



## DoD INSTRUCTION 4715.27

### DoD LOW-LEVEL RADIOACTIVE WASTE (LLRW) PROGRAM

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<b>Originating Component:</b>	Office of the Under Secretary of Defense for Acquisition and Sustainment
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<b>Reissues and Cancels:</b>	DoD 4715.6-R, "Low-Level Radioactive Waste Disposal Program," January 17, 2001
<b>Incorporates and Cancels:</b>	Deputy Under Secretary of Defense (Environmental Security) Memorandum, "Charter for Low Level Radioactive Waste Disposal Program," August 21, 1997
<b>Approved by:</b>	James A. MacStravic, Performing the Duties of the Under Secretary of Defense for Acquisition, Technology, and Logistics
<b>Change 2 Approved by:</b>	Karen Saunders, Chief of Staff

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**Purpose:** In accordance with the authority in DoD Directive 5134.01 and the July 13, 2018 Deputy Secretary of Defense Memorandum, this issuance:

- Establishes policy, assigns responsibilities, and provides procedures for LLRW disposal in accordance with DoD Directive 4715.1E and DoD Instruction 4715.06.
- Establishes the LLRW Disposition Advisory Committee (LLRWDAC).

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## **SECTION 1: GENERAL ISSUANCE INFORMATION**

### **1.1. APPLICABILITY.** This issuance:

a. Applies to:

(1) OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).

(2) LLRW containing source, special nuclear, or byproduct material that is acceptable for disposal in a land disposal facility, in accordance with the U.S. Nuclear Regulatory Commission (NRC) regulations (e.g., Sections 61.2, 20.1003 and 20.2008 of Title 10, Code of Federal Regulations (CFR)). This LLRW includes mixed waste, naturally occurring radioactive material waste, and naturally occurring and accelerator-produced radioactive material waste.

b. Does not apply to:

(1) LLRW resulting from activities falling under Sections 2121 and 2140 of Title 42, United States Code (U.S.C.) (also known as the “Atomic Energy Act of 1954”). These activities include, but are not limited to, waste:

(a) Generated by the Naval Nuclear Propulsion Program in accordance with Executive Order 12344 and Section 7158 of Title 42, U.S.C.

(b) Related to nuclear weapons programs.

(c) Generated by decommissioning former Army Deactivated Nuclear Power Program facilities.

(2) Decay in storage, release in effluents, disposal by release into sanitary sewage, treatment or disposal by incineration, and disposal of specific wastes in accordance with Sections 20.2002-20.2005 and 20.2108 of Title 10, CFR.

**1.2. POLICY.** It is DoD policy that all LLRW be handled and disposed in a manner that is protective of human health and the environment, and complies with DoD issuances and applicable statutory and regulatory requirements.

**1.3. INFORMATION COLLECTIONS.** The application for waiver, referred to in Paragraphs 2.2.a., 3.1.a., and 3.3.a.(1), does not require licensing with a report control symbol in accordance with Paragraphs 1.b.(9) and 1.b.(16) of Enclosure 3, Volume 1 of DoD Manual 8910.01.

**1.4. SUMMARY OF CHANGE 2.** This change is administrative and updates references and organizational symbols to reflect the reorganization of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, pursuant to the July 13, 2018 Deputy Secretary of Defense Memorandum.

## **SECTION 2: RESPONSIBILITIES**

**2.1. ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT (ASD(S)).** Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the ASD(S) oversees the implementation of this issuance.

**2.2. DOD COMPONENT HEADS.** The DoD Component heads:

- a. Except when part of environmental restoration, dispose of LLRW through the DoD lead agent or apply for a waiver, in accordance with Paragraph 3.3.
- b. For LLRW-generated from part of an environmental restoration site, coordinate LLRW disposal plans with the DoD lead agent before taking such LLRW actions.
- c. Designate a point of contact for LLRW matters and inform the DoD lead agent for LLRW of the designation.
- d. Assign a member to the LLRWDAC.
- e. Develop and publish procedures in DoD Component regulations, as needed, to comply with this issuance.
- f. Provide information to the DoD lead agent, as needed, to operate and support the DoD LLRW Program.

**2.3. SECRETARY OF THE ARMY.** In addition to the responsibilities in Paragraph 2.2., the Secretary of the Army:

- a. Serves as the DoD lead agent for LLRW in accordance with DoD Instruction 4715.06.
- b. Helps the ASD(S) coordinate, manage, and implement the DoD LLRW Program.
- c. Provides oversight of and guidance for the DoD LLRW Program for safe, compliant, and cost-effective LLRW disposal and:
  - (1) Establishes the LLRWDAC to review performance and policy issues of the DoD LLRW Program.
  - (2) Designates the LLRWDAC chair and develops a charter for committee operations.
- d. Designates a technical advisor to support the DoD lead agent to:
  - (1) Review current federal, State, and international laws, regulations, and standards for LLRW disposal and determine their applicability to the DoD.
  - (2) Review DoD Component disposal plans for safety and compliance with this issuance.

