

March 2, 2016

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*Transmission: by email*

**Re: Nomination of Radionuclides as a Chemical of Mutual Concern  
under the GLWQA**

Dear Great Lakes Executive Committee Co-Chairs:

The undersigned 110 environmental, health and other advocacy groups urge the Canadian and U.S. federal governments to jointly designate radionuclides as Chemicals of Mutual Concern according to their responsibility in Annex 3, Part B, Sec. 2 of the Great Lakes Water Quality Agreement 2012.

This recommendation is based on our following findings:

- Radionuclides can have very serious immediate, long-term and intergenerational effects on human and non-human health;
- There is no level of radionuclides below which exposure can be defined as “safe;” therefore, very low levels of exposure can be significant;
- The inevitable exposure to naturally occurring radiation means that we should be even more cautious about avoiding additional body burdens resulting from exposure to radionuclides as a result of human activities over which we can have more control;
- There is a uniquely large number of facilities in the Great Lakes Basin containing, using, storing, and disposing of radionuclides for power generation purposes near the shores of the Great Lakes, and there are proposals for additional ones; for example, as of May 2013, there were 38 operating nuclear power reactors and 12 closed reactors located in the Basin (See attached map);
- The large number of facilities around the Great Lakes Basin, usually near the shoreline, result in on-going regular discharges into the lakes as well as a high probability of accidents that release higher amounts of radionuclides.
- This large number of facilities near the shores of the Great Lakes means a high likelihood of radioactive materials being transported on the lakes or across the rivers that connect the Great Lakes, with the potential for spills during transportation, as well as during loading and unloading;

- The Great Lakes have characteristics that make them particularly susceptible to persistent toxic substances. As some radionuclides persist for extremely long periods of time, this means that the protective measures will need to be different in the Great Lakes than in an ecosystem with different characteristics; and,
- There are substantial well-documented scientific, medical and public concerns about the threats posed by radionuclides in the Great Lakes Basin.

The attached document prepared for the Canadian Environmental Law Association presents evidence to support each of the findings we just listed.<sup>1</sup>

In 1997, the IJC's Nuclear Task Force reported that the data currently available on releases and presence of radionuclides in the Great Lakes ecosystem are inadequate to gain an understanding of the sources and of the impacts of radionuclides on the ecosystem. Unfortunately that situation has not changed in the almost two decades that have passed since that finding.

The lack of data should not be seen by the governments as a reason to not now designate radionuclides as a Chemical of Mutual Concern. It is clear from Annex 3, Part C. Science of the GLWQA that a prime purpose in a designation is to put a focus on obtaining the data and understandings needed. For example item 1 in part C lists the following commitment: "identifying and assessing the occurrence, sources, transport and impact of chemicals of mutual concern, including spatial and temporal trends in the atmosphere, in aquatic biota, wildlife, water and sediments."

Given that radionuclides are persistent toxic substances, given a situation where there is a substantial number of facilities that are a source of radionuclides to the Lakes, and given the relatively closed characteristics of the Great Lakes system, which means that radionuclides build up in the system, it is essential to designate radionuclides as a Chemical of Mutual Concern so that the data and science needed will be generated and so that preventive actions can be taken to protect the Lakes from threats from radionuclides.

In determining whether to make the designation, the Parties should be guided by the Principles and Approaches section in the GLWQA [Article 2, part 4], which calls for "prevention," "precaution," "anti-degradation," "ecosystem approach." All of these principles point to the requirement for a radionuclides designation.

In the consideration of radionuclides as a Chemical of Mutual Concern and in the development of a binational strategy once the designation has occurred, the Parties should ensure full opportunities for public engagement.

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<sup>1</sup> Canadian Environmental Law Association, Radionuclides as a Chemical of Mutual Concern, February 2016.

We the undersigned groups look forward to working with you in the development and implementation of a binational strategy for radionuclides - a Chemical of Mutual Concern.

