**Department of Energy**
Washington, DC 20585

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SANTA FE, N.M.

May 10, 1994

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The Honorable Bruce King
Governor of New Mexico
State Capitol
Sante Fe, New Mexico 87503

Dear Governor King:

I am pleased to send you the enclosed finalized Federal Facility Compliance Agreement (FFCA) for mixed waste, between the Department of Energy (DOE)/Los Alamos National Laboratory (LANL) and the Environmental Protection Agency, Region VI (EPA). Mixed waste contains both hazardous and radioactive components.

The FFCA was released for public comment on July 30, 1993. The New Mexico Environment Department (NMED) participated in the public review of the Agreement, and both the EPA and DOE apprised the NMED throughout the FFCA negotiation process. The Agreement was signed by the EPA and became effective on March 15, 1994.

The FFCA establishes a plan and schedule for LANL to find or develop mixed waste treatment capacity, which will allow LANL to achieve compliance with the Resource Conservation and Recovery Act. The Agreement also permits LANL to resume certain activities which generate mixed waste.

With passage of the Federal Facility Compliance Act (the Act), DOE is now required to develop a separate site mixed waste treatment plan for each DOE site, including LANL. The enclosed Agreement is not a substitute for the site treatment plan required by the Act. However, NMED will be an integral part of the development of the LANL site treatment plan and the integration of the site treatment plan with the enclosed Agreement.

Please be assured we will conduct all waste management operations pursuant with protecting public health and the environment. The subject Agreement is a vital part of our commitment.

Sincerely,

Richard J. Guimond
for Thomas P. Grumbly
Assistant Secretary for
Environmental Management

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# RESPONSE TO COMMENTS
# LOS ALAMOS NATIONAL LABORATORY
# FEDERAL FACILITY COMPLIANCE AGREEMENT

## I. BACKGROUND

The Resource Conservation and Recovery Act (RCRA) Land Disposal Restrictions (LDR) prohibit the storage of hazardous wastes restricted from land disposal, unless the storage is for the purpose of accumulating such quantities of the hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal. Among the hazardous wastes covered by the storage prohibition is "mixed waste," hazardous wastes which also contain a radioactive component. On September 30, 1992, the United States Environmental Protection Agency (EPA) issued a Notice of Noncompliance (NON) to Los Alamos National Laboratory (LANL), a Department of Energy (DOE) facility, notifying the facility that it was storing mixed waste in violation of the of the prohibition codified at 40 CFR § 268.50.

Following EPA's notification, DOE entered into negotiations with EPA to develop a Federal Facility Compliance Agreement (FFCA, Agreement). Hazel O'Leary, the Secretary of Energy, approved the Draft FFCA on July 19, 1993. As required by Section II of the FFCA, the document was made available for public review and comment for 30 days, from July 30 through August 30, 1993. At the request of several groups, the comment period was extended until September 10, 1993. Comments were received from the following sources:

New Mexico Environment Department
Concerned Citizens for Nuclear Safety
Pueblo of San Ildefonso
Los Alamos Study Group
J.G. Beery
Bonnie Bonneau
Thomas B. French

This document is EPA's response to those comments.

The purpose of the FFCA negotiated between EPA Region 6, and DOE/LANL, is to bring LANL into compliance with the storage prohibition of 40 CFR § 268.50.

The FFCA consists of two parts. The first part is a legal document that describes the administrative procedures for attaining compliance. This part provides introductory

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material, definitions, statements of fact, and provides for the enforcement of the terms of the FFCA. This part also provides processes for document submittal and review, dispute resolution, and modification and termination of the FFCA. Stipulated penalties are set forth for non-compliance. The FFCA also contains a commitment from DOE to fully fund all of the activities required by the FFCA.

The second part of the FFCA is a technical appendix which describes how the mixed wastes are to be characterized and treated and provides timelines for initiation and/or completion of characterization and treatment activities. The emphasis of this part is on the management of all mixed wastes on site in a manner which satisfies the requirements of RCRA and on research and development of methods for treating the mixed waste. LANL will also endeavor to locate and use commercial and DOE treatment, storage, and disposal facilities as they become available. Another feature of the technical appendix is the Waste Minimization Plan. This section describes efforts currently underway at LANL and those to be undertaken in the future as required by the FFCA. The major goal of this effort is to minimize the future need for storage, treatment, and disposal of mixed waste by avoiding its generation.

The FFCA represents an agreed response to the NON issued by EPA on September 30, 1992, and it covers only those matters involving hazardous and mixed wastes specifically identified in the document. Any other RCRA violations will be addressed separately. Furthermore, the FFCA does not interfere with the ability of the State of New Mexico to ensure compliance with all applicable state regulations.

The FFCA is not a substitute for the mixed waste inventory report or the plan for development of treatment capacities and technologies or any other requirement of the Federal Facility Compliance Act of 1992 (the Act), and the FFCA does not relieve DOE or LANL from complying with the requirements of the Act. Furthermore, the FFCA cannot be used by DOE or LANL to invoke sovereign immunity under the Act.

Several modifications were made to the FFCA as a result of comments received during the public comment period. The revised FFCA was sent to Jerry L. Bellows, Area Manager of the Los Alamos Area Office of DOE, for review and approval. After Mr. Bellows signed the FFCA, it was sent back to Region 6 for the signature of Dr. Allyn M. Davis, Director of the Hazardous Waste Management Division, and issuance by the Region.

