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Senate Bill 948 (as introduced 5-21-14)
Sponsor: Senator Phil Pavlov
Committee: Natural Resources, Environment and Great Lakes

Date Completed: 6-4-14

CONTENT

The bill would amend Public Act 113 of 1978, which governs radioactive waste, to do the following:

- **Provide that an exception to a prohibition against the deposit and storage of radioactive waste in Michigan would not apply to certain types of low-level radioactive waste.**
- **Create the Great Lakes Protection Radioactive Waste Advisory Board.**
- **Require the Board to prepare a report on the potential impacts in the Great Lakes Basin that could result from a proposed deep geologic repository for radioactive waste in Ontario.**
- **Require the Board to conduct at least three public hearings in areas that could be affected by the proposed repository.**
- **Repeal the provisions related to the Board one year and 90 days after the bill took effect.**

Deposit & Storage of Radioactive Waste

The Act prohibits the deposit or storage of radioactive waste in Michigan, but contains a number of exceptions to this prohibition. The exceptions include the safe and secure storage and/or disposal of low-level radioactive waste pursuant to Public Act 460 of 1982 (which enacted the Midwest Interstate Low-Level Radioactive Waste Compact) and Part 137 of the Public Health Code (which regulates sites for the disposal of radioactive waste).

The bill provides that this exception would not apply to permit storage or disposal of Class A or B waste that was generated outside Michigan, or Class C waste. "Class A waste", "Class B waste", or "Class C waste" would mean Class A waste, Class B waste, or Class C waste, respectively, as described in 10 CFR 61.55 that is low-level radioactive waste as defined in Section 13703 of the Public Health Code.

(Under 10 CFR 61.55, Class A waste is waste that is usually segregated from other waste classes at the disposal site. The physical form and characteristics of the waste must meet minimum requirements regarding packaging, reactivity, and other safety issues. If Class A waste also meets stability requirements prescribed in the Code of Federal Regulations, it is not necessary to segregate the waste for disposal.

Class B waste is waste that must meet more rigorous form requirements to ensure stability after disposal. The physical form and characteristics must meet both the minimum and stability requirements.

Class C waste is waste that must meet more rigorous requirements on waste form to ensure stability, and that requires additional measures at the disposal facility to protect against inadvertent intrusion. The physical form and characteristics of Class C waste must meet both the minimum and stability requirements.

Section 13703 of the Public Health Code defines "low-level radioactive waste" as radioactive material that consists of or contains Class A, B, or C radioactive waste, excluding waste or material that is any of the following:

- Owned or generated by the Department of Energy.
- Generated by or resulting from the operation or closure of a superconducting supercollider.
- Owned or generated by the U.S. Navy as a result of the decommissioning of Navy vessels.
- Owned or generated as a result of any research, development, testing, or production of an atomic weapon.
- Identified under the Formerly Utilized Sites Remedial Action Program.
- High-level radioactive waste, spent nuclear fuel, or byproduct material as defined in the Atomic Energy Act.
- Classified as naturally occurring or accelerator-produced radioactive materials known as N.A.R.M. waste.
- Waste that is determined by the Nuclear Regulatory Commission to be beneath regulatory concern, unless the Department of Community Health and the Low-Level Radioactive Waste Authority concur with this designation.

The definition also excludes waste or material that contains at least 100 nanocuries per gram of transuranic elements, or contains concentrations of radionuclides that exceed the limits established by the Nuclear Regulatory Commission for Class C waste.)

Advisory Board

The bill would create the 11-member Great Lakes Protection Radioactive Waste Advisory Board. The Board would have to include the following members appointed by the Senate Majority Leader:

- Three individuals with education and experience in a technical specialty that is pertinent to issues related to radioactive waste disposal, such as a hydrogeologist, health physicist, radiation engineer, or biologist.
- An individual representing a federally recognized Indian tribe.

The Board also would have to include the following members appointed or specified, as applicable, by the Speaker of the House of Representatives:

- An individual representing an industry generating Class C radioactive waste.
- An individual representing an environmental organization.
- An individual representing a member of a private conservation organization with a presence in the Great Lakes Basin.
- An individual with expertise in archaeological, historical, and cultural resources in the Great Lakes Basin.
- The executive director of an organization of states and provinces established to protect and conserve the Great Lakes.

In addition, the Board would have to include the chief of the Radiological Protection Division of the Department of Environmental Quality (DEQ), or his or her designee, and the chief of the Radiation Safety Section of the Department of Licensing and Regulatory Affairs.

The members first appointed would have to be appointed within 30 days after the bill's effective date. Members would serve for the life of the Board. If a vacancy occurred, it would have to be filled in the same manner as the original appointment was made. The Senate Majority Leader or Speaker of the House could remove a member that he or she appointed for incompetence, dereliction of duty, malfeasance, misfeasance, or nonfeasance in office, or any other good cause.

The chief of the DEQ's Radiological Protection Division would have to call the first Board meeting, at which the Board would have to elect a chairperson. After the first meeting, the Board would have to meet at least quarterly, or more frequently at the call of the chairperson if requested by at least two members. The Board would be subject to the Open Meetings Act and the Freedom of Information Act.

Board members would serve without compensation, but could be reimbursed for their actual and necessary expenses incurred in the performance of their official member duties.

Within one year after the bill took effect, the Board would have to submit to the Legislature and the Governor a report assessing a broad range of potential public health, natural resource, cultural, archaeological, and historical impacts in the Great Lakes Basin that could result from the deep geologic repository (DGR) for radioactive waste at the Bruce nuclear site in Kincardine, Ontario, as proposed by Ontario Power Generation. (The DGR project is described below, under **BACKGROUND**.)

To gather information for the report, the Board would have to conduct at least three public hearings in areas of the State that could be affected by the proposed DGR. The Board also could consult with people for assistance in preparing the report.

The bill's provisions regarding the Board would be repealed one year and 90 days after they took effect.

MCL 325.491 et al.

BACKGROUND

Ontario Power Generation (OPG) operates a facility for the management of low- and intermediate-level radioactive waste at the Bruce nuclear site in Kincardine, Ontario, a municipality located near the eastern shore of Lake Huron. In 2001, the municipality initiated discussions with OPG regarding the long-term management of such waste. As a result, OPG proposed to construct and operate a deep geologic repository adjacent to the waste management facility. The proposed DGR would be located within existing rock formations 680 meters (more than 2,200 feet) below ground, and would manage about 200,000 cubic meters (more than 260,000 cubic yards) of waste. Ontario Power Generation asserts that these formations are suitable for storing certain types of radioactive waste because the rock has low permeability, is located in a seismically stable area, and is isolated from groundwater and surfacewater.

According to OPG, low-level waste consists of minimally radioactive materials, such as mop heads, rags, floor sweepings, and protective clothing, used in nuclear stations during routine operations and maintenance. Intermediate-level waste consists of resins and filters and used reactor components. Currently, this waste is packaged and stored, or, for low-level waste, compacted or incinerated at the existing facility.

The proposal has been undergoing the review process necessary to obtain a construction license for the DGR, which is expected this year. Once the license is granted, site preparation and construction are anticipated to take five to seven years before the DGR can receive an operating license and begin accepting waste.

Legislative Analyst: Julie Cassidy

FISCAL IMPACT

The bill would have a minor, but negative fiscal impact on the Department of Environmental Quality and no fiscal impact on local units of government. The bill would establish the Great Lakes Protection Radioactive Waste Advisory Board, which would result in some minor administrative costs to the DEQ related to the reimbursement of travel and other necessary expenses of Board members.

Fiscal Analyst: Josh Sefton

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.