



## Department of Energy

Washington, DC 20585

June 26, 1998

Richard C. Mertz  
General Counsel  
New Mexico Environment Department  
1190 St. Francis Drive  
Santa Fe, New Mexico 87502



Dear Mr. Mertz:

Susan McMichael asked that I clarify for you how the documents provided to the New Mexico Environment Department (NMED) during the last month relate to the characterization of waste stream TA-55-43 at the Los Alamos National Laboratory (LANL). NMED received four sets of documents during this time; these four sets comprise the technical documentation for the characterization of this waste stream.

I sent the first set of documents to Secretary Weidler on May 18, 1998. The second set was sent to Secretary Weidler by Dan Pinkston of the Department of Justice on June 8, 1998. The third set was sent to Secretary Weidler on June 16, 1998, by Wendy Blake of the Department of Justice. The fourth set was delivered to Dr. Ed Kelley on June 17, 1998, by representatives from LANL. In addition to the documents specifically mentioned in the transmittal letter dated June 17, LANL also submitted to NMED on that date a number of detailed technical and quality procedures applicable to this waste stream. I have enclosed copies of each of the four transmittal letters for your convenience.

In these four shipments NMED received revised versions of two documents. On June 8, Dan Pinkston sent NMED copies of the PAN and FRAM Batch Data Reports. On June 16, Wendy Blake sent NMED a revised version of PAN Batch Data Report, and on June 17 NMED received a revised version of the FRAM Batch Data Report. The revisions to these two documents are minor and do not affect LANL's characterization of waste stream TA-55-43.

These four sets of documents constitute the technical documentation for the characterization of waste stream TA-55-43 with one exception. As stated in the letter to Dr. Kelley dated June 17 and in my letter to Susan McMichael dated June 19, the



Richard C. Mertz

June 26, 1998

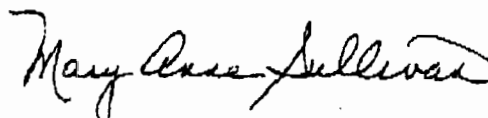
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Department of Energy (DOE) has provided the certification statements for only five waste boxes. It will provide the certification statements for additional waste boxes as the statements are generated. As we have previously explained, these certification statements do not provide new information on how these wastes were characterized; instead, they are summary "checklists" used in the final preparations for shipment of these wastes.

These four sets of documents contain many documents that address characterization and certification requirements other than those relevant to RCRA and the Hazardous Waste Act (HWA). On June 17, DOE provided Dr. Kelley with: (1) a "List of Documents for Process for Characterization and Certification of Waste Stream TA-55-43 Lot No. 01" (one page); and (2) a flowchart entitled "Process for Characterization and Certification of Waste Stream TA-55-43, Lot No. 01" (two pages). These two items identify the documents that are most relevant to the characterization of this waste stream pursuant to RCRA and the HWA. At your request, DOE delivered to NMED yesterday a written demonstration that the acceptable knowledge process for the TA-55-43 waste stream is equivalent to the conditions relating to the acceptable knowledge process in the draft RCRA permit for the Waste Isolation Pilot Plant. The three documents described in this paragraph are guides to the technical documentation rather than part of the documentation itself.

I hope this clarifies the scope of the technical documentation that DOE has provided to NMED. Please call me at 202-586-6732 or my colleague, Paul Detwiler, at 202-586-1371 if you have any questions about DOE's submission of these four sets of documents.

Sincerely,



Mary Anne Sullivan  
General Counsel

Enclosures



**Department of Energy**  
Washington, DC 20585

May 18, 1998

Secretary Mark E. Weidler  
Environment Department  
State of New Mexico  
Harold Runnels Building  
1190 St. Francis Drive  
Sante Fe, New Mexico 87502-6110

Dear Secretary Weidler:

Secretary Peña has asked me to follow up with you concerning your letter of February 2, 1998, in which you indicated that "New Mexico would expect the DOE to demonstrate that any TRU [transuranic] waste to be shipped to the WIPP has been fully characterized in accordance with the requirements of RCRA." Enclosed is much of the information used to characterize the waste stream at the Los Alamos National Laboratory (LANL) that DOE has decided to send to WIPP. This waste is referred to as the "TA-55-43, combustible/noncombustible debris waste stream." DOE anticipates that LANL will begin shipping this waste to WIPP in mid-June after the Environmental Protection Agency's (EPA's) rule certifying WIPP's compliance with the disposal regulations becomes effective.

