



SOUTHWEST RESEARCH AND INFORMATION CENTER

P.O. Box 4524 Albuquerque, NM 87196 505-262-1862 FAX: 505-262-1864 www.sric.org

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Sachiko McAlhany
NEPA Document Manager
SPD Supplemental EIS
U.S. Department of Energy
P.O. Box 2324
Germantown, MD 20874-2324

VIA: spdsupplementaleis@saic.com

RE: Comments on the Draft Surplus Plutonium Disposition Supplemental
Environmental Impact Statement (SEIS)

Dear Sachiko McAlhany:

Southwest Research and Information Center (SRIC) is a nonprofit organization established in 1971 to promote the health of people and communities, protect natural resources, ensure citizen participation, and secure environmental and social justice now and for future generations. SRIC has been actively involved with issues related to surplus plutonium management for more than two decades and to issues related to the Waste Isolation Pilot Plant (WIPP) for more than 35 years. Over the past several years, SRIC also has been involved with various activities related to Los Alamos National Lab (LANL). SRIC supports the goals of safely storing surplus plutonium, making weapons-grade plutonium unavailable for future weapons use, and safely disposing of plutonium waste. However, the existing the Department of Energy (DOE) National Nuclear Security Administration (NNSA) program is not achieving, and will not achieve, those goals.

The following comments are in addition to those made orally by Don Hancock at the August 26, 2010 Santa Fe scoping meeting; the written scoping comments submitted on September 17, 2010; the written scoping comments submitted on March 12, 2012; and the oral comments made by Don Hancock at the August 23, 2012 hearing in Santa Fe. Those comments also must be fully considered and addressed. Of course, the DOE NNSA must fully consider and address all comments received regarding the Draft SEIS.

For the many reasons that follow, DOE/NNSA cannot proceed with a *Final Surplus Plutonium Disposition Supplemental Environmental Impact Statement* (SPD Supplemental EIS). DOE must first issue a new or revised *Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS* (Storage and Disposition PEIS or PEIS). Moreover, the Draft SEIS is grossly inadequate and cannot serve as the basis for an adequate FEIS.

1. NEPA requires halting the Supplemental EIS (SEIS) and instead issuing a Programmatic EIS. DOE/NNSA is not in compliance with the National Environmental Policy Act (NEPA) and should not proceed with a SPD Supplemental EIS (DOE/EIS-0283-S2). The SPD Supplemental EIS to support decisions about surplus plutonium disposition is tiered from the December 1996 Storage and Disposition PEIS (DOE/EIS-0229). However, the surplus plutonium disposition program of the SPD Supplemental EIS is fundamentally changed from the program and alternatives discussed in the Storage and Disposition PEIS. Therefore, DOE/NNSA must issue for public comment a new Draft Storage and Disposition PEIS or a Draft Supplemental PEIS describing the surplus plutonium disposition program and its alternatives before it can proceed with an SPD Supplemental EIS. A new or supplemental Final PEIS and a revised ROD are required before the SEIS could be issued.

The SPD Supplemental EIS program is greatly changed from the Storage and Disposition PEIS in several ways. First, the PEIS considered and eliminated the alternative of disposing of surplus plutonium at the Waste Isolation Pilot Plant (WIPP) (pages 2-10 to 2-15). Nonetheless, the Draft SPD Supplemental EIS (DSEIS) includes WIPP as the preferred alternative for disposition of surplus plutonium that is not suitable for MOX fuel fabrication. Second, the PEIS did not include Los Alamos National Lab (LANL) as a pit disassembly or conversion location (pages 2-89 to 2-95). Nonetheless, the DSEIS includes LANL as a pit disassembly and conversion action alternative. Third, the PEIS stated that disposition would “meet the Spent Fuel Standard, thereby providing evidence of irreversible disarmament and setting a model for proliferation resistance.” at 1-6. Nonetheless, the DSEIS has abandoned the Spent Fuel Standard and provided no technical analysis that describes why the standard is no longer valid. Fourth, the PEIS included sites for up to 50 years of long-term storage (pages 2-2 to 2-7). However, storage at SRS and Pantex or reactor sites could be necessary for more than 50 years, given that the disposition program as described in the PEIS has not been implemented. Thus, at least four important elements of the current program were not considered in the PEIS, leading to the unavoidable conclusion that the program has dramatically changed, and a new PEIS or Supplemental PEIS is required before the SEIS can proceed.

SRIC has reiterated its position regarding the need for a PEIS to comply with NEPA repeatedly. The only response is on page 1-11 of the DSEIS:

Comment Summary: Commentors were concerned that related environmental impact statements (EISs) need to be updated before this *SPD Supplemental EIS* is issued and a decision made.

