

**STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT**

**IN THE MATTER OF
U.S. DEPARTMENT OF ENERGY
AND REGENTS OF THE UNIVERSITY OF CALIFORNIA
LOS ALAMOS, NEW MEXICO**

**COMPLIANCE ORDER
NMHWA**

RESPONDENTS.

**FEDERAL FACILITY COMPLIANCE ORDER
(LOS ALAMOS NATIONAL LABORATORY)**



1848

TABLE OF CONTENT

I.	BACKGROUND/HISTORY	3
II.	PARTIES BOUND	7
III.	JURISDICTION AND AUTHORITY	8
IV.	DEFINITIONS	9
V.	COVERED MATTERS	11
VI.	SITE TREATMENT PLAN	13
VII.	ANNUAL SITE TREATMENT PLAN UPDATES	13
VIII.	ADDITION OF NEW COVERED WASTE	16
IX.	DELETION OF WASTE	17
X.	REVISIONS	18
XI.	OTHER AMENDMENTS TO THE STP	21
XII.	AMENDMENTS TO THE ORDER	22
XIII.	FORCE MAJEURE	23
XIV.	FUNDING	25
XV.	MIXED TRANSURANIC WASTE	26
XVI.	PROJECT MANAGERS	27
XVII.	RESOLUTION OF DISPUTES	28
XVIII.	SITE ACCESS	32
XIX.	EXCHANGE OF DOCUMENTS	32
XX.	DOCUMENTS, INFORMATION, AND REPORTING REQUIREMENTS	33
XXI.	RESERVATION OF RIGHTS/ENFORCEABILITY	35
XXII.	CIVIL PENALTIES	36
XXIII.	CREATION OF DANGER	36
XXIV.	TERMINATION	37
XXV.	COMPLIANCE WITH OTHER APPLICABLE LAW	37
XXVI.	COVENANT NOT TO SUE	38
XXVII.	SEVERABILITY	38
XXVIII.	FINALITY OF ORDER	39

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(LOS ALAMOS NATIONAL LABORATORY)

This Order is issued by the New Mexico Environment Department (NMED) to require compliance by the United States Department of Energy (DOE) and the Regents of the University of California (the University) with a Site Treatment Plan for the treatment of mixed waste at the Los Alamos National Laboratory (LANL) pursuant to the New Mexico Hazardous Waste Act (HWA), NMSA 1978, §§ 74-4-1 et seq. (Repl. Pamp. 1993) and Section 3021(b) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6939(c), as amended by the Federal Facility Compliance Act of 1992, Pub. L. 102-386, 106 Stat. 1505 (1992) (FFC Act).

I. BACKGROUND/HISTORY

A. NMED is the agency within the executive branch of the New Mexico state government charged with administration and enforcement of the New Mexico Hazardous Waste Act, NMSA 1978, §§ 74-4-1 et seq.

B. Respondents are the DOE and the University. DOE is an agency of the federal government and the owner and a co-operator of Los Alamos National Laboratory (LANL). The University is a

public educational institution which manages and co-operates LANL pursuant to a management and operating contract with DOE.

C. LANL is located principally in Los Alamos County, New Mexico, approximately 60 miles northeast of Albuquerque and 25 miles northwest of Santa Fe. The LANL site encompasses approximately 43 square miles.

D. LANL is an "existing hazardous waste management facility" as those words are defined in 20 NMAC 4.1.801. LANL was chosen in 1942 as the site for the wartime development of the atomic bomb. The area was established as a military reservation, and operations began in 1943. The primary mission of LANL was nuclear weapons research and development. LANL has evolved into a multi-program, multi-discipline laboratory. With the end of the Cold War, LANL's central mission is to reduce the global nuclear danger through stewardship and support of the nuclear stockpile, management of nuclear materials, and environmental restoration and stewardship. In association with these activities, Respondents currently generates and stores mixed waste as that term is defined in Section IV.L (Definitions).

E. On May 13, 1992, DOE notified the United States Environmental Protection Agency (EPA) that it was storing at LANL mixed wastes which are restricted from land disposal in violation of the storage prohibitions under 3004(j) of RCRA, 42 U.S.C. § 6924(j), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). 42 U.S.C. § 6901 et seq. On September 30, 1992, EPA Region 6 issued a Notice of Noncompliance against DOE

alleging violations of the land disposal storage prohibitions under RCRA and HSWA.

F. On October 6, 1992, Congress passed the FFC Act. The FFC Act requires DOE, for each facility at which it generates or stores mixed waste, to submit a Site Treatment Plan (STP) for developing treatment capacities and technologies to treat all the facility's mixed waste, regardless of the time it was generated, to the standards required for waste subject to the land disposal prohibition set forth in Section 3004(m) of RCRA.

G. On March 15, 1994, DOE and EPA entered into a Federal Facility Compliance Agreement intended to resolve the violations of the storage prohibitions alleged in the Notice of Noncompliance by requiring DOE to comply with a schedule for developing treatment capacity and technologies. By its terms, the Agreement terminates when the State of New Mexico issues an order requiring DOE compliance with a plan for the treatment of mixed waste at LANL which has been approved by the State of New Mexico pursuant to the FFC Act.

H. The STP required by the FFC Act must be submitted to the appropriate State regulatory officials in the State where the facility is located, provided the State has (1) authority under State law to prohibit land disposal of mixed waste until the waste has been treated, (2) authority under State law to regulate the hazardous components of mixed waste, and (3) authorization from EPA to regulate the hazardous components of mixed waste. The State of New Mexico meets these criteria. Accordingly, on

March 31, 1995, DOE submitted its proposed STP to the Secretary of NMED for review, public comment, and approval by NMED. The proposed STP was submitted pursuant to the FFC Act to address violations of the land disposal restrictions under RCRA and HWA.

