



Environmental Quality Commission

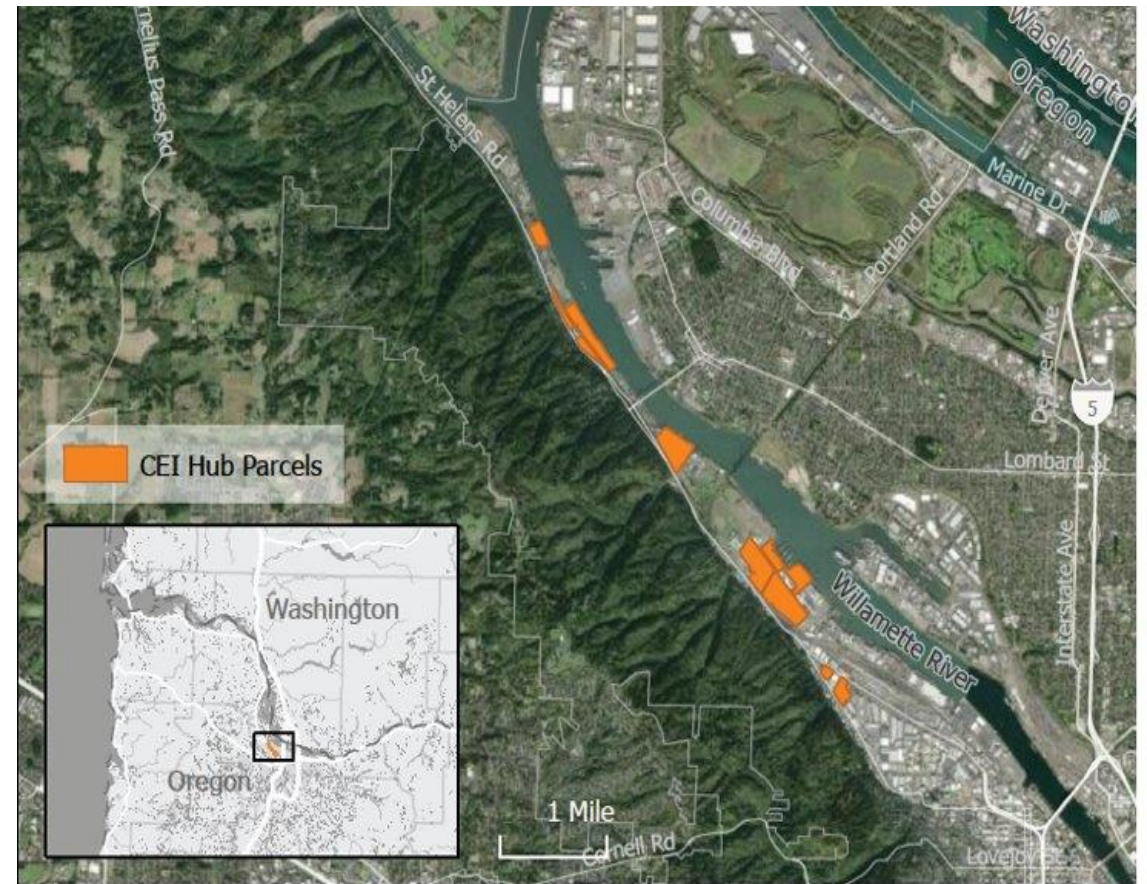
DEQ Fuel Tank Seismic Stability Program Update (Informational)

May 18, 2023

Salem, OR

The Start: Critical Energy Infrastructure Hub

- We will experience another mega earthquake
- Full storage is centered near downtown Portland
- 6-mile zone previously wetlands/ dredge spoils subject to liquefaction in an earthquake
- 13 tank farms
- 350M gallons of all types of refined oil and crude oil.
- 3 pipelines, 537 Tanks
- <2% of tanks built since 1993
- This is 90% of Oregon's oil supply



Source: Created by ECONorthwest.

Senate Bill 1567

Requires...

- Facility owners to assess their land and equipment integrity by June 2024
- Facilities develop and implement a risk mitigation plan.
- DEQ develop a risk mitigation implementation program, including rules.
- DEQ report to Legislature
- Oregon Department of Energy to develop an Energy Security Plan.



