# ATTACHMENT 1

## NOTICE OF PROPOSED RULEMAKING

## **CHAPTER 345**

DEPARTMENT OF ENERGY, ENERGY FACILITY SITING COUNCIL

FILING CAPTION: Updating rules to conform to revised statute and to allow for practicable implementation.

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 11/14/2023 5:00 PM

PUBLIC HEARING DATE: TBD

# NEED FOR THE RULE(S):

With Senate Bill 246 (2021), the legislature enabled the Energy Facility Siting Council, with support from ODOE, to update and clarify the definition of radioactive waste subject to the disposal ban (OAR 345 Division 50).

The rulemaking was undertaken to evaluate whether changes to rules are needed to protect public health and safety; consider what, if any, standards and rules are necessary to prevent disposal of radioactive waste in Oregon; and to align requirements with regulatory authority of other agencies and with practicable actions. The rulemaking will also improve how the process rules are organized and external Tables are referenced. Two new exemptions were added to the ruleset: one for petroleum wastes enriched in Lead-210 and one for metabolized medical isotopes when the receiving facility has a work procedure approved by ODOE staff.

# DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:

Staff Report and Supporting Materials for Energy Facility Siting Council meetings found at: https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Council-Meetings.aspx

# STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE:

It is not clear that this rulemaking would have a direct impact on racial equity in this state.

#### FISCAL AND ECONOMIC IMPACT:

These rule changes are intended to establish clear compliance guidelines, reduce worker risk, and increase equipment utilization.

# COST OF COMPLIANCE:

- (1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).
- (1) The ruleset will have minor impact to OHA-RPS and ODOE.

- (2) (a) The ruleset is not anticipated to have any significant impact to small business.
- (b) The ruleset establishes an opportunity for non-licensed disposal facilities to develop a waste management plan for metabolized medical isotopes. Following development of the plan, facilities would be expected to produce an annual summary memo. All reporting for licensed facilities is consistent with the requirements of their license.
- (c) The one-time plan development for non-licensed facilities may incur consulting fees, anticipated to be less than \$100,000.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

Small businesses were included in in the rulemaking process through OBI and ORRA.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

## CONTACT:

Thomas Jackman 503-551-7603 tom.jackman@energy.oregon.gov 550 Capitol St. NE Salem,OR 97301

# **RULES PROPOSED:**

 $345-050-0006,\,345-050-0010,\,345-050-0020,\,345-050-0025,\,345-050-0030$ 

AMEND: 345-050-0006

RULE TITLE: Disposal Prohibited

RULE SUMMARY: Modified rule language to be consistent with ORS 469.525 revision.

RULE TEXT:

As provided under ORS 469.525, no radioactive waste shall be disposed of within this state, no person may arrange for disposal of radioactive waste within this state, no person may transport radioactive waste for disposal in this state and no waste disposal facility for any radioactive waste shall be established, operated or licensed within this state, except as provided in ORS chapter 469 and this division.

STATUTORY/OTHER AUTHORITY: ORS 469.470 STATUTES/OTHER IMPLEMENTED: ORS 469.525

RULE TITLE: Purpose and Applicability

RULE SUMMARY: Modifying rule language to allow for practicable implementation of rule

requirements.
RULE TEXT:

(1) Because virtually all materials contain some radioactivity, the purpose of the rules in OAR 345-050-0006 through 345-050-0039 is to identify those materials that present such small health hazards that they are not considered to be radioactive waste and may be disposed of within the state.

- (2) OAR 345-050-0040 through 345-050-0130 establish standards for the siting of facilities for disposal of radioactive wastes that were generated before June 1, 1981, through industrial or manufacturing processes and that contain naturally occurring radioactive isotopes. These rules implement the requirements of ORS 469.375, 469.470 and 469.501 to 469.559 for such waste disposal facilities.
- (3) Except as provided in OAR 345-050-0060, these rules do not apply to uranium mine overburden or uranium mill tailings, mill wastes or mill by-product material that are subject to OAR chapter 345, divisions 92 and 95.
- (4) In accordance with ORS 469.525, the Department may establish an enforceable timeline or other requirements to determine whether a material is radioactive waste.
- (5) For the purpose of these rules, disposal does not include:
- (a) Temporary storage and staging of radioactive waste used or generated and stored or staged in accordance with a state license under ORS 453.635 as part of regular site operations
- (b) Temporary storage of radioactive waste at the Trojan Spent Fuel Storage Installation until a federal waste repository is operational, subject to the provisions of OAR 345-026-0300 through 345-026-0390
- (c) Temporary storage of radioactive waste from a reactor for which a site certificate has been issued pursuant to this chapter that is operated by a college, university or graduate center for research purposes and is not connected to the Northwest Power Grid; and
- (d) Temporary storage of radioactive waste at a facility not licensed under ORS 453.635 pending lawful disposal out of this state, subject to the following:
- (i) Any person that intends to temporarily store radioactive waste must report to the Department and Oregon Health Authority within 10 business days of discovery of such waste. The Department, in consultation with Oregon Health Authority, must determine that temporary storage of radioactive waste presents no significant risk to health and safety of the public and workforce. In order to determine that a radioactive waste presents no significant risk during temporary storage, it must be demonstrated that:
- (A) the waste will be located in an area of a facility that is reasonably expected to be inaccessible to

the public,

- (B) the waste will be clearly marked and cordoned or otherwise isolated from workers, and must be stored in such a manner that minimizes risk of mobilization. This may include cover and/or secondary containment;
- (C) workers will be informed and instructed on safety related to the waste;
- (D) any other requirements as determined by the Department in consultation with Oregon Health Authority and the holder of the waste.
- (ii) Temporary storage may not exceed 90 days without prior written authorization from the Department. To grant authorization to temporarily store radioactive waste for more than 90 days, the Department, in collaboration with Oregon Health Authority, must be assured that the waste will be properly disposed as soon as reasonably achievable, not to exceed 180 days in total.