I. On April 17, 1995, the public was given notice of and an opportunity to comment to NMED on the draft STP submitted by DOE on March 31, 1995 as required under the FFC Act. NMED provided public notice of the availability of the STP and an opportunity to comment by placing the notice in numerous newspapers throughout the State, including the Albuquerque Journal, a newspaper of statewide circulation, the Los Alamos Monitor, and at least two other newspapers serving the area in and around Los Alamos, New Mexico. The notice provided a period of ninety (90) days for the submission of public comments. During the period for public comment, NMED placed the draft STP at several locations throughout the State which assured that the Plan was reasonably available to members of the public. NMED considered all public comments which were submitted within the comment period and determined whether such comments warranted any changes to the draft STP.

J. On August 17, 1995, NMED gave the public notice of an opportunity to comment to NMED on the STP as it was proposed to be approved by NMED with modifications. NMED provided public notice of the availability of the STP and an opportunity to comment by placing the notice in the Albuquerque Journal and at least two newspapers serving the area in and around Los Alamos,

New Mexico. The notice provided for a period of thirty (30) days to comment. During the period of public comment, the STP was placed at several locations throughout the State to assure that the Plan was reasonably available to members of the public.

K. NMED approved the STP with modifications on October 4, 1995. The approved STP is incorporated by reference and attached hereto as Exhibit A to this Order.

II. PARTIES BOUND

This Order shall apply to and be binding upon Respondents and their respective successors in interest and assigns. The obligations of Respondents under this Order shall be joint and several. Respondents shall notify their agents, employees, current operating and other contractors at LANL, and all subsequent operating and other contractors at LANL of the existence of this Order, and Respondents shall direct them to comply fully with the requirements of this Order in all contracts and subcontracts entered into to carry out the requirements of this Order. No change in the contractual relationship between DOE and the University shall in any way alter DOE's responsibilities under this Order. DOE shall notify NMED if the present management and operating contract with the University is terminated and a new contract is awarded. On the date when the successor contractor assumes responsibility for the management and operation of LANL, the successor contractor shall be substituted for the University as a Respondent to this Order.

III. JURISDICTION AND AUTHORITY

A. This Order is issued pursuant to Section 74-4-1 et seq. of the HWA, the New Mexico Hazardous Waste Management Regulations (20 NMAC 4.1), and Section 3021(b) of RCRA, as amended by the FFC Act. Section 3021(b) of RCRA, as amended by the FFC Act, along with Executive Order 12088, requires each department, agency and instrumentality of the federal government engaged in the disposal or management of hazardous waste to comply with all federal and state requirements respecting the control and abatement of hazardous waste disposal and management.

B. NMED is an agency of the State of New Mexico which has (1) authority under State law to prohibit land disposal of mixed waste until the waste has been treated, (2) authority under State law to regulate the hazardous components of mixed waste, and (3) authorization from EPA under Section 3006 of RCRA to regulate the hazardous components of mixed waste, as such authorities are described in Section 3021(b) of RCRA, as amended by the FFC Act.

C. DOE is a department of the executive branch of the federal government which generates, transports, and manages hazardous waste, including mixed waste, at LANL and is therefore subject to and must comply with all applicable federal and state requirements respecting hazardous and mixed waste, including the HWA and 20 NMAC 4.1.

D. This Order fulfills the requirements contained in Section 3021(b)(5) of RCRA, as amended by the FFC Act, and stands in lieu of the Federal Facility Compliance Agreement referred to

in Section I (Background/History), or any other agreements, orders or interpretations of the requirement for DOE to develop and submit a plan for the development of treatment capacities and technologies to treat all of LANL's mixed waste to the standards promulgated pursuant to Section 3004(m) of RCRA.

IV. DEFINITIONS

Except as provided below or otherwise explicitly stated herein, the terms used in this Order shall have the same meaning as used in the HWA, 20 NMAC 4.1, RCRA, and EPA's regulations at 40 CFR Parts 124, 260 through 268, and 270.

A. "Atomic Energy Act" or "AEA" means the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 et seq.

B. "Compliance Date" means a fixed, firm, and enforceable date on or before which a task must be completed in accordance with the provisions of the STP.

C. "Days" means calendar days, unless otherwise specified. Any notice, deliverable, or other requirement that under the terms of this Order would be due on a Saturday, Sunday or a state or federal holiday shall be due the first business day following the Saturday, Sunday, or state or federal holiday.

D. "DOE" means the United States Department of Energy or any successor agencies, and its employees or authorized representatives.

E. "EPA" means the United States Environmental Protection Agency or any successor agencies, and its employees or authorized representatives.

F. "FFC Act" means the Federal Facility Compliance Act of 1992, Pub. L. 102-386, 106 Stat. 1505 (1992).

G. "Fiscal Year" means the federal fiscal year, which begins on October 1 of one calendar year and extends through September 30 of the following calendar year.

H. "Hazardous Waste" means hazardous waste as defined at Section 74-4-3.I. of the HWA and the New Mexico Hazardous Waste Management Regulations (20 NMAC 4.1) as they may be amended, which incorporates, by reference, federal regulations at 40 CFR Parts 260 and 261.

I. "HWA" means the New Mexico Hazardous Waste Act, NMSA 1978, §74-4-1 et seq. (Repl. Pamp. 1993)

J. "LANL" means the Los Alamos National Laboratory including its facilities and installations in or near Los Alamos, New Mexico.

K. "Land Disposal Restrictions" or "LDR" means the land disposal restrictions set forth in the HWA and 20 NMAC 4.1, which incorporates by reference 40 CFR Part 268.

L. "Mixed Waste" means waste that contains both a hazardous waste and source, special nuclear, or byproduct material regulated under the federal Atomic Energy Act of 1954.

M. "NMED" means the New Mexico Environment Department or any successor agencies, and its employees or authorized representatives.

N. "Order" means this document and all Attachments to this document referred to herein, including the STP in two volumes.

O. "Parties" means NMED, DOE and the University.

P. "RCRA" means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et. seq.

Q. "Secretary" means the Secretary of NMED or the Secretary's designee.

R. "University" means the Regents of the University of California or any successors or assigns, and its employees or authorized representatives.

