TENNESSEE GOVERNOR'S OFFICE
JUSTIN P. WILSON
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STATE OF TENNESSEE

DON SUNDQUIST
GOVERNOR

September 16, 1998

Mr. G. Bert Stevenson, NEPA Compliance Officer
Office of Fissile Materials Disposition
US Department of Energy
PO Box 23786
Washington DC 20026-3786

Dear Mr. Stevenson:

As the Governor's Lead Contact for State of Tennessee's National Environmental Policy Act (NEPA) reviews, I am providing comments in response to the "**Draft Environmental Impact Statement (DEIS) for Surplus Plutonium Disposition," DOE/EIS-0283-D**. The attached comments from state agencies represent the complete and official response of the State of Tennessee.

The State of Tennessee would like to remind DOE that, although this DEIS does not directly pertain to inventories of stored plutonium in this state, plutonium wastes and contaminated equipment do exist in Tennessee and DOE must address the disposition of these wastes in the near future. 1

In addition, the DEIS does not fully discuss transport of wastes for disposition. If wastes are to be transported through Tennessee, and particularly if wastes are to be brought into Tennessee for postirradiation, the State has significant concerns which are not addressed. Specifically, the DEIS does not provide adequate analysis of routing, safety or inspection procedures. 2

I request that the enclosed comments be given your full consideration. As always, your timely consideration of the interests of the State of Tennessee is appreciated. If you have any questions, please contact our staff policy analyst at 615-532-4968 (fax 615-532-0740).

Sincerely,

Justin P. Wilson
Deputy to the Governor for Policy

JPW:emw

Attachments

cc: Mr. Milton H. Hamilton, Jr., Commissioner
NEPA coordination file/Mr. Dodd Galbreath
NEPA contacts

State Capitol, Nashville, Tennessee 37243-0001
Telephone No. (615) 741-2001

FD326

FD326–1 **DOE Policy**

DOE acknowledges the Governor's concern that existing plutonium wastes and contaminated equipment in the State of Tennessee be dispositioned appropriately. Most of the plutonium stored at ORR is in the form of waste. Approximately 600 g (21 oz) of plutonium 238 (not weapons–usable) has been declared excess and is being held in storage at ORNL awaiting transfer for use in the space program. Approximately 780 g (28 oz) of other plutonium isotopes have been repackaged and are awaiting transfer to LLNL. The scope of this SPD EIS includes alternatives for the disposition of weapons-usable plutonium declared surplus to U.S. defense needs. Other radioactive materials, wastes and spent nuclear fuel that contain plutonium are beyond the scope of this SPD EIS. Alternatives for management of radioactive and hazardous wastes were evaluated in the *Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (DOE/EIS-0200-F, May 1997). RODs for TRU, hazardous and high-level waste have been issued; RODs for low-level and mixed low-level waste are expected shortly. Alternatives for management of spent nuclear fuel were evaluated in the *Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Final EIS* (DOE/EIS-0203-F, April 1995). RODs for this EIS were issued in May 1995, and March 1996. Transportation and disposal of TRU waste are evaluated in the *WIPP Disposal Phase Final Supplemental EIS* (DOE/EIS-0026-S-2, September 1997). A ROD for the WIPP EIS was issued in January 1998. Transportation and disposal of spent nuclear fuel are evaluated in the *Draft EIS for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250D, July 1999). A ROD has not been issued for the *Yucca Mountain EIS*.

As shown in the revised Section 1.6, if postirradiation examination is necessary for the purpose of qualifying the MOX fuel for commercial reactor use, DOE prefers to perform that task at ORNL. ORNL has the existing facilities and staff expertise needed to perform postirradiation examination as a matter of its routine activities; no major modifications to facilities or processing

capabilities would be required. In addition, ORNL is about 500 km (300 mi) from the reactor site that would irradiate the fuel.

