In Quietly Released Environmental Document, DOE Refuses to Analyze Disposal of Canadian Liquid High-Level Nuclear Waste in Canada, Supports Processing and Dumping at Savannah River Site

Under Guise of Nuclear Non-Proliferation, New “Supplement Analysis” Dodges Substantive Discussion of Terrorist Risks and Environmental Impacts

Columbia, SC – The U.S. Department of Energy has secretly conducted and quietly released a flawed environmental analysis which affirms the controversial plan to import liquid high-level nuclear waste from Canada for processing and dumping at DOE’s Savannah River Site (SRS) in South Carolina.

Not wanting to draw further attention to the associated terrorist threat and environmental risks of the import of liquid high-level nuclear waste from Canada’s Chalk River Laboratories, the environmental document was quietly posted on the DOE’s Office of NEPA Policy and Compliance website on Wednesday, December 2, 2015, the day of the terrorist attack in California. In a manner that undermines government openness, the document was posted without a news release or public notice or email alert about it.

The “Supplement Analysis”, dated November 2015, entitled “Foreign Research Reactor Spent Nuclear Fuel Acceptance Program: Highly Enriched Uranium Target Residue Material Transportation,” is a lower level DOE environmental document that can be prepared in secret, as was the case with this document, and that does not require public input or public meetings.

The liquid waste shipment to SRS would consist of approximately 6000 gallons of liquid nuclear waste, now stored in a single tank at Chalk River Labs in Ontario, in up to 150 shipments, each with four 15-gallon containers in a larger “Type B” shipping cask licensed by the U.S. Nuclear Regulatory Commission. The document states that the highly radioactive liquid would be temporarily stored in a tank in the aging H-Canyon reprocessing plant and processing to remove uranium would be done in batches. The resulting waste would be dumped into the SRS nuclear waste tanks, complicating and delaying the clean-out of the tanks. The waste would be stranded at SRS, having no known exit path from the site.

“The proposal must be immediately terminated as is absolutely no need to import this dangerous liquid nuclear waste to SRS given the environmental and terrorist risks it poses,” according to Tom Clements, director of the public interest organization Savannah River Site Watch, based in Columbia, South Carolina. “It is highly embarrassing and reckless that DOE is proposing to make a potentially vulnerable cross-border shipment of liquid nuclear waste when the material can be securely managed in Canada and not put on our highways at this time of a heightened national security crisis,” added Clements.
SRS Watch has called for preparation of a full “environmental impact statement” (EIS) on the proposal, requiring public participation and a more in-depth analysis of environmental impacts, terrorist threat and impacts to the clean-up and operation of the SRS tank system.

Representative Brian Higgins (Buffalo, New York), where the liquid waste could cross the U.S.-Canada border via the Peace Bridge, has also called for a full EIS to be prepared.

The material in question is a by-product of processing of U.S-origin uranium high enriched uranium (HEU) targets used to produce medical isotopes. A large amount of similar material has been solidified and stored in Canada and not proposed to be exported to the U.S. The deal to ship the liquid waste to SRS is reported by SRS officials to be worth $60 million.

The HEU in the material to be low enriched uranium unsuitable for nuclear weapons if it was able to be extracted could be “denatured with depleted uranyl nitrate to render it harmless from a weapons perspective. Despite appeals for over two years by SRS Watch, DOE has still refused to analyze this effective method to manage the waste in Canada.

DOE has not been able to give any explanation at SRS Citizens Advisory Board meetings as to why the option to manage the waste in Canada has not been analyzed. It is unknown why DOE has staunchly refused to conduct this analysis, but SRS Watch believes that the guiding hand is the $60-million business deal for SRS and contractor Savannah River Nuclear Solutions and not any real concern about proliferation or terrorism or negative impact to the SRS high-level waste system.

The environmental document released on December 2 is an update of a similar “supplement analysis” document released by DOE in March 2013. That document was also prepared by DOE in secret and with no public meetings or input.

In mid-October, the U.S. House of Representatives passed a bill with a vote of 416-0 that would require the Office of Homelands Security to prepare “a terrorism threat assessment regarding the transportation of chemical, biological, nuclear, and radiological materials through United States land borders and within the United States.” Rep. Higgins introduced the legislation given his concern about the liquid nuclear waste shipment by the Buffalo, NY area. The bill has not become law and its status in the U.S. Senate is unclear but SRS officials are aware of the legislation and it is believed that it has given them and Chalk River Laboratories officials pause about moving ahead with the shipment, which SRS officials have indicated could begin as soon as May 2016.

**According to SRS Watch, the Supplemental Analysis:**

Fails to analyze the viable option of processing, denaturing the liquid HEU content (with depleted uranyl nitrate), storage and disposal of the liquid waste in Canada;

Fails to reveal why this waste is being considered for export when similar liquid nuclear waste material has been managed in Canada;

While acknowledging that generic terrorist risks exist and that “DOE recognizes that an attack against radioactive material cargo does not have to result in diversion of the material to cause very undesirable consequences, such as release of radionuclides into the environment, the SA totally fails to properly analyze terrorist risks posed by the cross-border transport of the liquid nuclear waste;
Fails to properly analyze significant leakage of the contents of the liquid nuclear waste into the environment;

Passively admits security and environmental risks by acknowledging that that police escort would be required through U.S. states.

“As this nuclear waste can be securely managed in Canada, DOE must take steps to avoid the host of environmental and terrorist risks the shipments poses and inform Canadian authorities that the deal has been terminated,” said Clements of SRS Watch. “SRS will not be allowed to become an international nuclear waste dump and schemes like the dumping of nuclear waste from Canada or Germany or other places will be opposed as they make no sense from an environmental or security perspective.”

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**Notes:**

**“Supplement Analysis - Foreign Research Reactor Spent Nuclear Fuel Acceptance Program: Highly Enriched Uranium Target Residue Material Transportation,” December 2, 2015:**


“This Supplement Analysis (SA) summarizes recent activities related to the safe transport of target residue material (TRM), which contains HEU of U. S. origin, from Canada as part of DOE’s foreign research reactor (FRR) acceptance program. The material would be transported in liquid form to SRS. It would be processed in H-Canyon by conventional processing, and the HEU would be recovered for down-blending to LEU. The analysis in the SA supports DOE’s previous determination that the transport of TRM would represent neither substantial changes to the actions evaluated in previous NEPA analysis, including the FRR Spent Nuclear Fuel Environmental Impact Statement, nor represent significant new circumstances or information relevant to environmental concerns. This SA provides a detailed review of the process for transport package certification in the United States and Canada, the DOE program to train and familiarize first responders about the proposed shipments, and an analysis prepared by the Canadian Nuclear Safety Commission (CNSC) of the potential impacts of transporting the target residue material within Canada. The SA concludes that the impacts associated with transport of TRM from Canada to SRS would be very low including impacts under accident conditions during transportation. For more information, see [http://energy.gov/node/368791](http://energy.gov/node/368791).”

SRS “Update on H Area Operations,” SRS Citizens Advisory Board, September 22, 2015, with brief update on “Canadian Target Residue Materials (Liquid),” page 10:  


U.S. House bill – “Know the CBRN Terrorism Threats to Transportation Act,” “To require a terrorism threat assessment regarding the transportation of chemical, biological, nuclear, and radiological materials through United States land borders and within the United States, and for other purposes,” http://www.gpo.gov/fdsys/pkg/BILLS-114hr3350eh/pdf/BILLS-114hr3350eh.pdf


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