

## REGULATION OF HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL - BACKGROUND MEMORANDUM

Section 4 of 2017 Senate Bill No. 2156 ([appendix](#)) directs the Legislative Management to study, in consultation with the Geological Division of the Department of Mineral Resources and the Environmental Health Section of the State Department of Health, whether state and local level regulation of high-level radioactive waste disposal is consistent with applicable federal regulations and how to ensure the state has proper input into the federal location selection process for high-level radioactive waste material deposits.

### BACKGROUND

In 1979 the Legislative Assembly passed Senate Bill No. 2214, codified as North Dakota Century Code Chapter 23-20.2, which placed jurisdiction over the storage or disposal of nuclear and other wastes with the Industrial Commission. Section 23-20.2-02 defines high-level radioactive waste material as the highly radioactive material resulting from the reprocessing of spent nuclear fuel, and other highly radioactive material, which contains fission products in sufficient concentrations to require permanent isolation under federal law, including liquid waste produced directly in reprocessing and any solid material derived from the liquid waste.

Section 23-20.2-03 grants the Industrial Commission, acting through the office of the North Dakota State Geologist, the authority to require the drilling, boring, excavating, and construction of facilities in a manner to prevent contamination and pollution of surface and ground water sources and the environment. That section also allows the commission to regulate the drilling, boring, excavating, and construction of all underground storage, retrieval, and waste disposal facilities; limit and prescribe the nature, quantity, and source of materials to be stored in, whether as waste or otherwise, or retrieved from any facility regulated by that chapter; and adopt and enforce rules and orders to effectuate the purposes of the chapter.

Section 23-20.2-04 prohibits the excavation, drilling, boring, or construction of an underground storage and retrieval facility or an underground waste disposal facility or the conversion of any existing facility for use in any activity regulated by Chapter 23-20.2, without a permit from the Industrial Commission. A permit may not be issued until after notice and a hearing and payment of a fee for each permit in an amount set by the commission. The permit fee may not be in excess of \$1,000.

Each permit application must include:

- A description of the activity to be permitted.
- A description and discussion of the nature of the material to be stored, retrieved, or disposed.
- A description of the mechanical construction and operating procedures of the facility.
- Justification for the need for the facility to be permitted.
- A description of the subsurface geology and hydrology of the area to be affected by the construction and operation of the facility to be permitted.
- A description of a monitoring system to be used to ascertain the integrity of the facility and to ensure compliance with the provisions of Chapter 23-20.2.
- A description of a reclamation program for the restoration of the surface as nearly as possible to its original condition and productivity upon expiration of the permit or termination of any activities regulated by Chapter 23-20.2.

After a hearing on a permit application, the commission may deny the application and refund the license fee. A person denied a permit may appeal the denial by the commission in accordance with the Administrative Agencies Practice Act.

Section 23-20.2-06 lists the penalties for a violation of Chapter 23-20.2. A person that violates the chapter or any rule, regulation, or order of the commission is subject to a civil penalty of not more than \$1,000 for each act of violation and for each day the violation continues. It is a Class B misdemeanor, for the purpose of evading the chapter or any rule, regulation, or order of the commission for a person to:

- Make or cause to be made any false entry or statement in a report required by the chapter or by any rule, regulation, or order issued by the commission.

- Make or cause to be made any false entry in any record, account, or memorandum required by the chapter or by any rule, regulation, or order of the commission.
- Omit, or cause to be omitted, from any record, account, or memorandum, full, true, and correct entries as required by the chapter or by any rule, regulation, or order of the commission.
- Remove from the state or destroy, mutilate, alter, or falsify any record, account, or memorandum.

Section 23-20.2-09(1) prohibits a person from depositing, causing or permitting to be deposited in this state, any radioactive waste material that has been brought into the state for that purpose unless prior approval has been granted by a concurrent resolution passed by the Legislative Assembly. Senate Bill No. 2156 (2017) amended Section 23-20.2-09(1) to include a county's zoning approval may not preclude the disposal development if approved by the Legislative Assembly, but may regulate the size, scope, and location.