FD326–2 **Transportation**

If ORNL is used for the postirradiation examination of spent lead assembly MOX fuel, DOE would prepare detailed transportation plans, including routing and safety procedures, for the movement of these materials. Transportation of spent nuclear fuel to ORNL for postirradiation examination is discussed in the revised Section 4.27.6.3. Section 4.27.6.3 and Appendix H were revised to include waste management impacts from these activities at ORNL.

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JUSTIN P. WILSON
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THE STATE OF TENNESSEE
TENNESSEE EMERGENCY MANAGEMENT AGENCY
EMERGENCY OPERATIONS CENTER
MILITARY DEPARTMENT OF TENNESSEE
3041 SIDCO DRIVE, P.O. BOX 41502
NASHVILLE, TENNESSEE 37204-1502
(615) 741-0001

September 11, 1998

Mr. G. Bert Stevenson, NEPA Compliance Officer
Office of Fissile Materials Disposition
U.S. Department of Energy
P.O. Box 23786
Washington, DC 20026-3786

Dear Mr. Stevenson:

RE: Document No. DOE/EIS 0283-D, **Draft Environmental Impact Statement, Office of Fissile Materials Disposition - Surplus Plutonium Disposition**

The Tennessee Emergency Management Agency has reviewed the above document. The following comments are respectfully submitted for your consideration.

1. Environmental Impact Statement does not provide any substantial information or data on which to base an evaluation such as numbers of shipments, shipment routes, or processing locations. | 3

2. Roadworthiness and oversight of commercial carriers rollingstock carrying various physical and chemical forms of Surplus Plutonium is not addressed. Tennessee Highway Patrol Commercial Vehicle Enforcement Division Officers perform Commercial Vehicle Safety Alliance (CVSA) Enhanced out-of-service criteria inspections of vehicles carrying radioactive materials of a sensitive nature. | 4

3. The radiological status verification of shipments is not addressed. State Division of Radiological Health physicists must verify the status of a shipment to minimize public perception of hazards posed by a shipment and to verify CFR compliance. | 5

4. This Environmental Impact Statement does not address the ancillary risks to the public that Many thousands of gallons of toxic and caustic industrial chemical compounds in hundreds of semi-tractor-trailer shipments will pose to the public. In most cases the chemical properties of these shipments pose a much greater danger to the public than do the radiological considerations. | 6

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FD326–3 **Transportation**

The shipment of spent lead assembly MOX fuel using commercial carriers would be the subject of detailed transportation plans in which routes and specific processing locations would be coordinated with State, tribal, and local governments. Section 4.27.6 provides the number of shipments that would be required for this type of material.

The shipment of waste would be in accordance with the decisions reached on the *Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (WM PEIS) (DOE/EIS-0200-F, May 1997) and the *WIPP Disposal Phase Final Supplemental EIS* (DOE/EIS-0026-S-2, September 1997).

The transportation of special nuclear materials is the subject of detailed planning with the DOE Transportation Safeguards Division. The dates and times that specific transportation routes would be used for special nuclear materials are classified information; however, the number of shipments that would be required, by location, has been included in this EIS. Additional details are provided in *Fissile Materials Disposition Program SST/SGT Transportation Estimation* (SAND98-8244, June 1998), which is available on the MD Web site at http://www.doe-md.com.

FD326–4 **Transportation**

DOE has developed and implemented a mandatory Motor Carrier Evaluation Program with 12 criteria for commercial trucking firms. Under the Motor Carrier Evaluation Program criteria, trucking firms with poor safety records would be excluded from transporting the materials required for the surplus plutonium disposition program. The Motor Carrier Evaluation Program would be invoked as one of the requirements in DOE's contract for shipping of any radioactive material. As stated in Appendix L.3.2, equipment used in this system is subjected to significantly more stringent maintenance standards than commercial transport equipment.

FD326–5 **Transportation**

Transportation of nuclear materials would be in compliance with all applicable Federal, State, and local laws, rules, regulations, and requirements.