- (3) Develop and maintain procedures for safe, compliant, and cost-effective LLRW disposal.
  - (4) Draft and coordinate DoD LLRW policy.
  - (5) Review requests for waivers in accordance with the requirements of Paragraphs 2.2.a. and 3.3.
  - (6) Maintain liaison on behalf of DoD with:
    - (a) Federal and State regulators and State compacts.
    - (b) Host nations, through coordination with the lead environmental component or installation commander, for resolution of overseas waste issues.
  - (7) Provide technical assistance and training on LLRW disposal to the DoD Components, as necessary and upon request, when resources allow it.
  - (8) Keep up to date on state-of-the-art LLRW techniques and technology so that the DoD uses the most efficient, compliant, and safe means for LLRW disposal.
  - (9) Keep records of DoD LLRW disposal and LLRW awaiting disposal.
  - (10) Negotiate inter-Service support agreements with DoD Components for LLRW disposal, as necessary.
  - (11) Refer requests for support in arranging for LLRW disposal for non-DoD entities on a cost-reimbursable basis to LLRWDAC for decision and direction:
    - (a) Non-DoD federal agencies are in accordance with applicable law (e.g., Section 2692 of Title 10, U.S.C.), permits, and inter-agency agreements.
    - (b) Civilian authorities (other than federal agencies) are in accordance with applicable law, permits, and Part 185 of Title 32, CFR.
- e. Raises significant LLRW issues to the ASD(S).

## **SECTION 3: PROCEDURES**

### **3.1. DISPOSAL OF LLRW.**

- a. Unless as part of an environmental restoration, the DoD Components will dispose of LLRW through the DoD lead agent or obtain a waiver in accordance with Paragraph 3.3.
- b. LLRW disposal as part of an environmental restoration does not require disposal of LLRW through the DoD lead agent (see Paragraph 3.3.c.).

### **3.2. FUNDING.**

- a. The Department of the Army will budget for and finance the costs associated with the DoD lead agent and technical advisor responsibilities described in Paragraph 2.3.
- b. The DoD Components will reimburse the costs associated with LLRW disposal performed by the DoD lead agent for LLRW and its contractors for the DoD Component.

### **3.3. WAIVERS.**

**a. Requesting a Waiver.** A DoD Component may send a written request for waiver to the DoD lead agent for LLRW in accordance with Paragraph 2.2.a. The waiver, if granted, will allow the DoD Component to dispose of a certain quantity of LLRW through the Component's own means, on a case-by-case basis.

(1) The DoD Components must include information about quantities, types, and locations of all their disposed LLRW subject to the waiver. The information must be in the format that the DoD lead agent uses to track LLRW disposals.

(2) Waiver requests will include cost and technical information that show LLRW disposal to be safe, compliant, and cost effective as proposed under the waiver. Cost information will include the costs of the DoD lead agent inspections of LLRW shipments conducted in accordance with the terms of the waiver.

(3) DoD Component LLRW points of contact will forward DoD Component waiver requests to the DoD lead agent.

**b. Reviewing a Waiver.** The DoD lead agent will review the waiver request and:

(1) If approving the waiver request, monitor procedures in accordance with the terms of the waiver approval as appropriate to ensure proper disposal of LLRW.

(2) If disapproving the waiver request, provide the DoD Component with the reason for disapproval.

**c. Appealing a Disapproved Waiver.** The LLRWDAC will publish procedures for handling waiver appeals in accordance with this paragraph.

(1) A DoD Component may appeal the DoD lead agent's disapproval of the Component's waiver request to the LLRWDAC within 90 days after the date of disapproval.

(2) If the LLRWDAC upholds the DoD lead agent's disapproval, the DoD Component may refer the matter to the chain of command.

**d. Exceptions for Environmental Restoration.**

(1) As stated in Paragraph 2.2.a., LLRW disposal from environmental restorations does not require disposal through the DoD lead agent or the Paragraph 3.3.a. waiver requirements from the DoD lead agent. In such cases, DoD Components will follow applicable DoD Component guidelines for uninterrupted and prompt restoration of LLRW contaminated sites.

(2) As stated in Paragraph 2.2.b., the DoD Component will coordinate disposal plans with the DoD lead agent. DoD Components should ensure that the April 2016 Memorandum of Understanding between the NRC and DoD is considered for all LLRW disposal from environmental remediation.

**3.4. LLRW OR MATERIAL OUTSIDE DOD POSSESSION AND CONTROL.**

a. In general, LLRW or material outside DoD possession and control may not be accepted, handled, removed, or disposed of when the following conditions apply:

(1) Is owned by, or in the possession of, a private citizen, business, State, or non-federal entity, or

(2) Is located on property that is not currently and never was owned by, leased to, or otherwise possessed by a DoD Component.

b. In exceptional circumstances and on a case-by-case basis, a DoD Component, in consultation with its legal office, must determine, in writing, that there is a legal basis for acceptance, handling, removal, or disposal of the LLRW or material in accordance with this issuance.

