



State of Oregon Department of Environmental Quality

# Fuel Tanks Seismic Stability 2023 Advisory Committee Meeting 3 Meeting Summary

March 3, 2023

## Purpose of meeting

On March 3, 2023, the Oregon Department of Environmental Quality convened the third meeting of the Fuel Tanks Seismic Stability Rulemaking Advisory Committee via Zoom webinar. The purpose of the meeting was to:

- Discuss the existing California and Washington policies and the environmental justice considerations reviewed by PSU and the conceptual performance-based design criteria workplan proposed by Haley and Aldrich.
- Discuss OAR Chapter 340 Division 300 Draft Rule.
- Provide a platform for public input.

## Meeting attendees

The meeting attendees included members of the FTSS Rulemaking Advisory Committee:

- Paul Edison-Lahm - Environmental justice interests, NAACP
- Randy Groves - Eugene Springfield Fire Chief (retired) & City Councilor
- Nancy Hiser - Linnton Neighborhood Association
- Andrew Holbrook - Kinder Morgan NW Operations Manager
- Lindsey Hutchison - Attorney for Willamette Riverkeeper
- Holli Johnson - Western States Petroleum Association
- Amit Kumar - Structural engineer at City of Portland
- Doug Lenz - Columbia Pacific Bio-Refinery plant manager
- Warren Seely - Seely Mint Farm
- Sterling Stokes – Portland Harbor Community Coalition
- Chris Voss - Multnomah County Director of Emergency Management
- Jacque Wurster - Director of neighborhood emergency team in Eugene, Community Emergency Response Team certified

DEQ staff and technical support team members in attendance:

- Mike Korten Hof – DEQ Fuel Tank Compliance Program Manager
- Svetlana Lazarev – DEQ Seismic Stability Program Analyst
- Lauren Wirtis – DEQ Communications
- Abby Boudouris – DEQ Senior Legislative Analyst
- Kasia Burns – DEQ Office Specialist
- Scott Smith – DEQ Spill Contingency Planner
- Allison Pynch – Haley and Aldrich, Inc. Project Engineer
- Della Graham – Haley and Aldrich, Inc. Project Manager
- Arun Pallathadka – PSU Department of Geography PhD candidate
- Yumei Wang – PSU Senior Advisor on Infrastructure Resilience and Risk
- Luke Hanst – PSU Institute for Sustainable Solutions
- Beth Gilden – PSU Institute for Sustainable Solutions

There were approximately 36 members of the public in attendance.

## Translation or other formats

[Español](#) | [한국어](#) | [繁體中文](#) | [Русский](#) | [Tiếng Việt](#) | [العربية](#)

800-452-4011 | TTY: 711 | [deqinfo@deq.oregon.gov](mailto:deqinfo@deq.oregon.gov)



State of Oregon  
Department of Environmental Quality

## **Welcome and meeting overview**

DEQ welcomed everyone to the meeting and provided an overview of Zoom webinar, meeting agenda, and December meeting follow-up. Portland State University discussed their review of the policies governing the seismic mitigation at petrochemical facilities in California and Washington and environmental justice study methodology. Haley and Aldrich talked about the conceptual seismic performance-based design criteria development considerations. Rulemaking Advisory Committee members discussed DEQ's draft rule followed by public input, and rulemaking timeline.

## **Seismic Mitigation at Petrochemical Facilities Law Review – PSU**

This part of the presentation focused on the law background, authority, vulnerability assessments and performance requirements of California Accidental Release Prevention Program, Marine Oil Terminal Engineering & Maintenance Standards and Washington's Facility Oil Handling Standards. Summaries of the California program prepared by PSU were included in the meeting materials. The topics reviewed included:

- Vulnerability Assessment Requirements
- Assessment Personnel Certification Requirements
- Mitigation Plan Requirements
- Timeline for Mitigation
- Performance Requirements
- Considerations for Lighter Mitigation Requirements
- Plan Review Requirements & Public Comments

## **Seismic Performance-based Design Criteria Considerations – Haley and Aldrich**

Once the amendments to Haley and Aldrich's work plans and budget have been finalized, the following considerations are expected to be developed:

- Review of current city, state, national and international design standards to understand what is currently required to establish the standard of practice regarding the building codes, the tank and supporting infrastructure design requirements, spill containment, fire resistance and response requirements.
- Considerations for engineering design earthquakes include probability of occurrence, magnitude and degree of shaking, percent of maximum shaking for design, probability that the design shaking level will be exceeded.
- Possible Performance Criteria including the structural design requirement, geotechnical design requirements, spill containment and sloshing and fire control.
- State of infrastructure including new versus retrofit and secondary effects.

