June 28, 2013

General Counsel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Executive Secretary U.S. Department of State Washington, DC 20520

Tom Clements

Southeastern Nuclear Campaign Coordinator tomclements329@cs.com



1112 Florence Street Columbia, SC 29201

Phone Cell 803.834.3084 803.240.7268

Re: Application XSNM3745 for a License to the U.S. Nuclear Regulatory Commission for Export of Highly Enriched Uranium from the U.S. to Canada:

<u>Time to Halt Bomb-Grade Uranium Shipments</u>

And, to be Filed in Docket No. 71-9225

To Whom it Concerns:

This is a comment being submitted by public interest groups in the United States and Canada concerning the June 4, 2013 application to export of bomb-grade uranium from the U.S. Department of Energy's National Nuclear Security Administration's Y–12 National Security Complex in Oak Ridge, Tennessee to the Atomic Energy of Canada, Limited's National Research Universal (NRU) reactor at Chalk River Laboratories in Canada. The end use of the highly enriched uranium (HEU) is for production of medical isotopes.

While we are not now formally intervening against the license request now before the U.S. Nuclear Regulatory Commission to export 7.0 kilograms of 93.35% HEU to Chalk River, we want to go on record as supporting a prompt halt to HEU shipments from the U.S. to Canada. No HEU shipments to the NRU reactor should take place beyond the 2016 date for ending HEU-use in the NRU reactor, as recently announced by Natural Resources Minister Joe Oliver.

While conversion of the NRU reactor from HEU use is long overdue, Canada must be held to its commitment that HEU use at the reactor will soon halt and that other options for medical isotope production will be pursued. This means that the current license request for HEU export will be one of the very last that will be submitted. We will be attentive to any future applications for export of HEU from the U.S. to Canada and will oppose any requests which would take the NRU reactor beyond the HEU halt in mid-2016.

Additionally, we want to express concern about plans by the U.S. Department of Energy to import liquid high-level waste from Chalk River for processing in the DOE's aging H-Canyon reprocessing plant located at the Savannah River Site in South Carolina. Though a request for a full Supplemental Environment Impact Statement (SEIS) was requested by numerous public interest groups in the U.S. (at http://tinyurl.com/mwehghw), DOE has so far turned down that request. Such an SEIS is still needed as

it would evaluate alternatives to the risky shipment of such waste over our highways and bridges and would evaluate options to treat the liquid waste in place at Chalk River.

Waste from the reprocessing of HEU targets has in recent years been managed in Canada and there has been no explanation as to why the liquid HLW, which has been stored in a single tank since 2003, cannot also be processed on site at Chalk River and stored in Canada. Waste from processing of targets made from the final shipments of HEU to Canada must also be disposed of in Canada.

Though there have been unsubstantiated claims that the liquid waste shipment is being planned for nuclear non-proliferation reasons, denaturing of the HEU in the liquid waste via addition of depleted uranium nitrate to the waste tank may well present the soundest option from a nuclear non-proliferation standpoint. DOE's rejection of the request to prepare an in-depth SEIS means that the evaluation of this proposal and options to manage the waste in Canada have been ignored.

Failure to consider the "denature-in-place" option may well be a blow to sound nuclear non-proliferation policies in both the U.S. and Canada and reflects a denial to citizens on both sides of the border to submit formal comment on that and other disposition options.

Given the goal of promptly eliminating all commerce in bomb-grade uranium, we thank you very much for considering the views expressed in this letter. We request that the letter be made a formal part of the record for export license XSNM3745 and that it be placed in the NRC's digital library. If you have questions about this letter or the issues discussed in it, please contact Tom Clements, Friends of the Earth, Columbia, South Carolina, tel. 803-834-3084, tomclements329@cs.com.