Response: This *SPD Supplemental EIS* is being prepared in accordance with applicable Council on Environmental Quality and DOE NEPA regulations. This *SPD Supplemental EIS* addresses all of the relevant issues and analysis covered in the other documents and updates the analyses where necessary. The other related EISs and supplement analyses, and the decisions announced in the RODs for these documents, remain valid and, in accordance with Council on Environmental Quality and DOE NEPA regulations, do not need to be updated before this *SPD Supplemental EIS* can be issued.

That response is not adequate for several reasons. First, asserting that the PEIS “remain[s] valid” is clearly contradicted by looking at the portions of its Chapter 2 cited above. If the PEIS remains valid, WIPP must be excluded from consideration as a disposition alternative; LANL must be excluded from consideration as a pit disassembly or conversion location; and Hanford, Idaho National Lab, and Pantex must be included as alternative pit disassembly or conversion locations. But the DSEIS provides no analysis of Hanford or INL for pit disassembly or conversion and rejects Pantex for that activity.

Pit disassembly and conversion at Pantex was evaluated in the *SPD EIS* (DOE 1999b), and DOE selected PDCF at SRS for reasons set forth in the *SPD EIS* ROD (65 FR 1608). Although DOE is reconsidering the decision to build a PDCF at SRS and is looking at other options including using PF-4 at LANL, DOE is not reconsidering pit disassembly and conversion at Pantex for the reasons set forth in the *SPD EIS* ROD. at 2-15.

That Record of Decision (ROD) of 2000 describes the attributes of SRS, but provides no analysis of why Pantex is not a reasonable alternative. Thus, the DSEIS does not adequately consider alternative pit disassembly and conversion locations included in the PEIS.

Second, the DSEIS provides no adequate analysis of the reasons to reconsider the SRS pit disassembly and conversion facility. Page 2-1 states that DOE/NNSA commissioned a study and developed options for disassembly and conversion based on the study. However, the study document (MPR 2011) is not available for public review. As of October 10, 2012, the SPD website continues to state that reference documents are “Coming Soon.” However, Council on Environmental Quality (CEQ) regulations provide:

No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons with the time allowed for comment. 40 CFR §1502.21.

CEQ further explained that requirement:

Care must be taken in all cases to ensure that material incorporated by reference, and the occasional appendix that does not accompany the EIS, are in fact available for the full minimum public comment period. 46 FR 18034. Emphasis added.

The study cannot be the basis for the alternative locations considered nor for excluding other sites because it is not “reasonably available for inspection.” The EIS process is ongoing for more than 18 years (since the 1994 public meetings on surplus plutonium disposition), so there is no justification for references not being available in a timely manner to fully comply with CEQ regulations.

Third, if the PEIS remains valid, all the disposition alternatives would meet the Spent Fuel Standard. But they do not. That Standard is abandoned, with the mere assertion that:

DOE believes that the alternatives, including the WIPP Alternative, analyzed in this *SPD Supplemental EIS* provide protection from theft, diversion, or future reuse in nuclear weapons akin to that afforded by the Spent Fuel Standard. at 2–12.

That assertion in no way serves as a rigorous technical basis for changing a fundamental requirement of the PEIS disposition program. Nor does sending surplus plutonium to WIPP provide “evidence of irreversible disarmament and setting a model for proliferation resistance” as required by the Spent Fuel Standard. Indeed, part of the WIPP alternative is processing plutonium in H Canyon, which is an actual and symbolic proliferation facility and could result in plutonium being more weapons usable than in its current state, certainly does not demonstrate either “irreversible disarmament” or “proliferation resistance.” If the Spent Fuel Standard is to be abandoned, a new or supplemental PEIS that discusses why the Spent Fuel Standard is not viable and the alternatives to that standard must be issued for public comment.

Fourth, DOE/NNSA have provided no documentation of any analysis of the PEIS and whether updating is needed. CEQ has stated:

As a rule of thumb, if the proposal has not yet been implemented, or if the EIS concerns an ongoing program, EISs that are more than 5 years old should be carefully reexamined to determine if the criteria in Section 1502.9 compel preparation of an EIS supplement. 46 FR 18036.

Thus, a 16-year old PEIS should logically be supplemented. DOE/NNSA have produced no document of a careful reexamination of the PEIS and the need to update it, and the cursory assertion in no way can serve as such a reexamination. Therefore, for those many reasons, before a SEIS can be issued, a new or supplemented PEIS must be issued for public comment, and a final PEIS and revised ROD must be issued.

2. The DSEIS misstates previous decisions and misrepresents the history of the plutonium disposition program, so much so that the SEIS is legally inadequate.

According to the DSEIS, the Proposed Action is:

DOE proposes to disposition an additional 13.1 metric tons (14.4 tons) of surplus plutonium for which it has not previously made a disposition decision; to provide the appropriate capability to disassemble surplus pits and convert surplus plutonium to a form suitable for disposition; and to provide for the use of MOX fuel in TVA and other domestic commercial nuclear power reactors. at 1-2.