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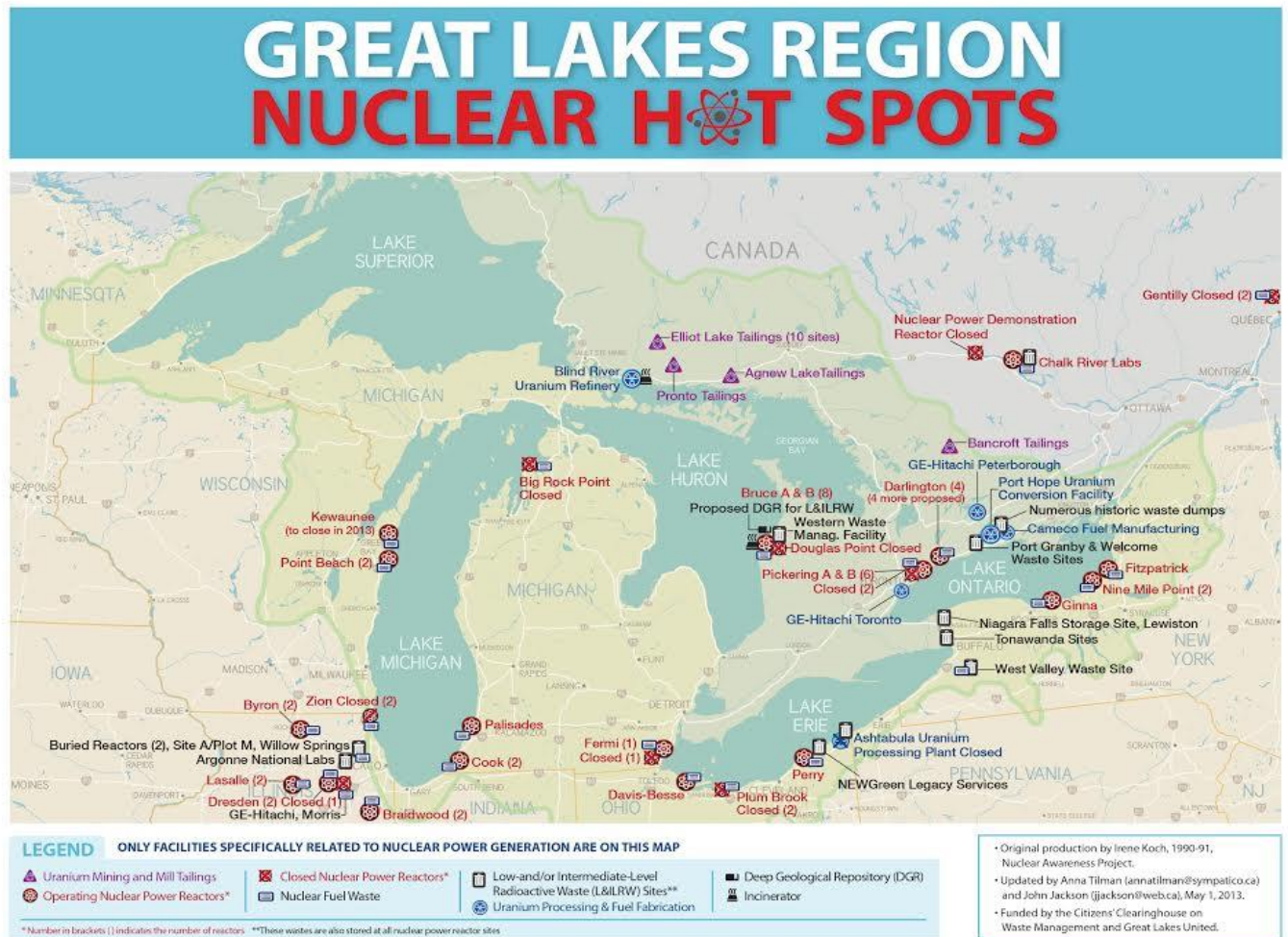
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## Facilities Related to Nuclear Power in the Great Lakes Basin<sup>2</sup>



<sup>2</sup> Map outlines facilities that were present or proposed as of April 2013.