V. COVERED MATTERS

This Order addresses LDR requirements pertaining to storage and treatment of covered waste at LANL regardless of the time of generation and accumulation.

A. Covered Waste. Covered waste is all mixed waste at LANL, regardless of time generated, which is being stored in violation of the land disposal requirements of Section 3004(j) of RCRA, including mixed waste that is newly discovered, identified, generated, or received from off-site; mixed waste that is generated through environmental restoration and decontamination

and decommissioning activities; and legal material that has been evaluated and determined to be mixed waste.

B. Other Matters Covered in this Order. Respondents anticipate that as they characterize, sort and survey mixed waste currently in storage at LANL, they will determine that certain waste previously identified as mixed waste is actually hazardous waste without a radioactive component or radioactive waste without a hazardous component. In those cases where the waste is determined to be a radioactive waste without a hazardous component, Respondents shall provide to NMED all information required for deleted waste under Section IX. C (Deletion of Waste). Upon approval by NMED, such waste shall no longer be subject to the terms of this Order. In those cases where the waste is determined to be a hazardous waste without a radioactive component which is subject to LDR treatment standards, NMED will consider such waste as a covered waste for a period of ninety (90) days upon approval by NMED of Respondents' written determination that the waste is a hazardous waste which is not a mixed waste. NMED will consider such waste as a covered waste only if they receive Respondents' written determination within fourteen (14) days after Respondents first identify hazardous waste without a radioactive component. Respondents' written determination shall include all the information required for deleted waste under Section IX.C (Deletion of Waste).

VI. SITE TREATMENT PLAN

The STP contains two volumes and is intended to bring LANL into compliance with LDR storage prohibitions under the HWA and RCRA. The Compliance Plan Volume of the STP provides overall schedules for achieving compliance with LDR storage and treatment requirements for mixed waste at LANL based on compliance dates as defined in Section IV (Definitions). The Compliance Plan includes a schedule for the submittal of applications for permits, construction of treatment facilities, technology development, off-site transportation for treatment, and the treatment of mixed wastes in full compliance with the HWA and 20 NMAC 4.1, which incorporates by reference 40 CFR Parts 260 through 270. The Background Volume of the STP contains information described below in Section VII (Annual Site Treatment Plan Updates). Respondents shall carry out all activities in accordance with the schedules and requirements set forth in the Compliance Plan Volume of the STP and this Order.

VII. ANNUAL SITE TREATMENT PLAN UPDATES

A. Respondents shall submit an update of the STP for NMED's review and comment on or before March 31, 1996, and annually thereafter no later than March 31 of each year. Each Annual Update shall bring the STP current to the end of the previous federal fiscal year and, upon approval, shall be incorporated into this Order. The Annual Update shall provide a summary of the current status of DOE's progress in implementing

the STP, including proposed revisions, technology development, funding and other concerns that may affect the implementation of the STP.

B. The Annual Update to the STP shall be divided into two volumes: an update to the Background Volume and an update to the Compliance Plan Volume.

Background Volume. The update to the Background Volume shall provide the following information:

1. the amount of each covered waste stored at LANL as follows: (1) the estimated volume in storage at the end of the previous fiscal year; and (2) the estimated volume anticipated to be placed in storage in the next five fiscal years.
2. a progress report from the end of the previous federal fiscal year describing treatment progress and treatment technology development for each treatment facility and activity scheduled in the STP. If applicable, Respondents will also describe current or anticipated alternative treatment technology that is being evaluated for use instead of treatment technologies or capacities identified in the STP. This description will include potential alternative commercial treatment and off-site DOE treatment capacity or technology development.

3. a description of DOE's funding for STP-related activities and any funding issues that may affect the schedule.
4. the status of the "No-Migration Variance Petition" or any treatability variance(s).
5. a progress report on characterization and/or treatment capabilities or plans for mixed transuranic waste related to the waste treatment standards, if any, at the WIPP facility.

Compliance Plan Volume. The update to the Compliance Plan Volume shall contain changes and revisions to the Compliance Plan Volume occurring since the previous Annual Update; proposed revisions and amendments, including compliance date changes; a description of waste deleted in accordance with the requirements in Section IX (Deletion of Waste); documentation of new covered waste in accordance with the requirements in Section VIII (Addition of New Covered Waste); and any other changes to the overall schedule in the Compliance Plan Volume of the STP. The Annual Update to the Compliance Plan Volume shall identify changes which require NMED approval as a revision under Section X (Revisions) or an amendment under Section XI (Other Amendments to the STP).

C. NMED approval of revisions and other amendments proposed by Respondents shall be in accordance with the procedures set forth below in Section X (Revisions) and Section XI (Other Amendments to the STP).

D. The Annual Update will be publicly available during regular business hours at the following locations: NMED Library, 1190 St. Francis Drive, Santa Fe, N. M. 87502 and the LANL Community Reading Room, 1350 Central, Suite 101, Los Alamos, N. M. 87544.

VIII. ADDITION OF NEW COVERED WASTE

A. All waste which Respondents request to be included in the Compliance Plan Volume of the STP as a covered waste under this Order shall be proposed for NMED's approval as a revision pursuant to the procedures in Section X (Revisions).

B. Respondents' request shall include, in addition to the required information for revisions pursuant to Section X (Revisions), the following information: a description of the applicable waste code, waste form, volumes, technology and capacity needs, and schedules for treatment or developing treatment technology for such covered waste consistent with the relevant provisions of this Order. If Respondents cannot provide the information or schedules required by this Section because of inadequate characterization or it is otherwise impracticable to do so, Respondents' request shall include appropriate justification, including the characterization methodology used, supporting information, and proposed plans for developing such information and schedules. In no event shall the provision of such information or schedules be postponed for two consecutive annual updates.