It is a gross falsehood that DOE “has not previously made a disposition decision” regarding the 13.1 metric tons of surplus plutonium. The fact is that DOE previously determined that surplus plutonium would be immobilized and dispositioned to meet the Spent Fuel Standard. In its 1997 ROD, DOE determined that all surplus plutonium, including the 13.1 metric tons, would be dispositioned by either immobilization or MOX:

DOE will provide for disposition of surplus plutonium by pursuing a strategy that allows: (1) Immobilization of surplus plutonium for disposal in a repository pursuant to the Nuclear Waste Policy Act, and (2) fabrication of surplus plutonium into MOX fuel, for use in existing domestic commercial reactors (and potentially CANDU reactors, depending on future agreements with Russia and Canada). 62 FR 3029.

The 2000 ROD explicitly re-affirmed that 1997 decision:

Consistent with the January 1997 decision on the Storage and Disposition PEIS, the Department of Energy is affirming its decision to use a hybrid approach for the safe and secure disposition of up to 50 metric tons of surplus plutonium using both immobilization and mixed oxide fuel technologies and to construct and operate three new facilities at its Savannah River Site. The hybrid approach allows for the immobilization of approximately 17 metric tons of surplus plutonium and the use of up to 33 metric tons as mixed oxide fuel which would be irradiated in commercial reactors. 65 FR 1619.

Both NEPA and good government policy require DOE to base its proposals and actions on factual bases. CEQ regulations state:

NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. 40 CFR §1500.1(b).

DOE could state that it is changing its decisions – if it complies with NEPA and other federal laws – but the DSEIS is based on a fundamental falsehood that DOE “has not previously made a disposition decision.” That the DSEIS is fundamentally erroneous requires that it be stopped and that a Final SEIS not be issued.

The DSEIS also fails to recognize that the entire plutonium disposition program of the PEIS ROD has failed. Immobilization has not occurred, neither have the reactor disposition alternatives. The PEIS ROD stated:

The time to attain production scale operation in existing LWRs and CANDU reactors could be about 8–12 years, depending on the need for and source of test assemblies that might be required. The time to complete the disposition mission is a function of the number of reactors committed to the mission, among other factors. For the variants considered, the time to complete varies from about 24 to 31 years. 62 FR 3022.

While it is more than 15 years since the PEIS ROD was issued, no successful lead assembly tests have occurred, and no production scale reactor operation has occurred at all, let alone in the

designated time period. In fact, there are no production scale LWRs that have agreed to use the Mixed Oxide (MOX) fuel, and no such MOX fuel has been produced. Nor will the production of MOX fuel occur in the next few years, if ever. The completion of the disposition mission in reactors by 2028 is clearly not feasible. Thus, the reactor disposition mission has failed, and a new or supplemented PEIS is needed to discuss the reasonable alternatives.

In the April 19, 2002 Amended ROD on Surplus Plutonium Disposition that changed previous decisions, DOE announced: “Cancellation of the immobilization portion of the disposition strategies announced in those RODs due to budgetary constraints.” 67 FR 19432. No comprehensive analysis has been provided that adequately supported that decision. Since that Amended ROD, there has effectively been no immobilization disposition program. Thus, the disposition immobilization program of the PEIS ROD also has failed, and a new PEIS is needed to discuss the reasonable alternatives.

Under DOE regulations,

When required to support a DOE programmatic decision (40 CFR 1508.18(b)(3)), DOE shall prepare a programmatic EIS or EA (40 CFR 1502.4). DOE may also prepare a programmatic EIS or EA at any time to further the purposes of NEPA. 10 CFR § 1021.330(a).

DOE has provided no NEPA or legal basis that describes and analyzes why a new PEIS should not be completed. Once a new PEIS is completed, additional NEPA analyses also may be necessary for the specific surplus plutonium programs discussed in the NOIs.

3. Since DOE is re-considering the PEIS disposition program, the Preferred Alternative should be immobilization.

Like many other groups, SRIC has long supported immobilization of surplus plutonium and continues to believe that option should be implemented. Thus, in the new NEPA analysis, SRIC urges that the preferred alternative be some form(s) of immobilization for all of the surplus plutonium. The NEPA analysis must discuss immobilization to meet the Spent Fuel Standard as well as any reasonable alternatives to do not meet that standard, if DOE persists on abandoning that requirement. If DOE is proceeding with “stardust” or “inert material” for some plutonium oxide “to reduce the plutonium content to less than 10 percent by weight and inhibit plutonium material recovery” (at 2-8), it must describe the process, whether it could be applied to more than 6 metric tons of surplus plutonium, and whether it is a reasonable alternative for up to 50 metric tons of surplus plutonium. The NEPA analysis must discuss how all of surplus pit plutonium could be immobilized or otherwise “inhibited from plutonium material recovery” and stored at SRS in addition to the detailed analysis of how the 6 metric tons of non-pit plutonium could be immobilized. The NEPA analysis must also discuss how the Mixed Oxide Fuel Fabrication Facility (MFFF) could be modified to be part of the immobilization program, as well as discussing how it could be modified for pit disassembly and conversion activities.

