96	Reduced volume of LA-W928 by approving reclassification of sludges as LLW
Amendment 1.0	STP/CPV	10/30/96	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates
Rev. 3.0	STP/CPV	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/CPV	9/4/97	Extended CPV Activity 3.1.2B Compliance Date to 12/29/97
Rev. 4.0	STP/CPV	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/CPV	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 CPV Appendices, and deleted treated items
Rev. 6.0	STP/CPV	(to be added)	Added volumes reported in FY97 <i>Annual Update</i> to several treatability groups, added Activities and Compliance Dates, adjusted several original inventory volumes, transferred one LA-W929 item to a new treatability group, and deleted treated items

LANL CPV

Rev. 7.0 November 1998

Page 43

Rev. 7.0	STP/CPV	<i>(to be added)</i>	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, provided option for shipping covered waste, under special circumstances, prior to addition by approved revision.
----------	---------	----------------------	---

CPV APPENDIX B.
SUMMARY OF CPV INVENTORY CHANGES

The following tables provide a comprehensive summary of changes to the CPV covered waste inventories (additions, deletions, and shifts of waste between treatability groups) occurring as of the date of this revision. The volumes given in the tables reflect changes to the individual MLLW treatability group volumes due to increases or decreases, as noted. Table B-1 reports the inventory changes arising from Revisiosn 6.0 and 7.0, while Table B-2 reports the inventory changes previously approved in Revision 4.0/5.0.

Key to Reading the Subgroups.

The original STP inventory in each MLLW treatability group is now denoted as subgroup -0 of that treatability group (e.g., the original volume of STP treatability group LA-W906 became LA-W906-0). The original October 4, 1995 STP inventory in each MLLW treatability group has been modified through the revision process in the FFCO. The following revisions have affected volumes in individual treatability groups to date:

Revision	Effect on Volumes
Rev. 2.0	Reduced volume of LA-W928
Rev. 3.0	Divided original volume of LA-W929 into three subgroups
Rev. 4.0	Transferred original volume of LA-W929 from three subgroups to other treatability groups, added new treatability groups
Rev. 5.0	Increased and decreased volumes in several treatability groups
Rev. 6.0	Increased and decreased volumes in several treatability groups, transferred the volume in LA-W929-5 to another treatability group
Rev. 7.0	Adjusted volumes in several treatability groups

Each revision that has added volumes to individual treatability groups has resulted in creation of an additional subgroup of that treatability group, 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).

Additions and Deletions to Date.

To date, MLLW inventory increases and decreases have been incorporated into the covered waste inventories through Revisions 2.0, 4.0, 5.0, 6.0, and 7.0. Revision 2.0 incorporated decreases in treatability group LA-W928 due to deletion of covered waste items. Rev. 4.0 resulted in decreases to LA-W929 and increases in other TGs, primarily by transferring LA-W929 items to other TGs. Rev. 5.0 and 6.0 resulted in both additions to and deletions of covered waste volumes (i.e., increases and decreases) in a number of TGs. Therefore, the Appendix B tables that follow show that subgroups -4, -5, -6 and -7 exist for some treatability groups, but not for all.

These tables provide a master list of MLLW inventory changes presented in the *Annual Updates*, to enable users of the STP to track all changes in the LANL MLLW covered waste inventory that occurred since the original STP inventory was established in the October 4, 1995 FFCO/CPV.

Changes (additions or deletions) to the CPV covered waste inventory have occurred since the end of FY97. However, only those reported as of Rev. 6.0 and Rev. 7.0 are included in this table. All others will be reported in the next *Annual Update* and associated revision request. Therefore, the "*Net Covered Waste Inventory*" may not fully reflect the actual CPV covered waste inventory as of the date of this revision, in some instances.

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
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	10.43 ^a	Decrease 6	Decrease 0.62 ^b					2	0.34		
					Decrease 2	Decrease 0.42 ^c								
					Decrease 46	Decrease 8.91								
					Decrease 2	Decrease 0.14								
		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

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.3	Aqueous Organic Liquids	LA-W906-0	45	1.65							45	1.65	261	16.06
		LA-W906-4	27	0.36							27	0.36		
		LA-W906-5	101	8.31 ^d							101	8.31		
		LA-W906-6	0	0.00	Increase 88	Increase 5.74					88	5.74		
3.1.4	Organic-Combustible Solids	LA-W911-0	305	28.10	Increase 2	Increase 0.42 ^c					307	28.52	382	36.07
		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		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	
3.1.4	Organic-Contaminated Noncombustible Solids	LA-W919-0	79	7.71	Increase 1	Increase 0.11 ^e						80	7.82		
		LA-W919-4	9	0.38								9	0.38		
		LA-W919-5	89	10.53								89	10.53		
		LA-W919-6	0	0.00	Increase 49	Increase 8.58						49	8.58		
		LA-W919-7	0	0.00					Increase 4	Increase 0.002		4	0.002		
													231	27.31	
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		
													105	15.17	

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.5	Activated or Inseparable Lead	LA-W921-0	14	4.77	Decrease 1	Decrease 0.06 ^f			Increase 1	Increase 0.208	12	3.20		
					Decrease 2	Decrease 1.72								
		LA-W921-5	18	3.35	Decrease 4	Decrease 0.83 ^f					14	2.52		
		LA-W921-6	0	0.00	Increase 9	Increase 1.58					9	1.58	35	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