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## II. CHANGES MADE TO THE LANL DRAFT FEDERAL FACILITY COMPLIANCE AGREEMENT

A. Section I.8. of the FFCA was amended as follows:

> "DOE acknowledges that New Mexico is a State (a) with authority under State law to prohibit land disposal of mixed waste until the waste has been treated and (b) with both authority under State law to regulate the hazardous components of mixed waste and authorization from the EPA under 42 U.S.C. § 6926 to regulate hazardous components of mixed waste. DOE further acknowledges that the exception to the waiver of sovereign immunity referred to in Section 102(c)(3)(A) of the Federal Facility Compliance Act shall not apply after October 6, 1995 unless DOE is in compliance with a plan that has been submitted to and approved by the State, or an agreement entered into between DOE and the State pursuant to 42 U.S.C. § 6939c(b), and an order requiring compliance with such plan or agreement which has been issued by the State pursuant to 42 U.S.C. § 6939c(b). DOE further acknowledges that the terms of this Agreement shall not restrict in any manner the content of such plan or agreement and cannot be relied upon by DOE as having any precedential effect in negotiations with the State regarding such plan or agreement."

B. Section I. of the FFCA was amended with an additional paragraph (9.) which contains the following language:

> "DOE has entered into Accords with the Pueblos of San Ildefonso, Santa Clara, Jemez, and Cochiti, pursuant to which DOE has agreed to consult with the Pueblos to assure that tribal rights, responsibilities, and concerns are addressed prior to DOE taking actions, making decisions, or implementing programs that may affect the Pueblos or their cultural, religious, and environmental resources. Nothing in this Agreement shall be construed to interfere with DOE's obligations under the Accords and DOE assures that it intends to consult with the Pueblos concerning the effects on the Pueblos of the decisions and programs which are required as a result of this Agreement."

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C. Section II.3. and 4. of the FFCA was amended as follows:

> 3. ". . . available to members of the public who might wish to review it. The notice provided a period of 30 days for submission of comments. At the request of several groups, EPA extended the comment period for an additional ten days."
>
> 4. "EPA considered as expeditiously as possible all public comments which were submitted within the extended comment period and determined whether . . ."

D. Language was inserted after the last sentence of Section IX.9., to read:

> "Approval of a deliverable by EPA does not constitute approval by NMED, and DOE understands that any plan approved by NMED or agreement reached between DOE and NMED addressing mixed waste at LANL under the Federal Facility Compliance Act may impose different or additional requirements and schedules on DOE."

E. Section XXIII. of the FFCA was revised to read:

> ". . . the requirements of all applicable local, state, tribal, and federal laws and regulations. DOE shall obtain or cause its contractors . . ."

F. In Section I.C.3. (page 2) of the Compliance Plan of the FFCA "impoundments" was changed to "impoundment".

G. The last paragraph of Section II.B.1. (page 5) of the Compliance Plan was revised to read:

> "The completion of this study will lead to development of the permit application and will identify upgrades which can be made. If upgrades are needed, a schedule for upgrade activities will be submitted as a deliverable (IFLL 200)."

H. Section II.C.2.e. (page 9) of the Compliance Plan of the FFCA was revised so that LDR Waste Minimization Work Plan is listed as WM-200.

I. All references to "HWMR-6" in the Agreement were ommitted.

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## III. RESPONSES TO COMMENTS RECEIVED

(Comments are presented in normal type; **Responses are presented in bold.**)

### A. State of New Mexico Environment Department (NMED)

General Comments

1. NMED will not be a signatory to the Federal Facility Compliance Agreement (FFCA; Agreement) and NMED has not consented to the terms and provisions therein; therefore, NMED is not bound by the FFCA from exercising its full regulatory authorities under the Federal Facility Compliance Act (the Act).

RESPONSE: **Although NMED participated in the negotiation of this FFCA, NMED will not be a signatory. Therefore, NMED has no enforcement obligations pursuant to the Agreement. During enforcement of the FFCA by EPA, NMED is not restricted from taking any enforcement action at LANL under the State's environmental laws that it would otherwise have the authority to take absent this Agreement, or from exercising its full authority under the Federal Facility Compliance Act.**

**The FFCA has been drafted to protect the State's authority to pursue enforcement actions for violations of RCRA (or any other state environmental law), to the extent that the State would otherwise have such authority absent the Agreement.**

1.a. The Act requires DOE to obtain State approval of any proposed FFCA to treat mixed waste at LANL because NMED is the proper regulatory authority under the Act. The Act does not require NMED to have in place an EPA approved Land Disposal Restriction (LDR) Program in order to act as the appropriate "Authority" to receive and enforce site treatment plans as required under the Act.

RESPONSE: **The Federal Facility Compliance Act of 1992 requires that in order for states to review Site Treatment Plans, they must**

**have authority under State law to prohibit land disposal of mixed waste until the waste has been treated and both authority under State law to regulate the hazardous components of mixed waste and authorization from EPA under section 3006 of RCRA to regulate the hazardous component of mixed waste. New Mexico meets these requirements, and NMED is correct in its assertion that New Mexico is the appropriate "Authority" to receive and enforce Site Treatment Plans as required under the Act.**

**The FFCA is an agreed resolution between DOE and EPA of violations of the storage prohibition contained in the RCRA LDR regulations described in EPA's NON to DOE dated September 30, 1992. Negotiation of the FFCA began before the Act was passed. The FFCA is not a substitute for the Site Treatment Plan required by the Act. Therefore, the FFCA does not infringe on New Mexico's authority under the Act to approve and enforce a Site Treatment Plan for LANL, nor does the FFCA relieve DOE of its obligation to submit such a plan to NMED.**

1.b. EPA approval of the FFCA effectively undermines NMED's authority under the Act and allows the Department of Energy (DOE) to invoke sovereign immunity after the three year grace period expires on the ground that the FFCA has been approved by the "proper regulatory authority".

