State of Oregon Department of Environmental Quality

Oregon Environmental Quality Commission Meeting

Sept. 14, 2023

Rulemaking Action Item C
Fuel Tank Seismic Stability Rulemaking

Table of Contents

DEQ Recommendation to the EQC

DEQ recommends that the Environmental Quality Commission adopt the rules and amendments proposed in this Fuel Tank Seismic Stability report as part of Chapter 340 of the Oregon Administrative Rules.

Language of Proposed EQC Motion:

"I move that the commission adopt the new division 300 rules and also the amendments to division 012 proposed in this report as part of Chapter 340 of the Oregon Administrative Rules."

Introduction

In early 2020, Multnomah County's Office of Sustainability and the City of Portland Bureau of Emergency Management commissioned a study of the Critical Energy Infrastructure Hub located along the Willamette River in Portland. The study's purpose was to characterize and quantify the anticipated damages from the CEI Hub in the event of a Cascadia Subduction Zone earthquake. The last Cascadia event occurred in January 1700 and there is a 37% chance the next one will occur in the Pacific Northwest within 50 years or by 2073. More than 90% of all liquid fuel in Oregon is stored at the facilities in the CEI Hub. This includes the gas and diesel supply for the Portland metro area, as well as all the jet fuel for Portland International Airport. Other hazardous materials are also stored at the CEI Hub. Many of these tanks are old; the average year the tanks were built is 1954. The total potential release of hazardous materials stored at the CEI Hub as a result of a Cascadia Subduction Zone earthquake ranges from about 94.6 million to 193.7 million gallons. That is an unimaginable threat to the Willamette and Columbia rivers and to the Pacific Ocean.

In 2022, Senate Bill 1567 authorized DEQ to develop a program to evaluate the vulnerability of large capacity fuel storage and distribution facilities in Columbia, Lane and Multnomah counties in the event of an earthquake. The bill requires these facilities to develop and implement a plan to reduce risk to protect the life and safety of employees, surrounding communities and the environment. DEQ is conducting rulemaking to implement the state law.

DEQ assembled a 13-member Rules Advisory Committee to help with the rulemaking and held four meetings between October 2022 and April 2023. Committee members represented neighborhoods in the vicinity of the fuel facilities, emergency response, community groups and potentially regulated parties. It was created to advise DEQ in the development of these rules. Three of the meetings provided opportunities for public input. DEQ is planning to present the rules to the Environmental Quality Commission for adoption in September 2023 to meet the statutory deadline of June 1, 2024, when facilities must complete their Seismic Vulnerability Assessments. The proposed rules are not expected to have significant fiscal impacts on the public, other government agencies and large or small businesses with the exception of regulated facilities.

Statement of Need

What need would the proposed rule address?

There is a 37% chance that the Pacific Northwest will be hit with a magnitude nine earthquake in the next 50 years due to the nature of the Cascadia Subduction Zone. The large capacity fuel storage and distribution facilities in Multnomah, Columbia and Lane counties are vulnerable to ground shaking and secondary effects caused by a powerful earthquake. This rule aims to reduce the risk of damage to the employees, communities surrounding the fuel facilities and ecosystems of the Willamette and Columbia rivers.

How would the proposed rule address the need?

This rule requires facilities to perform Seismic Vulnerability Assessments and propose and execute Risk Mitigation Implementation Plans that would reduce the risk of oil spills due to a high magnitude earthquake. Facilities must submit their assessments to DEQ by June 1, 2024. The plans are due 180 calendar days after DEQ has approved the assessments. Implementation of all risk mitigation actions proposed in these plans is expected to be completed within 10 years.

How will DEQ know the rule addressed the need?

DEQ will know the rule addressed the need when all measures in the DEQ-approved Risk Mitigation Implementation Plans are implemented as required by the proposed rules.

Rules Affected, Authorities, Supporting Documents

Lead division
Land Quality Division

Program or activity
Fuel Tank Seismic Stability Program Development

Chapter 340 action

Adopt				
340-300-0000	340-300-0001	340-300-0002	340-300-0003	340-300-0004
340-300-0005	340-300-0006	340-300-0007	340-012-0064	

Amend
340-012-0140

Statutory Authority - ORS				
ORS 468	468.015	468.020		

Legislation
SB 1567 (2022)

Other authority
Oregon Law 2022 Chapter 99

Supporting documents:
Report for Oregon's Fuel Tank Seismic Stability Program: Environmental Justice, Laws, Policies, and Risk Minimization Best Practices by Luke Hanst, **Arun Pallathadka**, and **Idowu Ajibade**, **Portland State University: Institute for Sustainable Solutions, 2023**

Report on Engineering Research Summary for the Oregon DEQ Seismic Rules Development, Haley and Aldrich, Inc., 2023

Fee Analysis

These proposed rules would establish new fees.

Brief description of proposed fees

- Seismic Vulnerability Assessment Submittal Fee of $39,000
- Risk Mitigation Implementation Plan Submittal Fee of $36,000
- Year one Annual Compliance Fee of $23,000
- Year two and subsequent years Annual Compliance Fee not to exceed $50,000
- Risk Mitigation Implementation Plan Modification Fee of $5,000

Reasons

The proposed fees are to cover the costs of Seismic Vulnerability Assessment and Risk Mitigation Implementation Plan reviews and program administration costs. These fees are new fees created to address risks at the large capacity fuel storage and distribution facilities in Multnomah, Columbia and Lane counties and the environmental damage a Cascadia Subduction Zone 9.0+ earthquake would cause to the environment. The fees are authorized by Senate Bill 1567, adopted during the 2022 legislative session.

The fees will generate the following revenue amounts:

- 2023-2025: 17 Assessments at the amount of $39,000 per assessment = $663,000
- 2023-2025: 17 Annual Compliance fees of $23,000 per facility in year one = $391,000
- 2025-2027: 17 Mitigation Plans at the amount of $36,000 per mitigation plan = $612,000
- 2027 +: up to $50,000/year until the implementation of all mitigation measures proposed in DEQ approved Risk Mitigation Implementation Plans is approved by DEQ.

DEQ may reevaluate the Annual Compliance Fee each year and adjust it based on that year's projected program costs. The Annual Compliance Fee will not exceed $50,000 in any given year.

Fee proposal alternatives considered

- SVA Submittal Fee $39,000
- RMIP Submittal Fee $39,000
- Annual Compliance Fee $50,000
- Risk Mitigation Implementation Plan Modification $5,000

Fee payer

These fees may affect as many as 17 facilities; 14 in the CEI hub in Multnomah County; two in Columbia County along the Columbia River, and one in Lane County.

Affected party involvement in fee-setting process

The fee-payers' perspective was represented in the Rules Advisory Committee membership. The list of the committee members is included in the Rules Advisory Committee charter.

DEQ held a fee-payer informational session on May 15, 2023, to inform the fee-setting process and to understand the regulated facilities' perspective. The May 15 meeting materials are posted on the Fuel Tank Seismic Stability Rulemaking website.

Summary of impacts

The facilities subject to the rules will pay the following fees:

- Seismic Vulnerability Assessment Submittal Fee of $39,000
- Risk Mitigation Implementation Plan Submittal Fee of $36,000
- Year one Annual Compliance Fee of $23,000
- Year two and consequent years Annual Compliance Fee not to exceed $50,000
- Risk Mitigation Implementation Plan Modification Fee of $5,000

Fee payer agreement with fee proposal

Eight of the 17 facilities that will potentially be affected by the proposed rule attended an informational session on May 15, 2023. No objections to the proposed fees and fee structure have been brought to DEQ's attention to date.

How long will the current fee sustain the program?

Current Fees		
Program costs covered by fees	$0	0%
Program costs covered by General Fund	$0	0%
Fees Last Changed	Not Applicable – New Fee Program	

Proposed Fees		
Expected change in revenue (+/-)	$1.24M/biennium	100%
Impact to General Fund required by statute/rule to fund program	$1.12M/biennium	0%
Proposed fee allows General Fund replacement	$0	0%

Proposed Fees	
Expected effective date	Sept. 15, 2023

Transactions and Revenue				
Biennium	**Number of transactions**	**Number of fee payers**	**Impact on revenue (+/-)**	**Total revenue (+/-)**
2023-2025	17*	17	$2.1M	$3.2M**

*Estimated, fewer or more facilities may be subject to the proposed rules.
**Includes fee and General Fund revenue

Fee schedule

Assessment fee due by June 1, 2024 - $39,000
Mitigation fee due six months after DEQ approval of assessment - $36,000
Mitigation plan amendments when requested - $5,000.
Annual Compliance Fee year one - $23,000
Annual Compliance Fee year two and subsequent years – up to $50,000. May be reduced based on each year's projected program cost.

Statement of Fiscal and Economic Impact

The most significant impact will be on the 17 facilities that are potentially affected by this rule. There may be an indirect effect on the public through increased fuel and infrastructure costs, and there will be a minor impact to state and local governments. There is one small business that may face a greater financial burden under the proposed rules than the larger businesses.

Oregon Department of Geology and Mineral Industries has a specified role in the assessment and mitigation plan approval process, with related fiscal impacts. Other state agencies like Oregon Department of Energy and Office of the Oregon State Fire Marshal have interests related to the work in these rules, but that involvement is typically included in their ongoing work and does not change significantly because of this program.

The anticipated impacts to the state agencies are as follows:

- DOGAMI: $202,000
- ODOE: negligible
- OSFM: negligible

DEQ plans to use some fee revenue to cover DOGAMI expenses.

Local governments

There may be economic impacts to the City of Portland, the City of Eugene, Multnomah, Lane and Columbia Counties. The fiscal impacts to local governments are expected to be similar to those of other state agencies like ODOE and OSFM.

Public

The proposed rule may have an indirect economic impact on the public through increased fuel and infrastructure costs with costs passed through to consumers as higher fuels costs.

Assuming assessment and mitigation expenses average $15 million per facility, the total costs are $255 million. Fuel consumption in Oregon was 983 trillion British Thermal Units in 2020[1] with a total expenditure of approximately $12 billion. Assuming one gallon of motor gasoline equals 120,238 Btu[2] , if costs are distributed uniformly, fuel prices could increase by about $0.03 per gallon.

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[1] US Energy Information Administration Oregon Profile Data

https://www.eia.gov/state/data.php?sid=OR

[2] Finished motor gasoline sold at retail in the United States, including fuel ethanol content

https://www.eia.gov/energyexplained/units-and-calculators/british-thermal-units.php

Large Businesses - businesses with more than 50 employees

The proposed rule will have a significant economic impact on the 17 facilities potentially subject to Senate Bill 1567. The proposed rule, in addition to the DEQ fees, is likely to result in costs associated with installation, design, permitting, construction and maintenance of seismic protection measures at existing tanks and structures or with seismic standards for new tanks and structures. These improved protections would likely reduce spills in the event of earthquakes. This, in turn, reduces the risk of impacts to the environment, public health and property that result from spills and earthquakes. In addition, the facilities subject to the rule will incur fees and the cost of compliance.

If adopted, the rules would result in benefits associated with:

- Improved understanding of facility vulnerability to earthquakes and other disasters, spill risk and associated prevention and preparedness needs.
- Reduced risk of accidental major spills and associated costly and lengthy cleanups.
- Prevention of secondary events such as fire and ability to contain fires that cannot be prevented on the facility property.
- Reduced risk of pollution to waterways.
- Improved safety of people on site and in nearby communities and environment.
- Understanding of the residual risk remaining after mitigation and improved ability to plan for emergency response measures associated with that risk.

DEQ fees charged to the 17 regulated facilities are estimated to total $5,185,000 over the assumed 10-year program life as follows:

- Year one: $1,054,000
- Year two: $1,003,000
- Year three: $391,000
- Years four - ten: $2,737,000

Proposed year one fees consist of the Seismic Vulnerability Assessment report filing fees of $39,000 per facility and annual compliance fees of up to $23,000 per facility. Year two fees consist of the Risk Mitigation Implementation Plan filing of to $36,000 per facility and an Annual Compliance Fee of up to $50,000, adjusted based on the estimated year two program expenses. Year three and consequent years' fees consist of the Annual Compliance Fees of up to $50,000.

Facilities will directly incur costs due to engineering services to develop plans for submittal to DEQ. The costs are expected to range by an order of magnitude depending on land conditions, equipment conditions and operating choices. Facility Seismic Vulnerability Assessment costs may range from $25,000 to $250,000. Risk Mitigation Implementation Plan development costs may range from $25,000 to over $250,000. Facilities can expect the average cost for each type of plan to be approximately $150,000 per facility.

Risk Mitigation implementation costs for facilities are estimated to be up to two orders of magnitude greater than the cost of developing plans which puts the implementation costs between $5,000,000 and $50,000,000 per facility.

Small Businesses – businesses with 50 or fewer employees

One of these facilities is operated by a small business. The effects listed under large businesses will be the same that will affect the small business but may have a larger impact on them compared to the larger companies.

The proposed rule may indirectly economically affect the small businesses not subject to the proposed rule through increased fuel and infrastructure costs.

ORS 183.336 - Cost of Compliance for Small Businesses

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

McCall Oil and Chemical Corporation is the only company subject to the proposed rule that employs less than 50 people.

b. Projected reporting, recordkeeping, and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The proposed rules do not require any additional activities in addition to those directed in Senate Bill 1567.

c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.

The proposed rules do not require any activities in addition to those directed in Senate Bill 1567.

d. Describe how DEQ involved small businesses in developing this proposed rule.

As part of the rulemaking process, DEQ held four meetings with the Rule Advisory Committee. Several of the committee members represented the affected industry. Committee members' input assisted in developing the proposed rules. On May 15, 2023, DEQ held a meeting with potentially affected facilities to gather feedback on the proposed fees.

Documents Relied on for Fiscal and Economic Impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the Rules affected, authorities, supporting documents section above.

Document title	Document location
US Energy Information Administration Oregon Profile Data	https://www.eia.gov/state/data.php?sid=OR
Finished motor gasoline sold at retail in the United States, including fuel ethanol content	https://www.eia.gov/energyexplained/units-and-calculators/british-thermal-units.php

Advisory Committee Fiscal Impact Statement Review

As ORS 183.33 requires, DEQ asked for the advisory committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

The committee reviewed the draft fiscal and economic impact statement. The committee's comments and recommendations are documented in the RAC 4 Meeting Summary.

Some of the committee members agreed with DEQ's conclusion that the overall fiscal impact of the rule, including impacts to small businesses, will be insignificant. Others thought that there might be some potential fiscal impact, but the currently available information is not sufficient to estimate the significance of such impact. Several committee members noted that DEQ's fiscal impact statement does not address the significant fiscal impact on all the considered groups if the proposed rules are not adopted and implemented. Some committee members had no comment.

Housing Costs

The rule's impact on housing costs, affordability and the housing market is expected to be negligible. As the program develops, it is DEQ's goal to minimize financial impacts and maximize the benefits of the rule.

DEQ determined the proposed rules would have no effect on the development costs because these rules only apply to fuel tanks with a storage capacity of two-million gallons or more. This would not cause any rise in the cost of housing in the surrounding areas.

Racial Equity

Requirement

ORS 183.335(2)(a)(F), as amended by House Bill 2993 (2021), requires state agencies, when providing notice of a rulemaking, to provide a statement identifying how adoption, amendment or repeal of the proposed rules will affect racial equity in the state. Statute language: ORS 183.335(1)(a) Prior to the adoption, amendment or repeal of any rule, the agency shall give notice of its intended action. The notice required by subsection (1) of this section must include a statement identifying how adoption of the rule will affect racial equity in this state ORS183.335 (2)(a)(F).

What does "Racial Equity" mean?

House Bill 2993 does not define "racial equity" and there is no one meaning of the phrase as a term of art – many different meanings have been suggested. In legislative history, legislators acknowledged that there is no clear meaning of the phrase, and they did not attempt to provide one. Courts interpreting undefined phrases that have no fixed meaning as a term of art, give the words their ordinary meaning. The ordinary meaning of "racial equity" is treating people of all races fairly, justly and without bias. A statement of how a rule will affect "racial equity" means how the rule will affect the fair, just and unbiased treatment of people of all races.

Reference definitions from House Bill 4077 (2022)

House Bill 4077 established the Environmental Justice Council within the office of the Governor. The bill requires that the council with staff support from the Department of Environmental Quality, in collaboration with the office of Enterprise Information Services, the Institute for Natural Resources, the Portland State University Population Research Center, other natural resources agencies and the Oregon Health Authority, develop an environmental justice mapping tool. An inclusive community engagement process to receive input from communities across this state is required by this new law.

"Equity analysis" means an analysis used to determine or evaluate environmental justice considerations. "Fair treatment" means that no one group of people, including racial, ethnic or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal environmental programs and policies.
"Environmental justice" means equal protection from environmental and health risks, fair treatment and meaningful involvement.

Equity beyond racial considerations

The definition of equity should be ever-changing and responsive depending on who is impacted by a cause and how the effects of this cause are experienced. At large, it is a concept meant to provide resources depending on need, understanding that not one person, community or environment will need the same resources. Societal and structural barriers can stand in the way of access to resources and contribute to an

inequitable structure that oppresses various groups in disparate ways. Equity must expand beyond fiscal and racial considerations. Vulnerability assessments can guide direction, but they must be accompanied by accountability measures to adequately protect environments and communities.

According to Federal Emergency Management Agency's report to the National Advisory Council [3], the core definition of equity is providing the greatest support to those with greatest need to achieve a certain minimum outcome. An equitable policy means providing more support to people with more need. By perpetually assisting larger communities that already have considerable resources, the smaller, less resource-rich, less-affluent communities cannot access funding to appropriately prepare for a disaster, leading to inadequate response and recovery, and little opportunity for mitigation. Through the entire disaster cycle, communities that have been underserved stay underserved, and thereby suffer needlessly and unjustly. The marginalized communities tend to be both the most exposed to damage and least able to recover financially.

[3] FEMA National Advisory Council Report
https://www.fema.gov/sites/default/files/documents/fema_nac-report_11-2020.pdf

Environmental Justice Considerations

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. DEQ is committed to incorporating environmental justice best practices into its programs and decision-making, to ensure all people in Oregon have equitable environmental and public health protections.

As part of this rulemaking, DEQ has contracted with Portland State University's Institute for Sustainable Solutions to conduct an environmental justice review using a social vulnerability assessment model and community focus groups to understand community's perspective on fuel storage facilities and to identify areas of concern. The study consists of geospatial regional and site-specific analyses of Columbia, Lane and Multnomah counties, field analysis and focus group community discussions. The spatial analysis of social vulnerability revealed that there were varying patterns across different areas. The study considers the following demographic factors[4]:

- Population density – more populated communities require more resources prior to, during, and after a hazard event
- Population over 65 years of age – older people require more assistance during and after a hazard event
- Non-White Population – need more resources to recover after a disaster
- Population without high school diploma – have less access to information and resources
- Renters – have fewer resources to recover after a disaster
- Low-income population – fewer resources before, during and after a hazard event
- Linguistically isolated population – require more assistance and outreach before, during and after a hazard event

Categories not addressed in the PSU study but mentioned in the Eugene-Springfield Climate and Hazard Vulnerability Assessment[5] include:

- Population with flammable roof, vegetation within 10 meters of home
- Geographically isolated population

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[4] Social Vulnerability to Environmental Hazards
https://onlinelibrary.wiley.com/doi/abs/10.1111/1540-6237.8402002

[5] Eugene-Springfield Climate and Hazard Vulnerability Assessment

www.eugene-or.gov/DocumentCenter/View/20644/2014-EugeneSpringfield-Climate-and-Hazards-Vulnerability-Assessment

- Population isolated from public agencies for fear of interacting with public agencies
- Population without health insurance
- Population without a vehicle
- Disabled
- Institutionalized

The houseless population is also disproportionately exposed to environmental and industrial hazards. The environmental justice mapping tool being developed under House Bill 4077 will include a wide variety of additional social vulnerability indices and will be available for use by September 2025.