IX. DELETION OF WASTE

A. With the exception of hazardous waste or radioactive waste addressed under this Order pursuant to Section V.B. (Covered Matters), all waste which Respondents request to be deleted from the Compliance Plan Volume of the STP as a covered waste under this Order shall be proposed for NMED's approval as a revision pursuant to the procedures in Section X (Revisions).

B. Mixed waste may be deleted as a covered waste under this Order when:

1. documentation is provided to NMED that the waste has been received at an off-site facility for treatment, disposal, or storage pending treatment or disposal;
2. it is determined by NMED to no longer be subject to LDR under the HWA or 20 NMAC 4.1; or
3. changes to applicable statutes or state regulations cause a mixed waste or waste category to be no longer subject to the LDR requirements of the HWA.

C. Respondents' request shall include, in addition to the required information for revisions pursuant to Section X, the following information: a description of the applicable waste code, waste form and volumes; if applicable, characterization methodology used along with supporting information; and other relevant information regarding deleted waste, including schedules for the treatment of hazardous waste, subject to LDR treatment standards, which was previously identified as mixed waste covered by this Order.

X. REVISIONS

A. A revision is an amendment to the Compliance Plan Volume of the STP that is either required by NMED, or proposed by Respondents and approved by NMED, after public comment in accordance with Section 3021(b)(4) of RCRA as amended by the FFC Act. NMED shall approve, approve with modifications, or disapprove all revisions in accordance with this Section and the requirements of Section 3021(b)(4) of RCRA, as amended by the FFC Act. Revisions may be proposed to NMED in the Annual Site Treatment Plan Update or at such other times which Respondents deem necessary.

B. A revision is:

1. The addition of a treatment facility at LANL or treatment technology development not previously identified in the STP;
2. Any change to a compliance date of more than ninety (90) days;
3. Any addition or deletion of a treatability group in the STP;
4. An increase in volume in a treatability group in the STP;
5. Any other amendment to the Compliance Plan Volume of the STP which NMED determines is of such significance as to warrant public comment.

of hazardous waste, subject to LDR standards, which was previously identified as mixed waste covered by this Order; and any other relevant information regarding the deleted waste.

C. Upon approval by NMED, any waste deleted from a treatability group in the Compliance Plan Volume of the STP shall no longer be subject to the terms of this Order.

4. Section X.B. (Revisions).

B. A revision is:

4. An increase in volume in excess of 10% or greater than one cubic meter in a treatability group in the Order, whichever is greater;
5. Any addition of waste which Respondents request to be new covered waste under Section VIII.A. (Addition of New Covered Waste); or
6. Any other amendment to the Compliance Plan Volume of the STP which NMED determines is of such significance as to warrant public comment.

C. Revisions shall be made as follows:

1. When NMED requires a revision, it will provide Respondents with a written description of the revision and rationale for the revision.
2. When Respondents propose a revision, they shall provide NMED a written proposal which includes:
 - a. A detailed description of the proposed revision;
 - b. The rationale for the proposed revision;
 - c. The anticipated length of any delay in performance that would result from the proposed revision, including all compliance dates that would be affected; and
 - d. If the proposed revision would result in a delay in performance, a plan for implementing all reasonable measures to address the cause of the delay, to avoid or minimize the delay, and to avoid such delays in the future, and a schedule for implementing such plan.
3. All proposed or required revisions shall be available for public review and comment. NMED will publish a Notice of Availability in a newspaper of statewide circulation and at least one newspaper serving the area in and around Los Alamos, New Mexico within thirty (30) days after a revision is required by NMED or proposed by Respondents. NMED's written description of a required revision, or Respondent's written proposal for a proposed revision, shall be made available to the public for review at appropriate locations. NMED will accept

public comment on the revisions for at least thirty (30) days.

4. NMED will provide the Respondents with advance written notice of a determination to approve with modification or disapprove a proposed revision. Such notice will include the rationale for the modification or disapproval. Within thirty (30) days after receipt of the notice, the Respondents may respond in writing to the notice and shall have the opportunity to discuss the determination with NMED. This time period may be extended or shortened by mutual agreement of the Parties.

5. NMED will make every reasonable effort to issue its decision on a revision expeditiously, and will issue such decision within six months from the date NMED provides the Respondents with a written description of a required revision or six months from the date NMED receives a written proposed revision from the Respondents. This time period may be extended by mutual agreement of the Parties.

D. In making a determination on a revision, NMED will make every reasonable effort to consult with EPA and any other State in which a facility affected by the revision is located.

E. In making a determination on a revision, NMED will consider the following factors: the need for regional treatment facilities; funding availability; new or emerging technologies; new technical information that may affect waste treatment options; site priorities identified through consultation among DOE, regulatory agencies and other stakeholders; and any other factors which are relevant.

XI. OTHER AMENDMENTS TO THE STP

A. Amendments to the STP that are not revisions may be required by NMED, or may be proposed by Respondents and approved, approved with modifications, or disapproved by NMED in accordance with this Section.

B. Amendments other than revisions shall be made as follows:

1. When NMED requires an amendment, it will provide the Respondents with a written description of the amendment and the rationale for the amendment.

2. When the Respondents propose an amendment, they shall provide NMED with a written proposal which includes:

a. A detailed description of the proposed amendment;

b. The rationale for the proposed amendment;

c. The anticipated length of any delay in performance that would result from the proposed amendment, including all compliance dates that would be affected; and

d. If the proposed amendment would result in a delay in performance, a plan for implementing all reasonable measures to address the cause of the delay, to avoid and minimize the delay, and to avoid such delays in the future, and a schedule for implementing such plan.

3. NMED will provide the Respondents with advance written notice of a determination to approve with modification or disapprove a proposed amendment. Such notice will include the

rationale for the modification or disapproval. Within thirty (30) days after receipt of the notice, the Respondents may respond in writing to the notice and shall have the opportunity to discuss the determination with NMED. This time period may be extended or shortened by mutual agreement of the Parties.

4. NMED will make every reasonable effort to issue its decision on an amendment expeditiously, and will issue such decision within ninety (90) days from the date NMED provides the Respondents with a written description of a required amendment or ninety (90) days from the date NMED receives a written proposed amendment from Respondents. This time period may be extended by mutual agreement of the Parties.