**RESPONSE: The Federal Facility Compliance Act states that, with respect to DOE, the waiver of sovereign immunity shall apply after the three year grace period expires unless DOE is in compliance with both a "plan" that has been submitted and approved pursuant to Section 3021(b) of the Solid Waste Disposal Act and which is in effect, and an order requiring compliance with such a "plan" which has been issued pursuant to Section 3021(b) and which is in effect.**

**Section I.8. of the FFCA states that the FFCA is not a substitute for DOE's requirement to submit a Site Treatment Plan to the State pursuant to the Act. In other words, the FFCA is not the "plan" referred to in the Federal Facility**

**Compliance Act. Therefore, the FFCA does not meet the requirements for the exception to the waiver of sovereign immunity, and EPA approval of the LANL FFCA will not undermine NMED's authority under the Act.**

1. (cont'd) . . . therefore, the FFCA should be amended such that Section I.8. clarifies EPA's and NMED's roles pursuant to the Act: EPA's approval of the FFCA does not constitute grounds for invoking sovereign immunity under the Act; NMED does not consent to the terms of the Agreement; the FFCA cannot be used as a substitute for the Act requirement to obtain State approval of a site treatment plan.

RESPONSE: **Section I.8. of the FFCA was modified to make clearer NMED's and DOE's roles relative to the Agreement and the Act as follows:**

**"DOE acknowledges that New Mexico is a State (a) with authority under State law to prohibit land disposal of mixed waste until the waste has been treated and (b) with both authority under State law to regulate the hazardous components of mixed waste and authorization from the EPA under 42 U.S.C. § 6926 to regulate that hazardous components of mixed waste. DOE further acknowledges that the exception to the waiver of sovereign immunity referred to in Section 102(c)(3)(A) of the Federal Facility Compliance Act shall not apply after October 6, 1995 unless DOE is in compliance with a plan that has been submitted to and approved by the State, or an agreement entered into between DOE and the State pursuant to 42 U.S.C. § 6939c(b), and an order requiring compliance with such plan or agreement which has been issued by the State pursuant to 42 U.S.C. § 6939c(b). DOE further acknowledges that the terms of this Agreement shall not restrict in any manner the content of such plan or agreement and cannot be relied upon by DOE as having any precedential effect in negotiations with the State regarding such plan or agreement."**

2. The limitations on spending set forth in the Anti-Deficiency Act are inapplicable under the Resource Conservation and Recovery Act (RCRA); i.e, Consent Agreements, including the FFCA, and as such are unlawful and infringes on EPA's and the State's enforcement powers.

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**RESPONSE: The State of New Mexico will not be a signatory to the FFCA; therefore, the State's right and ability to assess civil penalties against LANL for violations of RCRA will not affected by the FFCA.**

2.a. Under RCRA and the Act, the obligation of DOE to comply with RCRA and the right of the State and EPA to assess civil penalties, is required by law and not contingent upon congressional funding.

2.b. The FFCA creates an agreement contingent upon congressional funding and could trigger an Anti-Deficiency Act defense which would not otherwise exist. Therefore, the FFCA should be amended so that it is clear that DOE's obligation to comply with RCRA is not contingent upon congressional funding.

**RESPONSE: The FFCA contains several provisions that obligate DOE/LANL to obtain funding for both compliance with the agreement and for payment of stipulated penalties for non-compliance.**

**Section XIX.1. requires DOE to request and obtain funding necessary to address all compliance matters at LANL as set forth in the Agreement. Section XIX.3. authorizes EPA to take appropriate action should DOE delay in fulfilling its obligations set forth in the Agreement as a result of insufficient availability of funding.**

**Section XX.1. requires DOE to take all necessary steps and use its best efforts to obtain timely and sufficient funding to meet its obligations and commitments under the Agreement. In those cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates establishing the obligation of such funds will be adjusted to ensure payment. It is the obligation of DOE to provide that something required by this Agreement is a violation of the Anti-Deficiency Act. This would involve written opinions from the Comptroller General of the United States and the Department of Justice.**

**Section XX.2. further emphasizes DOE's obligation to obtain adequate funding, by authorizing EPA to exercise any or all of its applicable statutory and regulatory options, should DOE fail to obtain such funds.**

**EPA believes that the language in the FFCA adequately defines DOE's obligations to obtain funding; therefore, no modifications to the Agreement are necessary.**

Specific Comments

1. The FFCA should be amended to clarify that approval of deliverables by EPA does not constitute approval by NMED, and that EPA approved deliverables may or may not satisfy State requirements.

RESPONSE: **EPA believes that the FFCA makes clear the EPA's authority to enforce the Agreement and the requirement for DOE to adhere to applicable State laws; however, the following modification was made to the FFCA:**

**"Approval of a deliverable by EPA does not constitute approval by NMED, and DOE understands that any plan approved by NMED or agreement reached between DOE and NMED addressing mixed waste at LANL under the Federal Facility Compliance Act may impose different or additional requirements and schedules on DOE."**

**This language was inserted after the last sentence of Section IX., paragraph 9, (page 18).**

2. The FFCA should be amended to provide funding for NMED in order to allow NMED sufficient resources to complete any operational/programmatic requirements imposed by the Agreement.

RESPONSE: **Since NMED will not be a signatory to this Agreement, NMED review of deliverables is optional and not a programmatic requirement imposed on NMED by the FFCA; therefore, the appropriation of additional funds to NMED for resource acquisition is not justified.**

3. The FFCA should be amended such that Section XVIII. clarifies that compliance with the provision of Creation of Danger does not relieve DOE/LANL from

any other obligations under the New Mexico Hazardous Waste Act or their RCRA Operating Permit. This section should be further modified to state that NMED may require DOE to stop any activities that NMED feels have caused or may cause a release or threat to human health or the environment.

RESPONSE: **Section XXIII. of the FFCA requires DOE to pursue compliance under the Agreement in accordance with the requirements of all applicable local, state, and federal laws and regulations. It further requires DOE to timely obtain all permits and approvals necessary under such laws. EPA believes that the language in the FFCA is sufficiently clear to protect NMED's authority to intervene where creation of danger exists; therefore, no further clarification is necessary.**

4. The FFCA should be amended so that Appendix A is modified to clearly show the relationship of Attachment A, Appendix B to those Waste Categories listed in Appendix A.