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.6	Corrosive Solutions	LA-W914-0	60	0.69							60	0.69	197	1.21
		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		
3.1.6	Aqueous Cyanides, Nitrates, Chromates, and Arsenates	LA-W915-0	9	0.13							9	0.13	23	0.17
		LA-W915-4	3	0.002							3	0.002		
		LA-W915-5	11	0.04							11	0.04		
3.1.7	Water-Reactive Wastes	LA-W916-0	78	6.03							78	6.03	113	7.05
		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		
3.1.8	Compressed Gases Requiring Scrubbing	LA-W917-0	13	0.35							13	0.35	25	0.63
		LA-W917-7	0	0.00					Increase 12	Increase 0.28	12	0.28		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	
3.1.9	Compressed Gases Requiring Oxidation	LA-W918-0	6	0.08								6	0.08		
		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		
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		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.11	Halogenated Organic Liquids	LA-W907-0	384	16.58	Decrease 3	Decrease 0.0076					381	16.57	537	18.30
		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		
3.1.11	Nonhalogenated Organic Liquids	LA-W908-0	275	14.34	Increase 0 ^g Decrease 4 Decrease 0 ^h	Increase 0.076 Decrease 0.49 Decrease 0.11					271	13.82	899	20.22
		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		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.11	Bulk Oils	LA-W909-0	28	3.75	Increase 0 ⁱ	Increase 0.47					5	2.00	45	5.81
					Decrease 23	Decrease 2.22								
		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		
3.1.11	PCB Wastes with RCRA Components	LA-W910-0	4	0.74	Increase 6	Increase 0.62 ^b					10	1.36	40	2.75
		LA-W910-6	0	0.00	Increase 30	Increase 1.39					30	1.39		
3.1.11	Liquid and Solid Oxidizers	LA-W923-0	6	0.117							6	0.117	93	1.37
		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		
3.2	Lead Waste - TBD	LA-W924-0	129	40.16							129	40.16	129	40.16

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.2	Mercury Wastes - TBD	LA-W925-0	63	18.30							63	18.30	137	20.91
		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		
3.2	Compressed Gases - TBD	LA-W926-0	10	1.25							10	1.25	10	1.25
3.2	Biochemical Laboratory Wastes	LA-W927-0	9	1.34							9	1.34	9	1.34
3.2	Dewatered Treatment Sludge	LA-W928-0	61	12.71							61	12.71	61	12.71
3.2	Explosives	LA-W932-0	0	0.00							0	0.00	1	0.00000
		LA-W932-4	1	0.00000							1	0.00000		
				1							1		1	0.00000

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
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 ^j			7	0.003		
		LA-W933-7	0	0.00					Increase 4	Increase 0.002	4	0.002		
												153	0.30	

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.3.1	Lead for Surface Decontamination	LA-W930-0	36	33.43	Decrease 1	Decrease 0.11 ^k			Increase 0 ^o	Increase 0.095	22	26.16		
				Decrease 4	Decrease 0.35 ^k			Decrease 1	Decrease 0.208					
				Decrease 6	Decrease 1.04									
		LA-W930-5	115	23.75	Decrease 1	Decrease 0.21 ^k					111	22.92		
				Decrease 3	Decrease 0.62 ^k									
		LA-W930-6	0	0.00	Increase 14	Increase 12.06					14	12.06	147	61.14
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 ^j			0	0.00	0	0.00

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.3.3	Lead Requiring Sorting	LA-W931-0	23	4.76	Decrease 23	Decrease 4.78					0	0.00	12	1.08
		LA-W931-5	8	0.44	Increase 0 ^m	Increase 0.02					8	0.44		
		LA-W931-6	0	0.00	Increase 4	Increase 0.64					4	0.64		
None ⁿ	IPA	None	0	0.00	Increase 1	Increase 0.0005 ⁿ					0	0.00	0	0.00
					Decrease 1	Decrease 0.0005 ⁿ								

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

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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.4	Missing/nonexistent/TBV	NONE (Revision 5)	48	8.81					0	Decrease 0.00095 ^p	48	8.81	48	8.81

NOTES:

- ^a This correction in LA-W904 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- ^b This transfer of LA-W904 waste to LA-W910 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- ^c This transfer of LA-W904 waste to LA-W911 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- ^d This correction in LA-W906 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- ^e 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.
- ^f These 5 items in subgroups LA-W921-0 and -5 (0.89 m³ total) were shipped on December 9, 1996 as discussed in DOE's letter dated December 24, 1996.
- ^g This increase in LA-W908 volume arises from an error in the original STP inventory data as discussed in Revision 6.0.
- ^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 m³, as reported in the FY97 STP *Annual Update*, consisted of 1 item (0.11 m³) from subgroup LA-W930-0 and 1 item (0.21 m³) from subgroup -5. The shipment of 0.97 m³, as reported in the FY97 STP *Annual Update*, consisted of 4 items (0.35 m³) from subgroup -0 and 3 items (0.62 m³) from subgroup -5.
- ^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.

EXHIBIT A

**LOS ALAMOS NATIONAL
LABORATORY**

MIXED WASTE SITE TREATMENT PLAN

COMPLIANCE PLAN VOLUME (CPV)

BACKGROUND VOLUME

Revision 7.0 6.0

November July 1998

(Rev. 7.0 11/98 6.0 7/98)

1.0 PURPOSE AND SCOPE OF THE COMPLIANCE PLAN VOLUME.

1.1 Introduction.

On October 6, 1992, Congress passed the Federal Facility Compliance Act (FFC Act) 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 RCRA. The FFC Act 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 FFC Act 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 FFC Act 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 FFC Act, NMED determined to approve the draft STP with modifications as provided in this document.