To date this is the only waste stream that DOE has approved for shipment to WIPP before it receives a RCRA Part B permit under the New Mexico Hazardous Waste Act (HWA). DOE will not make decisions about waste streams at other sites (for example, the Rocky Flats Environmental Technology Site or the Idaho National Engineering and Environmental Laboratory) until: (1) EPA completes its audits and inspections of these sites and certifies them; and (2) DOE finally determines that there is non-mixed waste at these sites that can be shipped prior to issuance of the RCRA permit.

There are three broad categories of information that the Department uses to characterize wastes for disposal at WIPP. "Program-level information" consists of information that the Carlsbad Area Office (CAO) uses to determine whether sites can adequately characterize and certify wastes for disposal at WIPP. Most of the documents that contain this information were included with DOE's Compliance Certification Application; if you have a copy of the application, you should already have many of them. Examples include: the Quality Assurance Program Description (QAPD); the Transuranic Waste Certification Quality Assurance Program Plan (QAPP); and the WIPP Waste Acceptance Criteria (WIPP-WAC). I have asked CAO to provide any additional information that it uses for this purpose. If you do not have a copy of the Compliance Certification Application, let me know and I will provide you with copies of the relevant portions.

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The second category of information consists of "site-level information." This is the information that CAO and LANL use to characterize and certify wastes at LANL. Enclosed are the following documents containing this category of information:

1. The Acceptable Knowledge Summary Report for TA-55-43 (and four other waste stream) and copies of the documents referred to in that report with two exceptions. The two exceptions are documents that may contain unclassified controlled nuclear information (UCNI); if we confirm that they do, we will make arrangements that will allow you to receive them.
2. LANL's Transuranic Waste Quality Assurance Management Plan (often referred to as the QAPjP), LANL's Transuranic Waste Quality Assurance Management Plan (QAMP) and LANL's Transuranic Waste Certification Plan.
3. The waste management procedures for TA-55 (the facility where this waste was generated) cited in the Acceptable Knowledge Summary Report and prior versions for the period when these wastes were generated.
4. The current and prior versions of the inspection and packaging procedures for transuranic wastes for the period during which these wastes were generated.

I will send you additional site-level information as we gather it.

The third category of information is "container-level information." This information consists of information that confirms that individual containers meet the requirements for disposal at WIPP. Examples of this type of information include:

1. Video tapes of the real time radiography (RTR) that was performed on the drums that originally contained this waste. In order to meet certain transportation requirements, this waste is being repackaged. Each drum contains a number of sealed plastic bags containing waste. These bags are being removed from the drums and placed into waste storage boxes. During this repackaging process, LANL notes the presence of any item that does not meet the waste acceptance criteria for WIPP and removes

Secretary Mark E. Weidler

May 18, 1998

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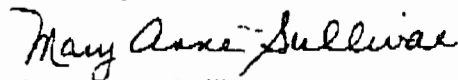
it from the waste stream. I have sent copies of these video tapes to Attorney General Udall; I will be sending copies to you as soon as I receive them from LANL.

2. "TRU Waste Storage Records" or "Waste Drum Reports" for each of the drums that are being repackaged. These reports contain detailed information on the contents of each drum. For example, the nature and weight of the material in each plastic bag in a drum is noted. These reports also note whether each bag (referred to as an item and given an "item id" number) contains any hazardous materials. Note that on the forms labeled "TRU Waste Storage Record" there is a box in the upper left quadrant of the first page labeled "Mixed Waste." If the drum does not contain mixed waste (as none of these do), the software that generates this form fills that box with gray stippling. Unfortunately, this stippling darkens when the forms are photocopied and it sometimes appears that the box is blackened.

I will send you additional information on individual containers as it is gathered. Much of this information has already been generated and will be sent to you as soon as I receive it. However, LANL is continuing to characterize individual containers, and thus some of this information is not yet available. I will send it to you as soon as it becomes available. Much of the characterization information that is not yet generated relates exclusively to the radioactive characteristics of the containers and is therefore not relevant to the HWA.

