

IDAPA 58 – DEPARTMENT OF ENVIRONMENTAL QUALITY

Waste Management and Remediation Division

58.01.10 – Rules Regulating the Disposal of Radioactive Materials Not Regulated Under the Atomic Energy Act of 1954, As Amended

To whom does this rule apply?

The rule applies to any person disposing of radioactive materials that are not regulated under the Atomic Energy Act of 1954, As Amended, but have radiological activities that necessitate environmental isolation. These radioactive materials include Formerly Utilized Site Remedial Action Program waste, naturally occurring radiological materials (NORM), and low activity radiological wastes exempted from Nuclear Regulatory Commission regulation through administrative processes.

What is the purpose of this rule?

This rule regulates the disposal of radioactive materials not regulated under the Atomic Energy Act of 1954, As Amended, at facilities permitted and subject to the requirements of the Idaho Hazardous Waste Management Act, Chapter 44, Title 39, Idaho Code, and the Idaho Hazardous Waste Facility Siting Act, Chapter 58, Title 39, Idaho Code. This rule does not regulate NORM or TENORM waste from the production of elemental phosphorus or from the production of phosphate fertilizers, which includes the production of wet and purified phosphoric acid. The rule also places restrictions on disposal of certain radioactive materials at municipal solid waste landfills and identifies other approved disposal options for radioactive materials.

What is the legal authority for the agency to promulgate this rule?

This rule implements the following statute passed by the Idaho Legislature:

Health and Safety -

- [Section 39-4405, Idaho Code](#) – Hazardous Waste Management: Rules in General

Who do I contact for more information on this rule?

Albert Crawshaw
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706
Phone: (208) 373-0554
Email: albert.crawshaw@deq.idaho.gov
www.deq.idaho.gov

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58.01.10 – RULES REGULATING THE DISPOSAL OF RADIOACTIVE MATERIALS NOT REGULATED UNDER THE ATOMIC ENERGY ACT OF 1954, AS AMENDED

000. LEGAL AUTHORITY.

The Idaho Legislature has given the Board of Environmental Quality the authority to promulgate these rules pursuant to Section 39-4405, Idaho Code. (3-31-22)

001. TITLE AND SCOPE.

01. Title. These rules are titled IDAPA 58.01.10, “Rules Regulating the Disposal of Radioactive Materials Not Regulated Under the Atomic Energy Act of 1954, As Amended.” (3-31-22)

02. Scope. These rules regulate the disposal of radioactive materials not regulated under the Atomic Energy Act of 1954, As Amended, at facilities permitted and subject to the requirements of the Idaho Hazardous Waste Management Act, Chapter 44, Title 39, Idaho Code, and the Idaho Hazardous Waste Facility Siting Act, Chapter 58, Title 39, Idaho Code. These rules do not regulate NORM or TENORM waste from the production of elemental phosphorus or from the production of phosphate fertilizers, which includes the production of wet and purified phosphoric acid. These rules also place restrictions on disposal of certain radioactive materials at municipal solid waste landfills and identify other approved disposal options for radioactive materials. (3-31-22)

002. WRITTEN INTERPRETATIONS.

Any written statements pertaining to the interpretation of these rules shall be available for review at the Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255. (3-31-22)

003. ADMINISTRATIVE APPEALS.

Persons may be entitled to appeal agency actions authorized under this chapter pursuant to IDAPA 58.01.23, “Contested Case Rules and Rules for Protection and Disclosure of Records.” (3-31-22)

004. INCORPORATION BY REFERENCE.

01. General. Unless expressly provided otherwise, any reference in these rules to any document identified in Subsection 004.02 shall constitute the full adoption by reference, including any notes and appendices therein. The term “documents” includes codes, standards or rules which have been adopted by an agency of the state or of the United States or by any nationally recognized organization or association. (3-31-22)

02. Documents Incorporated by Reference. The following documents are incorporated by reference into these rules: (3-31-22)

- a. [10 CFR 30.14 through 30.15](#), revised as of January 1, 2014. (3-31-22)
- b. [10 CFR 30.18 through 30.21](#), revised as of January 1, 2014. (3-31-22)
- c. [10 CFR 32.11](#), revised as of January 1, 2014. (3-31-22)
- d. [10 CFR 32.18](#), revised as of January 1, 2014. (3-31-22)
- e. [10 CFR 40.13](#), revised as of January 1, 2014. (3-31-22)

03. Availability of Referenced Material. Copies of the documents incorporated by reference into these rules are available at the following locations: (3-31-22)