The remainder of this comment is addressed in responses FD326–3 and FD326–4.

FD326–6 **Transportation**

Any shipment of hazardous materials involves some level of risk, and exposure to acutely toxic chemicals can pose a significant danger to the public. Fortunately, transportation accidents involving releases of hazardous materials occur infrequently.

The shipment of hazardous materials required for construction and operation of the proposed surplus plutonium disposition facilities would be in strict accordance with applicable DOT regulations that cover the packaging and transportation of hazardous materials on public highways, airways, and waterways. These shipments would also be in compliance with all applicable State, tribal, and local laws, rules, regulations, and requirements. The DOT regulations include those specified in 49 CFR 172 and 173. Part 172 contains the Hazardous Materials Table which lists and classifies various types of hazardous materials (e.g., explosives, flammables, gases, corrosives, poisons, infectious substances, radioactive materials, etc.) and specifies related modal and placarding, marking, and labeling requirements. Part 172 also describes shipper and carrier responsibilities including driver training and emergency response requirements. Part 173 describes DOT performance-based packaging requirements and shipper responsibilities for material classification and notification.

DOT implements these regulations through its Hazardous Materials Safety Program. This program is a risk-based, prevention oriented system that uses data, information, and experience to classify hazardous materials and manage the risks of these materials in transport. As part of this program, DOT maintains a Hazardous Materials Information System (HMIS), which is a database of the Hazardous Material Incident Reports that have been filed with DOT. According to HMIS, in 1994, the risk of a fatality in the general

population from a hazardous materials transportation incident was estimated to be 1 chance in 13 million on an annual basis. By comparison, the annual fatality risk values for selected other types of incidents were estimated to be: (1) motor vehicle accidents - 1 in 6,100; (2) drowning - 1 in 68,000; (3) fires - 1 in 83,000; (4) railway accidents - 1 in 390,000; (5) commercial air carrier accidents - 1 in 1 million; (6) floods (in 1991) - 1 in 2.5 million; (7) lightning (in 1995) - 1 in 3.5 million; and (8) tornado (in 1995) - 1 in 8.7 million (see http://hazmat.dot.gov/riskscompare.htm).

The industrial chemicals expected to be required for construction and operation of the proposed facilities are identified in Appendix E. These chemicals would be acquired through normal, commercial processes, and would be delivered in accordance with the established transportation safety standards described above. Since these chemicals would be acquired on the local or regional commercial markets, their origins cannot be determined; therefore, the incremental risks resulting from the shipment of these materials cannot be quantified. However, the DOT data presented above suggest that the incremental risks associated with these shipments should be small in relation to other recognized hazards.

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5. The overall impact of MOX fuel on the commercial reactor fuel industry is not addressed. Projected usage needs by the industry versus quantities available from other in-place sources is not addressed. | 7

6. What is the proposed disposition of Transuranic waste generated? | 8

7. What is the proposed disposition of the High and Low Level waste generated?

If you have any further questions, please contact Elgan Usrey at (615) 741-2879 and he will be happy to assist you.

Sincerely,

John D. White, Jr.
Director

JDW:bc

FD326

FD326–7 **MOX Approach**

The MOX facility would produce nuclear fuel that would displace LEU fuel that utilities would have otherwise purchased. However, this should have minimal impact on the industry. DOE conducted a procurement process to acquire MOX fuel fabrication and irradiation services. As a result of this procurement process, DOE identified Catawba, McGuire, and North Anna as the proposed reactors to irradiate MOX fuel, as part of the proposed action in this SPD EIS. Therefore, only 3 out of approximately 107 operating domestic, commercial reactors would use the MOX fuel. MOX fuel is approximately 95 percent uranium dioxide and only about 5 percent plutonium dioxide, and no more than about 40 percent of any core would be MOX fuel. Production volume would also not change significantly; the number of MOX fuel assemblies would be only a small percentage of the total number of fuel assemblies produced annually. Finally, since the selected MOX fuel fabricator would also be a producer of LEU fuel, the work would remain in the same industry; the only changes would be the material used and location of the work.