The STP is intended to fulfill the requirements of the FFC Act and establish an enforceable framework to allow DOE and the Regents of the University of California (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 ~~develop treatment capacities and technologies, and treat or~~ otherwise meet the requirements set forth for LDR under the HWA and RCRA. The STP will be fully implemented by a Compliance Order issued by NMED on or before October 6, 1995.

1.2 Contents.

The STP contains two volumes and is intended to bring Respondents into compliance with LDR storage prohibitions under the HWA and RCRA. The Compliance Plan Volume of the STP provides overall schedules, including compliance dates, for achieving compliance with LDR storage and treatment requirements for mixed waste at LANL. The Compliance Plan includes a schedule for ~~the submittal of applications for permits, construction of treatment facilities;~~

technology development, 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. The Background Volume of the STP contains progress reports as required in the Compliance Order. Respondents shall carry out the activities described in the STP, including the Compliance Plan Volume of the STP, in accordance with the schedules and requirements set forth in the STP and the Order.

1.3 STP Revisions and Amendments.

The STP Compliance Plan Volume (CPV) 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. Appendix A to the CPV provides a summary of these CPV 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 bring existing waste treatment technologies into operation, process backlogged and currently generated waste, and include schedules required to develop new facilities and capacity for treatment and 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. Compliance dates for the activities identified in Table I may be found in Section 3.1.

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 3.2 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.
- 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.

2.1.4 2.3 Plans for Mixed Waste to be Shipped Off-Site for Treatment.

In lieu of plans to treat mixed-waste on-site, The preferred alternative for DOE may to treat mixed waste is at an off-site facility (at a commercial or non-commercial mixed waste treatment facility), or DOE may recycle waste at an off-site facility pursue parallel treatment options such as recycling/re-use or radiological decontamination. Requirements for waste shipped off-site for recycling are discussed under CPV Section 2.6. Should DOE elect to use off-site recycling facilities in lieu of (or in combination with) treatment, it will follow the requirements prescribed in this Section in the same manner as if the waste was being shipped off-site for treatment. Any and all requirements imposed by the off-site treatment/recycling facility and state regulatory, federal regulatory or other regulatory requirements applicable at the treatment/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 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 V- IV.

Should DOE decide to treat or recycle waste at a commercial off-site facility, 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.

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

- | | |
|----|--|
| A. | Meet all regulatory requirements for off-site 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 |

2.1.4.1 2.3.1 Specific Site Requirements for Non-commercial Treatment Facilities.

Shipment to Idaho National Engineering Laboratory.

Prior to shipment, Idaho National Engineering Laboratory 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 to INEL. Proper procedures including additional approvals (if necessary) and documentation shall be completed prior to the shipment of wastes to INEL. 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 INEL.

Shipments of low-level mixed wastes 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 V. 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. |

2.1.3 2.4 Requirements Pertaining to Radionuclide Separation.

The FFC Act 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 III V. "Radionuclide separation" shall mean segregating the radioactive portion of the mixed waste from the hazardous portion of the mixed waste.

Table III. 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.

2.1.5 2.5 Plans Related to Other Mixed Waste Activities.

1. Activities other than the types of activities specifically called for in the FFC Act 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 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 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.

- | | |
|----|--|
| A. | Meet all regulatory requirements for recycling/re-use. |
| 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. |

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 CPV 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.

- | | |
|----|---|
| A. | Meet all DOE requirements for radiological decontamination. |
| 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 |
| C. | Propose waste for deletion in accordance with Section IX of the FFCO. |

3.0 MIXED LOW-LEVEL MIXED WASTE STREAMS.

This Chapter presents proposed schedules for treatment technologies and the preferred options to treat mixed low-level mixed waste streams (MLW or 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 table in CPV Appendix B provides a comprehensive summary of changes to the CPV 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 Sections of this chapter, 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. For a complete listing of volumes by subgroup for all treatability groups, please refer to Appendix B.

3.1 Mixed Waste Streams. for Which Technology Exists

The following subsections summarize MLLW treatability groups. for which technology exists

3.1.1 Off-site Treatment by Thermal Treatment IPA Wastes and Scintillation Fluids.

Treatability Group(s):

LLMW for Thermal Treatment (MWIR Treatment ID DS-S001)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
IPA wastes	LA-W901	D001, D009, F002, F003, F005	0	0.00
scintillation fluids	LA-W902	D001, F003, F005	0	0.00
Totals			0	0.00

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. Meet all regulatory requirements prior to shipping waste	9/30/96
B. A. Complete shipping waste	12/30/96*
C. 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 transferred to Treatability Group LA-W906, in Revision 5.0, approved 12/29/97 by NMED.

**3.1.2 Off-site Treatment by Stabilization or Macroencapsulation
 Lead Blankets, Soil with Heavy Metals, ER Soils.**

Treatability Group(s):

LLMW for Stabilization

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (M ³)
lead blankets	LA-W903	D007, D008	0	0.00
soil with heavy metals	LA-W904	D004, D005, D006, D007, D008, D009, D010, D011	3	0.45
ER soils	LA-W905	D028, D029, F001, F005 D010, D011	0	0.00
Totals			3	0.45

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. Meet all regulatory requirements prior to shipping waste	05/30/97
B.A. Complete shipping waste or complete parallel option	12/30/98
C.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 Evaporative Oxidation (MWIR Treatment ID GJ-S801C)
Aqueous Organic Liquids

Treatability Group(s):

LLMW for Evaporative Oxidation/Off-site Treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
aqueous organic liquids	LA-W906-0 LA-W906-4 LA-W906-5	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D027, D028, D030, D032, D033, D034, D036, D037, D038, D039, D041, D042, D043, F001, F002, F003, F004, F005	173	10.32
Totals			173	10.32

Note: See below for additional wastes in this treatability group

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated off-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	12/30/96
B. Initiate construction	As specified in the NMED permit.
C. Complete system test and commence operation and begin treating mixed waste	6/19/99
D. Complete treatment of existing wastes to applicable regulatory standards, or	2/09/00
E.A. Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	02/09/00
F.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

Additional wastes.