RESPONSE: **Appendix A identifies primary waste streams that may contain a variety of hazardous waste constituents. The purpose of Appendix A is to ensure that the Agreement encompasses all potential process wastes that are currently being generated at LANL or which DOE knows will be generated during the term of the Agreement.**

**Tables 1-4 in Appendix B are more specific listings of process waste streams, based on current information, and subject to change as operations at LANL change. Appendix A can be changed only by formal modification to the Agreement. Tables 1-4 of Appendix B, on the other hand, are more specific and can be revised by annual reports to EPA.**

**No modifications were made to the FFCA.**

5(a). NMED has not determined whether or not LANL has interim status for mixed waste (according to 40 CFR § 265 standards).

RESPONSE: **New Mexico received RCRA Base Program authorization on January 25, 1985. EPA granted authorization for Mixed Wastes to New Mexico on July 25, 1990. Therefore, NMED regulations governing mixed waste and interim status issues**

**thereof, are equivalent to EPA's. LANL submitted its revised Part A permit application for mixed waste in a timely manner. New Mexico has not called in any Part B permit applications for mixed waste units at LANL; therefore, it appears that LANL has complied with the requirements needed to operate under interim status for mixed wastes, as outlined in EPA's Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste published in the *Federal Register* on September 23, 1988. Consequently, no modifications to the FFCA are required at this time.**

5(b). The provisions of 40 CFR §270.72 do not apply for upgrades to the container storage pads as implied by Section II.B.1 of the Compliance Plan of the FFCA.

RESPONSE: **The last paragraph on page 5 of the Compliance Plan [(Section II.B.1.] was revised to read:**

**"The completion of this study will lead to development of the permit application and will identify upgrades which can be made. If upgrades are needed, a schedule for upgrade activities will be submitted as a deliverable (IFLL 200)."**

5(c). Section II.D. [page 11] of the Compliance Plan of the FFCA ("applicable treatment facilities") is ambiguous and needs clarification.

RESPONSE: **EPA interprets the phrase "applicable treatment facilities" to mean facilities which have the unique capability required to handle (treat) the particular kind of waste requiring treatment. In the context of Section II.D, this simply means that those wastes which have known treatment capacities will be expedited relative to those that do not have known treatment capacities.**

5(d). Section I.C.3 of the Compliance Plan of the FFCA states that a Part B permit application was submitted for the TA-53 surface impoundments. LANL has decided to close two of the three impoundments and may withdraw the permit application.

RESPONSE: In Section I.C.3. of the Compliance Plan of the FFCA "impoundments" was changed to "impoundment".

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5(e). Section II.C.2.e. of the Compliance Plan of the FFCA should be modified so that the LDR Waste Minimization Work Plan is listed as WM-200.

**RESPONSE: The FFCA was so revised.**

6. The New Mexico Hazardous Waste Management Regulations have been revised and should now be cited as HWMR-7, instead of HWMR-6.

**RESPONSE: The FFCA was revised to incorporate this change.**

## B. Concerned Citizens for Nuclear Safety (CCNS)

1. Will the Compliance Plan (FFCA) achieve the degree of compliance required by law?

a. The FFCA is perceived as more of a "compliance study" than an enforcement document.

b. LANL will achieve "compliance" simply through the completion of studies.

**RESPONSE: On September 30, 1992, EPA Region 6 issued an NON to DOE/LANL for violations of the LDR prohibitions on the storage of mixed waste. The FFCA is an agreement which provides a legal mechanism for LANL to address the violations outlined in that NON. It is not unusual for settlements to provide for studies and investigations to develop solutions to compliance problems presented in particular cases. In this case, it must be considered that treatment of mixed wastes presents unusual difficulties because of the radioactive component of the waste. The FFCA contains specific deadlines for the development of treatment technologies and the treatment of low level mixed waste to meet LDR standards. The Compliance Plan is predicated on the real treatment of mixed waste.**

**The approach taken in the FFCA is not inconsistent with the Federal Facility Compliance Act, which requires DOE to submit to the State, specific Site Treatment Plans outlining schedules for treating mixed wastes, the types of technologies**

**that will be utilized and developed, and the funding strategy. The Act will require DOE to conduct "studies" in order to develop treatment technologies for mixed wasted - technologies which presently do not exist.**

**While the FFCA is not the site treatment plan required by the Act, the FFCA does incorporate many of the basic elements of Research and Development for treatment technologies that are required by the Act. Therefore, the FFCA is similar to the statutory requirements DOE must independently pursue with the State of New Mexico to achieve compliance with the Act at LANL.**

2. Future compliance is built on uncertainties and questionable assumptions.

   a. Too much reliance is placed on permitting assumptions, particularly with the Controlled Air Incinerator (CAI).

   b. EPA must consider how LANL will achieve compliance in the event that the CAI is not permitted.

   c. DOE internal audits have demonstrated failures at other incinerators which have caused releases of radionuclides to the environment.

RESPONSE: **The number of treatment options available for mixed wastes is extremely limited at this time. It is prudent to consider any technology that can safely decrease the volume of current mixed waste inventories. Indeed, Congress recognized this when it enacted the Federal Facility Compliance Act. The Act requires DOE to actively engage in Research and Development (R & D) activities that will yield viable treatment technologies for mixed waste.**

**The FFCA contains similar requirements for R & D, which, considering the limited commercial capacity, and the lack of treatment technologies currently available, represents a reasonable approach to management of mixed waste in a manner that could minimize the need for perpetual storage. The FFCA incorporates an understanding of current**

**technological limitations by requiring LANL to pursue many diverse treatment options and RCRA compliant storage.**

**The CAI is one of only several treatment options and it will have to undergo extensive testing and successfully pass a battery of stringent requirements before it can be permitted by NMED to treat mixed wastes. The pursuit of multiple treatment options may minimize the negative impact of the loss of a single technology, should that technology fail to be permitted or prove unsuccessful.**