Environmental justice analysis

The PSU environmental justice review study shows that in Multnomah County, the census block groups that are located between multiple fuel facilities, especially those directly adjacent to industrial areas in northwest Portland and the Portland airport, are of particular concern and contain numerous socially vulnerable neighborhoods.

Approximately 32% of all child daycare centers in Multnomah and Washington counties are situated within the four-mile radius of the fuel terminals, as are 38% of all nursing homes. In Lane County, the area around the fuel storage facility exhibits high social vulnerability and a greater proportion of socially vulnerable neighborhoods are found within a four-mile radius as compared with the rest of the county. In this county, more than 28% of senior homes, as well as about 31% of child daycare centers are situated within the four-mile radius of the fuel storage facility. Columbia County analysis did not identify any high social vulnerability areas in the vicinity of the fuel storage facilities. However, focus group discussions highlighted concerns about impacts on regional tribal population and fishery, farmland and workers, the natural watershed, and the migratory and native birds.

The PSU team of researchers assisting with this rulemaking also investigated the funding and grant opportunities to facilitate earthquake preparedness and risk mitigation work related to the safety of the neighboring communities.

Bulk fuel terminals store and transfer products derived from petroleum and plant sources.
They can release air contaminants during tank truck and rail car loading, fuel storage and vapor leaks from pumps, valves, and other equipment. The employees of the facilities and the residents of the neighborhoods adjacent to fuel terminals are disproportionately affected by health and safety risks and environmental impacts. Some of the neighborhoods near the facilities related to this rulemaking have populations with higher levels of all six social vulnerability criteria compared to the county and Oregon as a whole.

The facilities located on liquifiable soils vulnerable to earthquakes pose potential major health, safety, and fuel spill risks. Communities that are adjacent to or near fuel terminals are disproportionately impacted by emissions and safety risks. These communities are traditionally lower-income and have a higher percentage of people of color. These communities have been historically overburdened by environmental hazards and are being impacted by climate change first and hardest[6], as seen in the 2019 heat wave. Climate change and air pollution represent additional cumulative impacts that exacerbate the disparities between different racial groups in Oregon. Lower-income people in Oregon are disproportionately people of color[7] and are more likely to work in frontline occupations. Frontline workers, and especially those who work outdoors, such as fuel terminals workers, bear disproportionate exposure to the negative impacts of climate change, worsening air quality and any potential natural disasters.

This rulemaking is intended to prevent facility failure through seismic retrofits, replacement, relocation and other safety upgrades and maintenance improvements requirements at largest bulk fuel terminals in Oregon.

This rule and program implementation improves and addresses racial equity by:

1) Preventing spills and resulting damage after an earthquake, especially for the workers and residents in the immediate area.
2) Supporting public participation in the Risk Mitigation Implementation Plans approval process.

The proposed rules will reduce existing risk borne by those working and residing near the fuel terminals by decreasing the terminals' vulnerability to earthquakes and reducing the health and safety concerns caused by potential oil spills and fires caused by earthquakes and other earthquake-related secondary effects. The program will create a long-term positive impact on equity and environmental justice in Oregon by making the fuel facilities more resilient to earthquakes and less prone to a disaster caused by a potential earthquake and its secondary effects.

Advisory committee racial equity statement review

Several committee members agreed with DEQ's conclusion that the proposed rule and program implementation will improve and address racial equity by:

1) Preventing spills and resulting damage after an earthquake, especially for the workers and residents in the immediate area.

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[6] Oregon Health Authority Climate and Health in Oregon report: https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/2020/Climate%20and%20Health%20in%20Oregon%202020%20-%20Full%20Report.pdf

[7] US Census Bureau's American Community Survey: https://data.census.gov/cedsci/table?q=United%20States&t=Income%20and%20Earnings&g=0400000US41&tid=ACSST5Y2020.S1903

2) Supporting public participation in the Risk Mitigation Implementation Plans approval process. DEQ anticipates receiving and addressing comments during the risk mitigation plan approval process regarding the potential damage concerns and resources needed by communities due to uncertainty in the level of protectiveness.

Federal Relationship

There is no corresponding federal regulation.

Land Use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with statewide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
    - Resources, objects, or areas identified in the statewide planning goals, or
    - Present or future land uses identified in acknowledge comprehensive plans

DEQ determined whether the proposed rules involve programs or actions that affect land use by reviewing its Statewide Agency Coordination plan. The plan describes the programs that DEQ determined significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Natural Resources, Scenic and Historic Areas, and Open Spaces
6	Air, Water and Land Resources Quality
11	Public Facilities and Services
16	Estuarine Resources
19	Ocean Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program – Goal 16
- Water quality and sewage disposal systems – Goal 16
- Water quality permits and oil spill regulations – Goal 19

Determination

DEQ determined that these proposed rules do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

EQC Prior Involvement

DEQ shared information about this rulemaking with the EQC through an informational item on the May 18 EQC agenda.

Advisory Committee

Background

DEQ convened the Fuel Tank Seismic Stability Rules advisory committee. The committee included representatives from neighborhoods, local emergency response, community groups, local government and regulated facilities and met four times. The committee's web page is located at: https://www.oregon.gov/deq/rulemaking/Pages/seismicstability2023.aspx.

The committee members were:

Rulemaking Name Advisory Committee	
Name	**Representing**
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

Meeting notifications

To notify people about the advisory committee's activities, DEQ:

- Sent GovDelivery bulletins, a free e-mail subscription service, to the following lists:
  - Rulemaking
  - Fuel Tank Seismic Stability
- Added advisory committee announcements to DEQ's calendar of public meetings at DEQ Calendar.

Committee discussions

Committee discussions are summarized in the following meeting summaries:

October 26
December 16
March 3
April 21

Public Engagement

Public notice

DEQ provided notice of the proposed rulemaking and rulemaking hearing by:

- May 30, 2023, Filing notice with the Oregon Secretary of State for publication in the June 2023 Oregon Bulletin;
- Posting the Notice, Invitation to Comment and Draft Rules on the web page for this rulemaking, located at: RULEMAKING WEB PAGE
- Emailing approximately 23,000 interested parties on the following DEQ lists through GovDelivery:
    - DEQ Public Notices
    - Rulemaking
    - Fuel Tank Seismic Stability

- Emailing the following key legislators required under ORS 183.335:

    - Senator Sollman, Senate Energy and Environment Committee Chair
    - Representative Marsh, House Climate Energy and Environment Committee Chair
    - Representative Grayber, House Committee on Emergency Management, General Government and Veterans, Chair.
    - Representative Evans, House Emergency Management, General Government and Veterans committee
    - Senator Dembrow
    - Senator Manning
    - Senator Frederick
    - Representative Dexter
    - Representative Pham

- Emailing advisory committee members,
- Posting on the DEQ event calendar: DEQ Calendar

Public hearing

DEQ held three public hearings. DEQ received nine comments at the hearing. Later sections of this document include a summary of the 169 comments received from 186 commenters during the open public comment period including the transcribed oral comments received during public hearings, DEQ's responses, and a list of the commenters. The original comments are on file with DEQ.

Presiding officers' record

Hearing 1

Date	Thursday June 15, 2023
Place	Virtual Zoom Meeting
Start Time	7 p.m. PT
End Time	7:48 p.m. PT
Presiding Officer	Killian Stoltenburg

Hearing 2

Date	Saturday June 17, 2023
Place	Virtual Zoom Meeting
Start Time	2 p.m. PT
End Time	2:47 p.m. PT
Presiding Officer	Killian Stoltenburg

Hearing 3

Date	Tuesday June 20, 2023
Place	Virtual Zoom Meeting
Start Time	12 p.m. PT
End Time	12:40 p.m. PT
Presiding Officer	Killian Stoltenburg

Presiding officer:

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to register via chat or indicate their intent to

present comments by raising a virtual hand. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

Fifty-three people attended the virtual hearings. Nine people commented orally and no written comments were submitted at the hearings.

Summary of Public Comments and DEQ Responses

Public comment period

DEQ accepted public comment on the proposed rulemaking from May 31, 2023, until 4 p.m. on July 12, 2023.

For public comments received by the close of the public comment period, the following two tables organize the comments into categories with cross references to the commenter number. Table 1 lists categories 1-34 of comments in response to which DEQ made changes to the proposed rules. DEQ responses are included in the same table. Table 2 lists categories 35-77 of comments DEQ to which DEQ drafted responses but did not make any changes to the proposed rules. The list of commenters follows in Table 3. The original comments are on file with DEQ.

Table 1. Summary of comment categories that resulted in changes to the proposed rules and DEQ responses.

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
1	Extend the public comment period by 21 extra days	DEQ extended the public comment period as requested	1, 2, 4
2	Include provisions for training, response exercises, and external peer reviews	DEQ added language to cross-reference Oil Spill Contingency Planning training requirements as follows: 340-300-0004(2)(e) Training and response exercises as required in 340-141-0200 and education to employees and education and information to surrounding communities that promote awareness and equity.	48

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
		Peer reviews will be conducted by the contractors DEQ hires to review the assessments and the mitigation plans.	
3	Clarify whether the facility owner/operator refers to the owner of the land/facility or can include companies that might lease sections of the facility from the owner	DEQ added the following language verbatim from WAC 173-180-25 "Owner or Operator" does not include any person or entity that owns the land underlying a facility if the person or entity is not involved in the operations of the facility to the definition of the facility owner or operator.	133
4	Fix spelling error; “ADCE” should be “ASCE”	DEQ changed the ADCE acronym to the correct ASCE in section 15 of 340-300-0002.	133
5	Specify in section 2.b whether this refers to facility owner or operator, and define “significant new construction”	DEQ added the words "owner or operator" in 340-300-0003 as follows: (2) Facility owner or operator must submit Seismic Vulnerability Assessment updates to DEQ: and replaced the word "significant" as follows: (2)(b) When retrofits or new construction of any part of facility that require a permit from occur.	133
6	Clarify whether the rule requires an interim report after a magnitude 5 earthquake, or	DEQ added the words "or higher" to 340-300-0003 (3)(c) as follows: “(c) Within 30 calendar days or on a schedule approved by DEQ, after a magnitude five (5.0) or higher earthquake centered within 100 miles of the facility, facility owners must provide DEQ with an interim report on facility	133

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	magnitude 5 and higher	status, any damage, and anticipated changes…"	
7	Provide clear reporting requirements or a template for annual Risk Mitigation Implementation plans	DEQ added the following language clarifications to the annual reporting requirements in 340-300-0005: Reporting requirements and Inspections (1) Annual Risk Mitigation Implementation Plan implementation status reports must be submitted by June 1st of each year until the implementation is completed and approved by DEQ, or on a schedule approved by DEQ in the Risk Mitigation Implementation Plan and include the description of (a) the implementation work that has been completed; (b) the plan for the work that will follow; (c) the summary of the implementation schedule; (d) a list of action items; (e) Any risks to the implementation timeline and how those risks are being mitigated. (f) A facility status update if any magnitude 5or higher earthquakes have occurred.	133
8	Should sections 1, 2, and 3 reference only the facility owner for responsibility of payment of fees, or also reference operator?	The 340-300-0006 should reference the facility owner or operator. DEQ made the change to refer to owner or operator in 340-300-0006(1)(2)(3)(4).	133

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
9	DEQ should use the full magnitude Cascadia Subduction Zone event or local earthquake (whichever is greater) as the design level earthquake	The Design Level Earthquake based on ASCE 7 uses a shaking level that considers all potential earthquakes for a site. For Oregon, this includes earthquakes originating on both crustal faults and the Cascade Subduction Zone. The probabilistic analysis uses a range of magnitudes on each fault which is inclusive of, but not limited to, the 6.5 on Portland Hills Fault and 9.0 on Cascade Subduction Zone. DEQ adjusted the 340-300-0002(7) definition of ""Design Level Earthquake"" as follows: (7) “Design level earthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7."	155, 161, 169, 166, 149
10	Seismic design standards should account for a M9.0 earthquake’s site behavior, relying on current seismic code is not enough	DEQ adjusted the definition of "Design Level Earthquake" to allow for site specific calculations as follows: (7) “Design level earthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7. "	160
11	Clarify that interim steps should happen	DEQ added the words "on the timeline identified in the implementation plan" as follows:	169

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	on the timeline identified in the implementation plan, and that all work should be completed within the 10-year time limit	(6) All mitigation measures approved by DEQ must be completed on the timeline identified in the implementation plan within 10 years after the DEQ approves the Risk Mitigation Implementation Plan.	
12	DEQ should provide significantly more assurances that newly constructed facilities built in compliance with all current code requirements will not have to implement additional upgrades shortly after construction. As drafted, DEQ may require modifications to Risk Mitigation Implementation Plans (RMIP) any time there is "new scientific or	DEQ added the language to limit modification requests to no more frequently than every three years as follows: A modification may be DEQ initiated if new scientific or technological data becomes available but no more frequently than once every three years...' in 340-300-0004 (5)(b) The expectation established by SB1567 is explicitly to require modifications due to new scientific or technological data even if originally built to code.	144, 147, 148

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	technological data"		
13	SB 1567 requires that at least three years pass before modifications to the RMIP may be imposed, reflect this in rules	DEQ added the words "but no more frequently than once every three years." A modification may be DEQ initiated if new scientific or technological data becomes available but no more frequently than once every three years.	144, 148, 150, 167
14	Account for a scenario in which a facility owner commits to permanently closing tanks before mitigations must be implemented	Facility owner or operator can propose a commitment to permanently close its tanks before as one of the mitigation activities in the Risk Mitigation Implementation Plan which would make geotechnical and equipment assessment unnecessary. The timeline for such action would need to meet similar expectations for expediency.	145
15	Limit the ability of DEQ to change mitigation plans to only as absolutely necessary	DEQ added the language: “but no more frequently than once every three years” in 340-300-0004(7)(b) as follows: b) A modification may be DEQ initiated if new scientific or technological data becomes available but no more frequently than once every three years.	150, 147, 164
16	Reconsider the priorities of onsite personnel in sub-section 340-300-	DEQ changed the requirement as follows: (j) Evaluate the availability of day and night onsite personnel trained in emergency response and able to respond in the event of an earthquake.	150

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	0003(1)(j): requiring the evaluation of availability of day and night onsite personnel		
17	Remove the subsection which requires a final report to be submitted for an updated description of any residual risk	DEQ changed the residual risk requirements in 340-300-0004(2)(g) and kept the 340-300-005(4)(b) requirement of updated description of residual risk in the final post-implementation report. As the implementation of the risk mitigation measures approved by DEQ begins, this requirement will keep the DEQ appraised of how each implemented measure reduces the risk.	150
18	Return the design level earthquake to the definition decided in the RAC	DEQ adjusted the ORS 340-300-0002(7) "Design Level Earthquake" definition as follows: (7) “Design level earthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7."	162
19	Add a definition for transmission pipelines	DEQ removed all references to transmission pipeline in the rules. No definition is needed.	162, 167
20	Add piping systems to the facility	DEQ added piping systems to 340-300-0003 (1)(f)(B) as follows: (B) Tanks and piping systems	162

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	components list		
21	The term firewalls should be replaced with containment structures	DEQ replaced the term firewalls with fire control measures such as firewalls as follows: (i) Evaluate the integrity of fire control measures such as firewalls surrounding facility	162
22	Add regulatory language providing a facility with an opportunity to correct deficiencies in denied mitigation plans	DEQ changed the order of 340-300-0003(9)(a) and (b) to make it clear that DEQ modification will only happen if the facility does not correct the deficiency in a timely manner.	162
23	Remove language referring to "possible major earthquake" in residual risk provisions	DEQ removed the reference to possible major earthquake" in residual risk provisions as requested.	162, 167
24	DEQ must strengthen the rule language to protect the State's aquatic resources	DEQ added the words “as required by the performance objective defined in 340-300-0002" in 340-300-0001(2)(b)(B) as follows: (B) Address potential of facility to safely shut down during or immediately after a damaging earthquake, if needed, in order to minimize spills as required by the performance objective defined in 340-300-0002;	165

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
		and words: "and their ability to achieve the performance objective defined in 340-300-0002" in 340-300-0003(1)(d) as follows: (d) Summarize currently implemented spill prevention and mitigation measures and their ability to achieve the performance objective defined in 340-300-0002;"	
25	Change the definition of "Codes and Standards" to be more specific	DEQ added the words "seismic" and "seismic criteria" as well as API 653 to the definition of codes and standards as requested by the commenter.	167
26	Clarify whether facilities must meet compliance with Codes & Standards, achieve the performance objective, and meet the specifications, or meet at least one of these criteria	The mitigation measures proposed by facilities in Risk Mitigation Implementation Plans for existing structures must show that when implemented, the measures will help the facility to achieve the performance objective as provided in the proposed rules. Meeting the requirements of Risk Category IV design of new structures meets the intent of this rule. DEQ made clarification in the definition of "Design Level Earthquake" and the "Performance Objective" to clarify the requirement.	167
27	Address a typo in which the proposed definition for “Codes and Standards” is located at OAR 340-300-	DEQ changed the OAR 340-300-0002(2) reference to " Codes and Standards" to OAR 340-300-002(4) in 340-300-0003 (1) (f) and 340-300-0004(2)(a).	167

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
	002(4), but cross-references in other parts of the proposed rule cite to OAR 340-300-0002(2)		
28	Address discrepancies between the terms used of Maximum Allowable Uncontained Spill and Maximum Allowable Spill	DEQ corrected all references to the "Maximum Allowable Spill" to “Maximum Allowable Uncontained Spill".	167
29	Further define "all other parts of the facility" in 340-300-0002	DEQ removed reference to “all other parts of the facility” in 340-300-0002(7)	168
30	Change the design level earthquake	DEQ changed the definition of the Design Level Earthquake as follows: "Design Level Earthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7."	167
31	Change the risk category	DEQ removed Risk Category IV from Design Level Earthquake definition as redundant.	117, 150, 168

Summary of comment categories that resulted in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	**Commenter #**
32	Make the 14-day reporting timeline in 340-300-0003 Section 3.c longer if the reporting requirement is triggered by an earthquake of magnitude 5 or higher	DEQ changed the 14-day reporting requirement to 30 calendar days.	133
33	Add requirements for installation of seismically certified generators for critical operations	DEQ added the following requirement to 340-300-0004 “(2)(f) Description of emergency response capabilities including but not limited to trained personnel, training plan, properly installed seismically certified generators and adequacy of on-site fuel storage to power backup generators or installation of electrical hookups for emergency generators…”	48
34	Remove risk category IV	DEQ adjusted the requirement to minimize risk to the performance objective of the " Maximum Allowable Uncontained Spill" for existing structures. Meeting the requirements of Risk Category IV design of new structures meets the intent of this rule.	162, 167

Table 2. Summary of comment categories that did not result in changes to proposed rules with DEQ responses.

