#### ONE HUNDRED FOURTEENTH CONGRESS

# Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

#### **MEMORANDUM**

## October 26, 2015

To: Democratic Members of the Subcommittee on Environment and the Economy

Fr: Democratic Staff of the Committee on Energy and Commerce

Re: Hearing on "Update on Low-Level Radioactive Waste Disposal Issues"

The Subcommittee on Environment and the Economy will hold a hearing on <u>Wednesday</u>, <u>October 28, 2015 at 10:15 am in room 2322 of the Rayburn House Office Building</u> on low-level radioactive waste (LLRW) disposal. The Majority's stated purpose in holding this hearing is to examine:

- 1. Ongoing issues relating to the implementation of the Low-Level Radioactive Waste Policy Act (LLRWPA);
- 2. How low-level waste interstate compacts are functioning;
- 3. The Nuclear Regulatory Commission's (NRC) regulations governing management and disposal of low-level radioactive waste; and,
- 4. The federal government's disposal strategy, including the Department of Energy's (DOE) plan to dispose of waste Greater Than Class C.

## I. BACKGROUND

Under the Low-Level Radioactive Waste Policy Act of 1980 (P.L. 96-573), "low-level radioactive waste" is defined as radioactive material that is not high-level radioactive waste, spent nuclear fuel, transuranic waste or byproduct defined in Sec. 11(e)(2) of the Atomic Energy Act (uranium and thorium mill tailings and waste). Low-level waste is generated from a variety

<sup>&</sup>lt;sup>1</sup> U.S. Department of Energy, *Low-Level Radioactive Waste (LLRW)* (online at www.gtcceis.anl.gov/guide/llw/index.cfm) (accessed Oct. 25, 2015).

of sources, including commercial activities at nuclear reactors, manufacturing, and other industrial uses, as well as government sources, academic users, and medical facilities.

Low-level waste is classified for disposal purposes according to its potential hazard as either A, B, C or Greater Than Class C (GTCC) under regulations issued by the Nuclear Regulatory Commission under 10 CFR Part 61.<sup>2</sup> Class A waste generally contains lower concentrations of long half-lived radioactive material than Class B, and Class B waste contains lower concentrations than Class C waste. GTCC waste will be discussed in detail in a separate section below.

NRC is currently in the process of updating its regulations regarding the disposal of low level waste to "require new and revised site-specific technical analyses, to permit the development of site-specific criteria for LLRW acceptance based on the results of these analyses, to facilitate implementation, and to better align the requirements with current health and safety standards." <sup>3</sup>

The Low-Level Radioactive Waste Policy Amendments Act of 1985 established the policy that each state take responsibility for disposing of low-level radioactive waste generated within its borders. The Act encourages states to enter into interstate compacts under which a group of states would agree to develop a common site to dispose of their waste. As an inducement, the Act authorizes a compact to exclude waste produced outside the member States from its regional disposal facilities (an action which otherwise would be prohibited by the interstate commerce clause). Ten regional compacts have been formed and received the required approval of Congress. Eight states, Puerto Rico, and the District of Columbia remain unaffiliated.

Facilities that manage or dispose of low-level waste are licensed and regulated by either the NRC or one of the 37 states that have made arrangements with the NRC to regulate LLW under its Agreement State Program, authorized by Section 274 of the Atomic Energy Act. Section 274 allows NRC to delegate to a state portions of NRC's regulatory authority to license and regulate byproduct materials; source materials; and certain quantities of special nuclear materials.

Progress toward siting and opening new facilities to serve the various compacts has been slow. Currently, there are only four active licensed facilities:

• Barnwell, South Carolina (operated by Energy Solutions under license from the State of South Carolina -- accepts Class A, B, and C waste, but only from the Atlantic Compact states of Connecticut, New Jersey, and South Carolina);

<sup>&</sup>lt;sup>2</sup> See, 10 C.F.R. § 61 (2011).