Given the need for a new PEIS for surplus plutonium disposition and the need for an immobilization program, SRIC strongly objects to the statements in the DSEIS that DOE will not reconsider decisions already made to disposition surplus plutonium. At least one immobilization

facility must be considered a reasonable alternative and examined in detail. In addition, how at least some of the surplus plutonium could be vitrified in the Defense Waste Processing Facility must be considered a reasonable alternative and examined in detail. Such an analysis must also compare other immobilization methods with using H-Canyon for costs, environmental impacts, and proliferation risks.

4. Since DOE is reconsidering previous decisions, it must consider that the MOX preferred alternative should be cancelled, or its status revised and updated.

Revisiting the MOX preferred alternative is required for policy, NEPA, and legal reasons. First, if “budgetary constraints” caused the cancellation of the immobilization program in 2002, the current more extreme federal budgetary constraints and the much greater costs of MOX than previously estimated should result in canceling the MFFF. Any NEPA analysis must fully discuss why the cancellation should not occur, if DOE plans to continue the MFFF. Second, the DSEIS discusses LANL activities solely as supporting the MFFF. A reasonable alternative is to not use LANL for the MOX programs (as has been the long-standing policy). If not using LANL would mean that MFFF would not operate or would have less feedstock than its proposed 34 metric-ton capacity, then not proceeding with the MFFF is a reasonable alternative. Third, no U.S. light-water reactor (LWR) reactor company (including the Tennessee Valley Authority) has agreed to use MOX fuel, so it is incumbent upon DOE to develop alternatives to address the fact that much or all of the proposed 34 metric tons of surplus plutonium designated for the MFFF would not be used so that disposition program could not be implemented. Fourth, the more than \$4 billion already spent on MFFF and PDCF does not mean that either or both facilities will operate as previously designed. Another reasonable alternative would be to modify the MFFF so that it could carry out the disassembly and/or conversion activities, instead of using LANL. Fifth, MOX used in commercial reactors is not “disposed.” After being in the reactor, the MOX fuel will be spent nuclear fuel and either has to be stored for decades at the reactor site or some other storage site, since there is no disposal facility being developed under the Nuclear Waste Policy Act (NWPA). The NEPA analysis must also include the environmental impacts of long-term storage of the irradiated MOX fuel at any reactor that uses such fuel. Even if there were a geologic repository being developed under the NWPA, it is not likely to have the capacity for MOX reactor spent fuel because the current legal capacity of 70,000 metric tons could be fully used by existing commercial reactor spent nuclear fuel and defense high-level waste and spent fuel from MOX fuel is years away and therefore would likely be far down the queue of waste in a first repository. The Nuclear Waste Technical Review Board also has pointed out that MOX fuel creates numerous storage and security problems that are greater than for low-enriched uranium fuel. The DOE analysis must fully discuss and respond to those issues identified in the Board’s December 30, 2011 letter to Peter Lyons of DOE. (<http://www.nwtrb.gov/corr/bjg162.pdf>).

DOE NNSA should recognize that the surplus plutonium cannot be made into an “asset” by being converted to MOX. Rather, that plutonium should be considered and handled carefully as a waste, immobilized (or otherwise placed in a proliferation-resistant form), and stored at SRS or some other site. Spending billions of dollars more to try to make the surplus plutonium usable as MOX only serves to increase the costs of managing the plutonium, while also risking proliferation. The new NEPA analysis should discuss the alternative that the

MFFF will fail or that there will not be sufficient commercial reactors to use the MOX fuel. The new NEPA analysis must discuss the alternatives in such circumstances.

The new NEPA analysis should describe in detail the environmental impacts and revised costs of the MFFF, use of MOX fuel in reactors, storage and disposal of all wastes from MOX reactors so that there is current analysis of the environmental impacts and costs of both the MOX and immobilization alternatives, as well as any other alternatives that are being considered.

SRIC opposes MOX, which is a proliferation risk, creates many public health and safety dangers, has enormous economic costs, and there are no U.S. reactors capable and willing of using it. Regardless of policy preferences, a new or supplemental PEIS fully discussing and analyzing surplus plutonium disposition options is required as a matter of law.

5. WIPP as an disposition disposal alternative is not adequately analyzed because the actual capacity does not accommodate 6 metric tons of surplus plutonium.

In its previous comments SRIC identified numerous problems regarding use of WIPP and stated that a comprehensive technical analysis was necessary to show that WIPP is a reasonable alternative. The DSEIS fundamentally fails to include such an adequate analysis, as required by NEPA.

The DSEIS states:

Since the TRU waste projections from baseline activities at SRS and LANL are already included in subscribed estimates for these sites, implementation of surplus plutonium disposition would leave approximately 2,700 cubic meters (95,000 cubic feet) to 13,700 cubic meters (480,000 cubic feet) of unsubscribed capacity at WIPP to support other activities. at 2-43.