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

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m³)
aqueous organic liquids	LA-W906-6	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	88	5.74
Totals			88	5.74

Activities for wastes belonging to this treatability subgroup.

Activity	Compliance Dates
GC: Complete shipment of existing wastes for treatment to an off-site facility or complete parallel option	2/09/03
H.D: 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

**3.1.4 Thermal Desorption (MWIR Treatment ID GJ-S801B)
 Organic-Contaminated Combustible Solids.**

LLMW for Thermal Desorption/Off-site Treatment (preferred option)

Treatability Group(s):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
organic-contaminated combustible solids	LA-W911	D001, D004, D008, D009, F001, F002, F003, F005	381 382	36.07
Totals			381 382	36.07

LLMW for Thermal Desorption

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
organic-contaminated noncombustible solids	LA-W919	D001, D003, D004, D005, D006, D007, D008, D009, D010, D011, D012, D015, D018, D019, D020, D022, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D042, D043, F001, F002, F003, F004, F005	227 231	27.31
Totals			227 231	27.31

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated off-site and operated on-site. Shipment off-site for treatment is a parallel 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 ~~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 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 offsite facility.~~

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	11/16/98
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operations and begin treating mixed waste	02/01/01
D. Complete treatment of existing wastes to applicable regulatory standards, or	02/14/02
E. A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	02/14/02
F. 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 Macroencapsulation (MWIR Treatment ID PX-S803)-

Combustible Debris, Activated or Inseparable Lead, Noncombustible Debris.

Treatability Group(s):

LLMW for Macroencapsulation/Off-site treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
combustible debris	LA-W912	D001, D002, D003, D005, D006, D007, D008, D009, D011, D035, F001, F002, F003, F005	103 105	15.17
Totals			103 105	15.17

LLMW for Macroencapsulation

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
activated or inseparable lead	LA-W921	D008	34 35	7.09 7.30
noncombustible debris	LA-W922	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011	191	36.46
Totals			225 226	43.55 43.76

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated off-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	01/04/98
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operation and begin treating mixed waste	02/01/00
D. Complete treatment of existing wastes to applicable regulatory standards, or	08/25/00
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	08/25/00
F.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 Chemical Plating Waste Treatment Skid (MWIR Treatment ID LA-S004)
 Aqueous Wastes with Heavy Metals, Corrosive Solutions, Aqueous Cyanides,
 Nitrates, Chromates, and Arsenates.**

Treatability Group(s):

LLMW for Chemical Plating Waste Skid/Off-site Treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
aqueous wastes with heavy metals	LA-W913	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011	139	3.07
corrosive solutions	LA-W914	D001, D002	197	1.21
aqueous cyanides, nitrates, chromates, and arsenates	LA-W915	D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F007, P029, P098	23	0.17
Totals			359	4.45

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated off-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Resubmit revised permit application to NMED	10/30/96
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operations and begin treating mixed waste	03/17/00
D. Complete treatment of existing wastes to applicable regulatory standards, or	05/08/01
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	05/08/01
F.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 Metals. Treatment Skid (MWIR Treatment ID LA-S003)

Treatability Group(s):

~~LLMW for Water-Reactive Metals Skid/Off-site Treatment (preferred option)~~

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
water-reactive wastes	LA-W916	D001, D003, D004, D005, D007, D008, D010, D011	113	7.05
Totals			113	7.05

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated on-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	06/30/01
B. Initiate construction	As specified in the NMED permit

C. Complete system testing and commence operations and begin treating mixed waste	09/09/03
D. Complete treatment of existing wastes to applicable regulatory standards, or	04/21/04
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	04/21/04
F.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 Gas-scrubbing Skid (MWIR Treatment ID LA-S801)-
Compressed Gases Requiring Scrubbing.**

Treatability Group(s):

LLMW for Gas-Scrubbing Skid/Off-site Treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
compressed gases requiring scrubbing	LA-W917	D001, D002, P056	13 25	0.35 0.63
Totals			13 25	0.35 0.63

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated on-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	03/10/98
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operations and begin treating mixed waste	05/10/02
D. Complete treatment of existing wastes to applicable regulatory standards, or	08/28/03
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	08/28/03
F.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 Gas Oxidation Skid (MWIR Treatment ID LA-S801)
 Compressed Gases Requiring Oxidation.**

Treatability Group(s):

LLMW for Gas Oxidation Skid/Off-site Treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
compressed gases requiring oxidation	LA-W918	D001, U226	177 192	1.32 1.78
Totals			177 192	1.32 1.78

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated on-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	03/10/98
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operations and begin treating mixed waste	05/10/02
D. Complete treatment of existing wastes to applicable regulatory standards, or	08/28/03
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	08/28/03

<p>F.B. Provide documentation to NMED that waste was received at off-site facility or provide notification of parallel option</p>	<p>Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option</p>
---	---

**3.1.10 Mercury Amalgamation (MWIR Treatment ID PI-S801)
 Elemental Mercury.**

Treatability Group(s):

~~LLMW for Amalgamation/Off-site Treatment (preferred option)~~

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
elemental mercury	LA-W920	D006, D009, F005	79	0.66
Totals			79	0.66

Treatment:

The waste will be treated in a mobile treatment unit that will be fabricated off-site and operated on-site. Shipment off-site for treatment is a parallel 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 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 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 offsite facility.

