



October 26, 2015

TO: Members, Subcommittee on Environment and the Economy

FROM: Committee Majority Staff

RE: Hearing entitled “Update on Low-Level Radioactive Waste Disposal Issues”

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## I. INTRODUCTION

On Wednesday, October 28, 2015, at 10:15 a.m. in 2322 Rayburn House Office Building, the Subcommittee on Environment and the Economy will hold a hearing entitled “Update on Low-Level Radioactive Waste Disposal Issues.”

## II. WITNESSES

### Panel I

- Mr. Mark Whitney, Principal Deputy Assistant Secretary for Environmental Management, Department of Energy; and,
- Mr. Michael Weber, Deputy Executive Director of Operations for Materials, Waste, Research, State, and Compliance Programs, Nuclear Regulatory Commission.

### Panel II

- Ms. Jennifer Opila, Director, Organization of Agreement States;
- Ms. Leigh Ing, Executive Director, Texas Low Level Radioactive Waste Disposal Compact Commission; and,
- Mr. Chuck Smith, Councilmember, Aiken County, South Carolina, Chairman, Energy Communities Alliance.

## III. BACKGROUND

Low-Level Radioactive Waste (LLRW) is generated from a wide variety of industrial, research, medical, and utility activities. LLRW is material that is contaminated with radioactive material or has become radioactive through neutron radiation. This waste generally has a shorter half-life to decay and is less radioactive than spent nuclear fuel and high-level waste.<sup>1</sup>

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<sup>1</sup> Spent nuclear fuel and high-level waste disposal is governed by the Nuclear Waste Policy Act of 1982, as amended.

The Nuclear Regulatory Commission (NRC) classifies LLRW into four categories. Class A is the least hazardous material with the most flexible disposal regulations. Classes B and C are more radioactive with longer decay time and have more stringent NRC restrictions on disposal facilities. Greater Than Class C (GTCC) is considered the most hazardous LLRW. NRC regulations state that Class A, B, and C can be disposed of in a near-surface disposal, while GTCC is not suitable for near-surface disposal. Of the amount of LLRW that is generated annually, a vast portion is categorized as Class A material. In 2014, 98.5 percent of the 1.13 million cubic feet of commercial LLRW that was disposed of was Class A waste.<sup>2</sup>

In 1980, Congress passed the Low-Level Radioactive Waste Policy Act<sup>3</sup> to establish a national LLRW disposal policy. The law left responsibility for management and disposal of Class A, B, and C LLRW generated within State borders to each State government, but made the Federal government responsible for GTCC. The Federal government also is responsible for the disposal of three types of Federal waste: Department of Energy (DOE) generated waste, decommissioning waste from the U.S. Navy, and waste from nuclear weapons program research, development, testing, and production.

The Act encouraged States to form regional compacts that would work together to site, license, and operate disposal facilities for LLRW generated within compact States. In 1986, the Low-Level Radioactive Waste Policy Act Amendments of 1985 were enacted to provide greater authority to the existing host States by permitting host States to restrict waste from outside the compacts in which they were located.<sup>4</sup> To date, ten compacts have formed and approved by Congress.<sup>5</sup>

LLRW is disposed of at sites that meet NRC standards for low-level waste disposal facilities guided by 10 CFR Part 61 (Part 61 regulations). The facilities must be licensed either by the NRC or by the host State, if the State is part of the Agreement State Program with the NRC.<sup>6</sup> Although thirty-four States do not have access to a compact disposal facility, currently, there are four sites that do accept LLRW, all of which are located in Agreement States:<sup>7</sup>

- *EnergySolutions Clive Operations, Clive, UT* – The facility receives waste from all regions of the United States, but is limited to only Class A waste.
- *Barnwell Low-Level Radioactive Waste Disposal Facility, Barnwell, SC* –The facility accepts LLRW from the three States that are part of the Atlantic Compact, including South Carolina, New Jersey, and Connecticut. The facility receives Class A, B, and C

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<sup>2</sup> Department of Energy, “*Manifest Information Management System*,” accessible at: <http://mims.doe.gov/GeneratorData.aspx>

<sup>3</sup> P.L. 96-573

<sup>4</sup> P.L. 99-240.

<sup>5</sup> <http://www.nrc.gov/waste/llw-disposal/licensing/compacts.html>

<sup>6</sup> NRC’s Agreement State Program permits States to assume NRC regulatory authority under the Atomic Energy Act.

<sup>7</sup> <http://www.nrc.gov/waste/llw-disposal/licensing/locations.html>

LLRW. The State of South Carolina restricted access to the site in 2008 to just compact members.

- *U.S. Ecology, Richland, WA* – The facility accepts waste from the Northwest Compact (Washington, Oregon, Idaho, Montana, Wyoming, and Utah) and Rocky Mountain Compact (Nevada, Colorado, and New Mexico). The facility can receive Class A, B, and C waste.
- *Waste Control Specialists (WCS), LLC, Andrews County, TX* – WCS accepts waste from the Texas Compact generators (Texas and Vermont) and from outside generators with approval from the Compact. The facility receives Class A, B, and C waste.

The NRC is currently revising Part 61 regulations, which govern low-level radioactive waste disposal facilities to include site-specific technical analysis and criteria, rather than existing generic standards. In March 2015, NRC Staff issued the Proposed Rule for Low-Level Radioactive Waste Disposal for public comment.<sup>8</sup>

Section 631 of the Energy Policy Act of 2005 directed DOE to submit a recommendation to Congress for disposal of GTCC material.<sup>9</sup> DOE has yet to make a recommendation, but has considered certain sites as part of the process to prepare an environmental impact statement. In addition to disposal of GTCC material, DOE manages, stores, and disposes of LLRW at DOE sites across the country as part of its environmental cleanup efforts, national laboratory system management, and nuclear stockpile programs.

#### **IV. ISSUES**

The following issues may be examined at the hearing:

- Issues associated with implementing the Low-Level Radioactive Waste Policy Act;
- NRC revisions to Part 61 regulations for LLRW facilities; and,
- DOE's efforts to dispose of LLRW, specifically GTCC waste.

#### **V. STAFF CONTACTS**

If you have any questions regarding this hearing, please contact Andy Zach or David McCarthy of the Committee staff at (202) 225-2927.

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<sup>8</sup> For more information about the rulemaking process see: <http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html>

<sup>9</sup> P.L. 109-58