The total WIPP capacity for TRU waste disposal is set at 175,600 cubic meters (6.2 million cubic feet) pursuant to the Waste Isolation Pilot Plant Land Withdrawal Act, or 168,485 cubic meters (5.95 million cubic feet) of contact-handled TRU waste (DOE 2008k:16). Estimates in the *Annual Transuranic Waste Inventory Report – 2011* indicate that approximately 148,800 cubic meters (5.25 million cubic feet) of contact-handled TRU waste would be disposed of at WIPP (emplaced volume plus anticipated volume) (DOE 2011k: Table C-1), approximately 19,700 cubic meters (696,000 cubic feet) less than the contact-handled TRU waste permitted capacity. Therefore, approximately 19,700 cubic meters (696,000 cubic feet) of unsubscribed contact-handled TRU waste capacity could support the waste generated by other missions, such as the actions analyzed in this *SPD Supplemental EIS*. at 4-54.

There are numerous inadequacies in those statements. First, the WIPP Land Withdrawal Act (LWA) does not require that the entire capacity of 175,564 cubic meters be used, nor that the entire 168,485 cubic meters of contact-handled (CH) capacity be used.

Second, the actual capacity of WIPP is less than 175,564 cubic meters because of the way the facility has been managed since it received its first waste shipment in March 1999. As the Attachment shows, Panels 1-5, which are closed, contain 75,770.85 of CH waste. If the remaining five panels dispose of the same amount of CH waste, the projected WIPP disposal capacity would be 151,542 cubic meters, or 2,742 cubic meters more than the estimated amount of CH waste in the 2011 Inventory. That “unsubscribed” amount is far less than the amounts of CH-TRU waste included in the DSEIS. Furthermore, just as the Attachment shows that the actual capacity of remote-handled (RH) waste is no more than 3,545 cubic meters (or about half of the legal limit), the table also shows that the legal CH capacity is unlikely to be available. The CH capacity of each panel is 18,750 cubic meters. But panel 6, which is currently being filled, will almost certainly have less than that amount of waste, thereby reducing the actual remaining capacity to less than 168,485 cubic meters.

Third, the DSEIS does not discuss the DOE decision that using some of the CH capacity for RH waste in shielded containers is a higher priority than surplus plutonium disposition. In response to DOE’s request, on August 8, 2011, the Environmental Protection Agency (EPA) approved use of RH waste in shielded containers. http://www.epa.gov/radiation/docs/wipp/shielded_container/shieldedcontainers_final_080811.pdf In its pending permit modification request to allow RH waste in shielded containers to the New Mexico Environment Department, DOE states that up to 6 percent of the floor space in panels 7-10 could be taken by RH waste in shielded containers. Since the total CH capacity of those four panels is 75,000 cubic meters (18,750x4), 6 percent is 4,500 cubic meters. Using actual practice for the first five panels, that amount of RH waste in shielded containers added to the projected 148,800 cubic meters totals 153,300 cubic meters or more than 1,750 cubic meters more than the projected disposal capacity. In that case, there would be no space for any of the surplus plutonium included in the DSEIS. Furthermore, the actual amount of space used by RH waste in shielded containers could be much more than the estimate in the permit modification request. That estimate is based on full three-packs of RH waste in shielded containers, but with dunnage drums, the space required for RH waste in shielded containers could be up to three times as much as projected. The use of dunnage drums in waste shipments and disposal is one reason that so much of WIPP’s disposal capacity has been unused.

Fourth, it is not correct that the “baseline activities at SRS and LANL are already included in subscribed estimates for these sites.” The 2011 WIPP Inventory does not include waste stream SR-221H-PuOx, which is the “pilot” program of pipe overpack containers with “inert material.” The decision to use LANL for some pit disassembly has not been made and the TRU waste from those activities are not included in the 2011 Inventory. In addition, there are substantial amounts of TRU waste below ground at Area G at LANL that are not included in the 2011 Inventory because a decision has not yet been made about those wastes. The possibility that some below ground waste at LANL, in addition to the amounts included in the 2011 Inventory, would go to WIPP must be considered. Such additional waste would further reduce “unsubscribed” capacity at WIPP. Rather than asserting that “baseline activities” are included, DOE must provide an analysis that confirms that assertion, must analyze the possibility that additional amounts of TRU waste would go to WIPP, and fully discuss the actual capacity limits of WIPP. An adequate analysis must include not just the legal capacity of WIPP, but also the actual capacity. Such an analysis must address the capacity shortfall. Such an analysis must address other wastes being considered for disposal at WIPP, including RH waste in shielded containers.

In addition to the technical need for such capacity analysis, NEPA legal requirements necessitate such a cumulative analysis. CEQ regulations state that an EIS must consider cumulative impacts:

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 CFR §1508.7

Regarding WIPP, the various proposed actions are significant.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. 40 CFR §1508.27(b)(7).