Facilities that may be covered

High-Capacity Fuel Storage Facilities	County
Cascade General Inc. (Vigor Shipyard)	Multnomah
McCall Oil & Chemical Corp	Multnomah
Zenith Terminals	Multnomah
Phillips 66	Multnomah
Chevron USA Inc.	Multnomah
Shell Portland Distribution Terminal	Multnomah
Kinder Morgan Liquids Term LLC	Multnomah
Northwest Natural Gas Co	Multnomah
Pacific Terminal Services Inc.	Multnomah
Nustar Portland Terminal	Multnomah
SeaPort Midstream Partners	Multnomah
Owens Corning Roofing and Asphalt LLC	Multnomah
PDX Fuel LLC	Multnomah
SFPP LP (Kinder Morgan Eugene)	Lane
PGE	Columbia
Columbia Pacific Bio-Refinery	Columbia



Seismic Stability Program Timeline



Rulemaking Advisory Committee

Name	Organization
Amit Kumar, PE	Development Services/City of Portland
Andrew Holbrook	Kinder Morgan
Chris Voss	Multnomah County
Doug Lenz	Columbia Pacific Bio-Refinery
Holli Johnson/ Tom Umenhofer	Western States Petroleum Assn.
Jacque Wurster	NW Eugene Ready
Lindsey Hutchison	Willamette Riverkeeper
Nancy Hiser	Linnton Neighborhood Association
Paul Edison-Lahm	NAACP Environmental Justice Committee
Peter Dusicka, PhD	Portland State University
Randy Groves	Eugene/Springfield Fire Chief (retired)
Sterling Stokes	Portland Harbor Community Coalition
Warren Seely	Seely Mint Farm

Rules Advisory Committee Meetings

Oct. 26, 2022

- Purpose and intent
- SB 1567 overview
- Environmental justice considerations
- Engineering considerations

Dec. 16, 2022

- Scope of the rule
- Technical tasks
- Rule outline
- Public input

March 3, 2023

- Draft rules
- EJ study methodology
- Conceptual engineering performance criteria

April 21, 2023

- Revised draft rules
- Equity impact statement
- Fiscal impact statement

Rule Frame

- 340-300-0000 Context
- 340-300-0001 Purpose and Applicability
- 340-300-0002 Definitions and Acronyms as used in this Division
- 340-300-0003 Seismic Vulnerability Assessment Requirements, Timeline and Approval Criteria
- 340-300-0004 Risk Mitigation Implementation Plan Requirements, Timeline and Approval Criteria
- 340-300-0005 Reporting Requirements, Test Methods and Procedures
- 340-300-0006 Program Administration and Compliance Fees
- 340-300-0007 DEQ Responsibility to Review and Approve SVAs and RMIPs

Risk Mitigation Implementation Timeline

- Seismic Vulnerability Assessment submitted to DEQ for review and approval on June 1, 2024.
- Mitigation plan due 180 calendar days after DEQ's approval of the assessment.
- Mitigation interim actions require 1, 3, & 5-year milestones based on feasibility and order of importance.
- Implementation to be completed in 10 years.
- Draft rule allows implementation plan amendments.

Residual Risk

- “Residual Risk” means potential risk remaining after all risk mitigation measures identified in the Risk Mitigation Implementation Plan are implemented.
- Plans must identify residual risk.
- Plans must include:
 - specific measures the facility will take to mitigate the effects of residual risk by creating an internal alarm and emergency plan
 - information local authorities may use for the creation of external alarm and emergency plans