I am also sending this information and a copy of this letter to Attorney General Udall. Please call me at 202-586-6732 or my colleague, Paul Detwiler at 202-586-1371, if you have any questions about this information.

Sincerely,



Mary Anne Sullivan  
Deputy General Counsel,  
Environment and Civilian  
and Defense Nuclear Programs

Enclosures



## U.S. Department of Justice

## Environment and Natural Resources Division

Daniel W. Pinkston  
Senior Trial Attorney  
Environmental Defense Section  
P.O. Box 23986  
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Telephone (202) 514-0988  
Facsimile (202) 616-0013

June 8, 1998

VIA FEDEX

Secretary Mark E. Weidler  
Environment Department  
State of New Mexico  
Harold Runnels Building  
1190 St. Francis Drive  
Santa Fe, New Mexico 87502-6110

Re: *Los Alamos National Laboratory Waste Characterization*

Dear Secretary Weidler:

Secretary Peña has asked us to forward additional documents to you regarding characterization at the Los Alamos National Laboratory ("LANL") of wastes that we anticipate will be shipped to the Waste Isolation Pilot Plant ("WIPP"). Copies of these documents have been previously provided to Mr. Lindsay Lovejoy, Jr., Assistant Attorney General, State of New Mexico; Mr. Kevin Ward, counsel for environmental plaintiffs in the pending litigation regarding WIPP; and Ms. Nancy Olinger, Assistant Attorney General, State of Texas, an intervenor in those cases.

These documents contain information used to characterize the waste stream at LANL that the Department of Energy has decided to send to WIPP. This waste is referred to as the "TA-55-43, combustible/noncombustible debris waste stream." These documents contain the following three types of information:

Program Level Information. Most of these documents contain information that DOE's Carlsbad Area Office ("CAO") uses to determine whether sites can adequately characterize and certify wastes for disposal at WIPP. Most of the documents that contain this information were included with DOE's Compliance Certification Application, and have therefore been available for quite some time.

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Site Level Information. This is information regarding audits that CAO performed to confirm that LANL properly instituted the requirements found in the program level documents concerning the characterization and certification of waste.

Container Level Information. These documents contain information that confirms that individual containers meet the requirements for disposal at WIPP. They include:

1. FRAM and PAN Batch Data Reports, which contain information about the radiological characteristics of the wastes in these containers.
2. Summary Report of Headspace Gas Analysis, which contains (a) analytical results used to ensure that the concentrations of hydrogen gas in the containers do not exceed levels set to ensure safe transportation of wastes while they are in the TRUPACT-II casks; and (b) analytical results used to confirm that the waste has been properly characterized using acceptable knowledge.

We will send you additional documents regarding these matters once they become available. You will now have virtually all of the information that has been generated to date and reviewed for quality assurance. LANL is continuing to characterize individual containers, and therefore some of this information is not yet available. We will send it to you as soon as it is.

If you have any questions regarding this matter, please free to call me at 202-514-0988.

Sincerely,

- Daniel W. Pinkston  
Senior Trial Attorney

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## U.S. Department of Justice

## Environment and Natural Resources Division

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June 16, 1998

VIA FEDERAL EXPRESS

Lindsay A. Lovejoy, Jr.  
Assistant Attorney General  
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407 Galisteo Street, 2<sup>nd</sup> Floor  
Santa Fe, NM 87501

Secretary Mark E. Weidler  
Environment Department  
State of New Mexico  
Harold Runnels Building  
1190 St. Francis Drive  
Santa Fe, New Mexico 87502-6110

Mr. Don Hancock  
Southwest Research and Information Center  
105 Stanford Drive, S.E.  
Albuquerque, NM 87106

Nancy Olinger, Esq.  
Assistant Attorney General  
300 West 15<sup>th</sup> Street  
10<sup>th</sup> Floor, Mail Code 015  
Austin, TX 78701

Re: WIPP

Dear Ms. Olinger and Messrs. Lovejoy, Weidler, and Hancock:

Enclosed please find the third set of documents containing information relating to waste characterization of the "TA-55-43, combustible/noncombustible debris waste stream" at the Los Alamos National Laboratory ("LANL"). These materials are submitted to you pursuant to the conditions and explanations in Mary Anne Sullivan's letters to Attorney General Udall and Secretary Weidler of May 18, 1998. The provision of these documents is not and shall not be construed as a



waiver of the objections asserted by DOE and other federal defendants to requests for production propounded by New Mexico and environmental plaintiffs in the consolidated cases of New Mexico v. Peña, Civ. Act. No. 91-2527 (JGP), and EDF v. Peña, Civ. Act. No. 91-2929 (JGP) (D.D.C.).