The various proposals that cumulatively affect the ability of WIPP to meet its longstanding mission to dispose of legacy TRU waste, the possibility that surplus plutonium would displace waste that is in the WIPP Inventory, that such additional waste may exceed the actual, not just the legal, capacity must be comprehensively analyzed, which has not been done in either a programmatic or WIPP-specific EIS.

6. The impacts of bringing the 6 metric tons of surplus plutonium to WIPP have not been adequately analyzed.

Although SRIC's scoping comments pointed out numerous issues that had to be included in an adequate NEPA analysis, the DSEIS does not provide that analysis. Regarding transportation, the DSEIS concludes:

The highest risk to the public due to incident-free transportation would be under the WIPP Alternative, where up to 9,800 truck shipments of radioactive materials, wastes, and unirradiated MOX fuel would be transported to and/or from SRS (see Table E-10). at E-47.

However, that analysis understates the transportation impacts. The analysis assumes full loads of surplus plutonium in TRUPACT-IIs or HalfPACTs. However, actual WIPP experience shows that a significant number of dunnage drums are included in shipments, thereby increasing the number of shipments. DOE must analyze the number of shipments to WIPP based on the historic number of dunnage drums. Such an analysis will increase the number of shipments, and therefore the risks to crews and the public from such shipments. That analysis is not covered by the uncertainties described in Appendix E.

The DSEIS also states:

It is assumed for analysis purposes in this *SPD Supplemental EIS* that WIPP would be available for the duration of the surplus plutonium activities under each alternative. at 4-54.

That assumption is not reasonable. The WIPP Hazardous Waste Permit describes WIPP's operational period as 25 years (see Attachments B, G, and H1), thus it is reasonable to assume that the last shipments to WIPP could be in 2023. In that eventuality, much of the surplus plutonium would not be shipped to WIPP. An adequate NEPA document would analyze the alternative that some or all of the 6 metric tons would not come to WIPP and would analyze all of the impacts and costs of extending the WIPP operations beyond 2023.

The DSEIS states:

The loaded POCs would be transferred to E-Area, where WIPP waste characterization activities would be performed: nondestructive assay, digital radiography, and headspace gas sampling. Once the POCs have successfully passed the characterization process and meet WIPP waste acceptance criteria, they would be shipped to WIPP in Transuranic Package Transporter Model 2 (TRUPACT-II) or HalfPACT shipping containers. at 2-8.

The DSEIS includes no analysis of how much of the waste might not meet WIPP waste acceptance criteria, whether any of those criteria might have to be changed to accommodate the surplus plutonium, whether other requirements of the WIPP Hazardous Waste Permit could be met or whether they would need to be modified, and whether additional shipping containers (numbers of TRUPACT-IIs or HalfPACTs or new NRC-certified shipping containers) would be required.

The DSEIS includes no analysis of how surplus plutonium would be emplaced at WIPP, including whether additional panels would be needed, whether different emplacement procedures would be needed, and whether the surplus plutonium would take space such that some waste in the WIPP Inventory could not be accommodated or its shipment to WIPP would be delayed while surplus plutonium was shipped first, and the impacts of longer term storage at sites with "displaced" waste. There is no analysis of the costs of extending the WIPP operational lifetime beyond 25 years, nor what changes in the facility – additional mining, upgrading of underground drifts or waste hoist, maintenance and improvements of the Waste Handling Building – and additional transportation containers could be required.

The DSEIS does not include or reference a new performance assessment that shows that the surplus plutonium would meet the WIPP certification requirements of 40 CFR §191 and §194.

The DSEIS does not analyze the impacts on WIPP operations of international inspections of disposition facilities, which are part of the PEIS ROD.

In addition, all disposition facilities will be designed or modified, as needed, to accommodate international inspection requirements consistent with the President's Nonproliferation and Export Control Policy. 62 FR 3028.

SRIC's scoping comments pointing out the analysis by the *Global Fissile Materials Report 2011* (<http://fissilematerials.org/library/gfmr11.pdf>):

“U.S. and Russian disposition of plutonium in MOX is to be monitored by the IAEA but the several tons of plutonium in plutonium-contaminated waste that is being disposed of in the WIPP facility is not. This will create a large uncertainty for any future international attempt to verify U.S. plutonium production and disposition.” at 18.

Nonetheless, the DSEIS includes no discussion of the impacts of the existing uncertainty from disposal at WIPP over the past decade, nor about the increasing uncertainty and impact if up to 6 metric tons of additional surplus plutonium is disposed at WIPP.

Therefore, for all of those reasons, the DSEIS analysis of the impacts of using WIPP is inadequate. Such an inadequate analysis does not provide the technical or legal basis for considering WIPP to be a reasonable alternative, nor does it provide a basis to include WIPP in a final SEIS.

