

Oregon Radioactive Waste Disposal Regulations OAR 345-050

Nov. 7, 2022,
RAC Meeting

Oregon
Department of
Energy



AGENDA

- **Welcome and Introductions**
- **Topic 1 – The Easy Stuff**
- **Topic 2 – The Challenge**
- **Public Comments**
- **Wrap up and Next Steps**

Draft Language Part 1:

Practical changes to the ruleset that allow for easier use and remove impractical barriers to compliance.

1. Modification to the “Seven-Day Rule” – consistent with quarterly disposal “milk-runs”
 - Allow for 90 day temporary storage with a possibility for an extension request.
 - Requires Oregon Health Authority check-in
2. Modification to Tables 1-3, addition of Tables 1a and 2a
 - Adding units consistent with current analytical reporting practices
 - Adding Tables 1a and 2a in place of the former text-based specific exemptions for radium-226 and 228. Table 1a will also include a value for lead-210.

Draft Language Part 2:

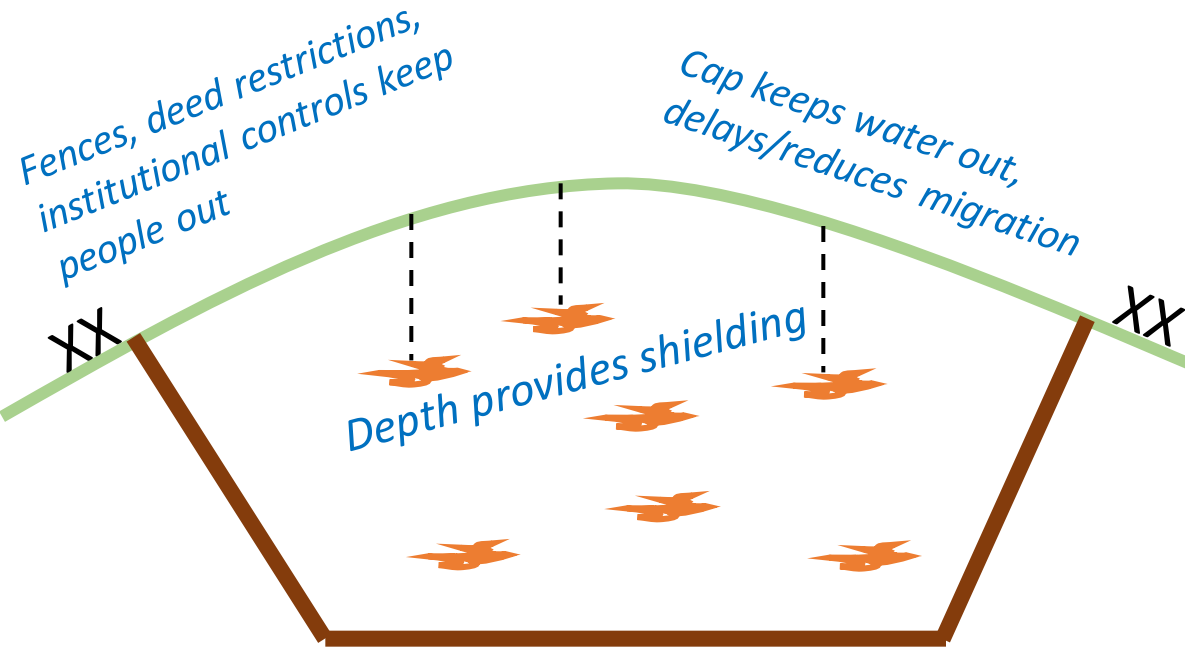
Potential changes to the Pathway Exemption. Would clarify and streamline language and makes programmatic changes.

1. Addition of a plant uptake pathway
2. Consideration of cumulative impact across Gamma, Water, and Plant uptake
3. Modification of the limit to correspond with the federal 100 millirem annual dose standard
4. How should exposure be considered, such as land-spreading or landfill disposal?
5. Other updates and considerations?

Oregon's current rules

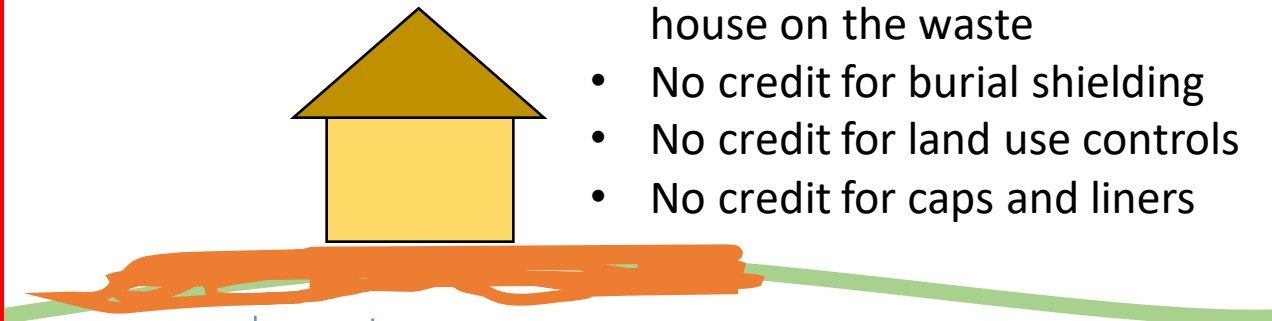
**Some other states allow disposal
in permitted facilities with safety features**