Activity	Compliance Dates
A. Submit permit application, amendment or modification to NMED	01/30/98
B. Initiate construction	As specified in the NMED permit
C. Complete system testing and commence operations and begin treating mixed waste	06/05/00
D. Complete treatment of existing waste to applicable regulatory standards, or	11/15/00
E.A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	11/15/00
F.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 Streams for Which Technology Requires Adaptation or for Which No Technology Exists

The following subsections summarize mixed waste streams for which technology requires adaptation or for which no technology exists:

3.2.1 Hydrothermal Processing

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

Treatability Group(s):

LLMW for Hydrothermal Processing/Off-site Treatment (preferred option)

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
halogenated organic liquids	LA-W907	D001, D002, D003, D007, D009, D010, D011, D018, D019, D022, D028, D029, D035, D043, F001, F002, F003, F004, F005, U077, U080, U226, U227, U228, U236	525 537	18.26 18.30
nonhalogenated organic liquids	LA-W908	D001, D002, D003, D004, D007, D008, D009, D011, D018, D038, D040, F002, F003, F004, F005, U002, U019, U154, U169, U188, U220, U246	843 899	20.20 20.22
bulk oils	LA-W909	D002, D004, D005, D006, D007, D008, D009, D010, D011, D021, D027, D039, F001, F002, F003, F005	45	5.81
PCB wastes with RCRA components	LA-W910	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	40	2.75
Totals			1453	47.02

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
Liquid and solid oxidizers	LA-W923	D001, D003, D005	93	1.37
Totals			93	1.37

Treatment:

The preferred destruction treatment technology option for this treatability group is Hydrothermal Processing which is a technology that needs development for adaptation to treat radioactive and PCB-bearing waste. This treatment technology is being adapted at LANL and is expected to be developed into a mobile treatment unit. The GJPO schedule for deployment of the unit indicates its possible availability to LANL after February 2002. Shipment off-site for treatment is a parallel the preferred option. Parallel preferred options include on-site or off-site recycling/re-use or radiological decontamination. Respondents shall submit treatment or off-site shipment schedules and options for NMED's approval by November 30, 1998. Treatment or other options other than off-site shipment shall be carried out pursuant to the revision process. Off-site shipments must be completed by February 2002.

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 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 offsite facility.

Activity	Compliance Dates
A. Complete shipping of existing wastes to an off-site treatment facility or complete parallel option	02/01/02

<p>B. Provide documentation to NMED that waste was received at off-site facility or provide notification of parallel option</p>	<p>Within 45 days of receipt of waste at treatment facility or within 45 days after completion of parallel option</p>
--	---

3.3 3.2 Mixed Waste Requiring Further Characterization or for Which Technology Assessment Has Not Been Done (MWIR Treatment ID LA-S701)

Treatability Group(s):

Treatability group	MWIR waste ID	RCRA codes	Number of items	Net volume (m ³)
lead wastes - TBD	LA-W924	D003, D008	129	40.16
mercury wastes - TBD	LA-W925-0	D007, D008, D009, F001	63	18.30
compressed gases - TBD	LA-W926	D001, D007, D009, D022, P056, U080, U226	10	1.25
biochemical laboratory wastes	LA-W927	D001, D003	9	1.34
dewatered treatment sludge	LA-W928	see Subsection 3.3 in the Background Volume	61	12.71
Totals			272	73.76

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.

Activity	Compliance Dates
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	12/20/00
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.

Treatability group	MWIR waste ID	RCRA Codes	Number of items	Net volume (m3)
mercury wastes-TBD	LA-W925-4 LA-W925-5 LA-W925-6	D003, D007, D008, D009, F001, F002, F005	74	2.61
explosives	LA-W932	D003	1	0.000001
labpacks	LA-W933	D001, D002, D003, D004, D005, D006, D007, D008, D010, F003, F005, D011, P012, P029, P098, P106, P113, P120, U131, U144, U145, U188, U190, U204, U216, U219	149 153	0.30
Totals			224 228	2.91

Activities for wastes belonging to these treatability groups and subgroups.

Activity	Compliance Dates
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 <u>complete parallel option</u>	12/20/03
K. Provide documentation to NMED that waste was received at off-site facility or <u>provide notification of parallel option</u>	Within 45 days of receipt of waste at off-site facility or <u>within 45 days after completion of parallel option</u>

3.4 3.3 Plans for Other Types of Activities.

The following subsection summarizes plans for other types of activities.

3.4.1 3.3.1 Lead Decontamination (MWIR Treatment ID LA-S001)/Off-site Treatment (preferred option)

Treatability Group(s):

Treatability group	MWIR waste ID	First category		Second category		Total	
		No. Items	Net volume (m ³)	No. Items	Net volume (m ³)	No. Items	Net volume (m ³)
lead for surface contamination	LA-W930-0 LA-W930-5	0	0.00	134	49.19	134 133	49.19 49.08
Totals		0	0.00	134	49.19	134 133	49.19 49.08

Note: See below for additional wastes in this treatability group

Treatment:

This treatability group contains two categories of lead for decontamination:

- The first category is lead in the original LA-W930-0 inventory that is amenable to decontamination in the on-site lead decontamination trailer, which was designed to decontaminate simple lead shapes, such as lead bricks, of certain physical dimensions. The trailer is on-site and has operated, but needs an upgrade for prolonged operation.
- The lead in the second category is lead in the original LA-W930-0 inventory that is not amenable to decontamination in the on-site lead decontamination trailer, plus subsequent additions to the original inventory shown in Appendix B. This lead will be processed using other on-site decontamination processes, such as dry sandblasting or hand-scrubbing, or sent to off-site lead decontamination services.