The enclosed documents include the following two types of information:

**Site-level information.** Included in these documents is a slightly revised Waste Stream Profile Form for waste stream TA-55-43. This form summarizes much of the important information about the waste stream. I have also included copies of two documents referred to in the Acceptable Knowledge Summary Report, which DOE once believed might contain unclassified controlled nuclear information (UCNI). We have now confirmed that these documents do not contain such information and are therefore providing you with copies. Also included is a report on radiolysis.

**Container-level information.** These documents include:

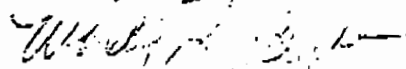
1. Visual Examination Batch Data Reports, which contain information about the visual examination of some of the containers.
2. The Repackaging Batch Data Report, which contains information about the repackaging of the wastes in order to meet transportation requirements regarding the potential for hydrogen gas generation.
3. A revised Passive-Active Neutron Assay System Batch Data Report for the containers.
4. Certification Statements for five of the containers. I will send you the certification statements for additional containers once they have been prepared and I receive copies of them.
5. Additional copies of the real-time Radiography Video Tapes. I have enclosed copies of these tapes only for Secretary Weidler, Assistant Attorney General Olinger and Mr. Hancock. I understand that DOE has already provided a copy of the tapes to Attorney General Udall.

With the exception of the FRAM Batch Data Report and the remaining certification statements, we have now sent you all of the relevant information concerning the characterization of the TA-55-43 waste stream and the certification of the containers that DOE intends to ship from LANL to WIPP. The FRAM data reports deal exclusively with the radiological aspects of these containers of waste, and therefore is not relevant to issues concerning RCRA or the New Mexico Hazardous Waste Act. As Ms. Sullivan mentioned in her previous letters, LANL is continuing to characterize individual containers, and thus some information is not yet available. I will send additional information to you as soon as it becomes available.

If you have any questions regarding this matter, please free to call me at (202) 305-0851.

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Sincerely,



Wendy L. Blake  
Trial Attorney

enclosures

cc/ without enclosure,  
Kevin Ward, Esq.



**Department of Energy**  
Albuquerque Operations Office  
P.O. Box 5400  
Albuquerque, New Mexico 87185-5400

June 17, 1998

Ed Kelley, Ph.D.  
Director, Water and Waste Management Division  
New Mexico Environment Department  
1190 St. Francis Drive  
Santa Fe, New Mexico 87502

Dear Dr. Kelley:

I would like to thank you and your staff for meeting Monday with Department of Energy (DOE) representatives on such an expedited basis. The availability of the Waste Isolation Pilot Plant (WIPP) to dispose of transuranic waste is a critical solution to one of the most vexing legacies of our nation's Cold War success. In meeting this need, the highest priority is to protect the health and safety of New Mexicans and all Americans. We have worked closely with the New Mexico Environment Department (NMED) over many years to establish WIPP as a national repository and waste management resource that meets all regulatory requirements designed to protect the public and the environment.

It is crucial that we continue to work together. It is for this reason that the Secretary requested Monday's meeting to better understand NMED's concerns that led to your letter of June 11, 1998 related to the transport of non-mixed transuranic waste to WIPP for disposal. The concerns expressed in the letter and at our meetings yesterday can be addressed.

We believe that the acceptable knowledge process Los Alamos National Laboratory (LANL) has undertaken definitively establishes that the waste stream LANL intends to ship to WIPP does not contain hazardous constituents regulated by RCRA or the Hazardous Waste Act. We are prepared to work vigorously to demonstrate this to your staff and to satisfy concerns you may have to the greatest extent possible.