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
35	These commenters expressed concerns about the risks of the CEI hub, highlighted the importance of DEQ taking a speedy action to make sure that the fuel tanks can withstand an earthquake, the facilities accept the financial responsibility for any earthquake-induced damage to communities or shut down, suggested that DEQ ask for federal help or expressed appreciation for DEQ's work without suggesting any changes to the proposed rules	DEQ's work with the Rules Advisory Committee and the environmental justice review conducted by Portland State University for this rulemaking highlighted similar concerns. DEQ is on track to present the proposed rules for adoption by the Environmental Quality Commission in September 2023.	30, 6, 3, 49, 128, 8, 41, 142, 153, 7, 104, 22, 21, 115, 125
36	Tanks should be built to withstand a 10.0 earthquake rather than 9.0.	The rule requires the facilities to minimize seismic risk to ACSE 7 code risk category IV, the most stringent risk category usually applied to critical and essential structures such as hospitals, fire stations and military installations.	5
37	The 10-year timeline: - Old tanks should be emptied of fuel; mitigation plan implementation timeline should be shorter than 10 years - Should be shortened to 2-3 years	The 10-year timeline for implementation of risk mitigation measures was developed using the discussions with the Rules Advisory Committee and the fee payers and the limited available information from similar regulations around the world. The	9, 14, 146, 156, 158, 166, 151, 19, 59, 60, 67, 76, 29, 155, 126, 17, 127, 45, 18, 52, 26, 129, 55, 10, 131, 132, 16, 51, 53, 24, 134, 25, 56, 70, 135, 57, 63, 137, 143, 58, 61, 66, 138,

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
	- Change the rules to allow more flexibility to the ten-year timeline	state of Washington recently adopted an update to the WAC 173-190 Facility Oil Handling Standards. The update established seismic resilience standards for terminal tanks and pipelines. The facilities subject to Washington regulations are given 10 years to meet the seismic protection requirements of the WAC 173-190 regulations. California's Marine Oil Terminal Engineering and Maintenance Standards requires facilities to conduct annual inspections, audits every 4 years and post-event inspections seismic vulnerability analyses. Facilities must develop corrective actions plans for identified deficiencies and correct those deficiencies by the next audit. The European Union's Seveso directive requires facilities to conduct accident risk analysis and implement protective measures	69, 71, 98, 139, 156, 121, 140, 77, 64, 78, 79, 80, 81, 82, 83, 84, 85, 161, 157, 159, 87, 88, 89, 163, 119, 27, 33, 36, 28, 31, 32, 34, 35, 37, 47, 50, 38, 124, 46, 96, 12, 13, 154, 110, 20, 101, 23, 113, 118, 94, 65, 72, 39, 40, 75, 42, 44, 54, 62, 68, 86, 90, 114, 100, 102, 122, 92, 93, 73, 99, 120, 95, 103, 105, 109, 112, 74, 123, 97, 91, 106, 107, 108, 111, 137, 144, 147, 148, 167, 49

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		but does not prescribe a timeline.	
38	Change the performance level to 90% of Maximum Considered Earthquake	The MCE (Maximum Considered Earthquake) is provided as the most severe earthquake effects considered by pertinent codes (ASCE 7, ASCE 41). Adjustments to the MCE are made to provide the risk-targeted Maximum Considered Earthquake (MCER), defined as follows (NEHRP 2020): The probabilistic spectral response accelerations shall be taken as the spectral response accelerations in the direction of maximum horizontal response represented by a 5% damped acceleration response spectrum that is expected to achieve a 1% probability of collapse within a 50-year period. At each spectral response period for which the acceleration is computed, ordinates of the probabilistic ground motion response spectrum shall be	130, 146, 151, 15, 20, 114, 112

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		determined from iterative integration of a site-specific hazard curve with a lognormal probability density function representing the collapse fragility (i.e., probability of collapse as a function of spectral response acceleration). The ordinate of the probabilistic ground motion response spectrum at each period shall achieve a 1% probability of collapse within a 50-year period for a collapse fragility that has (1) a 10% probability of collapse at said ordinate of the probabilistic ground motion response spectrum and (2) a logarithmic standard deviation value of 0.6. It should be noted that the MCE has been defined with consideration of the dynamic response characteristics and seismic performance of buildings designed to the code. As stated in the resource	

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		documents for ASCE 7 and ASCE 41 (NEHRP 2020): “The first basis for seismic design in the standard is that structures should have a suitably low likelihood of collapse in the rare events defined as the Maximum Considered Earthquake (MCE) ground motion. A second basis is that life-threatening damage, primarily from failure of nonstructural components in and on structures, is unlikely in a design earthquake ground motion (defined as two-thirds of the MCE).” Arbitrarily changing the ground motion hazard level (i.e., seismic demand) would be incompatible with the basis of the code. The 2/3 factor applied to MCE provides the Design Earthquake (DE), or Design Earthquake Ground Motion. The 2/3 factor is used in applicable codes (ASCE 7, ASCE 41) for both new and existing structures (i.e.,	

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		BSE-1N). Arbitrarily changing the seismic demand associated with the DE (i.e., adopting a MCE scaling factor of 90% as opposed to the 2/3 defined in the code) would also be incompatible with the basis of the provisions. The 2/3 factor has been applied with consideration of both the seismic demand (i.e., ground motion level) and seismic resistance of the structure. The capacity and demand have been used to examine the seismic performance and fragility of the structure."	
39	Further define surrounding communities	This rulemaking is intended to prevent significant facility failure during a magnitude 9 earthquake through seismic retrofits, replacement, relocation and other safety upgrades and maintenance improvements requirements at largest bulk fuel terminals in Oregon, minimizing risk	59, 60, 67, 76, 29, 126, 45, 18, 26, 131, 132, 16, 24, 134, 25, 70, 135, 57, 63, 143, 58, 61, 66, 138, 69, 71, 98, 139, 121, 140, 77, 64, 78, 79, 80, 81, 82, 83, 84, 85, 161, 87, 88, 89, 119, 27, 33, 28, 166, 31, 32, 34, 35, 37, 38, 124,

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		everywhere. The proposed rules aim to reduce the risk of damage to the fuel storage facilities employees, all communities surrounding the fuel facilities and ecosystem of the Willamette and Columbia rivers by setting the seismic performance objective for the facilities limiting any earthquake-caused uncontained fuel spills to 42 gallons. The proposed rules will reduce existing risk born by people working and residing near the fuel terminals by decreasing the terminals vulnerability to earthquakes and reducing the health and safety concerns caused by potential oil spills and fires caused by earthquakes and earthquake-related secondary effects such as fires.	96, 101, 23, 113, 116, 94, 65, 72, 39, 40, 75, 42, 44, 62, 68, 86, 90, 100, 102, 122, 92, 93, 73, 99, 120, 95, 103, 105, 109, 74, 123, 97, 91, 106, 107, 108
40	Add air quality monitoring system	The purpose of this rulemaking is preventing the earthquake-caused fuel spills at fuel storage	36

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		facilities in order to minimizing the risk of earthquake-caused air emissions and fires. The Seismic Stability team passed the suggestion of air quality monitoring along the CEI hub on to DEQ's Air Quality monitoring section for consideration regarding ongoing facility operations.	
41	Risks should be better defined	This rulemaking is intended to prevent facility failure during a magnitude 9 earthquake through seismic retrofits, replacement, relocation and other safety upgrades and maintenance improvements requirements at largest bulk fuel terminals in Oregon. The proposed rules aim to reduce the risk of damage to the fuel storage facilities employees, all communities surrounding the fuel facilities and ecosystem of the Willamette and Columbia rivers by setting the seismic	48, 103, 127, 129

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		performance objective for the facilities limiting any earthquake-caused uncontained fuel spills to 42 gallons. The proposed rules will reduce existing risk born by people working and residing near the fuel terminals by decreasing the terminals vulnerability to earthquakes and reducing the health and safety concerns caused by potential oil spills and fires caused by earthquakes and earthquake-related secondary effects such as fires.	
42	Require installation of an early warning system such as Shake Alert	The proposed rule requires the facilities to submit Risk Mitigation Implementation Plans addressing the risks identified in each individual facility's Seismic Risk Assessment and proposing adequate risk mitigation actions. Installation of an early warning system such as Shake Alert is one of the potential risk mitigation actions the facilities may suggest in	155, 11, 129, 136, 141, 169

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		their Risk Mitigation Implementation plan to minimize risk.	
43	Change the definition of a facility	The definition of facility in the proposed rules is based on DEQ's interpretation of the section 2 of the SB 1567(2022) definition of the facilities the law was intended to cover.	133
44	Adopt mitigation plan timelines consistent with the full 10-year period instead of 1, 3, and 5-year milestones	The Risk Mitigation Implementation Plan must propose risk mitigation measures to address vulnerabilities identified in the Seismic Vulnerability Assessment to protect public health, life safety and environment. The RMIP requirement of outlining interim mitigation actions that will be completed within 1, 3, and 5 years based on feasibility and order of importance is to allow the facilities some flexibility in prioritizing the mitigation measures implementation order based on each facility's unique circumstances while serving as accountability milestones with an understanding that	133

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		some risk mitigation measures might take up to 10 years to implement.	
45	Clarify the meaning of "external alarm" in 340-300-0004 section 9.b	The rule 340-300-004(9)(b) provision requires the facility owner or operator to provide DEQ with information that could be used by local authorities to create alarms and emergency plans to alert and assist local communities in preparing and dealing with any consequences of risk remaining after all risk mitigation action are implemented by facilities. Such alarms may include audible alert system, emergency notification system and other means of promoting community safety as determined by local authorities.	133
46	Make the facilities financially responsible for earthquake caused harm to communities	DEQ does not have the authority to make the facilities financially responsible for earthquake harm to communities within this rulemaking.	137, 146, 152, 155

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
47	Increase fees and fines	DEQ set the proposed fees after extensive discussions with the Rules Advisory Committee and the potential fee-payers during this rulemaking. The noncompliance fines are in the highest penalty matrix used at DEQ.	155, 146, 161, 166, 149
48	Prescribe specific mitigation efforts including modeling	Mitigation measures will depend on the Seismic Risk Assessments findings and will be unique to each facility. Facilities may incorporate modeling to analyze the mitigation measures proposed in their Risk Mitigation Implementation Plans.	146, 155
49	Require removal of the fuel from all CEI Hub tanks	Facilities will propose risk mitigation actions for DEQ's approval in their Risk Mitigation Implementation Plans. Fuel removal can be proposed as a risk mitigation measures.	149
50	Consider risks downstream from CEI Hub	DEQ considered the impacts of the proposed rules to the surrounding communities. This rulemaking is intended to prevent facility failure	149, 155, 161, 166

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		through seismic retrofits, replacement, relocation and other safety upgrades and maintenance improvements requirements at largest bulk fuel terminals in Oregon. Implementing this work will protect the health and safety of the facility employees and surrounding communities both human and ecological, near and far. The proposed rules will reduce existing risk born by those working and residing near the fuel terminals by decreasing the terminals vulnerability to earthquakes and reducing the health and safety concerns caused by potential oil spills and fires caused by earthquakes and other earthquake-related secondary effects. The program created by these rules will regulate fuel terminals' Seismic Vulnerability Assessments, the Risk Mitigation Implementation Plans and the mitigation	

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		actions implementation and will create a long-term positive impact on equity and environmental justice in the state by making the fuel facilities more resilient to earthquakes and less prone to a disaster caused by a potential earthquake and its secondary effects. This rule is intended to result in mitigation proposals that do not have residual risk exceeding minimal risk expectations at a distant location.	
51	Ensure proper enforcement of regulations	The rule requires the facilities to adhere to performance levels typically required by code for new construction while assessing their seismic vulnerability and designing the mitigation measures. The site-specific design level earthquake used for facility evaluation as part of Seismic Vulnerability Assessments and Seismic Risk Mitigation Implementation Plans is	160, 169

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		required to be determined using ASCE 7. This rulemaking includes amendments to Division 12 enforcement rules.	
52	Facilities should relocate and decentralize 90% of their oil storage assets	Facilities may consider relocation and decentralization as mitigation measures in their Risk Implementation Mitigation Plans.	160
53	New construction should be preferred to retrofitting older seismically unsafe tanks	Demolition and new construction may be considered by facilities as a mitigation measure in their Risk Mitigation Implementation plans.	160
54	The rules should adhere to the functional recovery performance standards in NIST Sp-1254	Minimizing the risk of earthquake-induced spills and secondary effects is the goal of this rulemaking as mandated by SB 1567 (2022). The post-earthquake operation of bulk oil and fuel storage facilities is beyond DEQ's authority and is out of scope for this rulemaking.	160
55	Change the implementation timelines to focus on projects	The purpose of these rules is to protect public health, life safety and	144

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
	with high cost-effectiveness and risk reduction benefits	environmental safety against fires and release of fuel products. The seismic risk mitigation measures and the timeline of their implementation submitted to DEQ for approval by the facilities can consider their cost-effectiveness and risk reduction benefits in the proposed implementation schedule.	
56	Remove facilities that use and store biological fuels	According to SB 1567 (2022) “bulk oils or liquid fuels terminal” means an industrial facility located in Columbia, Multnomah or Lane County that is primarily engaged in the transport or bulk storage of oils or liquid fuel products and is characterized by having: (a) Marine, pipeline, railroad or vehicular transport access; (b) Transloading facilities for transferring shipments of oils or liquid fuel products	144, 148

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		between transportation modes; and (c) One or more bulk storage tanks with a combined capacity of two million gallons or more. Facilities that use and store biological fuels that fall into the category described in the legislature, are subject to the proposed rules.	
57	Create a section of the rule allowing an agreement to remove and/or reduce fuel storage capacity to less than two million gallons	Facility owner or operator can propose a commitment to permanently close its tanks before as one of the mitigation activities in the Risk Mitigation Implementation Plan which would make geotechnical and equipment assessment unnecessary. The timeline for such action would need to meet similar expectations for expediency.	145
58	Provide a fee structure which either reimburses or charges lower fees based on the complexity of review of mitigation plans	DEQ considered different fee structure options, including flat fees, tiered flat fees and time and materials fee structures. DEQ considerations are	145

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		documented in the FTSS Program Fee Analysis document and were discussed with Rules Advisory Committee and the fee-payers. There is insufficient information about the complexity of facility implementation plans create more detailed categories.	
59	Remove asphalt-storage facilities from list of facilities affected by OAR 340-300	According to Senate Bill 1567 (2022), “bulk oils or liquid fuels terminal” means an industrial facility located in Columbia, Multnomah or Lane County that is primarily engaged in the transport or bulk storage of oils or liquid fuel products and is characterized by having: (a) Marine, pipeline, railroad or vehicular transport access; (b) Transloading facilities for transferring shipments of oils or liquid fuel products between transportation modes; and (c) One or more bulk storage tanks with a combined capacity of	147, 150, 164

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		two million gallons or more. The bulk storage facilities that have the combined capacity of storing over 2 million gallons of asphalt and fuels are subject to the proposed rules. Asphalt tanks have the potential to store other materials and have the potential to spill. Seismic Vulnerability Assessments are required. Mitigation actions must be identified during the Seismic Vulnerability Assessment and outlined in the Risk Mitigation Implementation plans and any exceptions may be considered during this phase.	
60	Clarify whether secondary containment structures are acceptable methods of mitigation	Because each facility's situation is unique, the rule leaves it up to the facilities to propose mitigation actions in the Risk Mitigation Implementation plans. The use of seismically resilient secondary containment systems/structures can	147

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		be proposed as one of the mitigation measures.	
61	Clarify how assessments of non-tank structures will be incorporated into the overall assessment and mitigation work	The facility owner or operator must assemble a team of qualified professionals to complete a comprehensive seismic vulnerability assessment of the facility and conform with state-of-practice engineering methods. As an example, an Oregon licensed engineer using methods to evaluate existing buildings using ASCE 41, which is considered to be the state of practice, is what DEQ would consider as acceptable for buildings within the facility. This must be complemented by other evaluations e.g., using ASCE 7 for piping. DEQ is not being overly prescriptive in the exact steps that the team of qualified professionals assembled by facility owner or operator to conduct the assessment takes.	150

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
62	The deadline of June 1, 2024, should be changed	DEQ does not have the authority to change the legislatively established deadline of June 1, 2024.	167, 150, 162
63	Extend the 90-day timeline for modifications after an earthquake occurrence	The 90-day modifications required in 340-300-0003(4) are not tied to an earthquake occurrence: (4) Seismic Vulnerability Assessment Modifications must be submitted no later than 90 days after DEQ notifies an owner and/or operator of new scientific or technical findings that may affect the submitted assessment as required in sections (1) and (2) of this rule.	150
64	Clarify "field explorations" in 340-300-0003(6)(a)(A)(iv)	The requirement to do a seismic vulnerability assessment will require characterization of subsurface soil, rock, and groundwater conditions at the facility. The scope of the required work to complete this characterization will vary from site to site, including differences in facility size,	162

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		topography, bathymetry, geologic conditions, historical subsurface data, etc. The rule provides owner and their engineers the ability to tailor the subsurface investigation to the type and scale required for assessment of each site or use previous soil information collected at the site. The characterization, and the associated scope of subsurface explorations, will be subject to review and approval by the DEQ and DEQ's technical peer reviewer.	
65	Remove or amend the requirement for the final report to provide an updated description of any residual risk	As the implementation of the risk mitigation measures approved by DEQ begins, this requirement will keep the DEQ appraised of how each implemented measure reduces the risk. This information is essential to approval decisions concluding risk is minimized. It is also essential for actions that may be taken by DEQ, other agencies or others in	162, 167

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		the community to pursue other emergency preparedness.	
66	DEQ should require environmental impact analysis. The Willamette River's beneficial uses and wildlife would be significantly impaired from a seismically caused spill	The purpose of these rules is to minimize the risk the bulk oil and liquid fuel terminals present to their employees, the residents of the surrounding communities and the environment. The previous studies have found that the volume of fuel spilled in an event of an earthquake in Portland CEI Hub could range between 95 and 194 million gallons and the result in devastating damages to neighborhoods and environment. The proposed rules focus on the requirements for Seismic risk assessment and mitigation to minimize the spills and secondary effects caused by an earthquake and minimization of the danger presented to communities and environment.	165

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		Additionally, while CalARP does require stringent offsite consequence analyses, other programs such as California's MOTEMS or Washington's WAC 173-180 do not require offsite consequence analyses and instead focus on in-depth structural vulnerability assessments. We've chosen to adopt the latter approach and emphasize structural vulnerability assessments and mitigations. However, the proposed rules do require that facilities develop a residual risk scenario to understand possible releases and consequences following the implementation of their mitigation plans in an effort to carry over some of CalARPs benefits.	
67	DEQ should compare this rulemaking to other U.S. State regulations	DEQ contracted with PSU to review and compare similar laws and regulations in other states and countries. PSU's findings were presented to the	165

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		Rulemaking Advisory Committee and used to inform this rulemaking. PSU did find that other states and countries require sufficient and resilient secondary containment systems, and this is reflected in the DEQ's rule requirement that secondary containment be constructed to ASCE 7 requirements, spill containment measures must be evaluated in the vulnerability assessment, and spill containment measures are included as a recommended / viable action that facilities can propose as part of their mitigation plans to meet the maximum spill requirements.	
68	Require specific mitigation actions by facilities	The proposed rules require the facilities to outline specific mitigation actions that may be unique to each facility in their Risk Mitigation Implementation Plans to address the risk identified in each	165

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		facility's Risk Mitigation Implementation plan, soil hardening, relocation, tank decommissioning and fuel removal can all be discussed in risk mitigation plans submitted for DEQ's approval.	
69	DEQ should work with other state agencies to strengthen its oil spill wildlife response	DEQ is committed to collaborating with other state agencies.	165
70	Remove requirement for assessment and retrofitting of non-fuel storage structures	The purpose of the Seismic Risk Assessment is to discover any potential risks and design the risk mitigation actions. If the assessment shows that no mitigation of certain structures would be beneficial to safety of employees, the residents of nearby communities and the environment, the mitigation of those structures may not be required.	167
71	An exemption for facilities that would not release fuel into any body of water should be implemented	The entire facility must be assessed under the Seismic Risk Assessment and any risk mitigation actions and exemptions may be	168

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		addressed in the Risk Mitigation Implementation Plan submitted for DEQ's approval.	
72	The jet fuel hydrant system is not a transfer and process pipeline and should be excluded from the rule	Any exemptions need to be discussed in the post Risk Mitigation Assessment Risk Mitigation Implementation plans. If a Seismic Vulnerability Assessment shows that the short distribution fuel lines can break and spill the contents of a tank, then this potential risk could be mitigated by installing shut off valves at the tank. In this case, the distribution lines themselves wouldn't be mitigated but the system would be.	168
73	Specify agency turnaround time for plan and assessment review	This is a developing program and DEQ's turnaround time for plan and assessment review will vary depending on the complexity of the assessments and plans.	168
74	Apply 15.4.10.1 exception in ASCE 7 if structural foundation can accommodate soil strength loss, lateral	Any risk mitigation actions and any exceptions from risk mitigation must be	168

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
	spreading, and total differential settlements	outlined in the Risk Mitigation Implementation Plan submitted to DEQ for approval.	
75	Secondary containment should not be required if the tank and all its components are adequately designed to code level seismic event	It is up to each facility to propose facility-specific risk mitigation measures for DEQ's approval in their Risk Mitigation Implementation Plans.	168
76	Exemptions should be made for airport hydrant fuel distribution systems	Any exemptions need to be discussed in the post Risk Mitigation Assessment Risk Mitigation Implementation plans. If a Seismic Vulnerability Assessment shows that the short distribution fuel lines can break and spill the contents of a tank, then this potential risk could be mitigated by installing shut off valves at the tank. In this case, the distribution lines themselves wouldn't be mitigated but the system would be.	168
77	A 90-day modification timeline after a 5.0+ M earthquake is not feasible	"The 90-day modifications required in 340-300-0003(4) are not tied to an earthquake occurrence:	150

Summary of comment categories that did not result in changes to proposed rules with DEQ responses			
Category #	**Comment Summary**	**DEQ response**	Comment #
		(4) Seismic Vulnerability Assessment Modifications must be submitted no later than 90 days after DEQ notifies an owner and/or operator of new scientific or technical findings that may affect the submitted assessment as required in sections (1) and (2) of this rule."	