3. The Future of Land Disposal Sites for LANL's Waste Streams

   a. LANL proposes expanding Area G for disposal of low level mixed waste. Continued use of Area G is controversial due to public concerns and Pueblo ancestral issues. EPA cannot assume the continuing existence of Area G as an interim storage site for RCRA wastes.

   b. The FFCA assumes the eventual discovery of an off-site facility at which to dispose of low level mixed waste. LANL's current inability to secure such a facility demonstrates that this assumption cannot be made in advance and should not be incorporated as an integral part of the Compliance Plan. CCNS questions the credibility of the FFCA without the determination of a disposal site for low level mixed wastes.

   c. There is an implicit assumption that the Waste Isolation Pilot Plant (WIPP) will become operational; e.g, the trans-uranic (TRU) mixed waste work off plan. EPA must seriously consider how LANL will achieve long-term compliance for TRU disposal in the event WIPP never opens.

RESPONSE: **The intent of the FFCA is to bring LANL into compliance with RCRA storage violations outlined in the Notice of Non-compliance issued in September 1992. Although disposal**

**issues, *per se*, are not within the scope of the FFCA, treatment issues are. The FFCA requires LANL to develop treatment for mixed wastes so the storage backlog can be treated to LDR standards.**

**Should future conditions (physical or political) at TA 54, Area G adversely affect LANL's ability to comply with the requirements of the FFCA, DOE and EPA have the authority to modify the Agreement to accommodate changing conditions.**

**The future disposition of Native American ancestral sites within LANL's boundaries, is also not within the scope of this Agreement. However, EPA is sensitive to Tribal concerns regarding this issue. (Please see the Responses to the Pueblo de San Ildefonso comments.) Again, should issues involving ancestral sites impact LANL's ability to comply with the requirements of the FFCA, the Agreement may be modified at that time to conform to changing conditions.**

**It is difficult to forecast the future capacity of commercial mixed waste treatment facilities. Present demand far exceeds capacity. However, it is not unreasonable to presume that market forces could stimulate increased capacity development in the private sector. Regardless of the current or future status of off-site treatment capacity, DOE must recognize it as another option and be prepared to take full advantage of it should the opportunity arise.**

**DOE is considering alternatives to WIPP, but at present, WIPP represents a reasonable option. Should WIPP prove non-viable, R & D activities for treatment and disposal of TRU mixed wastes will have to be increased.**

4. Waste Minimization

   a. A 20% reduction in waste stream generation is not sufficient to demonstrate dedicated waste minimization program. EPA should insist on greater levels of reduction.

b. EPA should make an independent effort to determine what levels of reduction are achievable and insist on compliance with those levels.

RESPONSE: **The Resource Conservation and Recovery Act (RCRA) contains provisions for implementing hazardous waste minimization. Section 3002 of RCRA requires hazardous waste generators to identify in their biennial reports to EPA (or the State) the efforts undertaken to reduce the volume and toxicity of waste generated and reductions in volume and toxicity actually achieved. In addition, generators are required to certify on any manifest accompanying off-site shipment of their waste that they have a program in place to reduce the volume or quantity and toxicity of such waste *to the degree determined by the generator to be practicable.* LANL's waste minimization program complies with the letter and spirit of RCRA and the mandates of 40 CFR § 262.41(a)(6) & (7).**

5. EPA should be more aggressive in its environmental oversight of LANL. In addition, EPA should consider alternative methods for achieving LANL's long-term compliance.

RESPONSE: **Treatment options are extremely limited at this time. The FFCA requires LANL to utilize treatment technologies where they exist and to develop them where they are needed. EPA is not foreclosing the use of any method which might become available for achieving compliance with the LDR requirements.**

**EPA provides aggressive environmental oversight at LANL. NMED, as authorized by EPA, conducts yearly RCRA Compliance Evaluation Inspections at LANL. In July of 1993, the EPA's National Enforcement Investigations Center (NEIC) conducted an in depth multi-media inspection of the facility. In addition, EPA and NMED jointly provide ongoing extensive oversight and corrective action with the RCRA permit.**

The LANL FFCA provides for the safe and prudent management of mixed wastes, and mandates the development

**of treatment alternatives. These provisions are quite similar to the requirements outlined in the Federal Facility Compliance Act, and are consistent with current statutory requirements.**

## C. Pueblo de San Ildefonso (the Pueblo)

1. The FFCA must be crafted in a manner which restricts further releases from land disposal sites within LANL, ensures that the sites are brought into compliance with existing regulations, and recognizes the sovereign status of the Pueblo and its proximity to LANL. Specific issues include:

a. The Pueblo lies in close proximity to the physical facility in as much as it shares a common boundary with facility.

b. There is ongoing litigation over ownership of Native American ancestral property within LANL boundaries. This land may eventually be returned to the Pueblo.

RESPONSE: **In a very real sense, the FFCA has been crafted in a manner which will restrict further release of hazardous wastes to the environment. The purpose of this Agreement is to ensure that LANL manages its mixed waste streams in a manner that complies with the statutory requirements of RCRA. In this regard, hazardous waste management practices are implemented which protect human health and the environment, reduce the need for future corrective action, and minimize the generation of hazardous waste - all statutory requirements of RCRA.**

**The future disposition of Native American ancestral sites within LANL's boundaries, is not within the scope of this Agreement. However, should future transfer of property in any way impact LANL's ability to comply with the requirements of the FFCA, the Agreement could be modified at that time to conform to the new conditions. (Also please see the Response to Comment 2 below.)**

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2. The use of land by LANL for waste disposal adversely impacts Anasazi Pueblo sites that are eligible for inclusion in the National Register of Historic Places. The Superfund Memorandum of Agreement between Region 6 and Pueblos of the All Indian Pueblo Council recognizes that restrictions on impacts to Pueblo's cultural resources are considered enforceable requirements at waste disposal sites.