Sincerely,

Tom Clements
Friends of the Earth
Columbia, South Carolina

Lynda Schneekloth Sierra Club Niagara Group (NY) Buffalo, New York

John Bennett, Executive Director Sierra Club Canada Ottawa, Ontario

Alice Hirt Don't Waste Michigan Holland, Michigan

Kathryn Barnes Don't Waste Michigan- Sherwood Chapter Sherwood, Michigan

Ole Hendrickson

Gordon Edwards, Ph.D., President, Canadian Coalition for Nuclear Responsibility (CCNR) Hampstead, Quebec

Susan Corbett Sierra Club Nuclear Free Campaign Washington, DC

Michael J. Keegan Coalition for a Nuclear Free Great Lakes Monroe, Michigan

Emma Lui Council of Canadians Ottawa, Ontario

Philippe Giroul, Michel Duguay Le Mouvement Sortons le Québec du Nucléaire (MSQN) Montreal & Quebec City, Quebec

Terry Lodge

Concerned Citizens of Renfrew County

Pembroke, Ontario

Toledo Coalition for Safe Energy

Toledo, Ohio

Michael Mariotte

Nuclear Information and Resource Service

Takoma Park, Maryland

Jessie Pauline Collins

Ralph Hutchison

Citizens Resistance at Fermi 2

Gore, Oklahoma

Ruth Thomas Environmentalists Inc. Columbus, North Carolina

Oak Ridge, Tennessee

Ellen Dailey

Save Our Saugeen Shores

Saugeen Shores, Ontario

Faye More

Port Hope Community Health Concerns Committee

Oak Ridge Environmental Peace Alliance (OREPA)

Port Hope, Ontario

David A. Kraft, Director

Nuclear Energy Information Service (NEIS)

Chicago, Illinois

Glenn Carroll

Nuclear Watch South

Atlanta, Georgia

Mali Lightfoot

The Helen Caldicott Foundation

Asheville, NC

Anabel Dwyer

Straits Area Concerned Citizens for Peace and Justice

Cheboygan, Michigan

Christian Simard

Nature Quebec

Quebec City, Quebec

Mary Potter, President,

Provincial Council of Women of Ontario

Pelham, Ontario

Angela Bischoff

Greenspiration

Toronto, Ontario

Marc Fafard

Sept-Iles Sans Uranium (SISUR

Moisie, Quebec

Jerry Stein

The Peace Farm

Amarillo, Texas

Mavis Belisle

JustPeace

Dallas, Texas

Jo Hayward-Haines

SAGE (Safe and Green Energy)

Peterborough, Ontario

Bob Kinsey

The Colorado Coalition for Prevention of Nuclear War

Boulder, Colorado

Marylia Kelley

Tri-Valley Cares

Livermore, California

Barbara Warren

Citizens' Environmental Coalition

Albany, New York

Michel Fugère

Mouvement Vert Mauricie (MVM)

St-Mathieu-du-parc, Quebec

Art Jackson

West Athabasca Watershed Bio-regional Society

Hinton, Alberta

Michael Murphy

The Saskatoon Peace Coalition Saskatoon, Saskatchewan

Saskatoon, Saskatone war

Linda Harvey, M.D.

Physicians for Global Survival (PGS)

Saskatoon, Saskatchewan

Kevin Kamps Beyond Nuclear

Takoma Park, Maryland

Judith Deutsch Science for Peace University of Toronto

Toronto, Ontario

Denise Mattok, President

National Council of Women of Canada

Gracia Janes, NCWC VP Environment

National Council of Women of Canada

Ottawa, Ontario

Gideon Forman

Canadian Association of Physicians for the Environment

Toronto, Ontario

Victor Lau

Green Party of Saskatchewan (GPS)

Regina, Saskatchewan

Elaine Hughes

Council of Canadians, Quill Plains Chapter

Wynyard, Saskatchewan

Professor Jill Lennox

Department of English Language and Literatures

York University Toronto, Ontario

Tamara Lorincz

Halifax Peace Coalition

Nova Scotia Voice of Women for Peace

Halifax, Nova Scotia

Linda Murphy

Inter-Church Uranium Committee Educational Co-operative (ICUCEC).

Saskatchewan

Lisa Crawford

Fernald Residents for Environmental Safety & Health, Inc. (FRESH, Inc.)