Table 3. The list of commenters

Name	Organization	Comment Number	Hearing #
Dan Serres	Columbia Riverkeeper	1, 20	1
Lindsey Hutchison	Willamette Riverkeeper	2, 165	
Shawn Looney	Linnton resident	3	
Sterling Stokes	Portland Harbor Community Coalition	4, 155	
Gerry Brown	Eugene Resident	5	
Ralph Cohen	Ralph M Cohen Consultancy	6	
Emily Herbert	Portland resident	7, 12	
Jean Trygstad	Oregon resident	8, 36	

Name	Organization	Comment Number	Hearing #
Lenny Dee	Portland resident	9, 16	
Judy D. Willer	Oregon resident	10	
Nancy Hiser	Neighborhood association	11, 136	1
Dell Goldsmith		13	
Lauren Isaac	Oregon resident	14	
Eileen Fromer	Portland resident	15	
Sarah Prowell		16	
Henry Roller	Washington resident	18	
Gabriel Penk & 10 others	Portland and Eugene residents	19	
Cathy Sampson-Kruse	Umatilla Confideration	21	1
Gail Curtis	Multnomah Channel resident	22	1
Kevin Gallagher	University of Washington	23	
Craig Heverly	Portland resident	24	
John Marshall	Portland resident	25	
Paul Eisenberg	Baltimore resident	26	
Carol Turtle	Portland resident	27	
Elizabeth Hardy	Portland resident	28	
Alice Goss	Clinton resident	29	

Name	Organization	Comment Number	Hearing #
Nancy Hedrick	Portland resident	30	
Lynn Shoemaker	Whitewater resident	31	
John and Polly Wood	Hood River residents	32	
Leslie Martinsen	Lake Oswego resident	33	
Gregory Ellsworth	Portland resident	34	
Sharon E. Fasnacht	Olympia resident	35	
Dennis Kreiner	Carpentersville resident	37	
Barbara Scavezze	Woodinville resident	38	
Veronica Poklemba	Portland resident	39	
Sharon Sollenberger	Vancouver resident	40	
John Werderber	Warren resident	41	
Hugh Peach	Beaverton resident	42	
Gary Millhollen	Eugene resident	43	
Annie McCuen	Salem resident	44	
Mona McNeil	Vancouver resident	45	
Chris Bekemeier	Oregon resident	46	
Sarah Carolus	Portland resident	47	
John Talberth	Center for Sustainable Economy, Forest Carbon Coalition	48	

Name	Organization	Comment Number	Hearing #
Tracy Farwell	Better Energy LLC	50, 104, 110, 130, 151	
James Wesley	Port Angeles resident	51	
Jenifer Schramm	Portland resident	52	
Laura Allen	Eugene resident	53	
Bill O'Brien	Beaverton resident	54	
Lys Burden	Port Townsend resident	55	
Beverly Antonio	Centreville resident	56	
Mike Rummerfield	Onalaska resident	57	
Phillip Ratcliff	Salem resident	58	
Robert Jones	Salem resident	59	
Derek Benedict	Lynnwood resident	60	
Karen Jacques	Sacramento resident	61	
John S.	Portland resident	62	
Henry Berkowitz	Sabinsville resident	63	
Michael Brandes	Fort Lee resident	64	
Carolyn Latierra	Portland resident	65	
Mary Jo Mann	Portland resident	66	
Shary B.	Seattle resident	67	

Name	Organization	Comment Number	Hearing #
Sarah Bauman	Bellingham resident	68	
Kristen Bayless	Portland resident	69	
James Neu	Eugene resident	70	
Ken Humke	Portland resident	71	
Jennifer Nitz	Missoula resident	72	
Susan Haywood	Portland resident	73	
Josh Baresh	Carson resident	74	
Megan Baker	Springfield resident	75	
Amanda Dickinson	Yakima resident	76	
Isabella Palacios	Seattle resident	77	
Richard Smith	Melvindale resident	78	
Kathryn Ellis	Otis Orchards resident	79	
Dianne Ensign	Portland resident	80	
Ernie Walters	Union City resident	81	
Lise Hull	Bandon resident	82	
Kimberly Gorka	Portland resident	83	
Elena Rumiantseva	Redmond resident	84	
Nancy Riggleman	Tollhouse resident	85	

Name	Organization	Comment Number	Hearing #
Chuck Gehling	Hood River resident	86	
Darla Austerman	Nine Mill Falls resident	87	
Georgia Shankel	Chicago resident	88	
Stephen Dutschke	Louisville resident	89	
Mark Reback	Battle Ground resident	90	
John Oda	San Francisco resident	91	
Phillip Callaway	Crawfordsville resident	92	
Carmen Chacon	Pocatello resident	93	
JL Angell	Rescue resident	94	
Mary Thiel	Portland resident	95	
Cynthia Nielsen	Welches resident	96	
Michael Madden	New City resident	97	
Sharon Longyear	Port Ewen resident	98	
Brett Little	Fayetteville resident	99	
John Dunn	Morristown resident	100	
I. Engle	Village of Tularosa resident	101	
Tom Schwegler	Kansas City resident	102	
Jane Butler	Hedgesville resident	103	

Name	Organization	Comment Number	Hearing #
Karen Paule	Portland resident	105	
Marin Plut	Seattle resident	106	
David Pedersen	Saanichton resident	107	
Sierra Roberts	Portland resident	108	
Zowie DeLeon	Portland resident	109	
Arthur Ungar	Vancouver resident	111	
Melanie Plaut	Oregon Physicians for Social Responsibility	112	2
Angela Zehava	Portland resident	113	
Theodora Tsongas	Oregon Physicians for Social Responsibility	114, 166	2
Suzanne Cooper	Sauvie's Island resident	115	2
Carol Newman	Astoria resident	116	
Tom Umenhofer	Western States Petroleum Association	117	3
Jay Wilson	Emergency manager	118, 160	3
P. Horter	Portland resident	119	
Norm Conrad	Mount Vernon resident	120	
Raphael Ponce	Toulouse resident	121	
Teresa Van Haalen	Spokane valley resident	122	
Marco Pardi	Lawrenceville resident	123	

Name	Organization	Comment Number	Hearing #
Susanna Blunt	Portland resident	124	
Carol Sherman Rogers	Linnton resident	125	
Linda Fielder	Carrollton resident	126	
Mark Darienzo	Portland resident	127	
Joel Robe	Local emergency preparedness group in Eugene	128	
Patricia Kullberg	Portland resident	129	
Jennifer Scott	Fort Myers resident	131	
Dianne Riley	Columbia Riverkeeper	132	
Carmen Merlo	Port of Portland	133	
Kathleen Doyle	Golden resident	134	
Corrie Podolak	Hood River resident	135	
Ann Turner	Oregon Physicians for Social Responsibility	137	
John Livingston	Salem resident	138	
Mindy Gramberg	Portland resident	139	
Derek Gendvil	Las Vegas resident	140	
Kelly Weisbard Missett	Oregon Hazards lab	141	
Dwayne Hedstrom		142	
Tamara Babad	Oregon resident	143	

Name	Organization	Comment Number	Hearing #
Ken Pearson	NEXT renewables	144	
Greg Alderson	Portland General Electric	145	
Diane Meisenhelter	Portland resident	146	
Dustin Wilson	McCall Terminal Services	147	
Katie Tavis	Cascade Kelly Holdings	148	
Anne Capestany	Portland resident	149	
Ellen Wax	Working Waterfront Coalition	150	
Don Steinke	Clean Water of Southwest Washington	152	
Catherine Evleshinc	Braided River campaign	153	
Bea Rector	Portland resident	154	
Elissa Mendenhall	Portland resident	156	
Harmony Eberhardt	Portland Harbor	157	
Frances Mendenhall	Portland resident	158	
Sarah Farahat		159	
Lynn Spitaleri Handlin	Resident and business owner	161	
Sophia Steele	Western States Petroleum Alliance	162	
Turtle Farahat	Portland resident	163	
Madeline Fleisher	Owens Corning	164	

Name	Organization	Comment Number	Hearing #
Vicki Fanning	TransMontaigne/Seaport	167	
Mark Soleta	PDX Fuel LLC	168	
John Wasiutynski	Multnomah County Office of Sustainability	169	

Implementation

Notification

The proposed rules would become effective upon filing on approximately Sept. 15, 2023. DEQ would notify affected parties by:

- GovDelivery bulletins, a free e-mail subscription service, to the following lists:
  - Rulemaking
  - Fuel Tank Seismic Stability
- Emailing the following key legislators required under ORS 183.335:
  - Senator Sollman, Senate Energy and Environment Committee Chair
  - Representative Marsh, House Climate Energy and Environment Committee Chair
  - Representative Grayber, House Committee on Emergency Management, General Government and Veterans, Chair.
  - Representative Evans, House Emergency Management, General Government and Veterans committee
  - Senator Dembrow
  - Senator Manning
  - Senator Frederick
  - Representative Dexter
  - Representative Pham

Compliance and enforcement

- Affected parties - DEQ estimates 17 oil and liquid fuel storage and distribution facilities in Multnomah, Columbia and Lane counties will be affected by the proposed rules.
- DEQ staff – The Fuel Tank Seismic Stability group currently consists of a manager, a program analyst and an administrative coordinator. An inspector position and an environmental engineer position will be filled as the program develops.

DEQ will begin the next phase of contracting with engineering subject matter experts to provide peer review of the Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans.

Systems

Websites:

- Rulemaking - Fuel Tank Seismic Stability Rulemaking Website
- The Program - Fuel Tank Seismic Stability Program Website
- Database - DEQ will evaluate developing a Your DEQ Online module or alternative for Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans data management and communications.

Training

DEQ will offer rule implementation guidance and consultation to the affected parties.

Five Year Review

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

Exemption from five-year rule review

The Administrative Procedures Act exempts one of the proposed rules from the five-year review because the proposed rules would:

- Amend or repeal an existing rule. ORS 183.405(4).

Five-year rule review required

No later than Sept. 15, 2028, DEQ will review the newly adopted rules for which ORS 183.405 (1) requires review to determine whether:

- The rule has had the intended effect
- The anticipated fiscal impact of the rule was underestimated or overestimated
- Subsequent changes in the law require that the rule be repealed or amended
- There is continued need for the rule

Rules subject to 5-year review				
340-300-0000	340-300-0001	340-300-0002	340-300-0003	340-300-0004
340-300-0005	340-300-0006	340-300-0007	340-012-0069	

DEQ will use “available information” to comply with the review requirement allowed under ORS 183.405 (2).

DEQ will provide the five-year rule review report to the advisory committee to comply with ORS 183.405 (3).

Non-discrimination Statement and Translation Information

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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.

Note: The post-public comment changes are red-lined. The proposed additions to the Division 12 rules were not changed in response to public comment and are in brown.

Division 300
Draft Fuel Tank Seismic Stability Rules

340-300-0000
Context

(1) A Cascadia Subduction Zone earthquake impacting the large capacity fuel handling facilities in Oregon could create widespread environmental damage, fires, endanger health and safety of surrounding communities and place impossible demands on the state's emergency response capabilities.

(2) The 2022 Oregon legislature adopted Senate Bill 1567 enacted as chapter 99 of Oregon Laws 2022. The law authorizes the Environmental Quality Commissions to adopt requirements for Seismic Vulnerability Assessments and the Risk Mitigation Implementation Plans for large capacity bulk fuels terminals in Columbia, Lane and Multnomah counties.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0001
Purpose and Applicability

(1) The purpose of these rules is to protect public health, life safety and environmental safety against fires and release of fuel products and establish:

(a) The process and criteria for completion of facility-wide Seismic Vulnerability Assessments, including vulnerability to shaking associated with the Cascadia Subduction Zone and other earthquake sources and related post-earthquake secondary effects, performed by the facilities and submitted to DEQ for review and approval.

(b) The process and criteria for development of Risk Mitigation Implementation Plans to minimize risk to people and environment and to be prepared by facilities and submitted to DEQ for review and approval.

(c) Fees for Seismic Vulnerability Assessment reviews.

(d) Fees for Risk Mitigation Implementation Plan reviews.

(e) The process, criteria, and schedule for Risk Mitigation Implementation Plans implementation.

(f) Fees for ongoing implementation compliance.

(g) Reporting requirements.

(h) Enforcement provisions.

(2) The owners and operators of bulk fuel terminals or industrial facilities with at least 2-million-gallon oil or liquid fuel products ~~fuel~~ storage capacity located in Columbia, Multnomah and Lane counties must:

(a) Prepare and submit to DEQ the facility-wide Seismic Vulnerability Assessment.

(b) Prepare and submit to DEQ the facility-wide Seismic Risk Mitigation Implementation Plan designed to:

(A) Mitigate earthquake-induced damage in order to reduce the potential of ~~major~~ fuel spills and fires;

(B) Address potential of facility to safely shut down during or immediately after a damaging earthquake, if needed, in order to minimize spills as required by the performance objective defined in 340-300-0002;

(c) Provide risk mitigation measures implementation plans and timeline; and

(d) Provide periodic reports of the ongoing implementation of mitigation measures.

(e) Implement the risk minimization measures described in Risk Mitigation Implementation Plans when approved by DEQ within the approved timeline.

(f) Prepare and submit to DEQ post-implementation reports documenting completion of mitigation work and addressing residual risks.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0002
Definitions and Acronyms as used in this Division:

(1) **“**A~~D~~SCE” means American Society of Civil Engineers

(2) “API” means American Petroleum Institute

(3) “Assessment team” means a multidisciplinary team consisting of one or more of the following as applicable: project manager, on-site team leader, structural inspection professional, structural engineer, electrical inspection and design professional, mechanical inspection and design professional, fire inspection and design professional;

corrosion specialist, cathodic protection specialist, geotechnical engineer, and any other specialists needed.

(4) “Codes and Standards” means the adopted codes by State of Oregon Building Codes Division in effect on September 1, 2023 and their mandated standards, performance objectives and performance criteria for seismic design, evaluation and retrofit including but not limited to the following:

(a) For seismic design criteria ASCE 7;

(b) For existing building structures ASCE 41;

(c) For any building structures Oregon Structural Specialty Code and ASCE 7;

(d) For tanks ASCE 7 and reference standard for seismic criteria such as API 650 and API 653;

(e) For piping and piping racks ASCE 7;

(f) For secondary containment structures ASCE 7;

(g) For piers, wharves and other waterfront structures ASCE 61;

(h) Other applicable standards.

(5) “Confidential business information” means information as described in 19 C.F.R. 201.6 and OAR 340-090-0420.

(6) “DEQ” means the Oregon Department of Environmental Quality.

(7) “Design Level Eearthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7. ~~assuming a risk category IV~~. ~~The design level earthquake used for evaluation of new and existing structures, tanks, piers, wharves, components, and all other parts of the facility as part of Seismic Vulnerability Assessments and Seismic Risk Mitigation Implementation Plans, shall be two-thirds of the most severe earthquake considered by the building code (MCEr).~~

~~(8) “Deterministic seismic hazard analysis” means ground shaking hazard is assessed by identifying a specific reasonable (not worst case) earthquake event scenario or a “design level earthquake” – one for which the combination of magnitude and distance together with other pertinent source and site parameters provide large levels of ground shaking. Because of variability, the results of a deterministic analysis are presented in terms of percentile. ASCE 7-16 defines Deterministic (MCEr) ground motions as 84th percentile 5% damped spectral response acceleration in the direction of maximum horizontal response computed at that period.~~

(89) ~~"Earthquake hazard" or~~ "Sseismic hazard" means earthquake-induced ground shaking ~~caused by a design level or other earthquake and its~~ and secondary effects.

(~~10~~9) "Equity" means environmental justice considerations as addressed by the Oregon Environmental Justice Council and House Bill 4077 (2022).

(~~11~~10) "Facility" means the entire bulk oils or fuel terminal including any above-ground or underground tanks, piping, buildings, structures, ancillary components, spill containment structures, walls, and berms, transloading facilities, wharves, piers, moorings and retaining structures, loading racks, control equipment and any other structures within the property line or properties operated together.

(~~12~~11) "Facility owner or operator" means any person or ~~corporation~~ entity that owns, leases, and/or operates a facility. "Owner or Operator" does not include any person or entity that owns the land underlying a facility if the person or entity is not involved in the operations of the facility.

(~~13~~12) "Oils or liquid f~~F~~uel products" means ~~fuel~~ petroleum product or biological oils and blends of any kind~~-~~, that ~~is~~ are liquid at atmospheric temperature and pressure or liquified by reducing its temperature and increasing pressure including, but not limited to, petroleum, gasoline, reformulated gasoline, reclaimed oil, crude oil, asphalt, benzene, benzol, kerosene, fuel oil, diesel oil, liquified natural gas, propane, oil sludge, oil refuse, ~~biological oils and blends,~~ and oil mixed with wastes other than dredge spoil or any other volatile and inflammable liquid.

(~~14~~13) "Maximum Allowable Uncontained Spill" or "MAUS" means a not to exceed ~~threshold of total~~ volume of oil or liquid fuel released to the ground or water from a tank, including associated fuel handling equipment, or any other equipment not associated with a tank as a result of the Design Level Earthquake. The MAUS is measured per tank at the facility and is equivalent to the minimum reportable volume as provided in OAR 340-142.

~~(15) "MCEr" means Maximum Considered Earthquake as defined by ASCE 7.~~

(~~16~~14) "Minimize risk" means to ensure a facility's resilience to earthquake ~~hazard~~ induced damages as to reduce the severity of fuel releases and the resulting harm to people and environment in accordance with required performance objective.

(~~17~~15) "Mitigation" means an action that reduces the severity of harm caused to a facility, surrounding communities and the environment in the event of an earthquake.

(~~18~~16) "Off-site" means the environment outside of facility's property line but in the vicinity of the impact of the residual risk.