Senate Bill No. 2156 further amended Section 23-20.2-09 to prohibit a person from conducting any testing or exploration for the development of a storage or disposal facility for high-level radioactive waste material to be brought into the state unless prior approval has been granted by a concurrent resolution passed by the Legislative Assembly.

### **FEDERAL REGULATION**

The Nuclear Waste Policy Act of 1982 is a federal law that established a comprehensive national program for the safe, permanent disposal of highly radioactive wastes. The Act, which was codified into the United States Code under Title 42, defines high-level radioactive waste as the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from that liquid waste which contains fission products in sufficient concentrations; and other highly radioactive material that the Nuclear Regulatory Commission, consistent with existing law, determines by rule requires permanent isolation.

The Nuclear Waste Act has four enumerated purposes:

- To establish a schedule for the siting, construction, and operation of repositories which will provide a reasonable assurance the public and the environment will be adequately protected from the hazards posed by high-level radioactive waste and spent nuclear fuel as may be disposed of in a repository;
- To establish the federal responsibility and a definite federal policy for the disposal of high-level radioactive waste and spent fuel;
- To define the relationship between the federal government and state governments with respect to the disposal of high-level radioactive waste and spent fuel; and
- To establish a Nuclear Waste Fund, composed of payments made by the generators and owners of high-level radioactive waste and spent fuel, to ensure the costs of carrying out activities relating to the disposal of the waste and spent fuel will be borne by the persons responsible for generating the waste and spent fuel.

The Nuclear Waste Act requires the President of the United States to review each candidate site recommendation made by the Secretary of Energy. Not later than 60 days after the submission by the Secretary of Energy of a recommendation of a candidate site, the President may either approve or disapprove the candidate site, and must transmit the decision to the Secretary of Energy and to either the Governor and legislature of the state in which the candidate site is located, or the governing body of the affected Indian tribe where the candidate site is located. If, during the 60-day period, the President fails to approve or disapprove the candidate site or fails to invoke the authority to delay the decision, the candidate site is considered approved, and the Secretary of Energy must notify the Governor and legislature or governing body of the affected Indian tribe of the approval of the candidate site by reason of the inaction of the President. The President also must submit a recommendation of the site to Congress.

The designation of a site as suitable for application for a construction authorization for a repository is effective at the end of the 60-day period beginning on the date the the President recommends the site to the Congress, unless the Governor and legislature of the state in which the site is located or the governing body of an Indian tribe on whose reservation the site is located has submitted to the Congress a notice of disapproval. If any notice of disapproval of a repository site designation has been submitted to the Congress after a recommendation for approval of the site is made by the President, the site must be disapproved unless, during the first period of 90 calendar days of continuous session of the Congress after the date of the receipt by the Congress of the notice of disapproval, the Congress passes a resolution of repository siting approval and the resolution becomes law.

### **SUGGESTED STUDY APPROACH**

In conducting the study, the committee may desire to receive testimony from the Geological Division of the Department of Mineral Resources, the Environmental Health Section of the State Department of Health, and impacted parties, including the Pierce County Board of County Commissioners, the North Dakota League of Cities, the North Dakota Association of Counties, and the Energy and Environmental Research Center. The committee may decide to focus the testimony on whether state and local level regulation of high-level radioactive waste disposal is consistent with applicable federal regulations and how to ensure the state has proper input into the federal location selection process for high-level radioactive waste material deposits. Specifically, the committee may want to request the Geological Division of the Department of Mineral Resources, the Environmental Health Section of the State Department of Health and the impacted parties to suggest methods to improve the processes relating to approving the deposit of high-level radioactive waste material in the state and the notice of disapproval requirements under federal law and how to ensure the state has proper input into the federal location selection process for high-level radioactive waste material deposits.

ATTACH:1