FD326–8 **Waste Management**

As described in Appendix H and the Waste Management sections in Chapter 4 of Volume I, TRU waste would be disposed of at WIPP. MOX spent fuel and HLW canisters containing immobilized surplus plutonium would be disposed of in a potential geologic repository. This SPD EIS assumes, for the purposes of analysis, that Yucca Mountain, Nevada, would be the final disposal site for all immobilized plutonium and MOX spent fuel. As directed by the U.S. Congress through the NWPA, as amended, Yucca Mountain is the only candidate site currently being characterized as a potential geologic repository for HLW and spent fuel. DOE has prepared a separate EIS, *Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada* (DOE/EIS-0250D, July 1999), which analyzes the environmental impacts from construction, operation and monitoring, related transportation, and eventual closure of a potential geologic repository.

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STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DOE OVERSIGHT DIVISION
761 EMORY VALLEY ROAD
OAK RIDGE, TENNESSEE 37830-7072

September 16, 1998

US Department of Energy
Office of Fissile Materials Disposition
c/o SPD EIS
Post Office Box 23786
Washington DC 20026-3786

Dear Sirs

DOCUMENT REVIEW: Draft Environmental Impact Statement, "*Surplus Plutonium Disposition,*" DOE/EIS-0283-D, July, 1998.

The Tennessee Department of Environment and Conservation DOE Oversight Division (TDEC DOE-O) has reviewed the above Draft Environmental Impact Statement (EIS). The subject EIS was reviewed in accordance with the requirements of the Nation Environmental Policy Act (NEPA) and associated implementing regulations 40 CFR 1500, 1508 and 10 CFR 1021 as implemented.

The State does want to note that there are quantities of plutonium in the form of TRU waste, contaminated equipment, spent fuel, and working inventory still present on the Oak Ridge Reservation. Although not pertinent to this EIS, this plutonium will require final disposition and should to be addressed by DOE. Attachment 1 contains our current understanding of the plutonium inventory on the Oak Ridge Reservation. 1

After review of the subject document, the Division offers the following comments for your consideration:

Specific Comments:

1. **Volume I, Part A, Section 2.1.3., Page 2-9**
ORNL is a potential site for postirradiation examination of the lead assemblies. The DPEIS states that *"...only minor modifications for the receipt of materials would be required."* The PEIS should address what these "minor modifications" include. 9

2. **Volume I, Part A, Section 2.4.3.2, Page 2-30**
The MOX facility's proposed design would warehouse a year's production of fuel assemblies. The DPEIS also states the individual fuel assemblies could be stored for as long as 18 months prior to shipment to the designated domestic, commercial reactor. The statement of storage for up to 18 months suggests overproduction and possibility of long-term storage of unused/unwanted MOX fuel assemblies. 10

FD326

As described in Sections 2.18.3 and 4.28.2.8, additional spent fuel would be produced by using MOX fuel instead of LEU fuel in domestic, commercial reactors. Spent fuel management at the proposed reactor sites would not be expected to change dramatically due to the substitution of MOX assemblies for some of the LEU assemblies. Likewise, the additional spent fuel would be a very small fraction of the total that would be managed at the potential geologic repository. LLW would be disposed of in accordance with current site practices. This could include disposal at the DOE site generating the waste, or disposal at commercial facilities or other DOE sites in accordance with decisions made with respect to LLW in the WM PEIS (DOE/EIS-0200-F, May 1997).

FD326–9 **Lead Assemblies**

As discussed in response FD326–1, ORNL is the preferred alternative for postirradiation examination of lead assemblies. Section 2.17.3 was revised to indicate that at either ANL–W or ORNL, minimal modifications to existing equipment would be required for acceptance of full-length fuel rods.