C. In making a determination on an amendment, NMED will consider the following factors: the need for regional treatment facilities; funding availability; new or emerging technologies; new technical information that may affect waste treatment options; site priorities identified through consultation among DOE, regulatory agencies and other stakeholders; and any other factors which are relevant.

XII. AMENDMENTS TO THE ORDER

Except for the STP, this Order may be amended by agreement of the Parties. An amendment shall be in writing and signed by the Parties and shall not become effective until approved in writing by the Secretary.

XIII. FORCE MAJEURE

A. If Respondents are unable to comply with any requirement of this Order due to circumstances beyond their control, as defined herein, they may make a claim of *force majeure*. A *force majeure* is any event arising from a cause not foreseeable and beyond the control of the Respondents that could not be avoided or overcome by due diligence and that delays or prevents performance of an obligation required by this Order. A *force majeure* shall include a delay in NMED's review of a permit application or issuance of a permit or permit modification required to meet a compliance date or other obligation specified in the STP, provided, that the delay otherwise meets the definition of "*force majeure*."

B. Procedure.

1. To assert a claim of *force majeure*, the Respondents shall provide oral notification to NMED as soon as practicable after the event which Respondents knew or should have known constitutes *force majeure*, and shall provide written notice within seven (7) days after the event.

2. Written notice shall contain the following:

A. A detailed description of the *force majeure* event;

B. The anticipated length of delay in performance that would result from the *force majeure*, including all compliance dates or other obligations that would be affected; and

C. A plan for implementing all reasonable measures to address the cause of the delay, to avoid and minimize the delay, and to avoid such delays in the future, and a schedule for implementing such plan.

3. Respondents' failure to provide written notice in a timely manner shall preclude the Respondents from asserting any claim of *force majeure*. Respondents' failure to identify in the written notice all compliance dates or other obligations affected by the *force majeure* event shall preclude the Respondents from asserting any claim of *force majeure* as to all compliance dates or other obligations not so identified.

4. Within fourteen (14) days of receipt of a written notice of a claim for *force majeure*, NMED will provide to Respondents a written decision approving, approving in part, or denying the claim. If NMED approves in part or denies the claim, it will explain in such written decision its reasons for the partial approval or denial.

5. Within fourteen (14) days of receipt of the NMED's written decision to approve in part or deny a *force majeure* claim, the Respondents may invoke the dispute resolution procedures of Section XVII (Dispute Resolution). Respondents' failure to invoke the dispute resolution procedures within this time period shall be deemed to be an acceptance by the Respondents of NMED's decision.

6. If NMED approves or approves in part a claim of *force majeure*, the STP shall be revised or amended accordingly

pursuant to applicable provisions of Section X (Revisions) or Section XI (Other Amendments to the STP).

XIV. FUNDING

A. It is the expectation of the Parties that all obligations and commitments established by this Order will be fully funded by DOE. DOE shall take all necessary steps and use its best efforts to obtain timely and sufficient funding to meet its obligations and commitments under this Order, including but not limited to the submission of timely budget requests.

B. DOE shall provide NMED an opportunity to participate in formulating the LANL Environmental Management budget and setting the LANL Environmental Management budget priorities as outlined in the addendum to the STP, "Compliance Date Approach and Environmental Management Budget Formulation Process."

C. Respondents understand that if, at any time, adequate funds or appropriations are not available to comply with this Order and the STP, they shall notify NMED in writing within thirty (30) days of learning that funds are not available and Respondents may request a revision or other amendment, as applicable, of any affected compliance dates pursuant to Section X (Revisions) or Section XI (Other Amendments to the STP).

D. Failure to obtain adequate funds or appropriations from Congress does not in any way relieve Respondents from their obligation to comply with the FFC Act or this Order. If adequate funds or appropriations are not available to fulfill Respondents'

obligations under this Order, NMED may exercise any or all of its applicable statutory and regulatory authority.

XV. MIXED TRANSURANIC WASTE

A. DOE intends to dispose of mixed transuranic waste (MTRU) from LANL at the Waste Isolation Pilot Plant (WIPP) located near Carlsbad, New Mexico. WIPP is currently scheduled to open for receipt of waste in June of 1998. DOE intends to file a "No-Migration Variance Petition" with EPA pursuant to Section 3004(d), (e) and (g) of RCRA, 42 U.S.C. § 6924(d), (e) and (g), and 40 C.F.R. § 268.6, seeking to demonstrate that there will be no migration of hazardous constituents from the WIPP disposal units for so long as the waste remains hazardous, and seeking a variance from the treatment standards for land disposal of MTRU waste that DOE intends to dispose at WIPP. As of the date of this Order, however, it is impossible to determine whether WIPP is a practicable disposal option for at least the following reasons: (1) it is not known whether WIPP will open or, if it does, when it will open; (2) it is not known whether EPA will grant DOE's "No-Migration Variance Petition"; and (3) it is not known whether a variance from the treatment standards for MTRU waste will be approved by EPA and NMED.

B. Accordingly, Respondents shall develop treatment technologies and treat MTRU waste at LANL according to the schedule set forth in the STP. Such 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.

C. In the event that WIPP opens for receipt of waste, EPA grants the "No-Migration Variance Petition," and EPA and NMED approve any proposed variance from treatment standards for MTRU waste, DOE shall immediately notify the NMED Project Manager in writing. DOE shall thereafter request approval from NMED for treatment of MTRU waste to be disposed at WIPP in accordance with Section X (Revisions) of this Order.

D. Compliance with any treatment standards approved by EPA in granting the "No-Migration Variance Petition" shall not constitute compliance with the FFC Act unless and until an amendment or revision to the STP is approved by NMED pursuant to the FFC Act, HWA and this Order.