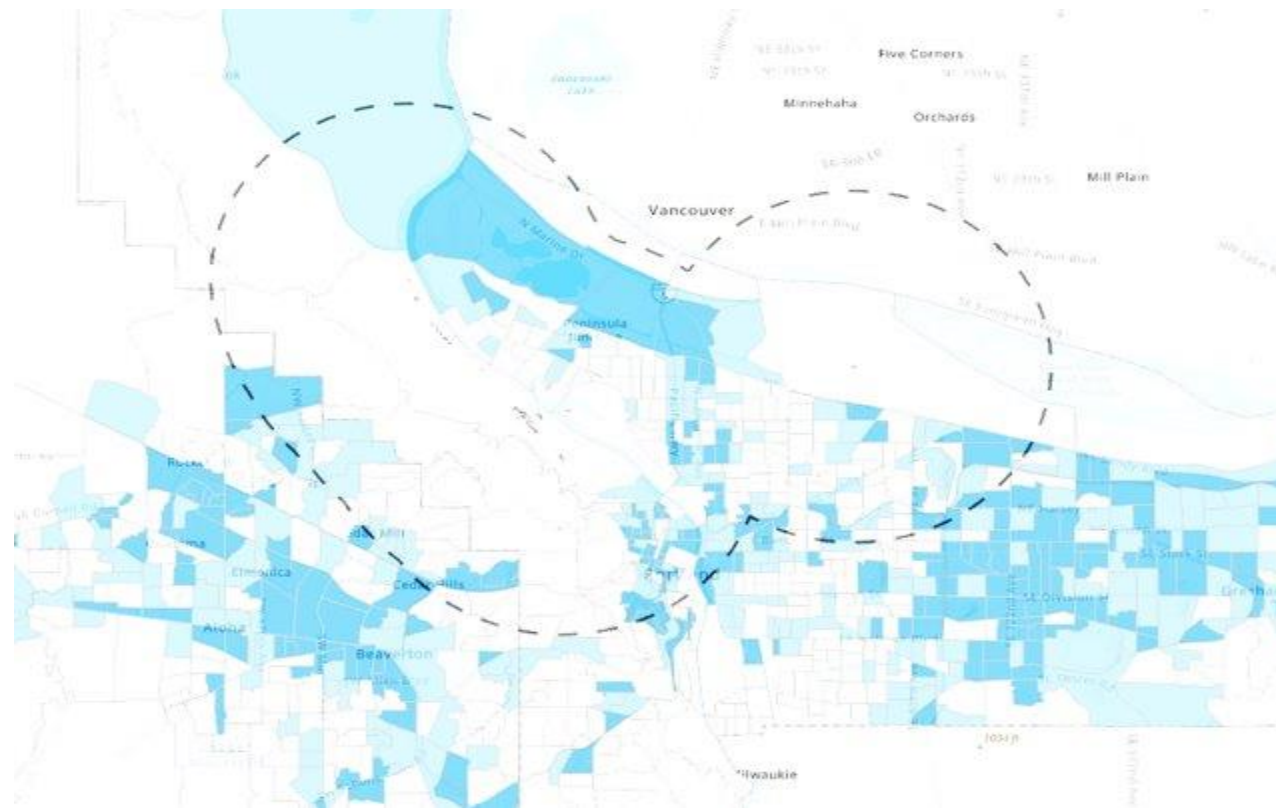
Fee Structure

Four fixed fees are proposed:

- Seismic Vulnerability Assessment Submittal Fee of \$39,000
- Risk Mitigation Implementation Plan Submittal Fee of \$36,000
- Annual Compliance Fee of \$23,000
- Risk Mitigation Implementation Plan Modification Fee of \$5,000

Environmental Justice

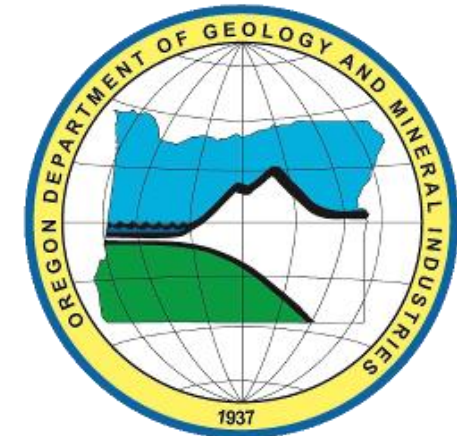
Social Vulnerability on Census Block Group scale of Multnomah and Washington Counties



- - - is a 4-mile buffer zone selected based on past fuel storage related incidents around the world

Technical Support Team

- Portland State University Institute for Sustainable Solutions
- Haley and Aldrich, Inc.
- Oregon Department of Geology and Mineral Industries



Next Steps

June 2023

- Public notice
- Public comment
- Public hearing

Sept. 2023

- EQC consider rules for adoption

Jan. 1, 2024

- Oregon Department of Energy Fuel Security Plan

Nov. 1, 2024

- DEQ's Recommendation to Legislature

Thank You!



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