- a. Department of Environmental Quality, 1410 N. Hilton, Boise ID 83706-1255. (3-31-22)
- b. Idaho State Law Library, 451 W. State Street, P.O. Box 83720, Boise ID 83720-0051. (3-31-22)
- c. U.S. Government Printing Office, www.ecfr.gov. (3-31-22)

005. OFFICE – OFFICE HOURS – MAILING ADDRESS AND STREET ADDRESS.

The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, telephone number (208) 373-0502. The office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday. (3-31-22)

006. -- 009. (RESERVED)

010. DEFINITIONS.

- 01. Accelerator-Produced Radioactive Material.** Any material made radioactive by a particle accelerator. (3-31-22)
- 02. Board.** The Idaho Board of Environmental Quality. (3-31-22)
- 03. Byproduct Material.** Byproduct Material means: (3-31-22)
- a.** Any radioactive material (except special nuclear material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or utilizing special nuclear material; and (3-31-22)
 - b.** The tailings or waste produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content. (3-31-22)
 - c.** Any discrete source of radium-226 that is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; or any material that: (3-31-22)
 - i.** Has been made radioactive by use of a particle accelerator; and (3-31-22)
 - ii.** Is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; and (3-31-22)
 - d.** Any discrete source of naturally occurring radioactive material, other than source material, that: (3-31-22)
 - i.** The U.S. Nuclear Regulatory Commission, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of Homeland Security, and the head of any other appropriate federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security; and (3-31-22)
 - ii.** Before, on, or after August 8, 2005, is extracted for use in a commercial, medical, or research activity. (3-31-22)
- 04. Department.** The Idaho Department of Environmental Quality. (3-31-22)
- 05. Exempt Quantities and Concentrations of Byproduct Materials.** Radioactive materials defined as exempt byproduct materials by the U.S. Nuclear Regulatory Commission (10 CFR 30.14 through 30.15, 10 CFR 30.18 through 30.21, 10 CFR 32.11 and 10 CFR 32.18). (3-31-22)
- 06. Naturally Occurring Radioactive Material (NORM).** Any material containing natural radionuclides at natural background concentrations, where human intervention has not concentrated the naturally occurring radioactive material or altered its potential for causing human exposure. NORM does not include source, byproduct or special nuclear material licensed by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954. (3-31-22)
- 07. Operator.** Any person(s) currently responsible, or responsible at the time of disposal, for the overall operation of a hazardous waste treatment, storage or disposal facility or part of a hazardous waste treatment, storage or disposal site. (3-31-22)
- 08. Owner.** Any person(s) who currently owns, or owned at the time of disposal, a hazardous waste treatment, storage or disposal facility or part of a hazardous waste treatment, storage or disposal site. (3-31-22)
- 09. Person.** Any individual, association, partnership, firm, joint stock company, trust, political subdivision, public or private corporation, state or federal government department, agency, or instrumentality, municipality, industry, or any other legal entity which is recognized by law as the subject of rights and duties. (3-31-22)

- 10. Radioactive Material.** Radioactive Material includes: (3-31-22)
- a.** Technologically Enhanced Naturally Occurring Radioactive Material; (3-31-22)
 - b.** Byproduct material authorized for disposal pursuant to 10 CFR 20.2008(b); (3-31-22)
 - c.** Exempt Quantities and Concentrations of Byproduct Materials; (3-31-22)
 - d.** Unimportant Quantities of Source Material; and (3-31-22)
 - e.** Any other byproduct, source material, or special nuclear material or devices or equipment utilizing such material, which has been exempted or released from radiological control or regulation under the Atomic Energy Act of 1954, as amended, to be disposed of in a commercial hazardous waste facility as regulated pursuant to the rules, permit requirements, and acceptance criteria provided for by Chapter 44, Title 39, Idaho Code. (3-31-22)
- 11. Reasonably Maximally Exposed Individual.** That individual or group of individuals who by reason of location has been determined, through the use of environmental transport modeling and dose calculation, to receive the highest total effective dose equivalent from radiation emitted from the site and/or radioactive material transported off-site. (3-31-22)
- 12. Source Material.** Source material means: (3-31-22)
- a.** Uranium or thorium, or any combination thereof, in any physical or chemical form; or (3-31-22)
 - b.** Ores which contain by weight one-twentieth of one percent (0.05%) or more of: (3-31-22)
 - i.** Uranium; (3-31-22)
 - ii.** Thorium; or (3-31-22)
 - iii.** Any combination thereof. (3-31-22)
 - c.** Source material does not include special nuclear material. (3-31-22)
- 13. Special Nuclear Material.** Special Nuclear Material means: (3-31-22)
- a.** Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the U.S. Nuclear Regulatory Commission determines to be special nuclear material. (3-31-22)
 - b.** Any material artificially enriched by any of the material listed in Subsection 010.12.a. (3-31-22)
- 14. Technologically Enhanced Naturally Occurring Radioactive Material (TENORM).** Any naturally occurring radioactive materials not subject to regulation under the Atomic Energy Act whose radionuclide concentrations or potential for human exposure have been increased above levels encountered in the natural state by human activities. TENORM does not include source, byproduct or special nuclear material licensed by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954. (3-31-22)
- 15. Unimportant Quantities of Source Material.** Radioactive materials defined as unimportant quantities of source materials by the U.S. Nuclear Regulatory Commission (10 CFR 40.13). (3-31-22)