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 Date
A. Complete lead decontamination	09/30/97

Lead shapes and forms in the second category.

Activity	Compliance Date
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.

Treatability group	MWIR waste ID	First category		Second category		Total	
		No. Items	Net volume (m ³)	No. Items	Net volume (m ³)	No. Items	Net volume (m ³)
lead for surface contamination	LA-W930-6	0	0.00	14	12.06	14	12.06
Totals		0	0.00	14	12.06	14	12.06

Activities for wastes belonging to this treatability subgroup.

Activity	Compliance Date
G. Complete shipment of wastes to decontamination operations, or	12/02/99
H. Determine treatment/disposal or other recycle options 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	07/31/00
J. Provide documentation to NMED that waste was received at off-site facility	Within 45 days of receipt of waste at treatment facility

3.4.2 3.3.2 Sorting, Surveying, and Decontamination. (MWIR Treatment ID GJ-S804)

Treatability Group(s):

Treatability group	MWIR waste ID	Number of items	Net volume (m ³)
1. nonradioactive or suspect waste items to be surveyed	LA-W929-0(1)	0	0.0
2. nonradioactive or suspect waste items to receive RCRA and radiological characterization	LA-W929-0(2)	0	0.00
3. nonradioactive or suspect waste items that cannot or should not be sampled	LA-W929-0(3)	0	0.0
Totals		0	0.00

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 suspect 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 will be assigned to applicable treatability groups and/or sent to offsite 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 low-level mixed waste; 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 transferred to 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) are in fact not 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 transferred to 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 transferred to 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.

Activity	Compliance Dates
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	2/28/97
C. Propose additional compliance dates if necessary	4/30/97

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

Activity	Compliance Dates
D. Complete RCRA and radiological sampling	1/28/97
E. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipment dates	2/28/97
F. Propose additional compliance dates if necessary	4/30/97

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

Activity	Compliance Dates
G. Complete visual verification	1/28/97
H. Submit documentation assigning waste items to applicable treatability groups or proposing off-site shipment dates	6/30/97
I. Propose additional compliance dates if necessary	9/30/97

Additional wastes:

Treatability group	MWIR waste ID	Number of items	Net volume (m ³)
Nonradioactive or suspect waste items	LA-W929-5	0	0.00
Totals		0	0.00

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	3/31/98
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	Number of Items	Net Volume (m ³)
Lead requiring sorting	LA-W931	D008	12	1.08
Totals			12	1.08

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 to 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.

Activity	Compliance Dates
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

3.5.3.4 Management of "Missing" Items.

Waste Category:

Category	MWIR waste ID	No. Items	Net volume (m ³)
Missing/nonexistent/TB V	None	48	8.81
Totals		48	8.81

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 further 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.

In these instances, DOE and UC, and their contractors, perform a thorough inspection of both the physical inventories and the data files. When DOE and UC 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 and UC will re-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 that all "*Missing/ nonexistent/TBV*" items do not in fact exist 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, DOE and UC will request deletion of all items having been fully verified as missing or nonexistent.

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 TG. 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 items to appropriate treatability groups	04/21/04
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

Treatment Technology:

Respondents are required to develop treatment technologies and treat mixed transuranic (MTRU) waste at LANL according to the schedule set forth below:

Activity	Compliance Date
A. Development of treatment technologies	June 30, 1999
B. Submit permit application amendment or modification to NMED for treatment of MTRU	December 31, 1999
C. Begin treating MTRU	Six (6) months after NMED permit issuance
D. Complete treatment of existing MTRU to applicable regulatory standards	December 31, 2010

The above schedule is not based on the assumption that WIPP will be a disposal option or that DOE will receive a variance from treatment standards for land disposal of MTRU waste to be disposed at WIPP. All revisions to compliance dates shall be in accordance with the procedures set forth in the compliance order.

**CPV APPENDIX A.
HISTORY OF STP REVISIONS AND AMENDMENT.**

As discussed in CPV Section 1.3, the STP Compliance Plan Volume 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, as amended and revised. This Appendix provides a summary of these CPV changes, and of modifications to the FFCO since its issuance.

To date, there have been six ~~six~~ **seven** revisions and two amendments to the CPV. 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 CPV Update portion of each year's *STP Annual Update*, and the original correspondence requesting each change.

Table A-1. SUMMARY OF CHANGES TO THE CPV AND THE FFCO.