## **Environmental Justice Study – PSU**

DEQ has both short- and long-term goals for social equity and environmental justice work. For this rulemaking, DEQ must identify the communities impacted by the facilities and the proposed rules. The rules must be implemented equitably. As program development and implementation proceed, social equity will be an ongoing conversation with continual refinement.

## **PSU outlined the methodology of the environmental justice study conducted for this rulemaking.**

The analysis is divided into three main parts:

- Fine scale analysis including social vulnerability proxy indicators and focus group discussions.
- Neighborhood scale analysis consisting of identifying the sociodemographic indicators and focus group discussions and
- Regional scale analysis.

## **OAR Chapter 340 Division 300 Draft Rule**

DEQ reviewed the nine sections of the draft rule and asked the committee to consider and discuss if the proposed draft rule criteria were satisfactory to prepare facility assessments and mitigation plans, approve or reject assessments or plans and implement the plans:

The rule sections are as follows:

- 340-300-0001 Purpose and Applicability
- 340-300-0002 Definitions and Acronyms as used in this Division
- 340-300-0003 Seismic Vulnerability Facility Assessment Process and Criteria
- 340-300-0004 Assessment Requirements
- 340-300-0005 Mitigation Implementation Plan Criteria
- 340-300-0006 Mitigation Plan Requirements
- 340-300-0007 Reporting requirements, test methods and procedures
- 340-300-0008 Program Administration and Compliance fees
- 340-300-0009 Department's Responsibility to Review and Approve Plans

### **Committee discussion addressed the following:**

- Purpose and applicability of the proposed draft rule.
- The proposed definitions of the "assessment team", "mitigation", "mitigation plan", "performance level", "reasonably practicable", "reasonable hours", "fuel", "entities", "as low as practicable", "seismic hazard", "based achievable technologies vs. state-of-the-art technologies".
- Safety of the nearby communities.
- Local jurisdictions' roles.
- On-site and off-site safety.
- Environmental, community and health concerns considerations in mitigation plans.
- The need for different performance criteria for different components of a facility.
- Liquefaction and its consequences.
- Out of service tanks.
- The assessment modification timeline.
- Mitigation plans timeline.
- Community and environmental impacts.
- Fee structure.
- Public review process.
- Enforcement and violations.
- Provisions protecting confidential business information.
- Gasses and Extremely Hazardous Substances stored on site.
- Equitable way of risk minimization on and off site.
- Offsite impacts inclusion in mitigation plans.

### **Public Input**

DEQ encouraged public input during the RAC meetings. Two members of the public provided input relating to:

- Centralization of fuel facilities in one location and associated risk.
- Alternative locations and energy modes.
- Construction on top of Portland Hills Fault.
- Out of service tanks removal and relocation.
- Sufficiency of fees to fund DEQ's oversight role.
- Independent peer reviews of assessments and mitigation plans and potential conflicts of interest.
- Integration of equity into the rule.

- The risk mitigation timeline.
- Hazardous substances.

DEQ plans to include time for public input during the April 21 meeting.

## **Program and Rulemaking Timeline**

DEQ reviewed the program and the rulemaking timeline and the plans to incorporate the feedback received during this meeting and within one week after the meeting into the second draft of the rule for committee's discussion in the April 21 meeting. In addition to the second draft of the rule, DEQ plans to present the rule's fiscal impact, the racial equity, and the environmental justice statements to the RAC on April 21, 2023. Material for the discussion will be sent to the RAC members about two weeks before the April 21 meeting.

**--The purpose of this meeting was achieved, and the meeting adjourned at 12 pm--**

## **Non-discrimination statement**

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

Visit DEQ's [Civil Rights and Environmental Justice page](#).