E. This Order does not in any way resolve any issue related to engineered barriers, waste form modifications, or any other waste treatment that may be required or adopted pursuant to the radioactive waste disposal regulations at 40 C.F.R. Part 191, or pursuant to the Waste Isolation Pilot Plant Land Withdrawal Act of 1992, Pub. L. 102-579 (1992).

XVI. PROJECT MANAGERS

Within ten (10) days of the effective date of this Order, the Parties shall each designate a Project Manager. Each Party shall notify the other in writing of the Project Manager it has selected and that Project Manager's address. Each Project

Manager shall be responsible for overseeing the implementation of this Order. Either Party may change its designated Project Manager by notifying the other Party, in writing, ten (10) days before the change, to the extent possible. To the extent possible, communications between the Parties concerning the terms and conditions of this Order shall be directed through the Project Managers at the address listed below:

NMED Project Manager:

Benito Garcia
Hazardous & Radioactive
Materials Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, NM 87502
(505) 827-1558

DOE Project Manager:

H.L. Plum
Regulatory Permitting and
Compliance Manager
U.S. Department of Energy
P.O. Box 6300
Los Alamos, NM 87544-A316
(505) 665-5042

The University Project Manager:

Micheline Devaurs
Project Manager
EM Division MS-J591
Los Alamos, NM 87545
(505) 667-2211

XVII. RESOLUTION OF DISPUTES

A. General. Except as otherwise specifically provided in this Order, any dispute arising out of this Order shall first be subject to this Section and this Section shall be followed and exhausted before pursuing any other legal remedy in any other forum. The failure of Respondents to enter into dispute resolution within the time period specified in this Section shall constitute a waiver of Respondents' right to invoke dispute resolution. Exchange of documents under this Section shall be in

accordance with Section XIX (Exchange of Documents). For purposes of this Section only, the term "days" shall mean work days.

B. Invoking dispute resolution. To initiate dispute resolution, the disputing party shall submit to the other Project Manager(s) a written Statement of Position within fourteen (14) days after the event which the disputing party knew or should have known would be disputed. The Statement of Position shall set forth the nature of the dispute, the work affected by the dispute, including specific compliance dates, and any factual data, analysis, opinion, or documentation supporting the disputing party's position.

C. Informal resolution. Any dispute subject to this Section shall in the first instance be the subject of informal negotiation between the Project Managers and/or their immediate supervisors. The period for informal negotiation shall not exceed twenty (20) days from the time the disputing party notifies the other parties in writing that it wishes to commence informal dispute resolution. The Parties shall meet and confer as necessary to attempt to resolve the dispute within the twenty (20)-day informal resolution period. The Parties may agree in writing to extend or reduce this time period, but in no event shall the time period exceed sixty (60) days.

D. Formal Resolution by Advisory Group. In the event informal resolution cannot be reached, the disputing party shall, within fifteen (15) days after such informal dispute resolution

period, submitted to the Advisory Group copies of all documents furnished to the Project Managers for informal resolution. The Advisory Group shall consist of the Los Alamos Assistant Area Manager for Environment and Projects for DOE, the Division Director for Environment, Safety and Health Assurance Division for the University and the NMED Director for the Water and Waste Management Division. After receipt of this documentation, the Advisory Group shall have fifteen (15) days to resolve the dispute.

E. Final Decision by the Secretary. In the event the Advisory Group has been unable to resolve the dispute within the time prescribed, the disputing party shall submit a written Request for Final Decision to the Secretary. The written request shall be accompanied by all documentation furnished to the Project Managers and Advisory Groups. Within thirty (30) days of receipt of the written Request for Final Decision, the Secretary will issue a final decision, including a written statement of the reasons for the decision. The Secretary's decision shall constitute a final agency action.

F. Extension of Time for Formal Dispute Resolution. If, during the formal dispute resolution process, it appears that resolution may be achieved by an extension of time, the Advisory Group may petition the Secretary for an extension of time in which to resolve the dispute.

G. Consultation with the Governor of New Mexico and with Other Affected States. The requirements of this Order have the

potential to affect national interests and the interests of other States and, in some instances, it may be necessary for Respondents to consult with the Governor of New Mexico and for the Parties to consult with officials of other affected States in order to resolve issues under this Section in an equitable manner. Such consultations shall occur as agreed upon by the Parties consistent with the needs of the particular situation.

H. Effect of Dispute Resolution on Respondents' Obligations. Respondents' obligations under this Order are not waived by the invocation of this dispute resolution process. However, the time period for completion of any work directly affected by a dispute shall be extended for at least a period of time equal to the actual time taken to resolve it through informal or formal dispute resolution, provided that NMED determines that the resulting delay in performance will not cause an undue risk to human health or the environment. All requirements of this Order not directly affected by the dispute shall continue and be completed in accordance with the terms of this Order.

I. Incorporation by Amendment. Any mutually agreed upon resolution shall be issued in writing, and signed by all Parties. Such writing shall operate as an amendment to this Order pursuant to Section XII (Amendments to the Order) and, as applicable, a revision under Section X or other amendment to the STP under Section XI.

XVIII. SITE ACCESS

Respondents shall at all reasonable times afford NMED, its contractors, designees, and agents access to LANL, with or without prior notice, for the purpose of verifying compliance by Respondents with this Order. Respondents shall provide an authorized representative to accompany NMED's employees or contractors while at LANL. NMED shall be permitted to enter LANL to review the progress of Respondents and their contractors in carrying out the activities under this Order including, but not limited to, the following: conduct tests and sampling which NMED deems necessary; verify data submitted to NMED by Respondents; and conduct interviews, as necessary, with Respondents' personnel. NMED, its contractors, designees, and agents shall abide by DOE and LANL site-specific safety and security requirements and procedures for access to and while at LANL. Nothing in this Order shall preclude NMED from exercising any authority to gain access to LANL or to obtain or gather data and information at LANL otherwise provided for by law.