STATUTORY/OTHER AUTHORITY: ORS 469.470 STATUTES/OTHER IMPLEMENTED: ORS 469.525

**RULE TITLE: Exempt Concentrations** 

RULE SUMMARY: Modified and moved rule language for internal consistency and added an

exemption.
RULE TEXT:

- (1) Materials that contain radionuclides in concentrations below the applicable concentration identified in Table 1 are not radioactive waste for purposes of ORS 469.525 and these rules. Additionally, wastes with the following characteristics are considered to contain exempt concentrations:
- (2) Radium-bearing materials containing less than 5 picocuries of radium-226 per gram of solid, regardless of quantity,
- (3) Thorium-bearing materials containing less than 20 picocuries of radium-228 per gram of solid, if the radium-228 is present with the parent thorium-232, regardless of quantity, or
- (4) Lead-210-bearing wastes which are not in equilibrium with uranium-238, are the result of fossil fuel-related production including refining, transport, or storage, and contain less than 10 picocuries per gram of solid regardless of quantity.

[ED. NOTE: The Table referenced in this rule is not printed in the OAR Compilation. Copies are available from the agency.]

STATUTORY/OTHER AUTHORITY: ORS 469 STATUTES/OTHER IMPLEMENTED: ORS 469.300, ORS 469.470, ORS 469.525

**RULE TITLE: Exempt Quantities** 

RULE SUMMARY: Modified and moved rule language for internal consistency.

**RULE TEXT:** 

- (1) Materials that contain radionuclides in individual quantities that do not exceed the applicable quantity identified in Table 2 are not radioactive waste for the purposes of ORS 469.525 and these rules unless the number of individual radionuclides at their maximum allowable activity given in Table 2 exceeds 10. Additionally, wastes with the following characteristics are considered to contain exempt quantities:
- (2) Radium-bearing material containing a total radium-226 activity of less than 10 microcuries, regardless of concentration.
- (3) Thorium-bearing materials containing a total radium-228 activity of less than 100 microcuries, if the radium-228 is present with the parent thorium-232, regardless of concentration in the solid.

[ED. NOTE: The Table referenced in this rule is not printed in the OAR Compilation. Copies are available from the agency.]

STATUTORY/OTHER AUTHORITY: ORS 469.470 STATUTES/OTHER IMPLEMENTED: ORS 469.300, ORS 97.153

**RULE TITLE: Specific Exemptions** 

RULE SUMMARY: Modified and moved rule language for internal consistency and added an

exemption.
RULE TEXT:

In addition to the exemptions under OAR 345-050-0020 and 345-050-0025, the following materials are exempt from the provisions of ORS 469.525 and OAR 345-050-0006:

- (1) Radioactive material that has been incorporated into a consumer product manufactured under a license issued by the Nuclear Regulatory Commission (NRC) or by an Agreement State, if the NRC or the Agreement State that issued the license has determined that the possession, use, transfer and disposal of such consumer product are exempt from regulatory requirements. An "Agreement State" is a state to which the NRC has delegated its authority to license and regulate byproduct materials (radioisotopes), source materials (uranium and thorium) and certain quantities of special nuclear materials in accordance with section 274b of the Atomic Energy Act.
- (2) Medical, industrial and research laboratory wastes contained in small, sealed, discrete containers in which the radioactive material is dissolved or dispersed in an organic solvent or biological fluid for the purpose of liquid scintillation counting and experimental animal carcasses that are disposed of or treated at a hazardous waste disposal facility licensed by the U.S. Environmental Protection Agency (U.S. EPA), by the Oregon Department of Environmental Quality, or by another state delegated the responsibility to regulate the disposal or treatment of hazardous waste by the U.S. EPA.
- (3) Burial of a human or animal body containing radioactive materials used for diagnostic or therapeutic purposes is exempt from the provisions of ORS 469.525 if the burial is otherwise done in accordance with applicable Oregon law.
- (4) Waste that is identified as the result of metabolized isotopes used in medical treatment. A facility may only dispose of such waste in accordance with a facility-specific plan approved by the Department in consultation with Oregon Health Authority. The plan must ensure that the material presents no significant risk to the public, workers, or the environment. The plan, at a minimum, should include:
- (a) how the facility will identify and confirm that waste is the result of metabolized isotopes used in medical treatment;
- (b) information regarding worker safety and training;
- (c) how the facility will manage waste that is determined to not be the result of metabolized isotopes used in medical treatment; and
- (d) a tracking and reporting schedule for informing the Department and Oregon Health Authority of actions taken under the plan.
- (5) Wastes containing only naturally occurring radioactive isotopes other than those in the uranium

and thorium decay series, as long as the isotopes exist in their naturally occurring isotopic concentrations.

(6) Wastes legally disposed before [DATE RULE REVISION EFFECTIVE], provided the waste is not removed from the location of original disposal.

STATUTORY/OTHER AUTHORITY: ORS 469.470 STATUTES/OTHER IMPLEMENTED: ORS 469.525