We recommend that NMED and LANL work together to identify and resolve issues concerning the use of acceptable knowledge to characterize heterogenous waste streams, rather than having NMED work on its own for the next 10 days. We believe that this would be the best way for us to resolve any technical issues NMED may identify about the characterization of this waste stream during its review of the documents we have provided to you. LANL would be able to answer your questions immediately and thereby allow us to quickly identify and resolve any significant issues.

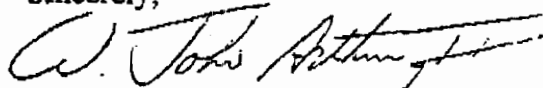
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Dr. Ed Kelley  
June 17, 1998  
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The accompanying attachments to this letter describe the information we have sent you via the Department of Justice that is relevant to the characterization of these wastes for purposes of RCRA and the Hazardous Waste Act. They also briefly describe how the information in these documents is used in the characterization process. As our attorneys discussed today, NMED will receive a third shipment of documents today from the Department of Justice. The documents in that shipment are for the most part not especially relevant to demonstrating that this waste stream does not contain hazardous constituents. The ones that are relevant are described in the attachments. Also included as attachments are four additional documents that have not yet been provided to you. Again, the attachments describe how these four documents are used in the waste characterization process. It is our understanding that NMED can begin its review of the characterization of this waste stream once it receives this letter, the attachments, and the third shipment of documents from the Department of Justice. If it would be helpful to you, representatives from LANL are willing to come to your offices in order to help you identify the documents discussed in these attachments.

The opening of WIPP is a long-standing national objective. WIPP is critical to our nation's ability to fulfill its obligation to safely dispose of its transuranic waste legacy. We believe that, if we work together as described above, we can cooperatively review the relevant documents and resolve issues of concern to NMED. We believe that this work can be accomplished expeditiously through this approach.

Sincerely,



W. John Arthur, III

Attachments

Dr. Ed Kelley  
June 17, 1998  
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### **Description of the Information Provided on Waste Characterization**

The following attachments describe the relevant documents that we have provided to NMED over the past month. It is important to clarify that many of the documents DOE provided to NMED are not particularly relevant to characterizing the wastes for purposes of RCRA and the HWA. The most important documents are:

The Acceptable Knowledge Summary Report (TWCP-1042) and the documents cited in that report;

Results of the plutonium feedstock analysis by the Savannah River Site and LANL (TWCP 1025, 1026, 1030, 1044);

The waste management procedures for facilities at TA-55 and NMT-7 (No TWCP numbers);

The three shipments of documents (one from DOE and two from the Department of Justice) and the four additional documents attached to this letter constitute virtually the entire set of technical documents the Department used to determine that these wastes comply with all of the requirements for disposing of wastes at WIPP, including the requirement that DOE not dispose of wastes containing hazardous constituents until WIPP is authorized to do so under RCRA and the Hazardous Waste Act. Included in the third shipment are the certification statements for the first five waste containers that DOE intends to ship to WIPP from LANL. These certification statements are primarily checklists that LANL uses to confirm that each container complies with the certification requirements before DOE sends it to WIPP. LANL will generate certification statements for the additional containers of this waste stream. We will send NMED these statements as LANL completes them. As our attorneys discussed, these statements do not contain new data about how these wastes were characterized; rather, they confirm that the characterization was done and done properly.

Of course, LANL and DOE are willing to supply any additional documents that NMED might request during its review of these documents we have already provided.

As noted above, many of the documents that DOE provided do not contain information that was particularly relevant to the determination that this waste stream does not contain hazardous constituents. However, there may be data in these documents that DOE used in that determination. For example, the PAN Batch Data Report contains measurements of the amount of discarded plutonium in the waste

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containers. DOE used this information to verify its earlier calculations that indicated that even if all of the chromium in the plutonium were to leach out, the concentration of chromium in the waste stream could not possibly exceed the regulatory threshold for RCRA. The Acceptable Knowledge Summary Report notes that the assumption that all of the chromium would leach out of the plutonium is highly conservative; virtually all of it would remain immobilized in the plutonium and therefore could not be deemed to be a hazardous constituent.

Attachments: Guide to Characterization and Certification Process (3 pages)  
Four technical documents (TWCP 1216, 1217, 1218 and Batch Data  
Report LA98-3.1.4-002)