011. -- 018. (RESERVED)

019. NOTIFICATION OF RADIOACTIVE MATERIALS.

Any person with knowledge of the transfer, or proposed transfer, of radioactive materials for disposal to any location other than a location authorized by Section 020 to receive radioactive materials for disposal shall notify the Department of the transfer as soon as the transfer takes place or as soon as the person learns of the transfer, or

proposed transfer, whichever is sooner. (3-31-22)

020. RADIATION PROTECTION STANDARDS.

01. General Protection Standards. (3-31-22)

a. All owners and operators shall conduct operations in a manner consistent with radiation protection standards contained in 10 CFR 20; (3-31-22)

b. No owner or operator shall conduct operations, create, use or transfer radioactive materials in a manner such that any member of the public will receive an annual Total Effective Dose Equivalent (TEDE) in excess of one hundred (100) millirem per year (1 milliseivert/year); and (3-31-22)

c. No person shall release radioactive materials for unrestricted use in such a manner that the reasonably maximally exposed individual will receive an annual TEDE in excess of fifteen (15) millirem per year (fifteen one-hundredths (0.15) milliseivert/year) excluding natural background. (3-31-22)

02. Protection of Workers During Operations. All owners and operators shall conduct operations in a manner consistent with radiation protection standards for occupation workers contained in 10 CFR 20. (3-31-22)

03. Disposal of Radioactive Material. No person, owner, or operator shall dispose of radioactive materials by any method other than: (3-31-22)

a. At a permitted treatment, storage or disposal facility under the authority of the Idaho Hazardous Waste Management Act, Chapter 44, Title 39, Idaho Code, provided that the facility owner or operator complies with each of the following: (3-31-22)

i. Department-approved waste acceptance criteria for radioactive material defined in Section 010; (3-31-22)

ii. A Department-approved closure program that provides reasonable assurance that the radon emanation rate from the closed disposal unit will not exceed twenty (20) picocuries per square meter per second averaged across the entire area of the closed disposal unit and meets the requirements in Subsection 020.01.b.; and (3-31-22)

iii. A Department-approved environmental monitoring program that monitors air, ground water, surface water and soil for radionuclides and ambient radiation levels in the environs of the facility and which demonstrates that no member of the general public is likely to exceed a radiation dose of one hundred (100) millirem (one (1) milliseivert) per year from operations conducted at the site. (3-31-22)

b. By transferring wastes for disposal to a facility licensed under requirements for uranium or thorium byproduct materials in either 40 CFR 192 or 10 CFR 40 Appendix A; (3-31-22)

c. By transferring wastes for disposal to a disposal facility licensed by the U.S. Nuclear Regulatory Commission, an agreement state, or a licensing state; or (3-31-22)

d. In accordance with alternate methods authorized by the Department upon application or upon the Department's initiative, consistent with Section 020.01 and all applicable state statutes and regulations. (3-31-22)

04. Prohibit Disposal at a Municipal Solid Waste Landfill. No person shall dispose of radioactive material as defined in these rules at a municipal solid waste landfill, except for individual consumer products containing radioactive material. (3-31-22)

021. -- 029. (RESERVED)

030. RECORDS.

Records of disposal, including manifest, shall be maintained for three (3) years in accordance with 40 CFR 262.40

and 40 CFR 262.23.

(3-31-22)

031. -- 039. (RESERVED)

040. VIOLATIONS.

01. Failure to Comply. Failure by any person, owner, or operator to comply with the provisions of these rules shall be deemed a violation of these rules. (3-31-22)

02. Falsification of Statements and Records. It shall be a violation of these rules for any person, owner, or operator to knowingly make a false statement, representation, or certification in any document or record developed, maintained, or submitted pursuant to these rules. (3-31-22)

03. Penalties. Any person violating any provision of these rules or order issued thereunder shall be liable for civil penalty in accordance with Chapter 44, Title 39, Idaho Code. (3-31-22)

041. -- 999. (RESERVED)