FD326–10 **MOX Approach**

The SPD Draft EIS's specification of assembly storage for up to 18 months is a bounding assumption for planning and analysis purposes. This SPD EIS reflects an extension of the possible storage time of individual assemblies to up to 2 years, a storage period that is neither expected nor desirable from a business standpoint. As stated in Section 2.4.3.2, production would closely follow product need. Reactor licensees typically order LEU fuel to coincide with their refueling outages, and fuel shipment is usually scheduled so that fuel does not have to be stored very long at the reactor site. Licensees work closely with each of the vendors involved in the fuel fabrication process, as well as the fuel fabricators, to ensure that the fuel is ready when needed. The only likely difference in this process for MOX fuel would be a closer relationship between the licensee and the fabricator; the two would work as a team. Reactor shutdowns and other operational issues that could affect the need for fuel would be accommodated in the fuel fabrication schedules, and adjustments would be made as required.

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3. Volume I, Part A, Section 2.4.3.2, Page 2-30
Please provide additional details for the statement *"Individual fuel assemblies could be stored for as long as 18 months..."* Describe the significance of the 18 months and what happens if storage exceeds 18 months. | 10

4. Volume I, Part A, Section 2.4.4.4, Page 2-36
This section needs to describe the events as listed in Table 2-3. Table 2-3 addresses transportation requirements for shipment of uranium fuel rods from a commercial fuel fabrication facility to the MOX facility. Section 2.4.4.4 does not address the commercial truck shipment of uranium fuel rods from a commercial fuel fabrication facility to the MOX facility. Describe the reason for shipment of these uranium fuel rods to the MOX facility. | 11

5. Volume I, Part B, Section 4.27.6, Page 4-374
ORNL is a candidate for postirradiation examination of the lead MOX fuel assemblies. The DPEIS does not address the waste streams associated with the testing nor does it describe the storage/disposal of the lead assemblies once testing has been concluded. | 12

If you have any questions regarding this letter, please contact Bill Childres or me at (423) 481-0995

Sincerely

Earl C. Leming
Director

xc: Justin Wilson - Governor's Office
Jim Hall - DOE
Dodd Galbreath - TDEC

el415.99

FD326

In the event that MOX fuel were made and then not be needed due to NRC not issuing a license amendment or other factors, DOE would be responsible for the unirradiated fuel and would reexamine its disposition option.

FD326–11 **Transportation**

Section 2.4.4.4 includes the shipment of uranium fuel rods from a commercial fuel fabrication facility to the MOX facility. Both uranium fuel rods and MOX fuel rods are bundled together at the MOX facility to form a complete MOX assembly.

FD326–12 **Waste Management**

Section 4.27.6.3 and Appendix H were revised to include waste management impacts from these activities at ORNL.

Attachment 1

SUBJECT: **Oak Ridge Plutonium Inventory and the *Surplus Plutonium Disposition Draft Environmental Impact Statement*, DOE/EIS-0283-D, U.S. Department of Energy dated July 1998**

REFERENCE: 1. *Plutonium Working Group Report on Environmental, Safety and Health Vulnerabilities Associated with the Department's Plutonium Storage*, DOE/EH-0415, U.S. Department of Energy dated November 1994

2. *Site Integrated Stabilization Management Plan (SISMP) for the Implementation of Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-1 (and 97-1)* dated April 15, 1998

CRITERIA and SCOPE:

Surplus Plutonium from above subject *Surplus Plutonium EIS* (originally from the *Storage and Disposition PEIS*): This document evaluates "weapons-usable fissile materials" (including all isotopes of plutonium except plutonium-238) that were declared "surplus" by the President in March 1995. In addition, "...plutonium that may be declared surplus in the future..." was evaluated. It is noteworthy that none of the Oak Ridge plutonium is included in the PEIS or the EIS.