(~~19~~17) "Limiting Performance L~~l~~evel" means a limiting structural damage state that results in a spill volume over the Maximum Allowable Uncontained Spill. ~~a structure could experience as a result of an earthquake determined using ASCE 7, assuming risk category IV.~~

(~~20~~18) “Performance objective” means that the Limiting ~~p~~Performance ~~l~~Level is not exceeded given ground motions consistent with the Design Level Earthquake. ~~results in a spill volume under the Maximum Allowable Spill.~~

~~(21) “Probabilistic seismic hazard analysis” means the ground shaking hazard assessed in terms of statistical likelihood of occurrence such as 2PE50 = 2% probability of exceedance in 50 years = annual probability of occurrence of 0.0004 = return period of 2475 years. Such analysis reflects the combined effects of multiple potential seismic sources and does not correspond to a single, specific earthquake. The result of such analysis is a hazard curve from which a uniform hazard response spectrum can be constructed.~~

(~~22~~19) “Residual Risk” means potential risk remaining after all risk mitigation measures identified in the Risk Mitigation Implementation Plan are implemented.

(~~23~~20) “Risk” means the chance of harmful effects to human health resulting from exposure to danger that can be determined by probability (how likely is event to occur) and impact (the determination of the consequences of an event).

(~~24~~21) “Risk Mitigation Implementation Plan” means a written document that outlines risk mitigation actions and steps to accomplish the goal of implementing the outlined actions to achieve the required performance objective to minimize the risk of damage to a facility, surrounding communities and the environment. The plan must include the implementation schedule of all proposed risk minimizing measures.

(~~25~~22) “Secondary effects” means liquefaction, settlement, lateral spread, subsidence or uplift, fires, landslides, tsunamis, seiche, ground and/or slope failures, floods, explosions, spills that occur due to earthquake shaking and the resulting damage to a facility.

~~(26)~~ “~~Seismic hazard level” means ground-shaking demands of a specified severity developed either on a deterministic or probabilistic basis.~~

(~~27~~23) “Seismic Vulnerability Assessment” means detailed facility-wide site-specific evaluation of the risk of seismically induced damage and secondary effects to a facility and environment when subject to the Design level earthquake with a goal of identifying risk mitigation measures.

~~(28) "Transfer and process pipeline" means a buried or aboveground pipeline used to carry oil or liquid fuel to or from a tank vessel or transmission pipeline, or to a vessel and the first valve inside secondary containment at the facility, provided that any discharge on the facility side of that first valve will not directly impact waters of the state. A transfer pipeline includes valves, and other appurtenances connected to the pipeline, pumping units, and fabricated assemblies associated with pumping units. A transfer and process pipeline does not include pipelines carrying ballast or bilge water, transmission pipelines, tank vessels or storage tanks. Instances where the transfer and process pipelines are not well defined will be determined on a case-by-case basis by the DEQ.~~

(~~29~~24) “Transloading” as used in Senate Bill 1567 and these rules means transfer of fuels from one storage location to another, one transportation mode to another, one tank to another, pipeline to a tank, pipeline from a tank to a generator.

(~~30~~25) “Qualified Professional” means Professional Engineer registered in Oregon as required in OAR 820-10-1000 and ORS 670.310 & 672.255.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0003
Seismic Vulnerability Assessment Requirements and~~,~~ Timeline ~~and Approval Criteria~~

(1) A comprehensive Seismic Vulnerability Assessment or series of assessments submitted to DEQ must comply with Chapter 99 of Oregon Law (2022) and:

(a) Be conducted and verified by the Assessment Team of qualified professionals;

(b) Evaluate the ability of the facility to achieve the performance objective;

(c) Describe each facility component included in 340-300-0003(1)(f)(A) in terms of construction, age, inspection and maintenance and operations;

(d) Summarize currently implemented spill prevention and mitigation measures and their ability to achieve the performance objective defined in 340-300-0002;

(e) Develop the ~~seismic hazard and~~ Design Level Earthquake for the site in accordance with ASCE 7. ~~, assuming a structure risk category of IV for all components.~~

(f) Use the Codes and Standards as defined by OAR 340-300-0002(~~42~~) and the Design Level Earthquake determined using ASCE 7~~, risk category IV~~ to evaluate the potential for a spill greater than the Maximum Allowable Uncontained Spill during or after the Design Level Earthquake of all components including:

(A) Existing buildings, structures, and ancillary components;

(B) Tanks, pipes and piping systems;

(C) Spill containment measure and structures;

(D) Transloading facilities, including wharves, piers, moorings and retaining structures;

(E) Loading racks;

(F) Control equipment; and

(G) Any other structures related to or supporting facilities that constitute the bulk fuel terminal.

(f) Evaluate soil's vulnerability to liquefaction, lateral spreading and seismic-induced settlement;

(g) Evaluate the safety of operating conditions, safe shutdown procedures, potential spills;

(h) Evaluate the availability and integrity of automated sprinkler systems and sufficient supplies of firefighting foam and other emergency response equipment located in seismically resilient locations that will be accessible after an earthquake or secondary effects to mitigate the risk of fire and explosions following an earthquake;

(i) Evaluate the integrity of ~~firewalls~~ fire control measures such as firewalls surrounding facility to limit fire spreading into surrounding communities; and

(j) ~~)~~ Evaluate the availability of day and night onsite personnel trained in emergency response and able to respond ~~to maintain operation~~ in the event of an earthquake.

(2) Facility owner or operator must submit Seismic Vulnerability Assessment updates to DEQ:

(a) Upon application for any permits for retrofit or reconstruction of facilities;

(b) When retrofits or new construction of any part of the facility that require a permit occur; and

(c) When notified by DEQ of the availability of new scientific, technical findings, best management practices or industry standards but no more frequently than once every three years.

(3) Seismic Vulnerability Assessment timeline:

(a) Facility owners or operators must reply to requests for information from DEQ related to regulated activities including but not limited to property ownership, equipment ownership, equipment design, fuels present, spill prevention and earthquake preparedness by a ~~date~~ deadline specified by DEQ.

(b) By June 1, 2024, facility must submit:

(A) The facility-wide complete assessment final report; or

(B) The initial assessment report, outlining the summary of work completed and work to be done, including a proposed schedule for completion with justification for an extension as provided in section (8) of this rule.

(c) Within ~~14~~ 30 calendar days or on a schedule approved by DEQ, after a magnitude five (5.0) or higher earthquake centered within 100 miles of the facility, facility owner or operator~~s~~ must provide DEQ with an interim report on facility status, any damage, and any potential effects ~~anticipated changes~~of the event ~~to~~ on Risk ~~m~~Mitigation

Implementation plan actions implementation and timeline. ~~Proposed schedules for supplemental reports may be included in the interim report for DEQ approval.~~

(4) Seismic Vulnerability Assessment Modifications must be submitted no later than 90 days after DEQ notifies an owner and/or operator of new scientific or technical findings that may affect the submitted assessment as required in sections (1) and (2) of this rule.

(5) A final Seismic Vulnerability Assessment report that contains a facility owner or operator letterhead signature page stating their responsibility for the report, an executive summary, introduction, a description, and summary of the observed conditions of the facility, any calculations and results from engineering analysis with noted deficiencies and appendices including all data and calculations, recommendations for mitigation with a priority list and explanation of priorities and references section must be submitted to DEQ for review and approval.

(6) A final Seismic Vulnerability Assessment report must be stamped by professional engineers of record licensed in Oregon that specialize in geotechnical and structural engineering and include the following:

(a) Geotechnical Assessment consisting of:

(A) Site Conditions Assessment:

(i) Description of ~~project~~ site surface conditions, ~~and~~ topography and bathymetry if adjacent to a body of water.

(ii) Description of regional and site geology including soil stress history, deposition/erosion environment, and bedrock and soil geologic units.

~~(iii) Description of active seismic sources relevant at the site.~~

(~~iv~~iii) Description of field explorations per 2022 Oregon Structural Specialty Code including geotechnical and geophysical methods, standards, numbers and types of explorations, testing, and instrumentation. Description of results including final exploration logs, field data, and sub-surface site profiles. Field explorations (number, types, and depth) must be sufficient to categorize subsurface conditions at the site including extent and properties of subsurface geologic strata including that of compressible, liquefiable, soft or loose soils, and bearing layers.

(iv) Summary of laboratory testing performed and results.

(v~~i~~) Description of site subsurface conditions including soil and rock units encountered, extents and properties of those layers, and groundwater conditions and include site cross sections.

(B) Seismic Hazard Evaluation consisting of:

(i) Description of seismic hazards at the site including seismic evaluation criteria (expected ground shaking), liquefaction, settlement, surface effects, loss of strength, lateral spread~~,~~ and slope stability as appropriate.

(ii) Descri~~be~~ption of ~~be~~ methods of analysis, assumptions, and results of analysis.

(iii) Description of the resulting effects on the structures onsite.

(C) Geotechnical Evaluation ~~consisting of foundation evaluation criteria for onsite structures based on seismic evaluation~~ including but not limited to seismic design parameters, estimated vertical settlement and lateral ground deformation, foundation bearing and lateral capacity~~,~~ and wall design parameters~~, and soil strength recommendations as appropriate~~.

(b) Structural Assessment consisting of description of expected seismic performance of all onsite structures where damage could result in a potential release of fuel including any above or underground tanks, pipes, foundations of structures, buildings, structures, ancillary components, spill containment structures, transloading facilities, wharves, piers, moorings and retaining structures, loading racks, control equipment and any other structures within the property line or properties operated together.

(c) Safety Assessment consisting of:

(A) Description of fire control and suppression systems and procedures and the potential impacts of seismic hazards on these systems.

(B) Description of spill containment systems, equipment, and procedures in the event of an earthquake and their vulnerabilities to the identified seismic hazards at the site.

(C) Description of onsite emergency equipment, operational safety measures, and personnel policies/availability and their vulnerabilities to the identified seismic hazards at the site.

(7) Upon a facility's submission of the Seismic Vulnerability Assessment, DEQ will review the submittal. If DEQ determines that any additional information, corrections, or updates are required to approve the submittal, then DEQ will notify the owner or operator in writing of the information required and a ~~date~~ deadline by which it must be provided.

(8) An owner or operator may request an extension of time from a deadline established in section 3 by providing DEQ a written request no fewer than 14 calendar days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:

(a) The owner or operator has demonstrated progress in completing the submittal; and

(b) A delay is necessary, for good cause shown by the owner or operator, related to obtaining more accurate or new data, performing additional analyses, or addressing

changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal.

(9) If DEQ determines it is not able to approve the owner or operator's submittal, or if the owner or operator does not timely provide additional information or corrections requested by DEQ, then in addition to any other remedies available, DEQ may:

(ab) Inform the owner or operator of the deficiency and provide the owner or operator with a deadline to correct the deficiencies and re-submit.

(ba) Modify the submittal and approve it as modified. If DEQ modifies the submittal under this subsection the owner or operator must pay the assessment modification fee as required by 340-300-0006 (4).

~~(b) Inform the owner or operator of the deficiency and provide the owner or operator with a deadline to correct the deficiencies and re-submit.~~

(10) Recordkeeping. The owner or operator of a facility that provides DEQ with any information related to a Seismic Vulnerability Assessment completed under this rule must retain all of its records related to the assessment for ten years from the date the information is submitted to DEQ.

(11) Owner or operator must submit any information required by DEQ to DEQ by the established deadline.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0004
Risk Mitigation Implementation Plan Requirements, Timeline and Approval Criteria

~~(1) The Risk Mitigation Implementation Plan must be stamped by a qualified professional engineer.~~

(~~2~~1) The Risk Mitigation Implementation Plan must propose risk mitigation measures to address vulnerabilities identified in the Seismic Vulnerability Assessment to protect public health, life safety and environment. The measures must ~~including~~ include but are not limited to:

(a) Retrofits, replacement, updates, reconstruction, removal, relocation or other mitigation measures intended to comply with the Codes and Standards as defined by OAR 340-300-0002(2) to achieve the performance objective and meet the specifications of OAR 340-300-0003 to reduce the expected spill ~~after a~~as a result of the Design Level Earthquake to below Maximum Allowable Spill. Meeting the requirements of Risk Category IV design of new structures satisfies the intent of this rule.

(b) Measures improving ~~F~~facility structural integrity;

(c) Measures to prevent ~~A~~anticipated exposures to hazardous materials releases and proposed measures to prevent those exposures;

(d) Measures to mitigate e~~E~~ffects on surface water, ground water, and air;

(e) Training and response exercises including applicable provisions in 340-141-0200 or the EPA Spill Prevention, Control, and Countermeasure requirements to employees and education and information ~~to employees and~~ surrounding communities that promote awareness and equity.

(f) ~~Connection to the local jurisdiction's requirements;~~ Additional provisions for resilience to ground shaking caused by earthquake and secondary effect hazards at the facility location.

~~(g) Site-specific determinations needed and a schedule to complete modifications or construction;~~

~~(h) Additional provisions for resilience to ground shaking caused by earthquake and secondary effect hazards at the facility location;~~

~~(i) Description of the possible major earthquake induced residual risk scenarios and their probability;~~

~~(j) Demonstration of the mitigation measures effectiveness to address risk scenarios identified in paragraph (i) of this subsection; and~~

~~(k) Potential consequences and resources needed to equitably mitigate the residual risk to employees and surrounding communities after mitigation measures are implemented.~~

(~~3~~2) Risk Mitigation Implementation Plans must include the following:

(a) Description of proposed mitigation measures including but not limited to ground and~~/or~~ slope improvement, foundation improvements or replacement, structural improvements, connection and piping improvements, containment improvements ~~and/~~or replacement.

(b) Description of engineering analysis methods, assumptions, and results of the seismic evaluation of the mitigation measures.

(c) Description of expected seismic performance of mitigated structures, containment, and ground improvement as appropriate.

(d) Description of any potential fuel release based on expected seismic performance.

(e) Description of safety improvements including but not limited to improvement, replacement or retrofit of spill containment and firefighting systems, personnel, training and operational changes, and emergency equipment and supply additions.

(f) Description of emergency response capabilities including but not limited to trained personnel, training plan, properly installed seismically certified generators and adequacy of on-site fuel storage to power backup generators or installation of electrical hookups for emergency generators; availability and integrity of automated sprinkler systems, supplies of firefighting foam and other emergency response equipment located in seismically resilient locations that will be accessible after an earthquake or secondary effects to mitigate the risk of fire and explosions following an earthquake.

(g) Description of post-Implementation residual risk that:

(A) Specifies measures of emergency response by the owner or operator to address the effects of residual risk remaining after all mitigation work is implemented including but not limited to an internal alarm and emergency plan.

(B) Provides relevant information to the community and local authorities for the creation of external alarm and emergency plans.

(C) Includes the following elements:

(i) Description of spill scenarios including reasonably likely worst case that may occur because of equipment failure despite the proposed mitigation measures.

(ii) All other measures identified in Oregon Laws Chapter 99 (2022, SB 1567).

(h) A schedule to complete all proposed mitigation as required in sections 3 and 5 of this rule.

~~(4) The Risk Mitigation Implementation Plan must be submitted to DEQ no later than 180 calendar days after DEQ's approval of the Seismic Vulnerability Assessment.~~

(~~5~~3) The Risk Mitigation Implementation Plan must outline interim mitigation actions that will be completed within 1, 3, and 5 years based on risk reduction, feasibility and order of importance with justification for 1-, 3- and 5-year selections.

~~(a) The proposed schedule must include justification for 1-, 3- and 5-year selections based on magnitude of risk reduction.~~

(~~b~~4) The proposed schedule may consider the duration of specific site activities or sequencing of tasks dependent on previous work.

(~~6~~5) All mitigation measures approved by DEQ must be completed on the timeline identified in the implementation plan, but no later than within 10 years after the DEQ approves the Risk Mitigation Implementation Plan.

(6) The Risk Mitigation Implementation Plan must be stamped by a qualified professional engineer.

(7) All measures proposed in Risk Mitigation Implementation Plans must conform with the Codes and Standards and specification provided in OAR 340-300-0002 and 340-300-0003 and be based on the evaluation based on the Design Level Earthquake as determined in accordance with ASCE7. ~~The Risk Mitigation Implementation Plans may be modified as follows:~~

(a) All measures must be consistent with local jurisdiction requirements.

~~A modification may be initiated by the owner or operator and~~

~~(A) requested in the case of significant changes or circumstances affecting the Risk Mitigation Implementation Plan and~~

~~(B) The modification must be approved by DEQ.~~

~~(b) A modification may be DEQ initiated if new scientific or technological data becomes available. A Facility will have 90 days to submit the requested modification.~~

(8) The Risk Mitigation Implementation Plan must be submitted to DEQ no later than 180 calendar days after DEQ's approval of the Seismic Vulnerability Assessment.

~~All measures proposed in Risk Mitigation Implementation Plans must conform with the Codes and Standards and specification provided in OAR 340-300-0002 and 340-300-0003 and may be based on a probabilistic or deterministic analysis or on an alternative method proposed by facility owner or operator with DEQ's approval.~~

(9) Upon facility's submission of the Risk Mitigation Implementation Plan, DEQ will review the submittal. If DEQ determines that any additional information, corrections, or updates are required to approve the submittal, then DEQ will notify the owner or operator in writing of the information required and a date deadline by which it must be provided.

~~Post-Implementation residual risk must be addressed and submitted to DEQ with the proposed Risk Mitigation Implementation Plan and must:~~

~~(a) Be used by the owner and/or operator to specify measures to mitigate the effects of residual risk by creating an internal alarm and emergency plan.~~

~~(b) Provide relevant information to local authorities for the creation of external alarm and emergency plans. because of despite the proposed mitigation measures.~~

(10) An owner or operator may request an extension of time from a deadline established in section (3) or section (4) of this rule by providing DEQ with a written request no fewer than 14 calendar days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:

(a) The owner or operator has demonstrated progress in completing the submittal; and

(b) A delay is necessary, for good cause shown by the owner or operator, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal.

~~Upon facility's submission of the Risk Mitigation Implementation Plan, DEQ will review the submittal. If DEQ determines that any additional information, corrections, or updates are required to approve the submittal, then DEQ will notify the owner or operator in writing of the information required and a date by which it must be provided.~~

(11) If DEQ does not approve the owner or operator's submittal, or if the owner or operator does not timely provide additional information or corrections requested by DEQ, then in addition to any other remedies available, DEQ may:

(a) Inform the owner or operator of the deficiency and provide the owner or operator with a revised deadline to submit the needed information.

(b) Modify the information provided by the owner or operator, approve it as modified, and the owner or operator must pay the plan modification fee as provided in 340-300-0006 (4).

~~An owner or operator may request an extension of time from a deadline established in section (3) or section (4) of this rule by providing DEQ with a written request no fewer than 14 calendar days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:~~

~~(a) The owner or operator has demonstrated progress in completing the submittal; and~~

~~(b) A delay is necessary, for good cause shown by the owner or operator, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal.~~

(12) The Risk Mitigation Implementation Plans may be modified as follows:

(a) A modification may be initiated by the owner or operator and

(A) requested in the case of significant changes or circumstances affecting the Risk Mitigation Implementation Plan and

(B) The modification must be approved by DEQ.

(b) A modification may be DEQ initiated if new scientific or technological data becomes available but no more frequently than once every three years. A Facility will have 90 days to submit the requested modification.

~~If DEQ determines it is not able to approve the owner or operator's submittal, or if the owner or operator does not timely provide additional information or corrections requested by DEQ, then in addition to any other remedies available, DEQ may:~~

~~(a) Modify the information provided by the owner or operator, approve it as modified, and the owner or operator must pay the plan modification fee as provided in 340-300-0006 (4).~~

~~(b) Inform the owner or operator of the deficiency and provide the owner or operator with a revised deadline to submit the needed information.~~

(13) Owner or operator must implement all aspects of the approved Risk Mitigation Implementation Plan.

(14~~3~~) Recordkeeping. The owner or operator of a facility that provides DEQ with any information related to a Risk Mitigation Implementation Plan completed under this rule must retain all of its records related to the Risk Mitigation Implementation Plan for ten years from the date the information is submitted to DEQ.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0005
Reporting R~~r~~equirements and Inspections
(1) Annual Risk Mitigation Implementation Plan implementation status reports must be submitted by June 1st of each year until the implementation is completed and approved by DEQ, or on a schedule approved by DEQ in the Risk Mitigation Implementation Plan and include the description of:

(a) The implementation work that has been completed;
(b) The plan for the work that will follow;
(c) The summary of the implementation schedule;
(d) A list of action items;
(e) Any risks to the implementation timeline and how those risks are being mitigated;
(f) Facility status updates if any magnitude 5 or higher earthquakes have occured.