RESPONSE: **The use of land at LANL for waste disposal is not within the scope of the FFCA. The FFCA addresses only issues involving treatment and storage. However, EPA is sensitive to the Pueblo's concerns regarding ancestral sites and cultural resources. EPA wants to ensure that LANL's compliance with the FFCA in no way adversely impacts these Pueblo concerns. The FFCA has been revised to add a paragraph to Section I (9.) to recognize DOE's obligation to consult with the four Pueblos with whom it has signed Accords:**

**"DOE has entered into Accords with the Pueblos of San Ildefonso, Santa Clara, Jemez, and Cochiti, pursuant to which DOE has agreed to consult with the Pueblos to assure that tribal rights, responsibilities, and concerns are addressed prior to DOE taking actions, making decisions, or implementing programs that may affect the Pueblos or their cultural, religious, and environmental resources. Nothing in this Agreement shall be construed to interfere with DOE's obligations under the Accords and DOE assures that it intends to consult with the Pueblos concerning the effects on the Pueblos of the decisions and programs which are required as a result of this Agreement."**

**Although the addition of this paragraph does not impose any obligations on DOE which are not already imposed by law or the Accords, it serves to highlight DOE's existing commitment to consult with the Pueblos before taking actions under the FFCA which may affect the Pueblos and their interests.**

3. The disposal of waste at LANL affects Pueblo land, air, and water. Specifically, Area G is a point source that discharges waste water contaminated with Tritium. Any discharges from Area G into ground water will adversely affect the Pueblo. Air releases from waste disposal and treatment facilities also impact the Pueblo.

RESPONSE: **The FFCA is very narrow in scope. It does not address violations of the Clean Air Act or the Clean Water Act; only violations of The Resource Conservation and Recovery Act. Furthermore, the FFCA addresses only those compliance issues related to violations of the Land Disposal Restrictions under RCRA, for the storage of mixed wastes. Disposal of waste at LANL, and discharges to air or water are not "Covered Matters", as defined in Section V., pursuant to this Agreement.**

**However, to reiterate (please see Response to Comment 1 above), the FFCA assures that mixed wastes will be managed properly, thus preventing releases to the environment and protecting human health. The proper management of mixed wastes required by the FFCA, will ensure that current problems associated with past improper management practices do not recur.**

**Furthermore, if LANL is found to be violating the requirements of any other environmental statute or RCRA compliance issues (other than mixed waste storage), appropriate enforcement action can be taken by either the State of New Mexico (NMED) or EPA.**

4. The FFCA should address wastes disposed prior to 1980. The Agreement should require that no further off-site releases from these sites be allowed to occur and that such sites should be assessed for their potential and actual threat to human health and the environment as required by CERCLA and SARA. No expansion of "problem" waste disposal sites should be allowed.

RESPONSE: **Issues involving previously-disposed mixed and non-mixed hazardous wastes are addressed pursuant to the requirements of the Hazardous and Solid Waste Amendments (HSWA) to RCRA (by permit) for corrective action. The FFCA does not specifically address the restoration of waste disposal sites. However, EPA and NMED are actively involved in this effort through their appropriate permitting authorities.**

**The State (NMED) RCRA permit has provisions for the proper handling, treating, and storing of hazardous waste. The HSWA portion of the RCRA permit issued by EPA in**

**May 1990, required the investigation of 603 Solid Waste Management Units (SWMU's). However, since issuance of the permit additional SWMU's have been identified by LANL, and are being incorporated into the RCRA Facility Investigation (RFI) Work Plans. In addition, special permit conditions require additional ground water and unsaturated zone monitoring.**

**Prevention of off-site release from waste disposal sites is a very high priority and mixed wastes generated from site restoration will be managed in a manner that is compliant with current RCRA regulations and the FFCA.**

5. The Agreement must include the Pueblo as a signatory, recognizing the Pueblo's sovereign nation status. The State of New Mexico has no authority to regulate (RCRA) Native Americans on their own land.

a. Section III. and XIX. should provide authority to the Pueblo for enforcement of the FFCA.

b. Section IX. should require DOE to submit all deliverables to the Pueblo for approval.

c. Section X. and XI. should require DOE to notify the Pueblo in the same manner as EPA.

d. Section XII., XVIII., and XXI. should involve the Pueblo as an equal party to dispute resolution, determination of danger process, and imposition of penalty process, respectively.

e. Section XIII., XIV., and XV. should require Pueblo approval for any extensions, modifications, or termination, respectively.

f. Section XVI. should require DOE to provide the Pueblo with deliverable documents and data.

RESPONSE: EPA recognizes Tribal Governments as sovereign entities, and as such, EPA recognizes the Pueblo's authority to enforce environmental regulations on Pueblo land; however,

**the Pueblo currently has no regulatory authority to enforce RCRA within LANL boundaries. Since the Pueblo does not have regulatory authority over this federal facility, it would be inappropriate to create such authority in this Agreement by making the Pueblo a signatory and granting the powers requested. However, EPA welcomes input from the Pueblos as this Agreement is implemented.**

**As stated in the Response to Comment 2 above, EPA expects DOE to cooperate fully with San Ildefonso and other Pueblos pursuant to the provisions outlined in the Accords with the Pueblos of San Ildefonso, Santa Clara, Jemez, Cochiti, and DOE. In addition, DOE will make all documents associated with the FFCA, available for public review, by placing them in the Environmental Restoration Program Reading Room at Los Alamos.**

6. The Agreement should be modified as necessary to ensure compliance with present or future Pueblo environmental regulations.