Harrison, Ohio

May 15, 2013

WHEREAS the U.S. Department of Energy plans to truck 23,000 litres of high-level radioactive liquid waste from Chalk River Laboratories (CRL), Ontario, to the Savannah River Site (SRS), South Carolina, in a series of weekly shipments over a period of a year or more;

WHEREAS these shipments could begin as early as August 2013;

WHEREAS high-level radioactive liquid waste has never previously been transported over public roads and bridges in North America;

WHEREAS the high-level radioactive liquid waste contained in just one of the planned shipments is more than enough to ruin an entire city's water supply;

WHEREAS there have been no public environmental assessment hearings in Canada or the U.S., nor any other kind of public forum on either side of the border, to address the hazards of such shipments of liquid radioactive wastes over public roads and bridges;

WHEREAS there has been no public process to discuss alternatives to the proposed shipments of liquid radioactive waste over public roads and bridges, such as on-site solidification of the wastes prior to shipment – given that such solidification has been carried out routinely for all the high-level liquid waste that has been produced at Chalk River since 2003;

WHEREAS high-level radioactive waste is the most radioactive material on the planet, created by the irradiation of uranium and/or plutonium in a nuclear reactor;

WHEREAS high-level radioactive waste gives off such intense penetrating radiation that it remains unapproachable for centuries;

WHEREAS high-level radioactive waste remains extraordinarily radiotoxic for millennia:

WHEREAS high-level radioactive liquid waste is created when the solid high-level waste from a nuclear reactor is dissolved in nitric acid, resulting in a highly corrosive solution containing dozens of radiotoxic materials such as cesium-137, iodine-129, strontium-90;

WHEREAS the high-level radioactive liquid waste from Chalk River contains a significant amount of weapons-grade uranium (HEU = highly enriched uranium) – the same material that was used as a nuclear explosive in the first atomic bomb dropped in 1945;

WHEREAS the principal justification for transporting the Chalk River liquid waste to the Savannah River Site is to rid Canada of the potential proliferation risk associated with the weapons-grade uranium that is still left in the liquid solution;

WHEREAS the Savannah River Site is one of the most radioactively contaminated sites in the entire DOE complex of nuclear weapons related facilities;

WHEREAS the continued operation of the aging H-Canyon reprocessing plant at the Savannah River Site to process the Chalk River liquid waste, as planned, will pose unnecessary safety risks, will add additional volumes of high-level radioactive waste into the already over-burdened SRS waste management system and will place unsustainable demands on the DOE budget;

WHEREAS all the non-proliferation objectives associated with the Chalk River liquid waste can be met by "denaturing" the weapons grade uranium on site at the Chalk River Laboratories so that it is no longer weapons-usable material and hence poses no further proliferation risk;

THEREFORE BE IT RESOLVED that the organizations listed on the following pages: [for list see http://ccnr.org/Endorsing Groups.pdf]

- (1) are opposed in principle to any shipment of radioactive liquid waste over public roads and bridges, or on any navigable waterways, or by air, recognizing that such waste can be, has been and should be solidified so that it is far less accessible to the environment of living things;
- (2) urge the governments of Canada and the United States to halt the shipment of high-level radioactive liquid waste from Chalk River Laboratories to the Savannah River Site pending the outcome of full public consultations on the advisability and the potential adverse impacts of the proposed shipments, as well as alternative procedures to achieve the stated objectives for such shipments;
- (3) urge the governments of Canada and the United States, and the governments of all states, provinces, and municipalities, as well as the indigenous and sovereign governments of Native American Indian tribal peoples of the USA, and the several nations of Aboriginal Peoples in Canada, to do everything in their power to disallow and prevent the shipment of liquid radioactive waste over public roads and bridges, or on any navigable waterways, or by air.

Please send a notice of your organization's endorsement of this resolution to Canadian Coalition for Nuclear Responsibility (CCNR) e-mail: ccnr@web.ca

66 Endorsing Groups as of June 20, 2013

Alliance for a Green Economy

Syracuse, New York Contact: Jessica Azulay

e-mail: jessica@allianceforagreeneconomy.org

Artists for Peace / Les Artistes pour la paix

Montreal, Quebec Contact: Pierre Jasmin

e-mail: jasmin.pierre@ugam.ca

L'Association pour la Protection de

l'Environnement des Hautes Laurentides (APEHL)

Contact: François Lapierre

e-mail: francois.lapierre@tlb.sympatico.ca

Beyond Nuclear

Takoma Park, Maryland Contact: Kevin Kamps

e-mail: kevin@beyondnuclear.org

Canadian Association of Physicians for the Environment (CAPE)

Toronto, Ontario

Contact: Gideon Forman e-mail: gideon@cape.ca

Canadian Coalition for Nuclear Responsibility (CCNR)

Montreal, Quebec

Contact: Gordon Edwards

e-mail: ccnr@web.ca

CentricoisES et mauricienNEs pour le déclassement nucléaire

(Mauricie residents for nuclear decommissioning)