Plutonium evaluated under vulnerabilities as reported in Reference 1, *Plutonium Working Group Report*: This report includes all of the Oak Ridge plutonium that is not considered "waste," nuclear reactor fuel, or spent nuclear fuel.

Plutonium evaluated under *Recommendation 94-1* as reported in Reference 2: "These criteria define an acceptable interim "end state" for stabilization and repackaging of Pu-bearing materials. The criteria do not apply to materials in working inventory, Pu associated with SNF, Pu-bearing liquids, or sealed (fabricated) Pu-bearing components. The criteria also do not apply to waste items (e.g., tools and equipment) whose surfaces are contaminated with low levels of Pu."

13

FD326

FD326–13 **Waste Management**

As described in Section 1.1, this SPD EIS addresses only surplus plutonium that is considered weapons usable. None of this plutonium is currently located at the Oak Ridge Reservation, and therefore, it is not addressed in this EIS.

TENNESSEE GOVERNOR'S OFFICE
JUSTIN P. WILSON
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OAK RIDGE PLUTONIUM INVENTORY:
(from reference 1. *Plutonium Working Group Report* dated November 1994)

Building	Kilograms	Form	Packages
Inst. Calibration, 2007	**	sealed sources	2
Analytical Lab, 2026	**	metal	1
Special Nuclear Material Vault, 3027	1.385	metal, oxide, scrap/residues, & sealed sources	106
Isotope Dispensing, 3038	**	metal & oxide	15
I & C Calibration, 3500	**	sealed sources	1
Alpha Isolation Laboratory, 3508	**	sealed sources	1
High Level Radiochemical Lab, 4501	**	solution	10
Transuranium Research, 5505	**	metal, oxide, & solution	21
Heavy Ion Accelerator, 6000	**	sealed sources	2
Linear Accelerator, 6010	**	metal & sealed sources	6
Tower Shielding Facility, 7700	**	sealed sources	4
Dosimetry Research, 7710, 7712, 7735	**	sealed sources	8
Waste Exam. Facility, 7824	**	scrap/residues & sealed sources	86
High Flux Isotope Reactor, 7900	**	metal	3
Radiochemical Engineering Development Center (REDC), 7920	1.46	oxide, solution, & sealed sources	111
Radiochemical Engineering Development Center (REDC), 7930	**	metal, oxide, scrap/residues, & sealed sources	175
Isotope Enrichment, 9204-3	**	oxide & solution	16
Uranium Casting, 9212	1.04	sealed sources	8
Source Storage, 9213	**	sealed sources	46
K-25 (ETTP), K-1025D	0.031	oxide	3
Oak Ridge Institute for Science and Education (ORISE), 2715 & Room E-38	0.028	Pu/Be sources	2
Total amount of plutonium at Oak Ridge in the Working Group Vulnerabilities Report	4.6 Kg (Vol. I, page 50)	metal, oxide, scrap/residues, & sealed sources	627

**Inventory is < 1 Kg.

Note: 1. The above is 1994 data from Reference 1, *Plutonium Working Group Report*, Vol. I, pages 50, A-18, & A-19, and Vol. II, Part 13, pages 8, 9 & 10 and has changed as follows since the report was written:

185 g has been packaged as waste and some or all is being stored in retrievable storage at ORNL/SWSA 5.

627 g has been packaged as waste and will be sent to LLNL for disposal in 2000.

609 g is Pu-238 and is being sent to REDC for possible use on the RTG program if the RTG program is transferred form the Mound Plant to ORNL.

The remainder of the plutonium listed in the above table is "working inventory" and will remain in the respective programs.

The above updated inventory information was obtained from Reference 2 and updated by L. T. Gordon, Plutonium Vulnerability Assessment Program Manager at ORNL based on July 7, 1998 data.