XIX. EXCHANGE OF DOCUMENTS

Whenever the terms of this Order require exchanges of documents, such exchanges shall be made by mail, by facsimile if followed within twenty-four (24) hours by a mailed copy, or by hand delivery to the Project Managers at the address listed above in Section XVI (Project Managers), unless those individuals or their successors give notice in writing to the Parties of a

change in designated recipient or address. Exchanges of documents required under this Order shall be complete upon mailing or upon hand delivery to the Project Managers.

XX. DOCUMENTS, INFORMATION, AND REPORTING REQUIREMENTS

A. **Exchange of Information.** Respondents shall cooperate fully in providing information concerning the status and progress of the activities covered by this Order as requested by NMED. No communications of this type shall alter or waive any obligations of Respondents under this Order, and no guidance, suggestions, or comments by NMED shall be construed as relieving Respondents of their obligation to obtain formal approval where such approval is required by this Order and to comply with the terms of this Order. Respondents are encouraged to confer with NMED at any time prior to the submission of any proposals, plans, studies, reports, updates, or notifications required by this Order.

B. **Records Inspection and Copying.** Respondents shall permit NMED, its contractors, designees and agents to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and analytical data, in any way pertaining to the activities required by this Order, with the exception of privileged material, and subject to the limitations of the AEA concerning the handling of unclassified controlled nuclear information, restricted data, and national security information. If Respondents assert a claim of privilege over any material, they shall identify the specific record, file,

photograph, document, or writing, or portion thereof, over which the claim of privilege is asserted, and shall describe the nature of the privilege with sufficient specificity for a court to rule on the propriety of the claim. Respondents shall not assert privilege over any sampling or analytical data.

C. Reporting Requirements.

1. Respondents shall as expeditiously as possible, but in no event more than ten (10) days after a compliance date, provide notice in writing to NMED of the completion of the activity required to be completed by that compliance date.

2. Respondents shall submit an Annual Update to the STP as required by the relevant provisions of the Compliance Plan Volume of the STP, in accordance with Section VII (Annual Site Treatment Plan Updates).

3. Respondents shall carry out all other reporting requirements through the designated Project Managers.

D. Certification Statement. Respondents shall provide a certification statement with the submission of any documentation required pursuant to the Order, including without limitation, annual STP updates under Section VII, proposed revisions under Section X, proposed amendments to the STP under Section XI and the Certificate of Completion required to terminate this Order under Section XXIV (Termination). Each such certification statement shall be signed by a responsible official of DOE or the University. Each such certification statement shall aver that the document or other submission is "true, accurate, and

complete." personal verification by the responsible official is not possible, then the certification statement shall aver that another person, acting under the direct instructions and under the supervisory authority of the responsible official, verified that the document or other submission is "true, accurate, and complete."

XXI. RESERVATION OF RIGHTS/ENFORCEABILITY

A. Reservation of rights. Notwithstanding any other provision of the Order, NMED reserves the right to pursue civil or administrative relief or refer a criminal action for any violations of state or federal law, past or future, which are not the subject matter of this Order. NMED reserves the right to take emergency response action at property owned or controlled by Respondents in the event conditions pose an imminent and substantial endangerment to human health or the environment. NMED specifically retains the right to conduct other environmental studies, investigations, monitoring, or emergency activities at property owned or controlled by Respondents, and to enforce all laws, statutes and regulations NMED is authorized to enforce. NMED's failure to exercise any power, authority, or rights in this Order shall not be construed as a waiver or relinquishment of such power, authority or right at other times or under other circumstances.

B. Enforcement. In the event Respondents fail to comply with the terms of this Order, including those that have not been

resolved pursuant to the dispute resolution mechanism under Section XVII (Dispute Resolution), this Order shall be enforceable by NMED by the filing of a civil action either in the First Judicial District Court for Santa Fe County or in the United States District Court for the District of New Mexico.

XXII. CIVIL PENALTIES

If Respondents fail to comply with the obligations of this Order, NMED may assess a civil penalty as provided for pursuant to the HWA.

XXIII. CREATION OF DANGER

A. Notwithstanding any other provision of this Order, if NMED determines that any activity set forth in the STP, even though carried out in compliance with this Order, have caused or may cause a dangerous release of a hazardous pollutant, or may pose a threat to public health or the environment, NMED may direct Respondents to stop further implementation of this Order as it relates to the activities creating the danger for such period of time as may be needed to abate any such release or threat or to undertake any action which NMED determines is necessary to abate such release or threat.

B. Following a stoppage of work pursuant to this Section, the Parties shall meet to discuss the resumption of activities and any amendments to this Agreement necessary as a result of the stoppage of work. NMED agrees that any compliance date dependent

on activities which were stopped pursuant to an NMED directive shall be extended for a period equal to the period during which the work was stopped plus a reasonable amount of time to resume activities.

XXIV. TERMINATION

This Order shall terminate when Respondents attain full compliance with the storage prohibitions under 3004(j) of RCRA and the HWA for covered waste. When Respondents have attained such compliance, they shall submit for NMED's written approval of a Certification of Completion. NMED's approval of the Certification of Completion does not, in any manner, relieve Respondents from their obligation to comply with the requirements of the HWA and Section 3004 of RCRA, and further, does not constitute an independent determination by NMED of such compliance. This Order shall terminate upon NMED's written approval of the Certificate of Completion.

XXV. COMPLIANCE WITH OTHER APPLICABLE LAW

This Order shall not in any way relieve Respondents from their obligation to comply with any of the applicable provisions of the HWA or its implementing regulations, the RCRA or its implementing regulations, or any permit, closure or post-closure plan, hazardous waste management requirement, order or agreement issued or entered into thereunder. This Order shall not relieve Respondents from their obligation to comply with any other

applicable federal, state, or local law, regulation, order, permit or any other agreement.