Trois Rivieres, Quebec Contact: Sébastien Bois

e-mail: declassmentnucleaire@gmail.com

Check this link later to see updated listings

Citizens Environmental Coalition

Albany, New York

Contact: Barbara Warren e-mail: warrenba@msn.com

Citizens for Alternatives to Chemical Contamination (CACC)

Lake Station, Michigan Contact: Kay Cumbow

e-mail: kcumbow@greatlakes.net

Clean Green Saskatchewan Saskatoon, Saskatchewan Contact: David Greenfield e-mail: greendl@sasktel.net

Coalition for a Nuclear Free Great Lakes

Monroe, Michigan

Contact: Michael J. Keegan e-mail: mkeegani@comcast.net

Committee for Environmentally Sound Development

New York, New York Contact: Olive Freud e-mail: <u>elfreud@aol.com</u>

Community Health Concerns Committee

Port Hope, Ontario Contact: Fave More

e-mail: more_faye@yahoo.com

Concerned Citizens of Renfrew County (CCRC)

Pembroke, Ontario Contact: Ole Hendricksen e-mail: ole@nrtco.net

Connecticut Coalition Against Millstone

Redding Ridge, Connecticut Contact: Nancy Burton

e-mail: nancyburtonct@aol.com

Council of Canadians - National Office

Ottawa, Ontario

Contact: Brent Patterson

e-mail: <u>bpatterson@canadians.org</u>

Council of Canadians - Saint John Chapter

Saint John, New Brunswick

Contact: Leticia Adair

e-mail: ladair@nb.aibn.com

Crabshell Alliance of

Greater Baltimore, Maryland

Contact: Dagmar Fabian

e-mail: dagmarfabian@gmail.com

Don't Waste Arizona

Phoenix, Arizona

Contact: Stephen Brittle

e-mail: dwaz@fastg.com

Don't Waste Michigan

Holland, Michigan

Contact: Alice Hirt

e-mail: alicehirt@gmail.com

Durham Nuclear Awareness(DNA)

Whitby, Ontario

Contact: Janet McNeill

e-mail: mcneill.janet@gmail.com

Ecological Options Network

Bolinas, California

Contact: Mary Beth Brangan

e-mail: marybeth@eon3.net

Environmentalists, Inc.

Columbia, SC and Columbus, NC

Contact: Mel Jenkins

e-mail: greenpalmetto@yahoo.com

Friends of the Earth USA (FOE)

Columbia, South Carolina

Contact: Tom Clements

e-mail: tomclements329@cs.com

Friends of the St. Clair River Watershed

Port Huron, Michigan

Contact: Lesley L. Lambright

e-mail: info@scriver.org

Heart of America Northwest

"The Public's Voice for Hanford Cleanup"

Washington and Oregon States Contact: Rep. Gerry Pollet, JD

e-mail: gerry@hoanw.org

Grand Rapids Chapter, Don't Waste Michigan

Grand Rapids, Michigank

Contact: Corinne Carey

e-mail: auntienuke@aol.com

Great Lakes United (GLU)

Buffalo, New York

Contact: John Jackson

e-mail: jjackson@glu.org

The Helen Caldicott Foundation Asheville, North Carolina Contact: Mali Lightfoot e-mail: MaliLightfoot@gmail.com

Hiroshima Day Coalition Toronto, Ontario Contact: Vinay Jindal

e-mail: vinay@live.ca

Ikanawtiket Environmental Inc. Truro Heights, Nova Scotia Contact: Joshua McNeelv e-mail: imcneelv@ikanawtiket.ca

International Institute of Concern for Public Health IICPH

Toronto. Ontario Contact: Anna Tilman

e-mail: annatilman@sympatico.ca

Maritime Aboriginal Peoples Council Truro Heights, Nova Scotia Contact: Roger Hunka e-mail: rhunka@mapcorg.ca

Michigan Stop The Nuclear Bombs Campaign Madison Heights, Michigan

Contact: Kim Bergier

e-mail: 2mistnbc@gmail.com

Minnesota Peace Group Fairmont, Minnesota Contact: Judi Poulson

e-mail: judpeace@gmail.com

Mouvement Sortons le Québec du Nucléaire (MSQN)

(Movement to Phase Out Nuclear in Quebec)

Quebec City, Quebec Contact: Michel Duguay

e-mail: michel.duguay@gel.ulaval.ca

Mouvement vert Mauricie (MVM)

