NEW MEXICO ENVIRONMENT DEPARTMENT
Hazardous and Radioactive Materials Bureau
2044 Galisteo
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Red LANL FFO/AP

FACSIMILE TRANSMITTAL

DATE:	November 17, 1998
TO:	Jody Plum
COMPANY:	DOE/LAAO
PHONE:	665-5042
FAX:	665-4872
FROM:	Janice Archuleta
COMPANY:	Hazardous and Radioactive Materials
PHONE:	505 - 827-1566
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Pages Including this cover : 1 (to go with fax I just sent).

Comments:

Cover sheet with revised date.

Here are the last changes made for draft Rev.7, agreed to at the meeting today. Let me know if there are any additional changes. Any of these new changes made were underlined, deleted language was struck out and underlined.

Thanks,
Janice

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P2

NEW MEXICO ENVIRONMENT DEPARTMENT
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FACSIMILE TRANSMITTAL

DATE:	July 27, 1998
TO:	Jody Plum
COMPANY:	DOE/LAAO
PHONE:	665-5042
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FROM:	Janice Archuleta
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Pages Including this cover : 10

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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 residuals 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.

~~4. DOE will notify the NMED when an expedited treatment opportunity is anticipated. An expedited treatment opportunity arises when covered waste can be added to a planned off-~~

~~site shipment rather than storing the waste for separate shipment pending formal addition in an approved revision. Under these special circumstances, the waste could be shipped after the NMED confirms that the expedited treatment is acceptable. The covered waste will be included for addition in the Respondent's annual revision request.~~

2.6 Recycling/Re-Use.

Respondent will pursue on-site or off-site recycling/re-use as a parallel preferred option. ~~Recycling/re-use reduces reliance on landfills and incinerators, reduced the potential impact on health and environment when harmful substances are removed from the waste stream, and conserves natural resources because it reduces the need for raw materials. Recycling/re-use has the same net effect as off-site shipment for treatment and disposal.~~

Should DOE elect to use recycling facilities in lieu of (or in combination with) treatment, it will follow the requirements ~~prescribed in Section 2.3~~ in the same manner as if the waste were shipped off-site for treatment. Any and all requirements by the ~~off-site treatment/recycling~~ 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 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 ~~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~~ 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 rRadiological 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 ~~released as a non-radioactive hazardous matacrial in accordance with Section V.B of the amended FFCO~~ 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 Order regulatory 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.