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FD326

2. **Oak Ridge also has approximately 40 to 70 Kg of plutonium, most of which is in the TRU waste or spent fuel categories and considered "out-of-scope" for the documents listed above.** Reference 1, *Plutonium Working Group Report*, Volume II, Part 9, pages 5-7 lists 37 facilities that contain material (plutonium waste or TRU containing no plutonium) determined to be outside the scope of that document. Page 31 of that document further clarifies plutonium that is out-of-scope for the vulnerabilities review. None of this plutonium is included in the 4.6 Kg total listed in the above table.

13

3. The above table does not include plutonium being processed at REDC for the Mark 42 Project. Plutonium waste products from the Mark 42 project will be added to the inventory explained under item 2 above.

FD326

WALTON, BARBARA A.
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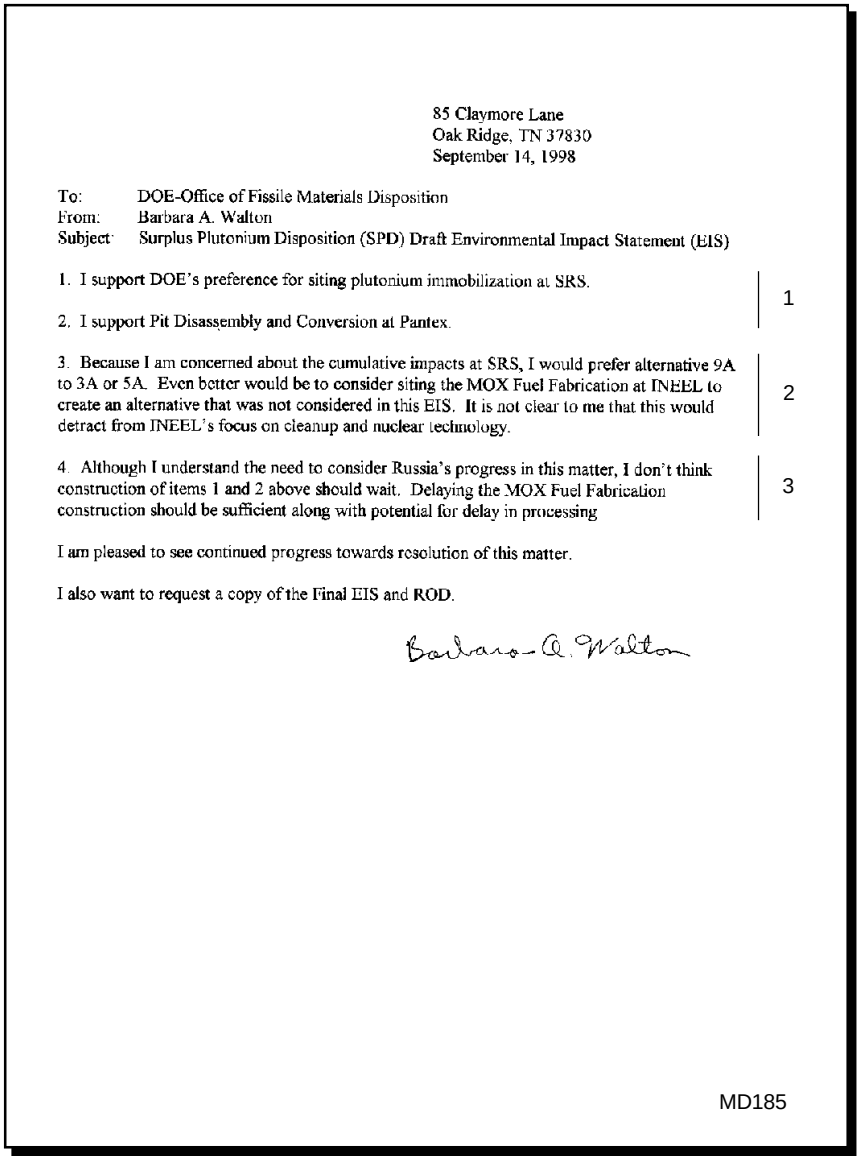

