TO: Governor Rick Snyder
Senate Natural Resources, Environment, and Great Lakes Committee Members
House Natural Resources, Tourism, and Outdoor Recreation Committee Members

FROM: Dan Wyant, Director

DATE: June 3, 2011

SUBJECT: Low-Level Radioactive Waste 2009 Survey Report

Section 18(a) of the Low-Level Radioactive Waste Authority Act, 1987 PA 204, as amended, requires generators of low-level radioactive waste (LLRW) annually to report to the Low-Level Radioactive Waste Authority (Authority), Department of Environmental Quality (DEQ), certain information on the volume, type, and activity of the LLRW produced. The Authority, in turn, provides a summary of the reported data to the Governor and appropriate legislative committees. This report is a brief summary of the information submitted by generators for waste disposed in calendar year 2009.

Twenty-two facilities reported that they generated waste requiring disposal in a licensed LLRW disposal facility. The following table compares 2009 data with that of 2008:

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Number of Facilities Reporting Waste in 2009</th>
<th>Volume of LLRW Generated in 2009 (ft³)</th>
<th>Number of Facilities Reporting Waste in 2008</th>
<th>Volume of LLRW Generated in 2008 (ft³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>7</td>
<td>7,149</td>
<td>7</td>
<td>1,994</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
<td>12</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Industry</td>
<td>6</td>
<td>1,686</td>
<td>7</td>
<td>2,941</td>
</tr>
<tr>
<td>Medical</td>
<td>3</td>
<td>10</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Utility</td>
<td>4</td>
<td>111,258</td>
<td>4</td>
<td>47,406</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>120,115</td>
<td>24</td>
<td>52,376</td>
</tr>
</tbody>
</table>

The increased volume for academic waste in 2009 is due to decommissioning activities at the PET Cyclotron and the Ford Nuclear Reactor at the University of Michigan. The increased volume for utility waste is due to decommissioning activities at the Fermi I plant and refuelling outages at the D.C. Cook and Palisades plants.

LLRW is categorized in Classes. Class A waste comprises the largest volume of LLRW. Michigan waste generators can ship Class A waste to a licensed disposal facility in Utah. Class B and Class C wastes are generated in much smaller volumes than Class A waste, but have significantly more radioactivity than Class A waste.
In 2008 the Energy Solutions disposal facility in Barnwell, South Carolina, stopped receiving LLRW from all states that were not part of the Atlantic Low-Level Waste Compact (South Carolina, New Jersey, and Connecticut). Under the provisions of the federal Low-Level Radioactive Waste Policy Act of 1980, Public Law 96-573 (LLRWPA), an interstate compact can restrict access to only its member states. This disposal facility in South Carolina had been the only facility in the nation that would accept Class B and C waste from Michigan and 35 other states. Because of this loss of access, Michigan generators currently have no disposal option for Class B and C wastes.

Three Michigan facilities reported that they generated 548 cubic feet of Class B or C waste in 2009. One of these facilities stores its Class B and C waste out of Michigan. The other two facilities, plus one facility that did not generate Class B or C waste in 2009, have 754 cubic feet of Class B and C waste in storage.

The lack of a disposal option for Class B and C wastes does not pose an imminent health or safety problem for Michigan residents and should not significantly affect the facilities storing such wastes. These facilities are licensees of the U.S. Nuclear Regulatory Commission, which regularly inspects their operations, including waste management and storage practices.

However, the fact that waste generators in 36 states have no disposal option for such waste does suggest that the national framework for managing and assuring disposal of radioactive waste, established under the LLRWPA, is not working. In the long-term, a disposal option will need to be found.

If you have any questions about this report, please contact Bob Skowronek, Radiological Protection Section, Resource Management Division, at 517-241-1253 or skowronekr@michigan.gov; or you may contact me at 517-373-7917.

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