(supported by predictive environmental model)



**ORS 469.525: Radioactive waste
disposal prohibited**

*(“A Pathway Exemption” described in OAR-050-0035 to 0038-
considers risk factors)*



- Assume a person builds a house on the waste
- No credit for burial shielding
- No credit for land use controls
- No credit for caps and liners

*Waste must pass leach
testing – demonstrate
inherently low migration*



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*Liner prevents/delays
migration to water*

What is the Practical Result?

- If changes to the pathway evaluation dose limit are changed (500 mrem to 100 mrem) with no other considerations for exposure, may limit approvals to wastes containing concentrations very close to Table 1 and 1a values.
- Restricting access (e.g. shielding) to the waste materials could potentially allow for approval pathway exemptions similar to current levels, but open question if credit can be taken for disposal practices.
- Unclear if this was the intended policy direction from legislature for agency rulemaking (ORS 469.525(2) and ORS 469.300(23)(b)(A)).

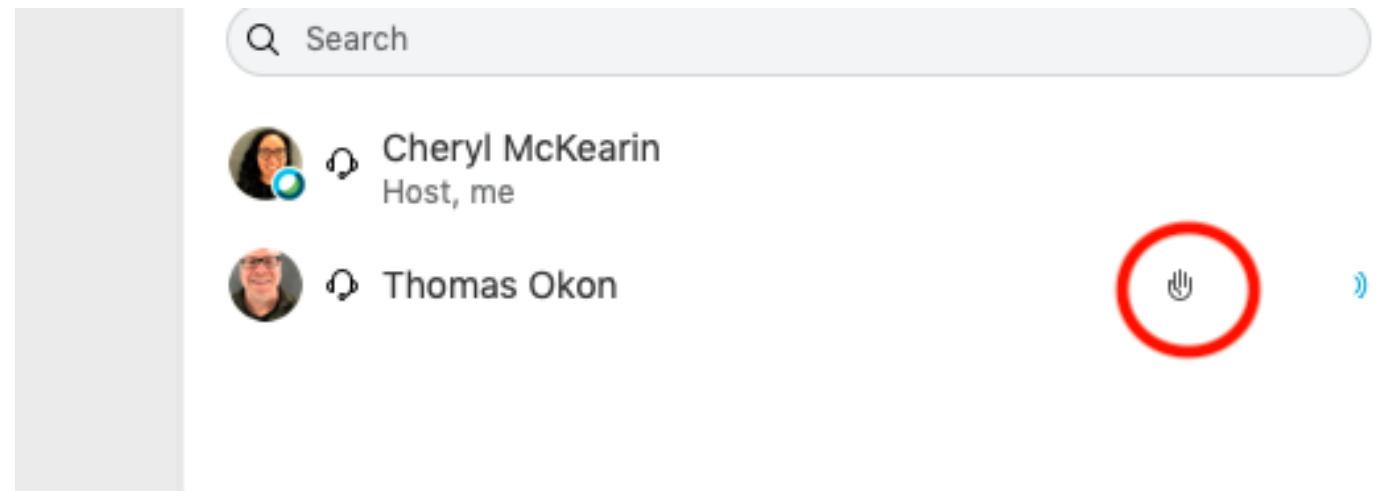
Planned Pathways – what is next?

There are (at least) three options for next steps:

1. Continue current route. Work on draft rules, send a revised ruleset in full to the Energy Facility Siting Council for its consideration and public comment.
2. Send the revised ruleset excluding substantive changes to the Pathway Exemption to EFSC for consideration. Pause further work on Pathway Exemption rules in order to allow time for 2023 legislature to offer clarification on policy direction. The RAC could then reconvene in summer 2023.
3. Request EFSC suspend entirely the rulemaking until after the 2023 legislative session and make no changes at this time.
4. Other options?

Public Comment

- **Phone Commenters: Press *3 to raise your hand to make comment, and *3 to lower your hand after you've made your comment.**
- **Webinar Commenters: Open the Participant list, hover over your name and click on the "Raise Your Hand icon".**



Questions?

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Alpha radiation emitting from natural U-238