(2) A facility shall allow access for inspections during the implementation of the Risk Mitigation Implementation Plan upon DEQ's request or at reasonable hours.

(3) DEQ inspections and frequency may include:

(a) Periodic onsite special inspections by the geotechnical and structural engineers verifying that design criteria are met.

(b) Periodic operation and maintenance inspections.

(c) Special inspections by a qualified Testing Agency with certified personnel as required in Oregon Structural Specialty Code Chapter 17, ASTM (formerly American Society for Testing and Materials, currently ASTM International) E329, etc.).

(4) A final post-implementation report, or series of final reports, must be submitted 180 calendar days after the implementation completion. The report or reports shall include:

(a) Engineering specifications for all work performed as actually built; and

(b) Updated description of any residual risk.

(5) Recordkeeping. The owner or operator must retain the final post-implementation report and all records related to the Risk Mitigation Implementation Plan implementation activities for ten years from the date the information is submitted to DEQ.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0006
Program Administration and Compliance Fees

(1) A facility owner or operator must pay a Seismic Vulnerability Assessment Submittal Fee of $39,000. The fee must accompany submittal of the Seismic Vulnerability Assessment or the initial assessment report if a series of assessments is submitted.

(2) A facility owner or operator must pay a Risk Mitigation Implementation Plan Submittal Fee of $36,000. The fee must accompany submittal of a Risk Mitigation Implementation Plan.

(3) A facility owner or operator must pay an Annual Compliance Fee by June 1 of each calendar year until the implementation of all risk minimization measures proposed in the Risk Mitigation Implementation Plan is completed and approved by DEQ. The Annual Compliance Fee structure is as follows:

(a) Year one Annual Compliance Fee of $23,000.

(b) Year two and consequent years Annual Compliance Fee will not exceed $50,000.

(c) DEQ may reduce the Annual Compliance Fee in year two or in subsequent years if DEQ determines that the entire fee is not necessary to fund program costs.

(4) A facility owner or operator must pay a Risk Mitigation Implementation Plan modification fee of $5,000 when requesting changes to previously submitted mitigation plans or if DEQ modifies a Seismic Vulnerability Assessment or a Risk Mitigation Implementation Plan as provided in of 340-300-0003(9) 12 of 340-300-0004(12).

(5) The modification fee does not apply to DEQ-required assessment plan modifications.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0007
DEQ Review and Approval of Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans

(1) DEQ will review and approve the Seismic Vulnerability Assessments submitted under OAR 340-300-0003 if they meet the requirements of Chapter 99 of Oregon Law 2022 and these rules.

(2) DEQ will approve Risk Mitigation Implementation Plan if the plan submitted under OAR 340-300-0004 meets the requirements of Chapter 99 of Oregon Law 2022 and these rules and when implemented will minimize the risk to the human health and safety and the environment in the event of ground shaking and secondary effects.

(3) Before DEQ approves a Seismic Vulnerability Assessment or a Risk Mitigation Implementation Plan required under these rules, DEQ may provide a copy of the mitigation plan to the Department of Geology and Mineral Industries, the office of the State Fire Marshal, the Oregon Department of Energy and the local government jurisdictions for review.

(4) Before approving a Risk Mitigation Implementation Plan, DEQ will provide a public notice and initiate a public comment period as follows:

(a) DEQ will announce the public notice through the Fuel Tank Seismic Stability GovDelivery mailing system.

(b) DEQ will hold a public comment period open for 30 calendar days. This period may be extended at DEQ's discretion. DEQ will review public comments and may request changes to the Risk Mitigation Implementation Plans prior to approval as determined appropriate by DEQ.

(c) DEQ will post all Risk Mitigation Implementation Plans barring any confidential business information on DEQ's website by the time of public notice.

(5) Public hearing

(a) If requested by 10 entities or a group representing 10 entities within the first 20 calendar days of the public comment period, a public hearing will be held. DEQ will extend the public comment period and hold a hearing at least 14 calendar days before the close of the public comment period.

(b) A notice of 30 calendar days will be provided ahead of a public hearing.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-012-0064
Fuel Tank Seismic Stability Enforcement Classification of Violations

(1) Class I:

(a) Failure to timely submit a facility Seismic Vulnerability Assessment as required under OAR 340-300-0004.

(b) Failure to timely submit a facility Risk Mitigation Implementation Plan or a final post-implementation report as required under OAR 340-300-0005.

(c) Failure to implement DEQ approved Risk Mitigation Implementation Plan.

(d) Failure to maintain equipment, personnel and training at levels described in an approved Risk Mitigation Implementation Plan.

(e) Operating a bulk fuel terminal without an approved facility Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(2) Class II:

(a) Failure to allow access for facility inspection when requested.

(b) Failure to submit a modification request prior to changing an approved Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(c) Failure to implement required changes to an approved Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(3) Class III:

(a) Failure to provide maintenance and inspections records of the storage and transfer facilities to DEQ upon request.

(b) Failing to notify DEQ within 14 calendar days of any significant changes that could affect implementation of a required Risk Mitigation Implementation Plan.

(c) Failing to retain records of Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan as required in 340-300-0003(11) and 340-300-003(13).

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-012-0140

Determination of Base Penalty

340-012-0140
Determination of Base Penalty

(1) Except for Class III violations and as provided in OAR 340-012-0155, the base penalty (BP) is determined by applying the class and magnitude of the violation to the matrices set forth in this section. For Class III violations, no magnitude determination is required.

(2) $12,000 Penalty Matrix:

(a) The $12,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have a Title V permit or an Air Contaminant Discharge Permit (ACDP) issued pursuant to New Source Review (NSR) regulations or Prevention of Significant Deterioration (PSD) regulations, or section 112(g) of the federal Clean Air Act, unless otherwise classified.

(B) Open burning violations as follows:

(i) Any violation of OAR 340-264-0060(3) committed by an industrial facility operating under an air quality permit.

(ii) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned, except when committed by a residential owner-occupant.

(C) Any violation of the Oregon Low Emission and Zero Emission Vehicle rules (OAR 340-257) by a vehicle manufacturer.

(D) Any violation of ORS 468B.025(1)(a) or (1)(b), or of 468B.050(1)(a) by a person without a National Pollutant Discharge Elimination System (NPDES) permit, unless otherwise classified.

(E) Any violation of a water quality statute, rule, permit or related order by:

(i) A person that has an NPDES permit, or that has or should have a Water Pollution Control Facility (WPCF) permit, for a municipal or private utility sewage treatment facility with a permitted flow of five million or more gallons per day.

(ii) A person that has a Tier 1 industrial source NPDES or WPCF permit.

(iii) A person that has a population of 100,000 or more, as determined by the most recent national census, and either has or should have a WPCF Municipal Stormwater Underground Injection Control (UIC) System Permit or has an NPDES Municipal Separated Storm Sewer Systems (MS4) Stormwater Discharge Permit.

(iv) A person that installs or operates a prohibited Class I, II, III, IV or V UIC system, except for a cesspool.

(v) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that disturbs 20 or more acres.

(F) Any violation of the ballast water statute in ORS Chapter 783 or ballast water management rule in OAR 340, division 143.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification by a 100 megawatt or more hydroelectric facility.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a dredge and fill project except for Tier 1, 2A or 2B projects.

(I) Any violation of an underground storage tanks statute, rule, permit or related order committed by the owner, operator or permittee of 10 or more UST facilities or a person who is licensed or should be licensed by DEQ to perform tank services.

(J) Any violation of a heating oil tank statute, rule, permit, license or related order committed by a person who is licensed or should be licensed by DEQ to perform heating oil tank services.

(K) Any violation of ORS 468B.485, or related rules or orders regarding financial assurance for ships transporting hazardous materials or oil.

(L) Any violation of a used oil statute, rule, permit or related order committed by a person who is a used oil transporter, transfer facility, processor or re-refiner, off-specification used oil burner or used oil marketer.

(M) Any violation of a hazardous waste statute, rule, permit or related order by:

(i) A person that is a large quantity generator or hazardous waste transporter.

(ii) A person that has or should have a treatment, storage or disposal facility permit.

(N) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a covered vessel or facility as defined in ORS 468B.300 or by a person who is engaged in the business of manufacturing, storing or transporting oil or hazardous materials.

(O) Any violation of a polychlorinated biphenyls (PCBs) management and disposal statute, rule, permit or related order.

(P) Any violation of ORS Chapter 465, UST or environmental cleanup statute, rule, related order or related agreement.

(Q) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or any violation of a solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a solid waste disposal permit.

(ii) A city with a population of 25,000 or more, as determined by the most recent national census.

(R) Any violation of the Oregon Clean Fuels Program under OAR Chapter 340, division 253 by a person registered as an importer of blendstocks,

(S) Any violation classified under OAR 340-012-0054 (1) (dd), (ee), (ff), or (gg).

(T) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions greater than or equal to 25,000 metric tons per year or by a person that has not reported greenhouse gas emissions to DEQ during the past five years, or by a person for which DEQ has insufficient information to accurately estimate emissions.

(U) Any violation of the Third-Party Verification rules under OAR Chapter 340, division 272.

(V) Any violation of the Landfill Gas Emissions rules under OAR chapter 340, division 239 by a person required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(W) Any violation of the rules for Emission Standards for New Heavy-Duty Trucks under OAR chapter 340 division 261 by engine, truck or trailer manufacturers and dealers.

(X) Any violation of the Climate Protection Program rules under OAR chapter 340, division 271.

(Y) Any violation of the Fuel Tank Seismic Stability Program rules under OAR chapter 340, division 300.

(b) The base penalty values for the $12,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $12,000;

(ii) Moderate — $6,000;

(iii) Minor — $3,000.

(B) Class II:

(i) Major — $6,000;

(ii) Moderate — $3,000;

(iii) Minor — $1,500.

(C) Class III: $1,000.

(3) $8,000 Penalty Matrix:

(a) The $8,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have an ACDP permit, except for NSR, PSD and Basic ACDP permits, unless listed under another penalty matrix, unless otherwise classified.

(B) Any violation of an asbestos statute, rule, permit or related order except those violations listed in section (5) of this rule.

(C) Any violation of a vehicle inspection program statute, rule, permit or related order committed by an auto repair facility.

(D) Any violation of the Oregon Low Emission Vehicle rules (OAR 340-257) committed by an automobile dealer or an automobile rental agency.

(E) Any violation of a water quality statute, rule, permit or related order committed by:

(i) A person that has an NPDES Permit, or that has or should have a WPCF Permit, for a municipal or private utility sewage treatment facility with a permitted flow of two million or more, but less than five million, gallons per day.

(ii) A person that has a Tier 2 industrial source NPDES or WPCF Permit.

(iii) A person that has or should have applied for coverage under an NPDES or a WPCF General Permit, except an NPDES Stormwater Discharge 1200-C General Permit for a construction site of less than five acres in size or 20 or more acres in size.

(iv) A person that has a population of less than 100,000 but more than 10,000, as determined by the most recent national census, and has or should have a WPCF Municipal Stormwater UIC System Permit or has an NPDES MS4 Stormwater Discharge Permit.

(v) A person that owns, and that has or should have registered, a UIC system that disposes of wastewater other than stormwater or sewage or geothermal fluids.

(F) Any violation of a Clean Water Act Section 401 Water Quality Certification by a less than 100-megawatt hydroelectric facility.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 2A or Tier 2B dredge and fill project.

(H) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of five to nine UST facilities.

(I) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a waste tire permit; or

(ii) A person with a population of more than 5,000 but less than or equal to 25,000, as determined by the most recent national census.

(J) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a small quantity generator.

(K) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person other than a person listed in OAR 340-012-0140(2)(a)(N) occurring during a commercial activity or involving a derelict vessel over 35 feet in length.

(L) Any violation of the Oregon Clean Fuels Program under OAR chapter 340, division 253 unless the violation is otherwise classified in this rule.

(M) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 25,000 metric tons per year but greater than or equal to 5,000 metric tons per year.

(N) Any violation of the Landfill Gas Emissions rules under OAR chapter 340, division 239 by a person that owns or operates a landfill with over 200,000 tons waste in place and is not required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(O) Any violation of a hazardous waste pharmaceutical statute, rule, permit or related order committed by a person that is a reverse distributor.

(b) The base penalty values for the $8,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $8,000.

(ii) Moderate — $4,000.

(iii) Minor — $2,000.

(B) Class II:

(i) Major — $4,000.

(ii) Moderate — $2,000.

(iii) Minor — $1,000.

(C) Class III: $ 700.

(4) $3,000 Penalty Matrix:

(a) The $3,000 penalty matrix applies to the following:

(A) Any violation of any statute, rule, permit, license, or order committed by a person not listed under another penalty matrix.

(B) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person not listed under another penalty matrix.

(C) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have a Basic ACDP or an ACDP or registration only because the person is subject to Area Source NESHAP regulations.

(D) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned by a residential owner-occupant.

(E) Any violation of a vehicle inspection program statute, rule, permit or related order committed by a natural person, except for those violations listed in section (5) of this rule.

(F) Any violation of a water quality statute, rule, permit, license or related order not listed under another penalty matrix and committed by:

(i) A person that has an NPDES permit, or has or should have a WPCF permit, for a municipal or private utility wastewater treatment facility with a permitted flow of less than two million gallons per day.

(ii) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that is more than one, but less than five acres.

(iii) A person that has a population of 10,000 or less, as determined by the most recent national census, and either has an NPDES MS4 Stormwater Discharge Permit or has or should have a WPCF Municipal Stormwater UIC System Permit.

(iv) A person who is licensed to perform onsite sewage disposal services or who has performed sewage disposal services.

(v) A person, except for a residential owner-occupant, that owns and either has or should have registered a UIC system that disposes of stormwater, sewage or geothermal fluids.

(vi) A person that has or should have a WPCF individual stormwater UIC system permit.

(vii) Any violation of a water quality statute, rule, permit or related order committed by a person that has or should have applied for coverage under an NPDES 700-PM General Permit for suction dredges.

(G) Any violation of an onsite sewage disposal statute, rule, permit or related order, except for a violation committed by a residential owner-occupant.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 1 dredge and fill project.

(I) Any violation of an UST statute, rule, permit or related order if the person is the owner, operator or permittee of two to four UST facilities.

(J) Any violation of a used oil statute, rule, permit or related order, except a violation related to a spill or release, committed by a person that is a used oil generator.

(K) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a very small quantity generator, unless listed under another penalty matrix.

(L) Any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by a person with a population less than 5,000, as determined by the most recent national census.

(M) Any violation of the labeling requirements of ORS 459A.675 through 459A.685.

(N) Any violation of rigid pesticide container disposal requirements by a very small quantity generator of hazardous waste.

(O) Any violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by non-residential uses of property disturbing less than one acre in size.

(P) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person not listed under another matrix.

(Q) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 5,000 metric tons per year.

(b) The base penalty values for the $3,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $3,000;

(ii) Moderate — $1,500;

(iii) Minor — $750.

(B) Class II:

(i) Major — $1,500;

(ii) Moderate — $750;

(iii) Minor — $375.

(C) Class III: $250.

(5) $1,000 Penalty Matrix:

(a) The $1,000 penalty matrix applies to the following:

(A) Any violation of an open burning statute, rule, permit or related order committed by a residential owner-occupant at the residence, not listed under another penalty matrix.

(B) Any violation of visible emissions standards by operation of a vehicle.

(C) Any violation of an asbestos statute, rule, permit or related order committed by a residential owner-occupant.

(D) Any violation of an onsite sewage disposal statute, rule, permit or related order of OAR chapter 340, division 44 committed by a residential owner-occupant.

(E) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of one UST facility.

(F) Any violation of an HOT statute, rule, permit or related order not listed under another penalty matrix.

(G) Any violation of OAR chapter 340, division 124 or ORS 465.505 by a dry cleaning owner or operator, dry store owner or operator, or supplier of perchloroethylene.

(H) Any violation of ORS Chapter 459 or other solid waste statute, rule or related order committed by a residential owner-occupant.

(I) Any violation of a statute, rule, permit or order relating to rigid plastic containers, except for violation of the labeling requirements under OAR 459A.675 through 459A.685.

(J) Any violation of a statute, rule or order relating to the opportunity to recycle.

(K) Any violation of OAR chapter 340, division 262 or other statute, rule or order relating to solid fuel burning devices, except a violation related to the sale of new or used solid fuel burning devices or the removal and destruction of used solid fuel burning devices.

(L) Any violation of an UIC system statute, rule, permit or related order by a residential owner-occupant, when the UIC disposes of stormwater, sewage or geothermal fluids.

(M) Any Violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by residential use of property disturbing less than one acre in size.

(b) The base penalty values for the $1,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $1,000;

(ii) Moderate — $500;

(iii) Minor — $250.

(B) Class II:

(i) Major — $500;

(ii) Moderate — $250;

(iii) Minor — $125.

(C) Class III: $100.

Statutory/Other Authority: ORS 468.020 & 468.090 - 468.140
Statutes/Other Implemented: ORS 459.995, 459A.655, 459A.660, 459A.685 & 468.035
History:
DEQ 16-2022, amend filed 09/23/2022, effective 09/23/2022
DEQ 4-2022, amend filed 03/16/2022, effective 03/16/2022
DEQ 27-2021, amend filed 12/16/2021, effective 12/16/2021
DEQ 20-2021, amend filed 11/18/2021, effective 01/01/2022
DEQ 17-2021, amend filed 11/17/2021, effective 11/17/2021
DEQ 16-2021, amend filed 10/04/2021, effective 10/04/2021
DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020
DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019
DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018
DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16
DEQ 1-2014, f. & cert. ef. 1-6-14
DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11
DEQ 6-2006, f. & cert. ef. 6-29-06
DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06
Renumbered from 340-012-0042, DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05
DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01
DEQ 19-1998, f. & cert. ef. 10-12-98
DEQ 9-1996, f. & cert. ef. 7-10-96
DEQ 4-1994, f. & cert. ef. 3-14-94
DEQ 21-1992, f. & cert. ef. 8-11-92
DEQ 33-1990, f. & cert. ef. 8-15-90
DEQ 15-1990, f. & cert. ef. 3-30-90
DEQ 4-1989, f. & cert. ef. 3-14-89

Statutory/Other Authority: ORS 468.020 & 468.090 - 468.140
Statutes/Other Implemented: SB 1567 (2022)

Division 300
Draft Fuel Tank Seismic Stability Rules

340-300-0000
Context

(1) A Cascadia Subduction Zone earthquake impacting the large capacity fuel handling facilities in Oregon could create widespread environmental damage, fires, endanger health and safety of surrounding communities and place impossible demands on the state's emergency response capabilities.

(2) The 2022 Oregon legislature adopted Senate Bill 1567 enacted as chapter 99 of Oregon Laws 2022. The law authorizes the Environmental Quality Commissions to adopt requirements for Seismic Vulnerability Assessments and the Risk Mitigation Implementation Plans for large capacity bulk fuels terminals in Columbia, Lane and Multnomah counties.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0001
Purpose and Applicability

(1) The purpose of these rules is to protect public health, life safety and environmental safety against fires and release of fuel products and establish:

(a) The process and criteria for completion of facility-wide Seismic Vulnerability Assessments, including vulnerability to shaking associated with the Cascadia Subduction Zone and other earthquake sources and related post-earthquake secondary effects, performed by the facilities and submitted to DEQ for review and approval.

(b) The process and criteria for development of Risk Mitigation Implementation Plans to minimize risk to people and environment and to be prepared by facilities and submitted to DEQ for review and approval.