XXVI. COVENANT NOT TO SUE

Except as provided for in Section XXI (Reservation of Rights/Enforceability) and Section XXIII (Creation of Danger) as long as Respondents remain in compliance with the terms of this Order, NMED will not initiate or pursue civil, criminal, or administrative relief of any kind in any forum for violations of storage prohibition under Section 3004(j) of RCRA with respect to covered waste at LANL which might otherwise be available under New Mexico or federal law, including without limitation, the right to seek and recover damages or penalties against Respondents or their contractors, successors, assigns, and employees for such violations. NMED expressly reserves the right to pursue civil or administrative relief, or refer a criminal action to the New Mexico Attorney General's Office, for any other violations of New Mexico or federal law, past or future, which are not the subject of this Order.

XXVII. SEVERABILITY

The provisions of this Order are severable. If any provision of this Order is declared by a court of law to be invalid or unenforceable, all other provisions of this Order shall remain in full force and effect.

**STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT**

**IN THE MATTER OF
U.S. DEPARTMENT OF ENERGY
AND REGENTS OF THE UNIVERSITY OF CALIFORNIA
LOS ALAMOS, NEW MEXICO**

**COMPLIANCE ORDER
NMHWA**

RESPONDENTS.

**AMENDMENT NO. 1
TO THE
FEDERAL FACILITY COMPLIANCE ORDER
(LOS ALAMOS NATIONAL LABORATORY)**

On October 4, 1995, the New Mexico Environment Department (NMED) issued a Federal Facility Compliance Order (Order) to require compliance by the United States Department of Energy (DOE) and the Regents of the University of California (LANL) with a Site Treatment Plan for the treatment of mixed waste at the Los Alamos National Laboratory pursuant to the New Mexico Hazardous Waste Act (HWA) NMSA 1978, §§74-4-1 *et. seq.* (Repl. Pamp. 1993) and Section 3021(b) of the Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §6939(c), as amended by the Federal Facility Compliance Act of 1992, Pub. L. 102-386, 106 Stat. 1505 (1992)(FFC Act). The parties have agreed that the Order should be amended to eliminate potential duplication, provide further clarity and flexibility in implementing the Order. Pursuant to Section XII of the Order, the October 4, 1995 Order is hereby amended as follows:

1. Section IV (Definitions)

N. "Order" means this document and all Attachments to this document referred to herein, including the STP in two volumes, as amended and revised.

All other provisions of Section IV of the Order shall remain unchanged and in effect.

2. Section V (Covered Matters)

B. Other Matters Covered in this Order. Respondents anticipate that as they characterize, sort and survey mixed waste currently in storage at LANL, they will determine that certain waste previously identified as mixed waste in the Compliance Plan Volume of the STP is not mixed waste, but is either hazardous waste without a radioactive component or radioactive waste without a hazardous component. In either case, Respondents may request NMED approval to delete the waste from the Compliance Plan Volume of the STP under Section IX.A (Deletion of Waste) by providing NMED all information required for deleted waste under Section IX.B. In those cases where the waste is determined to be a hazardous waste without a radioactive component which is subject to LDR treatment standards, NMED will consider such waste as a covered waste for a period of ninety (90) days upon approval by NMED of Respondents' written determination that the waste is a hazardous waste which is not a mixed waste. NMED will consider such waste as a covered waste only if they receive Respondents' written determination within fourteen (14) days after Respondents first identify hazardous waste without a radioactive component.

All other provisions of Section V of the Order shall remain unchanged and in effect.

3. Section IX (Deletion of Waste)

A. All waste which Respondents request to be deleted from the Compliance Plan Volume of the STP under this Order shall be proposed for NMED's approval to be deleted as follows:

1. documentation is provided to NMED that the waste has been received at an off-site facility for treatment, disposal, or storage pending treatment or disposal;
2. NMED determines that the wastes have been treated in accordance with the Compliance Plan Volume of the STP or are not, or no longer, subject to LDR under the HWA or 20 NMAC 4.1.;
3. changes to applicable statutes or state regulations cause a mixed waste or waste category to be no longer subject to the LDR requirements of the HWA; or
4. NMED approves the deletion of wastes under Section V.B. (Other Matters Covered in this Order).

B. Respondents' request for deletion shall include the following information: a detailed description of the waste to be deleted including the applicable waste code, waste form and volumes, the treatability group and corresponding section of the Compliance Plan Volume and any other relevant changes; and, if applicable, characterization methodology used along with supporting

information regarding the deleted waste, including schedules for the treatment of hazardous waste, subject to LDR standards, which was previously identified as mixed waste covered by this Order; and any other relevant information regarding the deleted waste.

C. Upon approval by NMED, any waste deleted from a treatability group in the Compliance Plan Volume of the STP shall no longer be subject to the terms of this Order.

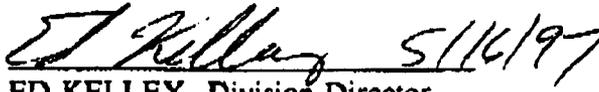
4. Section X.B. (Revisions).

B. A revision is:

4. An increase in volume in excess of 10% or greater than one cubic meter in a treatability group in the Order, whichever is greater;
5. Any addition of waste which Respondents request to be new covered waste under Section VIII.A. (Addition of New Covered Waste); or
6. Any other amendment to the Compliance Plan Volume of the STP which NMED determines is of such significance as to warrant public comment.

All other provisions of Section X of the Order shall remain unchanged and in effect.

NEW MEXICO ENVIRONMENT DEPARTMENT

BY  5/16/97
ED KELLEY, Division Director
Water and Waste Management Division

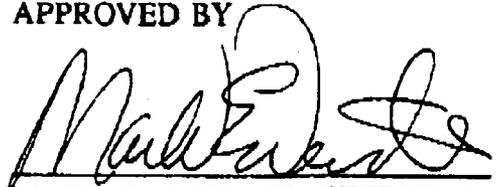
UNITED STATES DEPARTMENT OF ENERGY

BY 
G. THOMAS TODD, Area Manager
Los Alamos Area Office

REGENTS OF THE UNIVERSITY OF CALIFORNIA

BY 
TOM BACA, Division Director
Environmental Management

APPROVED BY


MARK E. WEIDLER, SECRETARY