SOUTHWEST RESEARCH AND INFORMATION CENTER
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September 17, 2010

RE: Scoping comments on the Notice of Intent to Modify the Scope of the Surplus Plutonium Disposition Supplemental Environmental Impact Statement and Conduct Additional Scoping

Southwest Research and Information Center (SRIC) is a private, 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.

The following comments are in addition to those made orally by Don Hancock at the August 26, 2010, Santa Fe scoping meeting. The Department of Energy (DOE) National Nuclear Security Administration (NNSA) should fully consider and address all comments.

Additional NEPA analysis is required before the draft EIS (DEIS) can be issued

SRIC believes that further National Environmental Policy Act (NEPA) analysis is required for the Surplus Plutonium Program. The *Storage and Disposition of Weapons-Usable Fissile Materials Programmatic EIS (Storage and Disposition PEIS)* did not analyze geologic disposal at WIPP. Indeed, that PEIS specifically excluded WIPP along with 26 other disposition options. PEIS at 2-13 and 2-15. The PEIS also did not analyze long-term storage for more than 50 years at SRS or reactor site(s), which now appears necessary. Thus, at least two important elements of the current program were not considered, leading to the obvious conclusion that the program has changed and a new PEIS is required before the DEIS can proceed. Under its 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). Once a new PEIS is completed, additional NEPA analyses also may be necessary.

Preferred alternative - immobilization

Like many other groups, SRIC has long supported immobilization of surplus plutonium and continues to believe that option should be implemented. Thus, if there is a DEIS, SRIC urges that the preferred alternative be some form of immobilization. The DEIS must discuss how all of the 13 metric tons of plutonium could be immobilized and stored at SRS in addition to the detailed analysis of how the 6 metric tons of non-pit plutonium could be immobilized. Further, DOE should reconsider the 2002 decision to cancel the immobilization plant. That decision was

a mistake. In the April 19, 2002 Record of Decision (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 *Federal Register* 19432. No comprehensive analysis has been provided that adequately supported that decision. Consequently, SRIC strongly objects to the statement in the Notice of Intent (NOI) that the "Supplemental EIS will not reconsider decisions already made to disposition surplus plutonium." 75 *Federal Register* 41851, July 19, 2010. An immobilization plant must be considered a reasonable alternative in the DEIS and examined in detail. In addition, how the surplus plutonium could be vitrifed in the Defense Waste Processing Facility must be considered a reasonable alternative in the DEIS and examined in detail. Such an analysis must also compare other methods with using H-Canyon for costs, environmental impacts, and proliferation risks.

<u>WIPP as an alternative</u>

SRIC has seen no technical analysis – and the NOI does not provide such analysis nor reference one – that justifies WIPP as a reasonable alternative. The two previous EISs *(Storage and Disposition PEIS and Surplus Plutonium Disposition EIS (SPD EIS))* have not considered WIPP as a disposal option for MOX or immobilization or non-pit plutonium. Thus, unless there is such a technical analysis, WIPP should be eliminated as a reasonable alternative. If there is such a technical analysis, it should be released to the public now (or when it is completed) and not delayed until the new PEIS or DEIS is issued.

If WIPP is considered in the new PEIS or DEIS, issues that must be discussed in detail include:
1. Would the plutonium fit into WIPP? WIPP is currently planned for more than 7 metric tons of plutonium. The new PEIS or DEIS must discuss how an additional 6 metric tons could be disposed at WIPP. Would WIPP's legal capacity of 6.2 million cubic feet of waste have to be increased? What would be the waste form(s)? Would existing requirements for waste characterization have to be changed? Would the waste comply with all provisions of the renewal WIPP Hazardous Waste Act permit, which will be issued by the end of 2010? How would such additional plutonium affect WIPP's operations? What would be the schedule for bringing the waste to WIPP? How much would it cost to process and ship the waste? What are the transportation impacts, including to populations along the transportation route? What have already been the transportation impacts of bringing the plutonium from Hanford, WA; Livermore, CA; and Los Alamos, NM to SRS? What are the cumulative impacts of additional transportation of the plutonium from SRS to WIPP?

2. What are existing forms of the non-pit plutonium? There must be a comprehensive analysis of the existing plutonium and what processing or blending would be required to meet existing WIPP Waste Acceptance Criteria (WAC). The analysis must include a detailed discussion of "star dust" being used as part of the blending process for the non-pit plutonium. The attributes of "star dust" must be described in detail, including its impacts on WIPP WAC, since that substance is not mentioned in the existing or proposed WIPP renewal permit or other documents. The new PEIS or DEIS analysis also must include the full range of environmental impacts, and costs and schedules of such processing, transportation, and disposal of non-pit plutonium at WIPP.

3. What changes in existing laws would be required? Those laws include the WIPP Land Withdrawal Act and repeated congressional appropriation act requirements prohibiting funds for

disposal at WIPP "of plutonium in excess of 20 percent by weight for the aggregate of any material category on the date of enactment of this Act, or is generated after such date."

4. What additional NEPA analysis is necessary to support a decision to bring additional plutonium waste to WIPP, in addition to the new PEIS discussed above? The need for a supplemental or new Waste Management PEIS and the need for a supplemental or new WIPP EIS must be examined in detail, since those existing documents do not provide analysis of the non-pit surplus plutonium coming to WIPP.

5. What are the impacts of the surplus plutonium on the WIPP performance asessment? What changes would be required in the Compliance Recertification Application that is to be submitted to EPA in 2014?

Eliminate MOX as a disposition alternative

The new PEIS or DEIS should describe in detail the environmental impacts and costs of the MOX plant, 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. Further, MOX used in commercial reactors is not "dispositioned." After being in the reactor, the MOX fuel will be waste and either has to be stored for decades at the reactor site or transported to some other storage site, since there is no disposal facility for the waste. DOE NNSA should recognize that the surplus plutonium cannot be made into an "asset" by MOX. Rather, that plutonium should be considered and handled carefully as a waste, immobilized and stored at SRS. 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 PEIS (and the DEIS, if it is issued) should discuss the alternative that the MOX Fuel Fabrication Facility (MFFF) will fail or that there will not be sufficient commercial reactors to use the MOX fuel. What happens in such circumstances? The analysis must also include the environmental impacts of long-term storage of the irradiated MOX fuel at the reactors.

Analyze the impacts of long-term storage of the surplus plutonium at SRS

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 PEIS (and the DEIS, if it is issued) should 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," as your fact sheet states. The analysis must include the impacts of storing the plutonium in its current forms and in the various forms considered possible.

Hold public hearings on the DEIS in both Albuquerque and Santa Fe

SRIC thanks you for holding a scoping meeting in the Santa Fe/Albuquerque area, as requested in the March 5, 2010, letter signed by five organizations, including SRIC. SRIC reiterates that

letter's request that public hearings on the DEIS be held in both Santa Fe and Albuquerque, if WIPP is considered. A copy of that letter is attached.

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

Yours truly,

Don Hancock