RESPONSE: **In recognition that the Pueblo may during the term of this FFCA issue regulations or standards which are applicable to LANL activities, Section XXIII. (Other Applicable Law) was revised to include applicable "Tribal" laws and regulations among those with which DOE must comply.**

**If future events result in conditions that are beyond the scope of Section XXIII., Section XIV. allows DOE and EPA to modify the Agreement to adjust to changing and/or unforeseen circumstances that could impact the successful implementation and execution of the Agreement. If Pueblo environmental standards make it necessary to modify the Agreement, it can be readily accomplished.**

7. The Agreement should be modified such that compliance is not subject to the Anti-Deficiency Act. The Federal Facility Compliance Act supersedes the Anti-Deficiency Act.

RESPONSE: **The FFCA contains several provisions that obligate DOE/LANL to obtain funding for both compliance with the agreement and for payment of stipulated penalties for non-compliance.**

**Section XIX.1. requires DOE to request and obtain funding necessary to address all compliance matters at LANL as set forth in the Agreement. Section XIX.3. authorizes EPA to take appropriate action should DOE delay in fulfilling its obligations set forth in the Agreement as a result of insufficient availability of funding.**

**Section XX.1. requires DOE to take all necessary steps and use its best efforts to obtain timely and sufficient funding to meet its obligations and commitments under the Agreement. If circumstances arise where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the date of obligation of such funds will be adjusted to ensure payment. It is the obligation of DOE to provide that something required by this Agreement is a violation of the Anti-Deficiency Act. This would involve written opinions from the Comptroller General of the United States and the Department of Justice.**

**Section XX.2. further emphasizes DOE's obligation to obtain adequate funding, by authorizing EPA to exercise any or all of its applicable statutory and regulatory options, should DOE fail to obtain such funds.**

**EPA believes that the language in the FFCA adequately defines DOE's obligations to obtain funding; therefore, no modifications to the Agreement are necessary.**

## D. Los Alamos Study Group

1. The FFCA places too much emphasis on the Permitting of Waste Isolation Pilot Plant (WIPP), the Controlled Air Incinerator (CAI), and on planning and funding for construction of the Hazardous Waste Treatment Facility.

RESPONSE: **The Hazardous and Solid Waste Amendments (HSWA) of 1984, which amend the Resource Conservation and Recovery Act, imposed substantial new requirements on the land disposal of hazardous waste. In particular, the amendments prohibit the continued land disposal of hazardous wastes, unless (1) the wastes meet treatment standards specified by EPA, or (2) the administrator determines that the**

prohibition is not required in order to protect human health and the environment.

This latter determination must be based on a demonstration by the owner/operator of the facility receiving the waste "that there will be no migration of hazardous constituents from the disposal unit or injection zone as long as the wastes remain hazardous." The DOE has chosen to comply with the land disposal restrictions for certain transuranic (TRU) wastes, by pursuing this second option - WIPP.

The CAI is one of only several treatment options. The pursuit of multiple treatment options may minimize the negative impact of the loss of a single technology, should that technology fail to be permitted or prove unsuccessful.

The number of treatment options available for mixed wastes is extremely limited at this time. It is prudent to consider any technology that can decrease the volume of current mixed waste inventories. Indeed, Congress recognized this when they enacted the Federal Facility Compliance Act of 1992 (the Act). The Act requires DOE to actively engage in Research and Development (R & D) activities that will yield viable treatment technologies for mixed waste.

The FFCA contains requirements for R & D similar to those in the Act. Considering the limited commercial capacity, and the lack of currently available technologies, this represents a reasonable approach to management of mixed waste in a manner that should minimize the need for perpetual storage. The FFCA incorporates an understanding of current technological limitations by requiring LANL to pursue many diverse treatment options as well as RCRA compliant storage.

2. The FFCA places too much emphasis on hypothetical means of disposing of mixed wastes.

RESPONSE: The FFCA does not address the "disposal" of mixed waste. It is not required to be within the scope of the Agreement. Please see the Response to Comment 1 above, which addresses issues of treatment and "storage".

3. The FFCA does not address the Mixed Waste Disposal Facility.

RESPONSE: **Disposal of mixed waste is not a requirement of the scope of the FFCA. The "Mixed Waste Disposal Facility" located at TA 67 is not a "Covered Matter" as defined in Section V. of the Agreement.**

4. The FFCA does not contain contingency plans in the event any or all of the proposed technologies/remedies do not get permitted, built, funded, or otherwise become operational.

RESPONSE: **The FFCA retains the flexibility to adapt to changes in technology and regulatory/permitting requirements through modification by DOE and EPA as specified in Section XIV.**

5. What is the utility of an Agreement that can be terminated once the State of New Mexico has issued a compliance order, or DOE and New Mexico have made another agreement?

RESPONSE: **The Federal Facility Compliance Act of 1992 (the Act) requires DOE to submit to the State, specific Site Treatment Plans outlining schedules for treating mixed wastes, the types of technologies that will be utilized and developed, and the funding strategy.**

**The FFCA is not a requirement of the Act, though it is enforceable pursuant to the Act. It is an agreement between EPA and DOE/LANL which provides a legal mechanism for DOE/LANL to address violations outlined in the Notice of Noncompliance (NON) issued by Region 6 EPA on September 30, 1992.**

**The Site Treatment Plan requirements of the Act, and the requirements of the FFCA are distinct and separate. The FFCA is not a substitute for the requirements of the Act. However, EPA believes the FFCA may bring LANL into compliance at an earlier date than would otherwise be achieved by the Act alone. If the State agrees, DOE may be able to incorporate the requirements of the FFCA into the Site Treatment Plan for LANL.**

## Enclosure

**As outlined in Section XV.3. of the FFCA, the Agreement will terminate when the State of New Mexico has issued an order requiring DOE compliance with either a plan for the treatment of mixed waste at LANL which has been approved pursuant to Section 3021(b)(2) of the Solid Waste Disposal Act (SWDA), as amended by the Federal Facility Compliance Act, or an agreement entered into between DOE and the State pursuant to section 3021(b)(5) of the SWDA, as amended by the Federal Facility Compliance Act.**

## E. J. G. Beery (Los Alamos)

1. The University of California (UC) and NMED should be parties to the Agreement.

a. The DOE-UC contract states that UC will operate the LANL on DOE's behalf; therefore, DOE cannot be a co-operator as defined in the FFCA.

b. EPA granted, on January 25, 1985, to the State of New Mexico final authority to administer a hazardous waste program. EPA cannot now withdraw that authorization and independently negotiate an Agreement with DOE.