(The Green Movement of the Mauricie Region)

St-Mathieu-du-Parc, Quebec

Contact: Michel Fugère

e-mail: mfugeremvert@sympatico.ca

Le Municipalité de Saint-Fabien

Saint-Fabien, Québec Contact: Suzanne Tremblay

e-mail:

National Council of Women of Canada

Ottawa. Ontario

Contact: Gracia Janes

e-mail: gracia.janes@bellnet.ca

Nature Quebec

Quebec City, Quebec Contact: Christian Simard

e-mail: Christian.Simard@naturequebec.org

Nevada Nuclear Waste Task Force

Las Vegas, Nevada Contact: Judy Treichel e-mail: Judynwtf@aol.com

NOAH Friends of the Earth Denmark

Copenhagen, Denmark Contact: Palle Bendsen e-mail: noah@noah.dk

No Nuker Taiwan Taipei, Taiwan Contact: Jimi Chen

e-mail: jimicdchen@gmail.com

Northwatch Northeastem Ontario Contact: Brennain Lloyd

e-mail: northwatch@northwatch.org

Nuclear Energy Information Service (NEIS)

Chicago, Illinois Contact: David Kraft e-mail: neis@neis.org

Nuclear Information and Resource Service (NIRS)

Takoma Park, Maryland Contact: Diane D'Arrigo e-mail: <u>Dianed@nirs.org</u>

Nuclear Watch South Atlanta, Georgia Contact: Glenn Carroll

e-mail: nukewatchsouth@mindspring.com

Nukewatch Luck, Wisconsin

Contact: Bonnie Urfer or John LaForge e-mail: nukewatch1@lakeland.ws

Ohio Sierra Club Columbus, Ohio Contact: Pat Marida

e-mail: marida@wideopenwest.com

Ontario Coalition of Aboriginal People

Wabigoon, Ontario Contact: Brad Maggrah e-mail: ocapprez@gmail.com

Physicians for Global Survival

Ottawa, Ontario Contact: Linda Harvey

e-mail: linda.harvey@xplornet.com

Peterborough and Kawarthas Chapter

Council of Canadians Peterborough, Ontario Contact: Roy Brady

e-mail: rbrady1@cogeco.com

Peterborough Health Coalition

Peterborough, Ontario Contact: Roy Brady

e-mail: rbrady1@cogeco.com

Proposition One Nuclear Free Future Campaign

Tryon, North Carolina Contact: Ellen Thomas e-mail: et@prop1.org

Provincial Council of Women of Ontario

Toronto, Ontario Contact: Gracia Janes

e-mail: gracia.janes@bellnet.ca

Regroupement pour la surveillance du nucléaire (RSN) (see Canadian Coalition for Nucklear Responsibility)

Montreal, Quebec

Contact: Gordon Edwards e-mail: ccnr@web.ca

Le Réseau québécois des groupes écologistes (RQGE)

Montréal, Québec Contact: François Lapierre e-mail: <u>tresorie@rqqe.qc.ca</u>

Safe and Green Energy (SAGE)

Peterborough, Ontario Contact: Jeff Brackett

e-mail: brackett@nexicom.net

Saint John Area KAIROS

Canadian Ecumenical Justice Initiatives

Saint John, New Brunswick Contact: Angelina Martz

e-mail: aam angie@hotmail.com

Science For Peace

Toronto, Ontario

Contact: Judith Deutsch

e-mail: <u>i.deutsch@utoronto.ca</u>

Sierra Club Canada

Ottawa, Ontario

Contact: John Bennett e-mail: jb@sierraclub.ca

Snake River Alliance

Boise, Idaho

Contact: Liz Woodruff

e-mail: lwoordruff@snakeriveralliance.org

Stand Up / Save Lives Campaign

Burr Ridge, Illinois

Contact: Maureen Headington e-mail: moeteam@comcast.net

Vermont Citizens Action Network

Hancock, Vermont Contact: Chris Williams e-mail: <u>cevan@sover.net</u>

Veterans Against Nuclear Arms (VANA)

Toronto, Ontario

Contact: Anton Wagner e-mail: awagner@yorku.ca

La Ville d'Amqui Amqui, Québec

Contact: Le maire Gaêtan Ruest e-mail: gruest@ville.amqui.qc.ca