7. LANL should not be considered a reasonable alternative location.

As noted in #1, LANL was not included as a reasonable alternative location for pit disassembly and conversion activities, so it cannot be considered until a new or supplemented PEIS is issued for public comment, and a final PEIS and a revised ROD are issued.

The analysis in the DSEIS is grossly inadequate. DOE/NNSA appears to have no specific proposal as to the amount of surplus plutonium that could come to LANL, despite SRIC's scoping comments specifically stating that such information is required. Without such information, DOE cannot provide an adequate NEPA analysis, nor can the public understand the proposal and effectively participate, as required by NEPA. Figure 1-7 (and Figure 2-3) indicate that 41.1 metric tons of surplus plutonium would require pit disassembly and conversion. The DSEIS also states:

Regardless of the disposition alternative selected, pit disassembly and conversion would be necessary for 35 metric tons (38.6 tons) of surplus plutonium. at 1-10 (and at 2-2).

The table on page 4-3 of the DSEIS shows MOX fuel being 34 metric tons, 41.1 metric tons, or 45.1 metric tons, so pit disassembly and conversion could potentially be up to 45.1 metric tons. Table B-3 indicates that LANL could be used for from 2 metric tons to 35 metric tons, but that table does not indicate why LANL could not be used for up to 45.1 metric tons of MOX fuel. Clearly, DOE has not identified how much plutonium would come to LANL and under what conditions specific amounts of plutonium would or would not come to LANL. The wide disparity of the amount of plutonium that could be at LANL makes an adequate NEPA analysis very difficult and confusing, at best, and impossible at worst.

That problem of insufficient information about the amount and forms of plutonium is not clearly addressed in Appendix F, which never indicates that maximum amount of plutonium at LANL and over what timeframe the impacts are calculated. Moreover, despite SRIC scoping comments, the DSEIS does not fully analyze the potential for criticality accidents; does not fully analyze the storage requirements of surplus plutonium awaiting processing and plutonium that has been processed; does not include the history of surplus plutonium shipments to and from LANL as part of the basis for the impacts of transportation analysis; and does not include the history of worker doses from routine operations and from accidents as part of the worker impact analysis.

Despite SRIC's scoping comments that stated that a full analysis was required, the DSEIS does not fully discuss the current missions of LANL and how a large expansion of pit disassembly and conversion would impact its other existing missions. The DSEIS does not analyze the overall impacts of the large expansion of pit disassembly and conversion on compliance with the Consent Order of 2005. To SRIC, it appears that such an expansion is directly contradictory to the requirements for cleanup and closure of Area G at LANL, because no additional waste from new surplus plutonium missions should be stored or disposed at Area G or other locations at LANL. The DSEIS does not discuss the existing financial shortfalls in the annual budgets for LANL cleanup and how an expansion of pit disassembly and conversion would impact the LANL budget, including cleanup funding.

Despite scoping comments from SRIC and others, the DSEIS analysis of seismic risks is grossly inadequate, and thus the environmental impacts of pit disassembly and conversion activities are seriously underestimated. An adequate NEPA analysis would include current seismic risk analysis, inadequacies of existing analysis, and more conservative analysis.

Despite the scoping comments of SRIC and others, the DSEIS analysis of environmental justice is grossly inadequate. Those comments noted that a discussion was required of whether the nearby pueblos have affirmatively supported that new mission, but the DSEIS has no such information. If the pueblos have not given such support, as SRIC believes is the reality, the analysis must include the basis for considering such an alternative, which the DSEIS does not do. The DSEIS also does not include any discussion of the government-to-government consultation that is required and its results.

Clearly, the DSEIS analysis is totally inadequate regarding the alternatives and impacts of using LANL. Such an inadequate DSEIS cannot be used as the basis for a final SEIS.

8. The impacts of long-term storage of the surplus plutonium at SRS must be fully analyzed. The *Technical Summary Report for Long-term Storage of Weapons-Usable Fissile Materials*, July 17, 1996, part of the Storage and Disposition PEIS documentation, discussed the "at least up to 50 years" storage system for plutonium and Highly Enriched Uranium (HEU). The new NEPA analysis should update that Report and re-analyze the storage impacts and costs at the K Area Complex at SRS, including the time period for which that area can "ensure the continued safe storage." The analysis must include the impacts of storing the plutonium in its current forms and in the various forms considered possible. The analysis must include the impacts of

bringing additional pits from Pantex and storing them, or treating and storing the resulting disassembled pits at SRS for more than 50 years.

9. The impacts of long-term storage of plutonium pits at Pantex must be fully analyzed.

The *Final Environmental Impact Statement for the Continued Operations of the Pantex Plan and Associated Storage of Nuclear Weapons Components* (SWEIS, DOE/EIS-0225) analyzed the impacts of plutonium pits storage at Pantex for approximately 10 years. Decisions announced in the 1997 ROD included:

Continue providing interim pit storage at Pantex Plant and increase the authorized storage level to 20,000 pits: This decision will allow the Pantex Plant to continue nuclear weapon dismantlement operations scheduled over the next 10 years until disposition decisions are made and implemented. 62 FR 3883.