(1) To accept a request regarding LLRW or material outside DoD possession and control, the DoD Component must:

(a) Find clear evidence (e.g., contract or documents, serial numbers, clear markings on material) that the LLRW or material is or was owned by the DoD Component.

(b) Determine that a response is necessary to avoid current or highly probable harm to human health or the environment.



(c) Conclude that a response avoids or minimizes current or future DoD Component liabilities.

(2) If such a finding is made in Paragraph 3.4.b.(1), the DoD Component must then determine if it has authority to respond, and if funds are available that may be used for the disposal of low-level radioactive material. If these factors are met, the DoD Component will determine if:

(a) The benefit or need associated with removal outweighs the cost, liability, and other burdens that may affect the DoD Component associated with the requested action, or applicable legal requirements mandating the removal.

(b) The expenditure is not prohibited by law.

(c) The expenditure is not provided for by any other appropriation or law.

(d) No other party with responsibility for the material is available to arrange for the proper disposal of the material.

c. All requests for DoD support for assistance to other federal agencies or civilian authorities for non-DoD LLRW disposal must be referred to LLRWDAC in accordance with Paragraph 2.3.d.(11). The DoD lead agent will recover the costs by reimbursement from non-DoD agencies associated with LLRW disposal performed for those agencies in accordance with applicable law.

## GLOSSARY

### G.1. ACRONYMS.

ASD(S)	Assistant Secretary of Defense for Sustainment
CFR	Code of Federal Regulations
LLRW	low-level radioactive waste
LLRWDAC	Low-Level Radioactive Waste Disposition Advisory Committee
NRC	Nuclear Regulatory Commission
U.S.C.	United States Code

**G.2. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

**environmental restoration of LLRW.** The process of identifying, investigating, and remediating sites, including installation restoration, formerly used defense sites, and installations affected by base realignment and closure decisions, contaminated by LLRW in accordance with Sections 6901 through 6992k of Title 42, U.S.C. (also known as, “The Resource Conservation and Recovery Act”), or Sections 9601 through 9675 of Title 42, U.S.C.(also known as, “The Comprehensive Environmental Response, Compensation, and Liability Act”) and the Defense Environmental Restoration Program.

**hazardous waste.** Defined in Section 6903(5) of Title 42, U.S.C.

**lead environmental component.** Defined in DoD Instruction 4715.05.

**LLRW.** Radioactive material classified as low-level radioactive waste consistent with applicable law and regulations by the NRC. For overseas locations, LLRW may include host-nation defined radioactive materials. LLRW may be NRC-regulated radioactive material, naturally occurring radioactive material, naturally occurring and accelerator-produced radioactive material, or mixed waste.

**LLRW disposal.** Includes the packaging, handling, manifesting, transportation, processing, treatment, and disposition of LLRW, and the records associated with these operations.

**mixed waste.** Defined in Section 6903(41) of Title 42, U.S.C. It is jointly regulated by NRC or NRC agreement States and the Environmental Protection Agency or the Environmental Protection Agency’s Resource Conservation and Recovery Act authorized States. A hazardous waste that does not meet the definition of a mixed waste would be regulated primarily under Resource Conservation and Recovery Act.

**naturally occurring and accelerator-produced radioactive material waste.** Waste composed of both radioactive materials produced by an accelerator used in sub-atomic particle physics research and naturally occurring radioactive material.

**naturally occurring radioactive material waste.** Waste whose natural radioactivity has been enhanced by some human process or activity. Naturally occurring radioactive material is a subset of naturally occurring and accelerator-produced radioactive material.

## REFERENCES

- Code of Federal Regulations, Title 10
- Code of Federal Regulations, Title 32, Part 185
- Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018
- DoD Directive 4715.1E, “Environment, Safety, and Occupational Health (ESOH),” March 19, 2005, as amended
- DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),” December 9, 2005, as amended
- DoD Instruction 4715.05, “Environmental Compliance at Installations Outside the United States,” November 1, 2013, as amended
- DoD Instruction 4715.06, “Environmental Compliance in the United States,” May 4, 2015, as amended
- DoD Manual 8910.01, Volume 1, “DoD Information Collections: Procedures for DoD Internal Information Collections,” June 30, 2014, as amended
- Executive Order 12344, “Naval Nuclear Propulsion Program,” February 1, 1982
- Memorandum of Understanding between the U.S. Nuclear Regulatory Commission and Department of Defense, “Coordination on Cercla Response Actions at DoD Sites with Radioactive Materials,” April 2016<sup>1</sup>
- United States Code, Title 10, Section 2692
- United States Code, Title 42

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<sup>1</sup> Available at <http://www.nrc.gov/docs/ML1609/ML16092A294.pdf>