(c) Fees for Seismic Vulnerability Assessment reviews.

(d) Fees for Risk Mitigation Implementation Plan reviews.

(e) The process, criteria, and schedule for Risk Mitigation Implementation Plans implementation.

(f) Fees for ongoing implementation compliance.

(g) Reporting requirements.

(h) Enforcement provisions.

(2) The owners and operators of bulk fuel terminals or industrial facilities with at least 2-million-gallon oil or liquid fuel products storage capacity located in Columbia, Multnomah and Lane counties must:

(a) Prepare and submit to DEQ the facility-wide Seismic Vulnerability Assessment.

(b) Prepare and submit to DEQ the facility-wide Seismic Risk Mitigation Implementation Plan designed to:

(A) Mitigate earthquake-induced damage in order to reduce the potential of fuel spills and fires;

(B) Address potential of facility to safely shut down during or immediately after a damaging earthquake, if needed, in order to minimize spills as required by the performance objective defined in 340-300-0002;

(c) Provide risk mitigation measures implementation plans and timeline; and

(d) Provide periodic reports of the ongoing implementation of mitigation measures.

(e) Implement the risk minimization measures described in Risk Mitigation Implementation Plans when approved by DEQ within the approved timeline.

(f) Prepare and submit to DEQ post-implementation reports documenting completion of mitigation work and addressing residual risks.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0002
Definitions and Acronyms as used in this Division:

(1) **“**ASCE” means American Society of Civil Engineers

(2) “API” means American Petroleum Institute

(3) “Assessment team” means a multidisciplinary team consisting of one or more of the following as applicable: project manager, on-site team leader, structural inspection professional, structural engineer, electrical inspection and design professional, mechanical inspection and design professional, fire inspection and design professional; corrosion specialist, cathodic protection specialist, geotechnical engineer, and any other specialists needed.

(4) “Codes and Standards” means the adopted codes by State of Oregon Building Codes Division in effect on September 1, 2023 and their mandated standards, performance objectives and performance criteria for seismic design, evaluation and retrofit including but not limited to the following:

(a) For seismic design criteria ASCE 7;

(b) For existing building structures ASCE 41;

(c) For any building structures Oregon Structural Specialty Code and ASCE 7;

(d) For tanks ASCE 7 and reference standard for seismic criteria such as API 650 and API 653;

(e) For piping and piping racks ASCE 7;

(f) For secondary containment structures ASCE 7;

(g) For piers, wharves and other waterfront structures ASCE 61;

(h) Other applicable standards.

(5) “Confidential business information” means information as described in 19 C.F.R. 201.6 and OAR 340-090-0420.

(6) “DEQ” means the Oregon Department of Environmental Quality.

(7) “Design Level Earthquake” means earthquake ground motions used in the design, evaluation or retrofit of structures to achieve a certain performance standard. For the purpose of this rule, the design level earthquake for all structures at each site will be determined in accordance with ASCE 7.

(8) “Seismic hazard” means earthquake-induced ground shaking and secondary effects.

(9) “Equity” means environmental justice considerations as addressed by the Oregon Environmental Justice Council and House Bill 4077 (2022).

(10) “Facility” means the entire bulk oils or fuel terminal including any above-ground or underground tanks, piping, buildings, structures, ancillary components, spill containment structures, walls, and berms, transloading facilities, wharves, piers, moorings and retaining structures, loading racks, control equipment and any other structures within the property line or properties operated together.

(11) “Facility owner or operator” means any person or entity that owns, leases, and/or operates a facility. "Owner or Operator" does not include any person or entity that owns the land underlying a facility if the person or entity is not involved in the operations of the facility.

(12) “Oils or liquid fuel products” means petroleum product or biological oils and blends of any kind, that are liquid at atmospheric temperature and pressure or liquified by reducing its temperature and increasing pressure including, but not limited to, petroleum, gasoline, reformulated gasoline, reclaimed oil, crude oil, asphalt, benzene, benzol, kerosene, fuel oil, diesel oil, liquified natural gas, propane, oil sludge, oil refuse, and oil mixed with wastes other than dredge spoil or any other volatile and inflammable liquid.

(13) “Maximum Allowable Uncontained Spill” or “MAUS” means a not to exceed volume of oil or liquid fuel released to the ground or water from a tank, including associated fuel handling equipment, or any other equipment not associated with a tank as a result of the Design Level Earthquake. The MAUS is measured per tank at the facility and is equivalent to the minimum reportable volume as provided in OAR 340-142.

(14) “Minimize risk” means to ensure a facility’s resilience to earthquake induced damages as to reduce the severity of fuel releases and the resulting harm to people and environment in accordance with required performance objective.

(15) “Mitigation” means an action that reduces the severity of harm caused to a facility, surrounding communities and the environment in the event of an earthquake.

(16) “Off-site” means the environment outside of facility’s property line but in the vicinity of the impact of the residual risk.

(17) “Limiting Performance Level” means a limiting structural damage state that results in a spill volume over the Maximum Allowable Uncontained Spill.

(18) “Performance objective” means that the Limiting Performance Level is not exceeded given ground motions consistent with the Design Level Earthquake.

(19) “Residual Risk” means potential risk remaining after all risk mitigation measures identified in the Risk Mitigation Implementation Plan are implemented.

(20) “Risk” means the chance of harmful effects to human health resulting from exposure to danger that can be determined by probability (how likely is event to occur) and impact (the determination of the consequences of an event).

(21) “Risk Mitigation Implementation Plan” means a written document that outlines risk mitigation actions and steps to accomplish the goal of implementing the outlined actions to achieve the required performance objective to minimize the risk of damage to a facility, surrounding communities and the environment. The plan must include the implementation schedule of all proposed risk minimizing measures.

(22) “Secondary effects” means liquefaction, settlement, lateral spread, subsidence or uplift, fires, landslides, tsunamis, seiche, ground and/or slope failures, floods, explosions, spills that occur due to earthquake shaking and the resulting damage to a facility.

(23) “Seismic Vulnerability Assessment” means detailed facility-wide site-specific evaluation of the risk of seismically induced damage and secondary effects to a facility and environment when subject to the Design level earthquake with a goal of identifying risk mitigation measures.

(24) “Transloading” as used in Senate Bill 1567 and these rules means transfer of fuels from one storage location to another, one transportation mode to another, one tank to another, pipeline to a tank, pipeline from a tank to a generator.

(25) “Qualified Professional” means Professional Engineer registered in Oregon as required in OAR 820-10-1000 and ORS 670.310 & 672.255.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0003
Seismic Vulnerability Assessment Requirements and Timeline

(1) A comprehensive Seismic Vulnerability Assessment or series of assessments submitted to DEQ must comply with Chapter 99 of Oregon Law (2022) and:

(a) Be conducted and verified by the Assessment Team of qualified professionals;

(b) Evaluate the ability of the facility to achieve the performance objective;

(c) Describe each facility component included in 340-300-0003(1)(f)(A) in terms of construction, age, inspection and maintenance and operations;

(d) Summarize currently implemented spill prevention and mitigation measures and their ability to achieve the performance objective defined in 340-300-0002;

(e) Develop the Design Level Earthquake for the site in accordance with ASCE 7.

(f) Use the Codes and Standards as defined by OAR 340-300-0002(4) and the Design Level Earthquake determined using ASCE 7 to evaluate the potential for a spill greater than the Maximum Allowable Uncontained Spill as a result of the Design Level Earthquake of all components including:

(A) Existing buildings, structures, and ancillary components;

(B) Tanks, pipes and piping systems;

(C) Spill containment measures and structures;

(D) Transloading facilities, including wharves, piers, moorings and retaining structures;

(E) Loading racks;

(F) Control equipment; and

(G) Any other structures related to or supporting facilities that constitute the bulk fuel terminal.

(g) Evaluate soil's vulnerability to liquefaction, lateral spreading and seismic-induced settlement;

(h) Evaluate the safety of operating conditions, safe shutdown procedures, potential spills;

(i) Evaluate the availability and integrity of automated sprinkler systems and sufficient supplies of firefighting foam and other emergency response equipment located in seismically resilient locations that will be accessible after an earthquake or secondary effects to mitigate the risk of fire and explosions following an earthquake;

(j) Evaluate the integrity of fire control measures such as firewalls surrounding facility to limit fire spreading into surrounding communities; and

(k) Evaluate the availability of day and night onsite personnel trained in emergency response and able to respond in the event of an earthquake.

(2) Facility owner or operator must submit Seismic Vulnerability Assessment updates to DEQ:

(a) Upon application for any permits for retrofit or reconstruction of facilities;

(b) When retrofits or any new construction of any part of the facility that require a permit occur; and

(c) When notified by DEQ of the availability of new scientific, technical findings, best management practices or industry standards but no more frequently than once every three years.

(3) Seismic Vulnerability Assessment timeline:

(a) Facility owners or operators must reply to requests for information from DEQ related to regulated activities including but not limited to property ownership, equipment ownership, equipment design, fuels present, spill prevention and earthquake preparedness by a deadline specified by DEQ.

(b) By June 1, 2024, facility must submit:

(A) The facility-wide complete assessment final report; or

(B) The initial assessment report, outlining the summary of work completed and work to be done, including a proposed schedule for completion with justification for an extension as provided in section (8) of this rule.

(c) Within 30 calendar days or on a schedule approved by DEQ, after a magnitude five (5.0) or higher earthquake centered within 100 miles of the facility, facility owner or operator must provide DEQ with an interim report on facility status, any damage, and any potential effects of the event on Risk Mitigation Implementation plan actions implementation and timeline.

(4) Seismic Vulnerability Assessment Modifications must be submitted no later than 90 days after DEQ notifies an owner and/or operator of new scientific or technical findings that may affect the submitted assessment as required in sections (1) and (2) of this rule.

(5) A final Seismic Vulnerability Assessment report that contains a facility owner or operator letterhead signature page stating their responsibility for the report, an executive summary, introduction, a description, and summary of the observed conditions of the facility, any calculations and results from engineering analysis with noted deficiencies and appendices including all data and calculations, recommendations for mitigation with a priority list and explanation of priorities and references section must be submitted to DEQ for review and approval.

(6) A final Seismic Vulnerability Assessment report must be stamped by professional engineers of record licensed in Oregon that specialize in geotechnical and structural engineering and include the following:

(a) Geotechnical Assessment consisting of:

(A) Site Conditions Assessment:

(i) Description of site surface conditions, topography and bathymetry if adjacent to a body of water.

(ii) Description of regional and site geology including soil stress history, deposition/erosion environment, and bedrock and soil geologic units.

(iii) Description of field explorations per 2022 Oregon Structural Specialty Code including geotechnical and geophysical methods, standards, numbers and types of explorations, testing, and instrumentation. Description of results including final exploration logs, field data, and sub-surface site profiles. Field explorations (number, types, and depth) must be sufficient to categorize subsurface conditions at the site including extent and properties of subsurface geologic strata including that of compressible, liquefiable, soft or loose soils, and bearing layers.

(iv) Summary of laboratory testing performed and results.

(v) Description of site subsurface conditions including soil and rock units encountered, extents and properties of those layers, and groundwater conditions and include site cross sections.

(B) Seismic Hazard Evaluation consisting of:

(i) Description of seismic hazards at the site including seismic evaluation criteria (expected ground shaking), liquefaction, settlement, surface effects, loss of strength, lateral spread and slope stability as appropriate.

(ii) Description of methods of analysis, assumptions, and results of analysis.

(iii) Description of the resulting effects on the structures onsite.

(C) Geotechnical Evaluation including but not limited to seismic design parameters, estimated vertical settlement and lateral ground deformation, foundation bearing and lateral capacity and wall design parameters.

(b) Structural Assessment consisting of description of expected seismic performance of all onsite structures where damage could result in a potential release of fuel including any above or underground tanks, pipes, foundations of structures, buildings, structures, ancillary components, spill containment structures, transloading facilities, wharves, piers, moorings and retaining structures, loading racks, control equipment and any other structures within the property line or properties operated together.

(c) Safety Assessment consisting of:

(A) Description of fire control and suppression systems and procedures and the potential impacts of seismic hazards on these systems.

(B) Description of spill containment systems, equipment, and procedures in the event of an earthquake and their vulnerabilities to the identified seismic hazards at the site.

(C) Description of onsite emergency equipment, operational safety measures, and personnel policies/availability and their vulnerabilities to the identified seismic hazards at the site.

(7) Upon a facility’s submission of the Seismic Vulnerability Assessment, DEQ will review the submittal. If DEQ determines that any additional information, corrections, or updates are required to approve the submittal, then DEQ will notify the owner or operator in writing of the information required and a deadline by which it must be provided.

(8) An owner or operator may request an extension of time from a deadline established in section 3 by providing DEQ a written request no fewer than 14 calendar days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:

(a) The owner or operator has demonstrated progress in completing the submittal; and

(b) A delay is necessary, for good cause shown by the owner or operator, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal.

(9) If DEQ does not approve the owner or operator's submittal, or if the owner or operator does not timely provide additional information or corrections requested by DEQ, then in addition to any other remedies available, DEQ may:

(a) Inform the owner or operator of the deficiency and provide the owner or operator with a deadline to correct the deficiencies and re-submit.

(b) Modify the submittal and approve it as modified. If DEQ modifies the submittal under this subsection the owner or operator must pay the assessment modification fee as required by 340-300-0006 (4).

(10) Recordkeeping. The owner or operator of a facility that provides DEQ with any information related to a Seismic Vulnerability Assessment completed under this rule must retain all of its records related to the assessment for ten years from the date the information is submitted to DEQ.

(11) Owner or operator must submit any information required by DEQ by DEQ established deadline.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0004
Risk Mitigation Implementation Plan Requirements and Timeline

(1) The Risk Mitigation Implementation Plan must propose risk mitigation measures to address vulnerabilities identified in the Seismic Vulnerability Assessment to protect public health, life safety and environment. The measures must include but are not limited to:

(a) Retrofits, replacement, updates, reconstruction, removal, relocation or other mitigation measures intended to achieve the performance objective and meet the specifications of OAR 340-300-0003 to reduce the expected spill as a result of a Design Level Earthquake to below Maximum Allowable Uncontained Spill. Meeting the requirements of Risk Category IV design of new structures satisfies the intent of this rule.

(b) Measures improving facility structural integrity;

(c) Measures to prevent anticipated exposures to hazardous materials releases;

(d) Measures to mitigate effects on surface water, ground water, and air;

(e) Training and response exercises including applicable provisions in 340-141-0200 or the EPA Spill Prevention, Control, and Countermeasure requirements to employees and education and information to surrounding communities that promote awareness and equity. ;

(f) Additional provisions for resilience to ground shaking caused by earthquake and secondary effect hazards at the facility location.

(2) Risk Mitigation Implementation Plans must include the following:

(a) Description of proposed mitigation measures including but not limited to ground and slope improvement, foundation improvements or replacement, structural improvements, connection and piping improvements, containment improvements or replacement.

(b) Description of engineering analysis methods, assumptions, and results of the seismic evaluation of the mitigation measures.

(c) Description of expected seismic performance of mitigated structures, containment, and ground improvement as appropriate.

(d) Description of any potential fuel release based on expected seismic performance.

(e) Description of safety improvements including but not limited to improvement, replacement or retrofit of spill containment and firefighting systems, personnel, training and-operational changes, and emergency equipment and supply additions.

(f) Description of emergency response capabilities including but not limited to trained personnel, training plan, properly installed seismically certified generators and adequacy of on-site fuel storage to power backup generators or installation of electrical hookups for emergency generators; availability and integrity of automated sprinkler systems, supplies of firefighting foam and other emergency response equipment located in seismically resilient locations that will be accessible after an earthquake or secondary effects to mitigate the risk of fire and explosions following an earthquake.

(g) Description of post-Implementation residual risk that:

(A) Specifies measures of emergency response by the owner or operator to address the effects of residual risk remaining after all mitigation work is implemented including but not limited to an internal alarm and emergency plan.

(B) Provides relevant information to the community and local authorities for the creation of external alarm and emergency plans.

(C) Includes the following elements:

(i) Description of spill scenarios including reasonably likely worst case that may occur because of equipment failure despite the proposed mitigation measures.

(ii) All other measures identified in Oregon Laws Chapter 99 (2022, SB 1567).

(h) A schedule to complete all proposed mitigation as required in sections 3 and 5 of this rule.

(3) The Risk Mitigation Implementation Plan must outline interim mitigation actions that will be completed within 1, 3, & and 5 years based on risk reduction, feasibility and order of importance with justification for 1-, 3- and 5-year selections.

(4) The proposed schedule may consider the duration of specific site activities or sequencing of tasks dependent on previous work.

(5) All mitigation measures approved by DEQ must be completed on the timeline identified in the implementation plan, but no later than within 10 years after the date DEQ approves the Risk Mitigation Implementation Plan.

(6) The Risk Mitigation Implementation Plan must be stamped by a qualified professional engineer.

(7) All measures proposed in Risk Mitigation Implementation Plans must conform with the Codes and Standards and specification provided in OAR 340-300-0002 and 340-300-0003 and be based on the evaluation based on the Design Level Earthquake as determined in accordance with ASCE7.

(a) All measures must be consistent with local jurisdiction requirements.

(8) The Risk Mitigation Implementation Plan must be submitted to DEQ no later than 180 calendar days after DEQ's approval of the Seismic Vulnerability Assessment.

(9) Upon facility's submission of the Risk Mitigation Implementation Plan, DEQ will review the submittal. If DEQ determines that any additional information, corrections, or updates are required to approve the submittal, then DEQ will notify the owner or operator in writing of the information required and a date deadline by which it must be provided.

(10) An owner or operator may request an extension of time from a deadline established in section (3) or section (4) of this rule by providing DEQ with a written request no fewer than 14 calendar days prior to the submittal deadline. DEQ may grant an extension based on the following criteria:

(a) The owner or operator has demonstrated progress in completing the submittal; and

(b) A delay is necessary, for good cause shown by the owner or operator, related to obtaining more accurate or new data, performing additional analyses, or addressing changes in operations or other key parameters, any of which are likely to have a substantive impact on the outcomes of the submittal.

(11) If DEQ does not approve the owner or operator's submittal, or if the owner or operator does not timely provide additional information or corrections requested by DEQ, then in addition to any other remedies available, DEQ may:

(a) Inform the owner or operator of the deficiency and provide the owner or operator with a revised deadline to submit the needed information.

(b) Modify the information provided by the owner or operator, approve it as modified, and the owner or operator must pay the plan modification fee as provided in 340-300-0006 (4).

(12) The Risk Mitigation Implementation Plans may be modified as follows:

(a) A modification may be initiated by the owner or operator and

(A) requested in the case of significant changes or circumstances affecting the Risk Mitigation Implementation Plan and

(B) The modification must be approved by DEQ.

(b) A modification may be DEQ initiated if new scientific or technological data becomes available but no more frequently than once every three years. A Facility will have 90 days to submit the requested modification.

(13) Owner or operator must implement all aspects of the approved Risk Mitigation Implementation Plan.

(14) Recordkeeping. The owner or operator of a facility that provides DEQ with any information related to a Risk Mitigation Implementation Plan completed under this rule must retain all of its records related to the Risk Mitigation Implementation Plan for ten years from the date the information is submitted to DEQ.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0005
Reporting Requirements and Inspections

(1) Annual Risk Mitigation Implementation Plan implementation status reports must be submitted by June 1st of each year until the implementation is completed and approved by DEQ, or on a schedule approved by DEQ in the Risk Mitigation Implementation Plan and include the description of:

(a) the implementation work that has been completed;

(b) the plan for the work that will follow;

(c) the summary of the implementation schedule;

(d) a list of action items;

(e) any risks to the implementation timeline and how those risks are being mitigated;

facility status update if any magnitude 5 or higher earthquakes have occurred.

