



Savannah River Site Watch
SRS Watch - www.srswatch.org
Columbia, South Carolina
Media Alert
May 29, 2014

**U.S. Department of Energy (DOE) Applies to Nuclear Regulatory Commission
to Export Bomb-Grade Uranium to Canada**

**National Nuclear Security Administration (NNSA) Seeks to Export 7 Kilograms of Highly Enriched
Uranium to NRU Reactor at Chalk River Laboratories in Ontario, for Medical Isotope Production**

***Plans to Ship 23,000 Liters of Liquid High-Level Waste from Chalk River
to DOE's Savannah River Site Slowly Proceeding***

Columbia, South Carolina - The U.S. Department of Energy has applied to the Nuclear Regulatory Commission for a license to export 7 kilograms of highly enriched uranium (HEU) to the National Research Universal (NRU) medical isotope production reactor in Canada. U.S. non-proliferation experts anticipate that this will be among the last shipments of HEU to Canada.

Notice of the export license application was printed in a notice in today's Federal Register - *see links below*. The notice states that the HEU would be exported "to fabricate targets at the National Research Universal reactor in Canada for ultimate use in production of medical isotopes."

The bomb-grade uranium is stored at the National Nuclear Security Administration's (NNSA) uranium storage facility at the Y-12 complex at the Oak Ridge site in Tennessee. The HEU would be fabricated into "targets" that are irradiated in the aging NRU reactor to produce medical isotopes. The HEU in the targets is converted Molybdenum-99, which decays into the short-lived isotope technetium-99m (Tc99m), which is used in many medical procedures.

"We hope that this among the very last shipments of bomb-grade uranium to Canada," said Tom Clements, director of Savannah River Site Watch in Columbia, South Carolina. "For nuclear non-proliferation reasons, use by Canada and other countries of HEU in medical isotope production and in research reactors must cease and reactors must either halt operation or be converted to low-enriched uranium that cannot be used in nuclear weapons. Canada and other countries must with all deliberate speed develop and deploy non-reactor options for production of essential medical isotopes."

Clements has tracked the non-proliferation concerns associated with HEU use for many years and visited the NRU reactor at Chalk River in 2001.

Nordion, Inc. operates the medical-isotope production facilities at Chalk River Labs, which is operated by Atomic Energy of Canada Ltd. The Nordion board has approved sale of the company.

Natural Resources Minister Joe Oliver has stated that the NRU reactor would cease operation in 2016 and that Canada would convert to non-reactor methods to produce medical isotopes, such as linear accelerators, would be pursued. Efforts to replace the NRU reactor, which started operation in 1957, when two MAPLE reactors failed to operate when technical issues arose.

"If Canada does not halt HEU use by 2016, we will oppose any further export from the US of highly enriched uranium and consider a formal intervention with the NRC," said Clements.

To extract the Mo-99, the HEU targets are dissolved in acid and the resulting highly radioactive waste is solidified. One tank, filled with by-product waste in 2004, contains 23,000 liters of liquid high-level waste that is planned to be shipped to the DOE's Savannah River Site in South Carolina. Both DOE and the Canadian Nuclear Safety Commission have refused to prepare "environmental impact statements" on the shipment and have not analyzed management of the high-level waste (HLW) in Canada. Public interest groups have protested the shipment of the liquid HLW, including risk of en-route accidents, and pointed out that the shipment is not being done for nuclear non-proliferation reasons but rather is for waste management purposes in Canada and to make money for SRS.

At SRS, the liquid waste would be processed in the old H-Canyon reprocessing facility, to remove remaining HEU, with resultant waste dumped into on-site HLW tanks. SRS waste tanks are slowly being closed and should not be receiving new waste, according to Savannah River Site Watch.