Action	Document Modified	Effective Date	Effect on FFCO/STP
Rev. 1.0	STP/CPV	6/12/96	Added off-site treatment as a parallel preferred option for most MLLW treatability groups
Rev. 2.0	STP/CPV	12/9/96	Reduced volume of LA-W928 by approving reclassification of sludges as LLW
Amendment 1.0	STP/CPV	10/30/96	Divided original volume of LA-W929 into three subgroups, and added new Activities and Compliance Dates
Rev. 3.0	STP/CPV	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/CPV	9/4/97	Extended CPV Activity 3.1.2B Compliance Date to 12/29/97
Rev. 4.0	STP/CPV	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/CPV	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 CPV Appendices, and deleted treated items
Rev. 6.0	STP/CPV	<i>(to be added)</i>	Added volumes reported in FY97 <i>Annual Update</i> to several treatability groups, added Activities and Compliance Dates, adjusted several original inventory volumes, transferred one LA-W929 item to a new treatability group, and deleted treated items

 LANL CPV
Rev. ~~6.0~~ 7.0

July November 1998

Page 46

Rev. 7.0	STP/CPV	<i>(to be added)</i>	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, provided option for shipping covered waste, under special circumstances, prior to addition by approved revision.
----------	---------	----------------------	---

**CPV APPENDIX B.
SUMMARY OF CPV INVENTORY CHANGES**

The following tables provide a comprehensive summary of changes to the CPV covered waste inventories (additions, deletions, and shifts of waste between treatability groups) occurring as of the date of this revision. The volumes given in the tables reflect changes to the individual MLLW treatability group volumes due to increases or decreases, as noted. Table B-1 reports the inventory changes arising from Revisions 6.0 and 7.0, while Table B-2 reports the inventory changes previously approved in Revision 4.0/5.0.

Key to Reading the Subgroups.

The original STP inventory in each MLLW treatability group is now denoted as subgroup -0 of that treatability group (e.g., the original volume of STP treatability group LA-W906 became LA-W906-0). The original October 4, 1995 STP inventory in each MLLW treatability group has been modified through the revision process in the FFCO. The following revisions have affected volumes in individual treatability groups to date:

Revision	Effect on Volumes
Rev. 2.0	Reduced volume of LA-W928
Rev. 3.0	Divided original volume of LA-W929 into three subgroups
Rev. 4.0	Transferred original volume of LA-W929 from three subgroups to other treatability groups, added new treatability groups
Rev. 5.0	Increased and decreased volumes in several treatability groups
Rev. 6.0	Increased and decreased volumes in several treatability groups, transferred the volume in LA-W929-5 to another treatability group
Rev. 7.0	Adjusted volumes in several treatability groups

Each revision that has added volumes to individual treatability groups has resulted in creation of an additional subgroup of that treatability group, 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).

Additions and Deletions to Date.

To date, MLLW inventory increases and decreases have been incorporated into the covered waste inventories through Revisions 2.0, 4.0, 5.0, and 6.0, and 7.0. Revision 2.0 incorporated decreases in treatability group LA-W928 due to deletion of covered waste items. Rev. 4.0 resulted in decreases to LA-W929 and increases in other TGs, primarily by transferring LA-W929 items to other TGs. Rev. 5.0 and 6.0 resulted in both additions to and deletions of covered waste volumes (i.e., increases and decreases) in a number of TGs. Therefore, the Appendix B tables that follow show that subgroups -4, -5, and -6 and -7 exist for some treatability groups, but not for all.

These tables provide a master list of MLLW inventory changes presented in the *Annual Updates*, to enable users of the STP to track all changes in the LANL MLLW covered waste inventory that occurred since the original STP inventory was established in the October 4, 1995 FFCO/CPV.

Changes (additions or deletions) to the CPV covered waste inventory have occurred since the end of FY97. However, only those reported as of Rev. 6.0 and Rev. 7.0 are included in this table. All others will be reported in the next *Annual Update* and associated revision request. Therefore, the "*Net Covered Waste Inventory*" may not fully reflect the actual CPV covered waste inventory as of the date of this revision, in some instances.

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
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	10.33 10.43 ^a	Decrease 6	Decrease 0.62 ^b					2	0.34		
		LA-W904-5	1	0.11	Decrease 2	Decrease 0.42 ^c					1	0.11	3	0.45
3.1.2	ER Soils	LA-W905-0	0	0.00							0	0.00	0	0.00

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.3	Aqueous Organic Liquids	LA-W906-0	45	1.65							45	1.65	261	16.06
		LA-W906-4	27	0.36							27	0.36		
		LA-W906-5	101	8.88 8.31 ^d							101	8.31		
		LA-W906-6	0	0.00	Increase 88	Increase 5.74					88	5.74		
3.1.4	Organic-Combustible Solids	LA-W911-0	305	28.10	Increase 2	Increase 0.42 ^c					307	28.52	381 382	36.07
		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 ^e	1	0.001		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.4	Organic-Contaminated Noncombustible Solids	LA-W919-0	79	7.71	Increase 1	Increase 0.11 ^e					80	7.82	227 231	
		LA-W919-4	9	0.38							9	0.38		
		LA-W919-5	89	10.53							89	10.53		
		LA-W919-6	0	0.00	Increase 49	Increase 8.58					49	8.58		
		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	103 105	15.17
		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 ^e	2	0.0004		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.5	Activated or Inseparable Lead	LA-W921-0	14	4.77	Decrease 1	Decrease 0.06 ^f			Increase 1	Increase 0.208	11	2.99	34	7.09
					Decrease 2	Decrease 1.72					12	3.20		
		LA-W921-5	18	3.35	Decrease 4	Decrease 0.83 ^f					14	2.52		
		LA-W921-6	0	0.00	Increase 9	Increase 1.58					9	1.58	35	7.30
3.15	Non-combustible Debris	LA-W922-0	41	5.62	Decrease 14	Decrease 2.915					27	2.71	191	36.46
		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		
3.1.6	Aqueous Wastes with Heavy Metals	LA-W913-0	83	1.50							83	1.50	139	3.07
		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		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.6	Corrosive Solutions	LA-W914-0	60	0.69							60	0.69	197	1.21
		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		
3.1.6	Aqueous Cyanides, Nitrates, Chromates, and Arsenates	LA-W915-0	9	0.13							9	0.13	23	0.17
		LA-W915-4	3	0.002							3	0.002		
		LA-W915-5	11	0.04							11	0.04		
3.1.7	Water-Reactive Wastes	LA-W916-0	78	6.03							78	6.03	113	7.05
		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		
3.1.8	Compressed Gases Requiring Scrubbing	LA-W917-0	13	0.35							13	0.35	13 25	0.35 0.63
		LA-W917-7	0	0.00					Increase 12	Increase 0.28	12	0.28		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.1.9	Compressed Gases Requiring Oxidation	LA-W918-0	6	0.08							6	0.08		
		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	177 192	1.32 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