RESPONSE: **In Section VI.4. of the FFCA, DOE acknowledges that it is owner and co-operator of LANL. Section XXIV. requires DOE to notify its agents, employees, and contractors (UC), and all subsequent operating contractors, owners, operators, management, and lessees of the existence of the FFCA and further requires DOE to direct them to comply fully with the terms of the Agreement in all contracts. DOE provides funding, program direction, and oversight to UC, and is therefore, also acknowledged as a co-operator in all LANL permits.**

**EPA is not withdrawing New Mexico's authorization to administer a hazardous waste program. The FFCA covers only violations of the Land Disposal Restrictions (LDR) as addressed in the Notice of Noncompliance issued by Region 6**

**EPA against LANL on September 30, 1992. The LDR Regulations were promulgated pursuant to the Hazardous and Solid Waste Amendments (HSWA) of 1984. NMED has State authority to administer an LDR program, but not EPA authorization to administer the RCRA LDR program; therefore, EPA retains enforcement authority for RCRA LDR violations.**

2. The Agreement refers to three Site Treatment Plans: conceptual, draft, and final. It would be much simpler to have a draft plan that evolves into a final plan.

RESPONSE: **The FFCA does not require DOE to submit Site Treatment Plans. Site Treatment Plans are a requirement of the Federal Facility Compliance Act.**

3. The TRU wastes in Storage Pads 1, 2 and 4 at TA-54, Area G should be left interred.

a. If this waste is exhumed and managed it will present a greater danger of radiation exposure than if it was left interred.

b. TRU waste managed in RCRA storage configurations presents a greater threat to human health than TRU waste that is buried.

RESPONSE: **RCRA requires that hazardous waste stored in containers be inspected on a weekly basis. This ensures that containers remain in good condition, leaks can be identified before they become a problem, and inventory is easily accomplished. Hazardous wastes stored in this manner present far less danger to human health and the environment than wastes which are buried. Buried containers cannot be easily assessed for leaks.**

**EPA recognizes that increased exposure to workers may result from frequent "walk through" inspections of mixed waste in storage. The Nuclear Regulatory Commission (NRC) and EPA, are currently developing storage guidelines that address this problem. RCRA regulations and permit guidance do not require that inspections must be "walk through". NRC and EPA suggest that facilities storing mixed**

**waste use methods other than "walk through" as a means to inspect high activity mixed waste in storage.**

**Furthermore, should EPA, NMED, or DOE determine that any activity carried out pursuant to the FFCA may cause a threat of release or an actual release of hazardous waste or hazardous constituents, that activity will immediately cease and action will be initiated to abate the threat or the release.**

## F. Thomas B. French (Taos)

1. No more hazardous or radioactive waste should be produced by LANL until LANL can properly dispose or store it.

RESPONSE: **According to DOE, LANL is currently operating under a self-imposed moratorium for the generation of mixed waste until such time as the final FFCA is signed by EPA. The FFCA mandates the "proper" storage of mixed waste.**

2. The FFCA is too lenient because deadlines for compliance are set too far in the future. This undermines the purpose of RCRA and is incongruous with what is required of non-Federal violators.

RESPONSE: **The purpose of the FFCA is to bring LANL into compliance with violations of the RCRA storage requirements under the Land Disposal Restrictions. Once issued the FFCA requires LANL to undertake immediate and aggressive actions to correct storage violations addressed in the Notice of Noncompliance issued by Region 6 EPA against LANL in September 1992.**

**Given the current technological limitations regarding treatment of mixed waste, and the magnitude of the research and development effort that must be undertaken, the schedule of compliance outlined in the FFCA is similar to what would be required of any non-Federal facility. Therefore, the actions taken by EPA at LANL are consistent with actions taken at non-Federal facilities.**

Enclosure

G. Bonnie Bonneau (Legions of Living Light, El Prado)

1. On site retrievable storage units should be given priority over incineration for management of mixed waste.

RESPONSE: **The Resource Conservation and Recovery Act, Land Disposal Restrictions, limit the amount of time hazardous wastes may be in storage. This limitation was established in order to prevent perpetual storage and thereby encourage treatment. The Agreement seeks to develop as many treatment options as possible which can meet permitting/regulatory requirements.**

2. How will the FFCA be affected by plans to move the entire U.S. Nuclear Weapons Production Program to LANL? Does the Agreement include this agenda?

RESPONSE: **The FFCA does not address any future changes in the scope of DOE operations. The FFCA is very specific in scope, in that only issues involving violation of mixed waste storage regulations are addressed. Should DOE change operations at LANL in a way that could impact compliance with the FFCA, the document will be modified to incorporate any necessary changes.**

3. It was difficult to get information on the Agreement or an explanation of it. There should be a way to get better information on environmental issues at LANL.

RESPONSE: **On July 30, 1993, public notice was given in four New Mexico newspapers that the FFCA was available at four locations throughout the state for public review. (This was not a statutory requirement but was done in an effort to inform the public and resolve any potential problems before final issuance.)**

**The names, addresses, and phone numbers of DOE and EPA staff contacts were provided, both with the notices, and at the locations where the document could be reviewed. In addition, EPA and DOE provided copies of the Agreement upon request.**

The comment period was originally scheduled to last 30 days, until August 30, 1993. However, several groups requested an

extension, and comments were accepted until September 10, 1993.

Information pertaining to the LANL FFCA can be obtained by writing or calling the points of contact listed in the following section.