



Savannah River Site Watch

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For Immediate Release
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Internal DOE Documents Reveal Details of Highly Unusual Canadian Spent Fuel Dropping Incident at Savannah River Site; Squabbling Amongst SRS Officials over Follow-Up Meetings

SRS Official States Delay in Shipment of Liquid High-Level Waste from Canada has DOE Headquarters "In a Lather"

[FOIA Documents Received by SRS Watch on December 13, 2016 are Linked Here](#)

Columbia, South Carolina – Details about the unexpected dropping of a highly radioactive spent fuel bundle in the L-Reactor storage pool have come to light in documents released under a Freedom of Information Act request by Savannah River Site Watch (SRS Watch).

The incident, which occurred on July 12, 2016, involved the unplanned drop of Canadian NRX research reactor spent fuel as it was being moved in the storage pool in the old L-Reactor, where spent nuclear fuel from research and medical isotope reactors is stored. The incident resulted in a "timeout" in spent fuel handling operations. During evaluation of the incident, DOE expressed concern about the situation impacting the shipping schedule of more NRX spent fuel from the Chalk River Labs in Ontario.

An "L-Area Technical Review Board" was convened to review the incident, which appears to have been caused by lifting cables twisting and falling free from lifting slots in the fuel assembly, causing the fuel to release and fall back into a storage basket. Though the event was unanticipated and could have damaged the fuel, DOE has reported no such damage and no release of radioactive materials. The height of the drop is unclear but appears to be between 8-10 inches and 2 feet.

"As damage to the spent fuel could have had negative impact to workers and operation of the L-Area spent fuel facility, it is imperative that DOE adjust its procedures to make sure such a potentially harmful incident never happens again," said Tom Clements, director of SRS Watch. "DOE must now fully inform that public as to what steps it's taking to improve procedures in the aftermath of the incident involving dropping of the Canadian spent fuel."

An "[Occurrence Report](#)" dated July 13 called event the "Inadvertent NRX Fuel released from Fuel Tool." That report summarizes the event:

On July 12, 2016, during the unloading and bundling of National Research Experimental (NRX)-5 fuel from the NRX basket in the unloading station, an NRX fuel assembly was being removed from basket position 4. After the fuel assembly was raised 24 inches for

fuel identification per procedure, the assembly became disengaged from the NRX tool and fell back into its original basket position. Fuel handling was stopped and a timeout was called. Limiting Conditions for Operations 3.1.4 was entered to allow Spent Fuel Project (SFP) Engineering and Nuclear and Criticality Safety Engineering to determine status of compliance with the nuclear safety data sheet. SFP Engineering is inspecting the NRX tool in use to help determine the cause of the disengagement.

After the timeout – “Limiting Condition for Operation” (LCO) was called, the “Spent Fuel Project (SFP) Engineering” and “Nuclear and Criticality Safety Engineering” groups were called in to analyze the situation and determine the cause for the dropping of the fuel. Their final report was not released in the FOIA documents sent to SRS Watch.

The FOIA documents reveal a testy email exchange between DOE officials ensued after the incident as there was argument over who was authorized to attend incident-review meetings and if the incident would impact NRX spent fuel shipments. The internal squabble arose as the L-Basin is operated by DOE’s Office of Environmental Management (EM) and the spent fuel “take-back” program in under the DOE’s National Nuclear Security Administration (NNSA), causing officials to clash over their respective jurisdictions.

Of note in a July 15 email from the NNSA official, concern was expressed about attention being drawn to the issue of shipment from Canada of NRX and NRU reactor spent fuel and that of liquid high-level nuclear waste, which DOE calls “Target Residue Material” in order to downplay the fact that it is a deadly liquid brew of highly radioactive isotopes:

*“My HQ is always very interested in the NRU/NRX and TRM shipment schedule and perceived hiccups. **The TRM delays are what’s really got them in a lather**, unfortunately that means the NRU/NRX program is getting a little additional attention. Once the TRM gets going, I’m hopeful NRU/NRX will fall a bit off the radar (fingers cross).”*

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Notes:

FOIA Documents and NRX spent fuel and tools photos, received vial mail on December 13, 2016, are linked here:

http://www.srswatch.org/uploads/2/7/5/8/27584045/foia_nrx_spent_fuel_incident_dec_1_2016.pdf

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