85 Claymore Lane
Oak Ridge, TN 37830
September 14, 1998

To: DOE-Office of Fissile Materials Disposition
From: Barbara A. Walton
Subject: Surplus Plutonium Disposition (SPD) Draft Environmental Impact Statement (EIS)

1. I support DOE's preference for siting plutonium immobilization at SRS. | 1

2. I support Pit Disassembly and Conversion at Pantex.

3. Because I am concerned about the cumulative impacts at SRS, I would prefer alternative 9A to 3A or 5A. Even better would be to consider siting the MOX Fuel Fabrication at INEEL to create an alternative that was not considered in this EIS. It is not clear to me that this would detract from INEEL's focus on cleanup and nuclear technology. | 2

4. Although I understand the need to consider Russia's progress in this matter, I don't think construction of items 1 and 2 above should wait. Delaying the MOX Fuel Fabrication construction should be sufficient along with potential for delay in processing | 3

I am pleased to see continued progress towards resolution of this matter.

I also want to request a copy of the Final EIS and ROD.

Barbara A. Walton

MD185

MD185–1 **Alternatives**

DOE acknowledges the commentor's support for siting the immobilization facility at SRS and the pit conversion facility at Pantex. As indicated in the revised Section 1.6, DOE prefers siting the pit conversion and MOX facilities at SRS. SRS is preferred for the pit conversion facility because the site has extensive experience with plutonium processing, and the pit conversion facility complements existing missions and takes advantage of existing infrastructure. The preferred can-in-canister approach at SRS complements existing missions, takes advantage of existing infrastructure and staff expertise, and enables DOE to use an existing facility (DWPF). DOE is presently considering a replacement process for the in-tank precipitation (ITP) process at SRS. The ITP process was intended to separate soluble high-activity radionuclides (i.e., cesium, strontium, uranium, and plutonium) from liquid HLW before vitrifying the high-activity fraction of the waste in DWPF. The ITP process as presently configured cannot achieve production goals and safety requirements for processing HLW. Three alternative processes are being evaluated by DOE: ion exchange, small tank precipitation, and direct grout. DOE's preferred immobilization technology (can–in–canister) and immobilization site (SRS) are dependent upon DWPF providing vitrified HLW with sufficient radioactivity. DOE is confident that the technical solution will be available at SRS by using radioactive cesium from the ion exchange or small tank precipitation process. A supplemental EIS (DOE/EIS-0082-S2) on the operation of DWPF and associated ITP alternatives is being prepared. Decisions on the surplus plutonium disposition program will be based on environmental analyses, technical and cost reports, national policy and nonproliferation considerations, and public input. DOE will announce its decisions regarding facility siting and approach to surplus plutonium disposition in the SPD EIS ROD.

MD185–2 **Cumulative Impacts**

DOE acknowledges the commentor's concern about the cumulative impacts from the proposed surplus plutonium disposition facilities at SRS. Section 4.32 takes into consideration existing missions at candidate sites, and analyzes the potential cumulative impacts of surplus plutonium disposition activities and other programs as well as current, past, and reasonably foreseeable

future activities at other sites. As discussed in Section 4.14, Alternative 7 considers siting the MOX facility at INEEL.

MD185–3 **Purpose and Need**

DOE acknowledges the commentor's concerns about scheduling the construction and operations of the proposed surplus plutonium disposition facilities. Pursuing both immobilization and MOX fuel fabrication provides the United States important insurance against potential disadvantages of implementing either approach by itself. The hybrid approach also provides the best opportunity for U.S. leadership in working with Russia to implement similar options for reducing Russia's excess plutonium in parallel. Further, it sends the strongest possible signal to the world of U.S. determination to reduce stockpiles of surplus plutonium as quickly as possible and in a manner that would make it technically difficult to use the plutonium in nuclear weapons again. Russian policy, however, is only one of the factors in decisions relative to the methods and timing of surplus plutonium disposition.