The most recent Supplement Analysis (SA) in 2008 analyzes the impacts of operations through 2011. DOE/EIS-0225/SA-04 at 1-4. Clearly, neither the Pantex SWEIS nor the SA provides adequate NEPA analysis for long-term storage of plutonium pits. Given that the surplus plutonium disposition program has failed, the long-term storage of plutonium pits at Pantex must for further analyzed, both in a new or supplemented PEIS and in a new or supplemental Pantex SWEIS.

10. The costs of all options must be analyzed.

The DSEIS includes no cost analysis of the alternatives. This is a serious inadequacy, especially given DOE's past decision in 2002 to cancel immobilization because of "budgetary constraints." Further, it appears that an important factor in reconsidering the PDCF is because of its costs and the rising costs of the MFFF. CEQ regulations state:

Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail. 40 CFR §1500.1(b).

Costs are clearly significant regarding decisions to be made about surplus plutonium storage and disposition. DOE/NNSA, the public, the Congress, and the administration must and will evaluate the alternatives based on costs and "budgetary constraints." That the DSEIS does not include the historic actual costs of the surplus plutonium storage and disposition program or the estimated future costs of the alternatives is a serious inadequacy. Such an inadequate DSEIS is not an adequate basis for a Final SEIS.

11. The comment period must be extended.

As already noted on page 3, the study regarding pit disassembly and conversion alternatives is not available. Moreover, many other references listed in the DSEIS are not publicly available including at reading rooms and they are not available on the SPD website, despite the NEPA requirement that all such documents be available for at least 45 days, the minimum time for public comment on an EIS. 40 CFR §1506.10(c), 10 CFR §1021.313(a). Therefore, if DOE is

continuing the SEIS process, it must extend the public comment period for at least 45 days from the date that all references are made publicly available (which should include availability on the SPD website). The only option to avoid such an extended comment period is to terminate the SPD SEIS process.

Thank you for your careful consideration of, and response to, these and all other scoping comments.

Yours truly,

A handwritten signature in black ink, appearing to read "Don Hancock". The signature is written in a cursive style with a large initial "D".

Don Hancock

WIPP DISPOSAL VOLUMES (cubic meters)											
(as of January 14, 2012)											
	Panel 1	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6	Panel 7	Panel 8	Panel 9	Panel 10	Totals
55-gal. Drums	38,139	23,865	8,394	12,858	21,255	6,339					110,850
Volume	8,009.19	5,011.65	1,762.74	2,700.18	4,463.55	1,331.19					23,278.50
SWB	1,239	3,176	1,730	1,405	2,200	741					10,491
Volume	2,329.32	5,970.88	3,252.40	2,641.40	4,136.00	1,393.08					19,723.08
TDOPS	35	1,451	2,227	1,048	788	131					5,680
Volume	157.50	6,529.50	10,021.50	4,716.00	3,546.00	589.50					25,560.00
85-gal drums	2	0	0	3	0	0					5
Volume	0.64	0.00	0.00	0.96	0.00	0.00					1.60
100-gal. Drums	0	1,278	5,409	11,050	9,951	1,218					28,906
Volume	0.00	485.64	2,055.42	4,199.00	3,781.38	462.84					10,984.28
SLB2s	0	0	0	0	0	5					5
Volume	0.00	0.00	0.00	0.00	0.00	36.95					36.95
R-Lid 72-Bs	0	0	0	198	246	74					518
Volume	0.00	0.00	0.00	176.22	218.94	65.86					461.02
F-Lid 72 Bs	0	0	0	0	18	0					18
Volume	0.00	0.00	0.00	0.00	16.02	0.00					16.02
CH volume	10,496.65	17,997.67	17,092.06	14,257.54	15,926.93	3,813.56					79,584.41
RH volume	0.00	0.00	0.00	176.22	234.96	65.86					477.04
Sources: Container numbers: http://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf											
Container volumes: http://www.nmenv.state.nm.us/wipp/documents/Part3.pdf											
RH legal limit											
RH canister capacity				176.22	234.96	534	650	650	650	650	7,079
CH legal limit											
CH capacity	10,496.65	17,997.67	17,092.06	14,257.54	15,926.93	18,750.00	18,750.00	18,750.00	18,750.00	18,750.00	168,485
Cumulative	10,496.65	28,494.32	45,586.38	59,843.92	75,770.85						
2011 Inventory remaining (DOE/TRU-11-3425, pages 426-427)											
CH						76,561					
RH (undercounted)						3,459					
RH (per Patterson - 1/26/2012)						5,336					
Note: Numbers in red are based on WIPP permit volumes and differ from the volumes in the source document, which undercounts the volumes..											
Compiled by: Don Hancock, Southwest Research and Information Center; 505/262-1862; sricdon@earthlink.net											