"The shipment of liquid high-level waste is unprecedented and poses risks in transport and handling," said Clements. "We strongly oppose the dumping of nuclear waste by Chalk River on the Savannah River Site, where it will put strain on an already challenged waste-management system," said Clements. "If the waste import is still being considered, DOE must prepare an environmental impact statement involving public participation and, for nuclear non-proliferation reasons, must focus on management of the waste in Canada."

SRS Watch learned on May 28 that the Nuclear Regulatory Commission has finished reviewing the license application for the liquid HLW shipping cask by NAC International but has further questions of the company. Review of a response to new "request for additional information" (RAIs) will take another 8 weeks and then a "certificate of compliance" could be issued or more questions could be sent to NAC International. The Canadian Nuclear Safety Commission has evidently not licensed the transport cask in Canada and may move to do that after the US license the cask for liquid waste shipment.

Notes:

1. A copy of group letter to DOE asking for an EIS on liquid HLW shipment is available on request.
2. Federal Register notice of May 29, 2014:

text: <http://www.gpo.gov/fdsys/pkg/FR-2014-05-29/html/2014-12481.htm>

pdf: <http://www.gpo.gov/fdsys/pkg/FR-2014-05-29/pdf/2014-12481.pdf>

[Federal Register Volume 79, Number 103 (Thursday, May 29, 2014)]

[Notices]

[Pages 30903-30904]

NUCLEAR REGULATORY COMMISSION

Application for a License To Export High-Enriched Uranium

Pursuant to 10 CFR 110.70 (b) ``Public Notice of Receipt of an Application,' ' please take notice that the Nuclear Regulatory Commission (NRC) has received the following request for an export license. Copies of the request are available electronically through ADAMS and can be accessed through the Public Electronic Reading Room (PERR) link <http://www.nrc.gov/reading-rm.html> at the NRC Homepage.

A request for a hearing or petition for leave to intervene may be filed within thirty days after publication of this

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notice in the Federal Register. Any request for hearing or petition for leave to intervene shall be served by the requestor or petitioner upon the applicant, the office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555; the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555; and the Executive Secretary, U.S. Department of State, Washington, DC 20520.

A request for a hearing or petition for leave to intervene may be filed with the NRC electronically in accordance with NRC's E-Filing rule promulgated in August 2007, 72 Fed. Reg 49139 (Aug. 28, 2007). Information about filing electronically is available on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. To ensure timely electronic filing, at least 5 (five) days prior to the filing deadline, the petitioner/requestor should contact the Office of the Secretary by email at HEARINGDOCKET@NRC.GOV, or by calling (301) 415-1677, to request a digital ID certificate and allow for the creation of an electronic docket.

In addition to a request for hearing or petition for leave to intervene, written comments, in accordance with 10 CFR 110.81, should be submitted within thirty (30) days after publication of this notice in the Federal Register to Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Rulemaking and Adjudications.

The information concerning this application for an export license follows.

NRC Export License Application

Description of Material

Name of applicant	date of application	date received	Material type	Total quantity
End use	Destination			
application No.	docket No.			

DOE/NNSA--Y-12 National Security High-Enriched 7.0 kilograms To
fabricate Canada. uranium-235
Complex, April 23, 2014, April Uranium (93.35%). contained in 7.5
targets at the uranium-235
28, 2014, XSNM3752, 11006162. kilograms uranium.
National Research
Universal reactor
Canada for in
ultimate use in
production of
medical isotopes.

For The Nuclear Regulatory Commission.

Dated this 15th day of May 2014 at Rockville, Maryland.
Michael J. Case,
Acting Deputy Director, Office of International Programs.
[FR Doc. 2014-12481 Filed 5-28-14; 8:45 am]
BILLING CODE 7590-01-P

3. DOE's Supplement Analysis (prepared in secret & without public input) and Amended Record of Decision on import of liquid high-level waste from Canada:

<http://energy.gov/nepa/downloads/eis-0279-sa-01-supplement-analysis>

<http://energy.gov/nepa/downloads/eis-0279-amended-record-decision>