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.2.1 3.1.1	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	18.26
3.2.1 3.1.1	Nonhalogenated Organic Liquids	LA-W908-0	275	14.34	Increase 0 ^g	Increase 0.076					271	13.82		
					Decrease 4	Decrease 0.49								
					Decrease 0 ^h	Decrease 0.11								
		LA-W908-4	409	3.38							409	3.38		
		LA-W908-5	130	2.91							130	2.91		
3.2.1 3.1.1	Nonhalogenated Organic Liquids	LA-W908-6	0	0.00	Increase 33	Increase 0.09					33	0.09		
		LA-W908-7	0	0.00					Increase 56	Increase 0.02	56	0.02	843	20.20
												899	20.22	

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3-2.1 3-2.1	Bulk Oils	LA-W909-0	28	3.75	Increase 0 ⁱ	Increase 0.47					5	2.00	45	5.81
		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		
3-2.1 3-2.1	PCB Wastes with RCRA Components	LA-W910-0	4	0.74	Increase 6	Increase 0.62 ^b					10	1.36	40	2.75
		LA-W910-6	0	0.00	Increase 30	Increase 1.39					30	1.39		
3-2.1 3-2.1	Liquid and Solid Oxidizers	LA-W923-0	6	0.117							6	0.117	93	1.37
		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		
3-3 3-3	Lead Waste - TBD	LA-W924-0	129	40.16							129	40.16	129	40.16

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3-3 3-2	Mercury Wastes - TBD	LA-W925-0	63	18.30							63	18.30	137	20.91
		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		
3-3 3-2	Compressed Gases - TBD	LA-W926-0	10	1.25							10	1.25	10	1.25
3-3 3-2	Biochemical Laboratory Wastes	LA-W927-0	9	1.34							9	1.34	9	1.34
3-3 3-2	Dewatered Treatment Sludge	LA-W928-0	61	12.71							61	12.71	61	12.71
3-3 3-2	Explosives	LA-W932-0	0	0.00							0	0.00	1	0.00000 1
		LA-W932-4	1	0.00000 1							1	0.00000 1		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3-3 3-2	Lab Packs	LA-W933-0	0	0.00							0	0.00	149 153	0.30
		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 ^j			7	0.003		
		LA-W933-7	0	0.00					Increase 4	Increase e-0.002	4	0.002		

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.4.1 3.3.1	Lead for Surface Decontamination	LA-W930-0	36	33.43	Decrease 1	Decrease 0.11 ^k			Increase 0 ^g	Increase 0.095	23	22	26.27	
					Decrease 4	Decrease 0.35 ^k			Decrease 1	Decrease 0.208			26.16	
					Decrease 6	Decrease 1.04								
		LA-W930-5	115	23.75	Decrease 1	Decrease 0.21 ^k					111		22.92	
					Decrease 3	Decrease 0.62 ^k								
		LA-W930-6	0	0.00	Increase 14	Increase 12.06					14		12.06	
														148
														147
														61.25
														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 ^j			0		0.00	0
														0.00

**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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
None ¹ 353	Lead Requiring Sorting	LA-W931-0	23	4.76	Decrease 23	Decrease 4.78					0	0.00	12	1.08
		LA-W931-5	8	0.44	Increase 0 ^m	Increase 0.02					8	0.44		
		LA-W931-6	0	0.00	Increase 4	Increase 0.64					4	0.64		
None ⁿ	IPA	None	0	0.00	Increase 1	Increase 0.0005 ⁿ					0	0.00	0	0.00
					Decrease 1	Decrease 0.0005 ⁿ								

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

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 ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)	Items	Volume (m ³)
3.5 3.4	Missing/nonexistent/TBV	NONE (Revision 5)	48	8.81					0	Decrease 0:00095 ^p	48	8.81	48	8.81

NOTES:

- ^a This correction in LA-W904 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- ^b This transfer of LA-W904 waste to LA-W910 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- ^c This transfer of LA-W904 waste to LA-W911 was approved by NMED on September 18, 1997 as discussed in Revision 6.0
- ^d This correction in LA-W906 volume arises from an error in the Appendix B in Revision 4/5 as discussed in Revision 6.0.
- ^e 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.
- ^f These 5 items in subgroups LA-W921-0 and -5 (0.89 m³ total) were shipped on December 9, 1996 as discussed in DOE's letter dated December 24, 1996.
- ^g This increase in LA-W908 volume arises from an error in the original STP inventory data as discussed in Revision 6.0.
- ^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 m³, as reported in the FY97 STP *Annual Update*, consisted of 1 item (0.11 m³) from subgroup LA-W930-0 and 1 item (0.21 m³) from subgroup -5. The shipment of 0.97 m³, as reported in the FY97 STP *Annual Update*, consisted of 4 items (0.35 m³) from subgroup -0 and 3 items (0.62 m³) 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.