(2) A facility shall allow access for inspections during the implementation of the Risk Mitigation Implementation Plan upon DEQ's request or at reasonable hours.

(3) DEQ inspections and frequency may include:

(a) Periodic onsite special inspections by the geotechnical and structural engineers verifying that design criteria are met.

(b) Periodic operation and maintenance inspections.

(c) Special inspections by a qualified Testing Agency with certified personnel as required in Oregon Structural Specialty Code Chapter 17, ASTM (formerly American Society for Testing and Materials, currently ASTM International) E329, etc.).

(4) A final post-implementation report, or series of final reports, must be submitted 180 calendar days after the implementation completion. The report or reports shall include:

(a) Engineering specifications for all work performed as actually built; and

(b) Updated description of any residual risk.

(5) Recordkeeping. The owner or operator must retain the final post-implementation report and all records related to the Risk Mitigation Implementation Plan implementation activities for ten years from the date the information is submitted to DEQ.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0006
Program Administration and Compliance Fees

(1) A facility owner or operator must pay a Seismic Vulnerability Assessment Submittal Fee of $39,000. The fee must accompany submittal of the Seismic Vulnerability Assessment or the initial assessment report if a series of assessments is submitted.

(2) A facility owner or operator must pay a Risk Mitigation Implementation Plan Submittal Fee of $36,000. The fee must accompany submittal of a Risk Mitigation Implementation Plan.

(3) A facility owner or operator must pay an Annual Compliance Fee by June 1 of each calendar year until the implementation of all risk minimization measures proposed in the Risk Mitigation Implementation Plan is completed and approved by DEQ. The Annual Compliance Fee structure is as follows:

(a) Year one Annual Compliance Fee of $23,000.

(b) Year two and consequent years Annual Compliance Fee will not exceed $50,000.

(c) DEQ may reduce the Annual Compliance Fee in year two or in subsequent years if DEQ determines that the entire fee is not necessary to fund program costs.

(4) A facility owner or operator must pay a Risk Mitigation Implementation Plan modification fee of $5,000 when requesting changes to previously submitted mitigation plans or if DEQ modifies a Seismic Vulnerability Assessment or a Risk Mitigation Implementation Plan as provided in of 340-300-0003(9) 12 of 340-300-0004(12).

(5) The modification fee does not apply to DEQ-required assessment plan modifications.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-300-0007
DEQ Review and Approval of Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans

(1) DEQ will review and approve the Seismic Vulnerability Assessments submitted under OAR 340-300-0003 if they meet the requirements of Chapter 99 of Oregon Law 2022 and these rules.

(2) The DEQ will approve Risk Mitigation Implementation Plan if the plan submitted under OAR 340-300-0004 meets the requirements of Chapter 99 of Oregon Law 2022 and these rules and when implemented will minimize the risk to the human health and safety and the environment in the event of ground shaking and secondary effects.

(3) Before DEQ approves a Seismic Vulnerability Assessment or a Risk Mitigation Implementation Plan required under these rules, DEQ may provide a copy of the mitigation plan to the Department of Geology and Mineral Industries, the office of the State Fire Marshal, the Oregon Department of Energy and the local government jurisdictions for review.

(4) Before approving a Risk Mitigation Implementation Plan, DEQ will provide a public notice and initiate a public comment period as follows:

(a) DEQ will announce the public notice through the Fuel Tank Seismic Stability GovDelivery mailing system.

(b) DEQ will hold a public comment period open for 30 calendar days. This period may be extended at DEQ’s discretion. DEQ will review public comments and may request changes to the Risk Mitigation Implementation Plans prior to approval as determined appropriate by DEQ.

(c) DEQ will post all Risk Mitigation Implementation Plans barring any confidential business information on DEQ’s website by the time of public notice.

(5) Public hearing

(a) If requested by 10 entities or a group representing 10 entities within the first 20 calendar days of the public comment period, a public hearing will be held. DEQ will extend the public comment period and hold a hearing at least 14 calendar days before the close of the public comment period.

(b) A notice of 30 calendar days will be provided ahead of a public hearing.

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-012-0064
Fuel Tank Seismic Stability Enforcement Classification of Violations

(1) Class I:

(a) Failure to timely submit a facility Seismic Vulnerability Assessment as required under OAR 340-300-0004.

(b) Failure to timely submit a facility Risk Mitigation Implementation Plan or a final post-implementation report as required under OAR 340-300-0005.

(c) Failure to implement DEQ approved Risk Mitigation Implementation Plan.

(d) Failure to maintain equipment, personnel and training at levels described in an approved Risk Mitigation Implementation Plan.

(e) Operating a bulk fuel terminal without an approved facility Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(2) Class II:

(a) Failure to allow access for facility inspection when requested.

(b) Failure to submit a modification request prior to changing an approved Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(c) Failure to implement required changes to an approved Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan.

(3) Class III:

(a) Failure to provide maintenance and inspections records of the storage and transfer facilities to DEQ upon request.

(b) Failing to notify DEQ within 14 calendar days of any significant changes that could affect implementation of a required Risk Mitigation Implementation Plan.

(c) Failing to retain records of Seismic Vulnerability Assessment or Risk Mitigation Implementation Plan as required in 340-300-0003(11) and 340-300-003(13).

Statutory/Other Authority: ORS 468.020, SB 1567 (2022)
Statutes/Other Implemented: SB 1567 (2022)

340-012-0140
Determination of Base Penalty

(1) Except for Class III violations and as provided in OAR 340-012-0155, the base penalty (BP) is determined by applying the class and magnitude of the violation to the matrices set forth in this section. For Class III violations, no magnitude determination is required.

(2) $12,000 Penalty Matrix:

(a) The $12,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit or related order committed by a person that has or should have a Title V permit or an Air Contaminant Discharge Permit (ACDP) issued pursuant to New Source Review (NSR) regulations or Prevention of Significant Deterioration (PSD) regulations, or section 112(g) of the federal Clean Air Act, unless otherwise classified.

(B) Open burning violations as follows:

(i) Any violation of OAR 340-264-0060(3) committed by an industrial facility operating under an air quality permit.

(ii) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned, except when committed by a residential owner-occupant.

(C) Any violation of the Oregon Low Emission and Zero Emission Vehicle rules (OAR 340-257) by a vehicle manufacturer.

(D) Any violation of ORS 468B.025(1)(a) or (1)(b), or of 468B.050(1)(a) by a person without a National Pollutant Discharge Elimination System (NPDES) permit, unless otherwise classified.

(E) Any violation of a water quality statute, rule, permit or related order by:

(i) A person that has an NPDES permit, or that has or should have a Water Pollution Control Facility (WPCF) permit, for a municipal or private utility sewage treatment facility with a permitted flow of five million or more gallons per day.

(ii) A person that has a Tier 1 industrial source NPDES or WPCF permit.

(iii) A person that has a population of 100,000 or more, as determined by the most recent national census, and either has or should have a WPCF Municipal Stormwater Underground Injection Control (UIC) System Permit, or has an NPDES Municipal Separated Storm Sewer Systems (MS4) Stormwater Discharge Permit.

(iv) A person that installs or operates a prohibited Class I, II, III, IV or V UIC system, except for a cesspool.

(v) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that disturbs 20 or more acres.

(F) Any violation of the ballast water statute in ORS Chapter 783 or ballast water management rule in OAR 340, division 143.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification by a 100 megawatt or more hydroelectric facility.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a dredge and fill project except for Tier 1, 2A or 2B projects.

(I) Any violation of an underground storage tanks statute, rule, permit or related order committed by the owner, operator or permittee of 10 or more UST facilities or a person who is licensed or should be licensed by DEQ to perform tank services.

(J) Any violation of a heating oil tank statute, rule, permit, license or related order committed by a person who is licensed or should be licensed by DEQ to perform heating oil tank services.

(K) Any violation of ORS 468B.485, or related rules or orders regarding financial assurance for ships transporting hazardous materials or oil.

(L) Any violation of a used oil statute, rule, permit or related order committed by a person who is a used oil transporter, transfer facility, processor or re-refiner, off-specification used oil burner or used oil marketer.

(M) Any violation of a hazardous waste statute, rule, permit or related order by:

(i) A person that is a large quantity generator or hazardous waste transporter.

(ii) A person that has or should have a treatment, storage or disposal facility permit.

(N) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a covered vessel or facility as defined in ORS 468B.300 or

by a person who is engaged in the business of manufacturing, storing or transporting oil or hazardous materials.

(O) Any violation of a polychlorinated biphenyls (PCBs) management and disposal statute, rule, permit or related order.

(P) Any violation of ORS Chapter 465, UST or environmental cleanup statute, rule, related order or related agreement.

(Q) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or any violation of a solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a solid waste disposal permit.

(ii) A city with a population of 25,000 or more, as determined by the most recent national census.

(R) Any violation of the Oregon Clean Fuels Program under OAR Chapter 340, division 253 by a person registered as an importer of blendstocks,

(S) Any violation classified under OAR 340-012-0054 (1) (dd), (ee), (ff), or (gg).

(T) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions greater than or equal to 25,000 metric tons per year or by a person that has not reported greenhouse gas emissions to DEQ during the past five years, or by a person for which DEQ has insufficient information to accurately estimate emissions.

(U) Any violation of the Third Party Verification rules under OAR Chapter 340, division 272.

(V) Any violation of the Landfill Gas Emissions rules under OAR chapter 340, division 239 by a person required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(W) Any violation of the rules for Emission Standards for New Heavy-Duty Trucks under OAR chapter 340 division 261 by engine, truck or trailer manufacturers and dealers.

(X) Any violation of the Climate Protection Program rules under OAR chapter 340, division 271.

(Y) Any violation of the Fuel Tank Seismic Stability Program rules under OAR chapter 340, division 300.

(b) The base penalty values for the $12,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $12,000;

(ii) Moderate — $6,000;

(iii) Minor — $3,000.

(B) Class II:

(i) Major — $6,000;

(ii) Moderate — $3,000;

(iii) Minor — $1,500.

(C) Class III: $1,000.

(3) $8,000 Penalty Matrix:

(a) The $8,000 penalty matrix applies to the following:

(A) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have an ACDP permit, except for NSR, PSD and Basic ACDP permits, unless listed under another penalty matrix, unless otherwise classified.

(B) Any violation of an asbestos statute, rule, permit or related order except those violations listed in section (5) of this rule.

(C) Any violation of a vehicle inspection program statute, rule, permit or related order committed by an auto repair facility.

(D) Any violation of the Oregon Low Emission Vehicle rules (OAR 340-257) committed by an automobile dealer or an automobile rental agency.

(E) Any violation of a water quality statute, rule, permit or related order committed by:

(i) A person that has an NPDES Permit, or that has or should have a WPCF Permit, for a municipal or private utility sewage treatment facility with a permitted flow of two million or more, but less than five million, gallons per day.

(ii) A person that has a Tier 2 industrial source NPDES or WPCF Permit.

(iii) A person that has or should have applied for coverage under an NPDES or a WPCF General Permit, except an NPDES Stormwater Discharge 1200-C General Permit for a construction site of less than five acres in size or 20 or more acres in size.

(iv) A person that has a population of less than 100,000 but more than 10,000, as determined by the most recent national census, and has or should have a WPCF Municipal Stormwater UIC System Permit or has an NPDES MS4 Stormwater Discharge Permit.

(v) A person that owns, and that has or should have registered, a UIC system that disposes of wastewater other than stormwater or sewage or geothermal fluids.

(F) Any violation of a Clean Water Act Section 401 Water Quality Certification by a less than 100 megawatt hydroelectric facility.

(G) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 2A or Tier 2B dredge and fill project.

(H) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of five to nine UST facilities.

(I) Unless specifically listed under another penalty matrix, any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by:

(i) A person that has or should have a waste tire permit; or

(ii) A person with a population of more than 5,000 but less than or equal to 25,000, as determined by the most recent national census.

(J) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a small quantity generator.

(K) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person other than a person listed in OAR 340-012-0140(2)(a)(N) occurring during a commercial activity or involving a derelict vessel over 35 feet in length.

(L) Any violation of the Oregon Clean Fuels Program under OAR chapter 340, division 253 unless the violation is otherwise classified in this rule.

(M) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 25,000 metric tons per year but greater than or equal to 5,000 metric tons per year.

(N) Any violation of the Landfill Gas Emissions rules under OAR chapter 340, division 239 by a person that owns or operates a landfill with over 200,000 tons waste in place and is not required to comply with OAR 340-239-0110 through OAR 340-239-0800.

(O) Any violation of a hazardous waste pharmaceutical statute, rule, permit or related order committed by a person that is a reverse distributor.

(b) The base penalty values for the $8,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $8,000.

(ii) Moderate — $4,000.

(iii) Minor — $2,000.

(B) Class II:

(i) Major — $4,000.

(ii) Moderate — $2,000.

(iii) Minor — $1,000.

(C) Class III: $ 700.

(4) $3,000 Penalty Matrix:

(a) The $3,000 penalty matrix applies to the following:

(A) Any violation of any statute, rule, permit, license, or order committed by a person not listed under another penalty matrix.

(B) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person not listed under another penalty matrix.

(C) Any violation of an air quality statute, rule, permit, permit attachment, or related order committed by a person that has or should have a Basic ACDP or an ACDP or registration only because the person is subject to Area Source NESHAP regulations.

(D) Any violation of OAR 340-264-0060(3) in which 25 or more cubic yards of prohibited materials or more than 15 tires are burned by a residential owner-occupant.

(E) Any violation of a vehicle inspection program statute, rule, permit or related order committed by a natural person, except for those violations listed in section (5) of this rule.

(F) Any violation of a water quality statute, rule, permit, license or related order not listed under another penalty matrix and committed by:

(i) A person that has an NPDES permit, or has or should have a WPCF permit, for a municipal or private utility wastewater treatment facility with a permitted flow of less than two million gallons per day.

(ii) A person that has or should have applied for coverage under an NPDES Stormwater Discharge 1200-C General Permit for a construction site that is more than one, but less than five acres.

(iii) A person that has a population of 10,000 or less, as determined by the most recent national census, and either has an NPDES MS4 Stormwater Discharge Permit or has or should have a WPCF Municipal Stormwater UIC System Permit.

(iv) A person who is licensed to perform onsite sewage disposal services or who has performed sewage disposal services.

(v) A person, except for a residential owner-occupant, that owns and either has or should have registered a UIC system that disposes of stormwater, sewage or geothermal fluids.

(vi) A person that has or should have a WPCF individual stormwater UIC system permit.

(vii) Any violation of a water quality statute, rule, permit or related order committed by a person that has or should have applied for coverage under an NPDES 700-PM General Permit for suction dredges.

(G) Any violation of an onsite sewage disposal statute, rule, permit or related order, except for a violation committed by a residential owner-occupant.

(H) Any violation of a Clean Water Act Section 401 Water Quality Certification for a Tier 1 dredge and fill project.

(I) Any violation of an UST statute, rule, permit or related order if the person is the owner, operator or permittee of two to four UST facilities.

(J) Any violation of a used oil statute, rule, permit or related order, except a violation related to a spill or release, committed by a person that is a used oil generator.

(K) Any violation of a hazardous waste management statute, rule, permit or related order committed by a person that is a very small quantity generator, unless listed under another penalty matrix.

(L) Any violation of ORS Chapter 459 or other solid waste statute, rule, permit, or related order committed by a person with a population less than 5,000, as determined by the most recent national census.

(M) Any violation of the labeling requirements of ORS 459A.675 through 459A.685.

(N) Any violation of rigid pesticide container disposal requirements by a very small quantity generator of hazardous waste.

(O) Any violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by non-residential uses of property disturbing less than one acre in size.

(P) Any violation of an oil and hazardous material spill and release statute, rule, or related order committed by a person not listed under another matrix.

(Q) Any violation of the Oregon Greenhouse Gas Reporting Program under OAR Chapter 340, division 215 by a person with greenhouse gas emissions less than 5,000 metric tons per year.

(b) The base penalty values for the $3,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $3,000;

(ii) Moderate — $1,500;

(iii) Minor — $750.

(B) Class II:

(i) Major — $1,500;

(ii) Moderate — $750;

(iii) Minor — $375.

(C) Class III: $250.

(5) $1,000 Penalty Matrix:

(a) The $1,000 penalty matrix applies to the following:

(A) Any violation of an open burning statute, rule, permit or related order committed by a residential owner-occupant at the residence, not listed under another penalty matrix.

(B) Any violation of visible emissions standards by operation of a vehicle.

(C) Any violation of an asbestos statute, rule, permit or related order committed by a residential owner-occupant.

(D) Any violation of an onsite sewage disposal statute, rule, permit or related order of OAR chapter 340, division 44 committed by a residential owner-occupant.

(E) Any violation of an UST statute, rule, permit or related order committed by a person who is the owner, operator or permittee of one UST facility.

(F) Any violation of an HOT statute, rule, permit or related order not listed under another penalty matrix.

(G) Any violation of OAR chapter 340, division 124 or ORS 465.505 by a dry cleaning owner or operator, dry store owner or operator, or supplier of perchloroethylene.

(H) Any violation of ORS Chapter 459 or other solid waste statute, rule or related order committed by a residential owner-occupant.

(I) Any violation of a statute, rule, permit or order relating to rigid plastic containers, except for violation of the labeling requirements under OAR 459A.675 through 459A.685.

(J) Any violation of a statute, rule or order relating to the opportunity to recycle.

(K) Any violation of OAR chapter 340, division 262 or other statute, rule or order relating to solid fuel burning devices, except a violation related to the sale of new or used solid fuel burning devices or the removal and destruction of used solid fuel burning devices.

(L) Any violation of an UIC system statute, rule, permit or related order by a residential owner-occupant, when the UIC disposes of stormwater, sewage or geothermal fluids.

(M) Any Violation of ORS 468B.025(1)(a) or (b) resulting from turbid discharges to waters of the state caused by residential use of property disturbing less than one acre in size.

(b) The base penalty values for the $1,000 penalty matrix are as follows:

(A) Class I:

(i) Major — $1,000;

(ii) Moderate — $500;

(iii) Minor — $250.

(B) Class II:

(i) Major — $500;

(ii) Moderate — $250;

(iii) Minor — $125.

(C) Class III: $100.

Statutory/Other Authority: ORS 468.020 & 468.090 - 468.140
Statutes/Other Implemented: ORS 459.995, 459A.655, 459A.660, 459A.685 & 468.035
History:
DEQ 16-2022, amend filed 09/23/2022, effective 09/23/2022
DEQ 4-2022, amend filed 03/16/2022, effective 03/16/2022
DEQ 27-2021, amend filed 12/16/2021, effective 12/16/2021
DEQ 20-2021, amend filed 11/18/2021, effective 01/01/2022
DEQ 17-2021, amend filed 11/17/2021, effective 11/17/2021
DEQ 16-2021, amend filed 10/04/2021, effective 10/04/2021
DEQ 14-2020, amend filed 05/07/2020, effective 05/07/2020
DEQ 199-2018, amend filed 11/16/2018, effective 01/01/2019
DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018
DEQ 13-2015, f. 12-10-15, cert. ef. 1-1-16
DEQ 1-2014, f. & cert. ef. 1-6-14
DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11
DEQ 6-2006, f. & cert. ef. 6-29-06
DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06
Renumbered from 340-012-0042, DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05
DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01
DEQ 19-1998, f. & cert. ef. 10-12-98
DEQ 9-1996, f. & cert. ef. 7-10-96
DEQ 4-1994, f. & cert. ef. 3-14-94
DEQ 21-1992, f. & cert. ef. 8-11-92
DEQ 33-1990, f. & cert. ef. 8-15-90
DEQ 15-1990, f. & cert. ef. 3-30-90
DEQ 4-1989, f. & cert. ef. 3-14-89

Statutory/Other Authority: ORS 468.020 & 468.090 - 468.140
Statutes/Other Implemented: SB 1567 (2022)