<sup>&</sup>lt;sup>3</sup> U.S. Nuclear Regulatory Commission, *Low-Level Radioactive Waste Disposal*, 80 Fed. Reg. 16082 (Mar. 25, 2003).

<sup>&</sup>lt;sup>4</sup> 42 U.S.C. § 2021.

- Richland, Washington (Operated by U.S. Ecology under license from the State of Washington -- accepts Class A, B, and C waste, but only from the eight members of the Northwest Compact and, by special agreement, the Rocky Mountain Compact states of Colorado, Nevada and New Mexico);
- Andrews County, Texas (Operated by Waste Control Specialists, LLC under license from the State of Texas -- accepts Class A, B and C wastes, from the Texas Compact states of Texas and Vermont and also from others subject to permission by the Texas Compact); and,
- Clive, Utah (Operated by EnergySolutions under license from the State of Utah -- permitted to accept only Class A waste, but may accept such waste from all regions of the United States.)<sup>5</sup>

#### II. GTCC WASTE

Section 3(b)(1)(D) of the Low Level Radioactive Waste Policy Act Amendments of 1985 assigned DOE responsibility for the disposal of GTCC resulting from NRC and Agreement State licensed activities.<sup>6</sup> The Energy Policy Act of 2005 (EPAct05) required DOE to develop plans and alternatives for the disposal of GTTC.<sup>7</sup>

In 2011, DOE prepared a Draft Environmental Impact Statement (EIS) for the disposal of GTCC as well as similar waste generated by DOE activities. The Department is currently working to complete the Final EIS which will evaluate the potential environmental impacts associated with the proposed development, operation, and long-term management of a disposal facility or facilities for greater-than-class C low-level radioactive waste and greater-than-class C-like waste. DOE plans to identify a preferred alternative in the final EIS, but no date has been provided for its completion.<sup>8</sup>

Meanwhile, on July 22, 2015, NRC released a paper from NRC staff to the Commissioners recommending that the Commission allow the State of Texas to license the disposal of GTCC waste. The recommendation was the result of a June 20, 2014 Petition for Rulemaking filed with the State of Texas by Waste Control Specialists, LLC requesting that Texas revise its regulations to allow acceptance of GTCC waste at the Andrews County low-

<sup>&</sup>lt;sup>5</sup> U.S. Nuclear Regulatory Commission, *Locations of Low-Level Waste Disposal Facilities* (online at www.nrc.gov/waste/llw-disposal/licensing/locations.html) (accessed Oct. 25, 2015).

<sup>&</sup>lt;sup>6</sup> Low-Level Radioactive Waste Policy Amendments Act of 1985, Pub. L. No. 99-240.

<sup>&</sup>lt;sup>7</sup> Energy Policy Act of 2005, Pub. L. No. 109-58.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Energy, *About the Greater-Than-Class C Low-Level Radioactive Waste EIS* (online at www.gtcceis.anl.gov/eis/index.cfm) (accessed Oct. 25, 2015).

level waste facility. On January 30, 2015, Texas asked the NRC to clarify the State's ability to license the disposal of GTCC and similar waste.<sup>9</sup>

## III. WITNESSES

The following witnesses are expected to testify:

## Panel I

#### **Mark Whitney**

Principal Deputy Assistant Secretary for Environmental Management Department of Energy

#### **Michael Weber**

Deputy Executive Director of Operations for Materials, Waste, Research, State, and Compliance Programs

**Nuclear Regulatory Commission** 

## Panel II

# Jennifer Opila

Director

Organization of Agreement States

## Leigh Ing

**Executive Director** 

Texas Low Level Radioactive Waste Disposal Compact Commission

#### **Chuck Smith**

Councilmember Aiken County, South Carolina Chairman Energy Communities Alliance

<sup>&</sup>lt;sup>9</sup> U.S. Nuclear Regulatory Commission, *Policy Issue Notation Vote - SECY-15-0094 - Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste* (Jul. 17, 2015) (online at pbadupws.nrc.gov/docs/ML1516/ML15162A 807.pdf).