

## MEMORANDUM

To: John Talberth, CSE  
From: Richard Mietz  
Re: Outline of Oregon's SB 1567 and status of DEQ's rulemaking process  
Date: February 9, 2023

### Introduction

This memorandum outlines the provisions of Oregon's SB 1567 relating to fossil fuel energy infrastructure resilience from seismic risks. The legislation was enacted into law after the last legislative session, and became effective July 1, 2022. The memorandum begins with a brief discussion of the current status and schedule for the Oregon Department of Environmental Quality's (DEQ's) rulemaking process, which is necessary to implement the requirements of the legislation. The memorandum focuses on those sections of the legislation that establish a new regulatory structure to study, evaluate, and mitigate the risks of spills from fossil fuel terminal facilities in the event of a major earthquake.

### Discussion

The DEQ is currently engaged in a rule making process to implement the legislation's primary requirement for owners and operators of terminal facilities engaged in the transport or bulk storage of oils or liquid fuel products to conduct and submit to DEQ a "comprehensive seismic vulnerability assessment." The agency is currently in the process of developing assessment and mitigation criteria and will also design an implementation program.

DEQ intends to formally propose these new rules for public comment by the end of May 2023, and hopes to have the Environmental Quality Commission review and adopt these rules at its regular meeting in the Fall of 2023. The DEQ also intends to complete facility assessments by June 1, 2024, as required under the legislation. In the meantime, DEQ has established a rules advisory committee to provide input and suggestions during the development of the new rules. The purpose of the committee is to advise DEQ on the development of the rules and to consider the fiscal and equity impacts of the proposed rules.

The DEQ's rulemaking website provides agency contacts for the ongoing process and provides links to background information on the proposed rulemaking, a description of the advisory committee with a list of its members, and additional links to the committee's draft work plan. <https://www.oregon.gov/deq/rulemaking/Pages/seismicstability2023.aspx>. The website also has a link to the Advisory committee's previous and currently scheduled meetings, which in turn contain additional links to the agendas and presentation slides, and a summary for each of the committee's first two meetings held on October 26 and December 16, 2022.

The committee's next meeting is scheduled for March 3, 2023, and a final meeting to discuss the draft proposed rules is scheduled to occur on April 21, 2023. The DEQ'S website contains a link for members of the public to attend the meetings by Zoom, and the agency intends to allow time for public comment at the meetings. Once the DEQ issues formal notice of the proposed rule at the end of May, there will be a 30-45 day period for the public to submit formal comments. The agency also plans to hold at least one public hearing in June of 2023, during which spoken or written comments can be submitted.

The primary focus of SB 1567 and the DEQ's rulemaking process required to implement the legislation is the requirement for operators of terminal fuel storage facilities with a tank capacity of over two million gallons located in Multnomah, Lane, and Columbia Counties to assess their facilities for vulnerability to a magnitude 9 earthquake, and to submit to DEQ a "comprehensive seismic vulnerability assessment" for the entire bulk oils or liquid fuels terminal. SB 1567 Section 2. The DEQ has identified 17 different facilities that will be subject to the new requirements and rules enacted pursuant to SB 1567. Twelve of those facilities are located along the Columbia River in Northwest Portland.

Section 2 of SB 1567 states that a seismic vulnerability assessment must include a seismic risk assessment conducted by qualified professionals using the most recent industry standards for assessing seismic risk to buildings, structures, and ancillary components, as well as bulk storage tanks, spill containment structures, transloading facilities, loading racks, control equipment, and any other structures and related or supporting facilities that constitute the bulk oils or liquid fuels terminal. A seismic vulnerability assessment also must include a determination of the terminal's vulnerability to liquefaction, triggering and liquefaction consequences such as lateral spreading and coseismic settlement in accordance with guidance contained in a 2016 study by the National Academies of Science, Engineering and Medicine.

Section 2 of the legislation also requires that all seismic vulnerability assessments must include a determination of whether the existing structures and related or supporting facilities for the terminal have been designed, improved or retrofitted to reduce the potential for significant structural damage to property or harm to people or the environment in or adjacent to the terminal facility in the event of a magnitude 9.0 Cascadia Subduction Zone earthquake, including impacts from the expected duration of shaking. Finally, all seismic vulnerability assessments must include a determination of the structures and related or supporting facilities for the terminal facility that are most vulnerable to seismic risk and the potential of those structures and facilities to maintain safe operating conditions, or safe shutdown procedures, to protect public health, life safety and environmental safety against releases of oil or liquid fuel products, including information about operational procedures during disasters.

Section 2 of SB 1567 also requires Oregon DEQ to review any seismic vulnerability assessment and to approve the assessment if it meets the requirements set out in the legislation and any other requirements for seismic vulnerability assessments contained in rules to be adopted by the Oregon Environmental Quality Commission (EQC). Section 2, subsection 4 of the legislation provides the EQC with the authority, in consultation with the State Department of Geology and Mineral Industries, to adopt rules for seismic vulnerability assessments submitted to the Commission by DEQ. That subsection also states that rules adopted by the Commission may require the owner or operation of a terminal facility to submit seismic vulnerability assessment updates to the DEQ upon the retrofit or reconstruction of all or part of any such terminal facility. The same subsection also provides that the rules adopted by the DEQ may also require the submission of an updated seismic vulnerability assessment based on new scientific or technical findings, but this authority is limited to once every three years.

Section 3 of SB 1567 sets out a requirement that the owner or operator of any terminal facility must properly implement a "seismic risk mitigation implementation plan" that has been approved by the DEQ. A seismic risk mitigation implementation plan must "at a minimum" identify actions, with timelines, to protect public health, life safety and environmental safety

within the facility, in areas adjacent to the facility and in other areas that may be affected as a result of damages to the facility. Section 3 of the legislation also states that, as a risk-based assessment, a seismic risk mitigation implementation plan must include consideration of the likelihood of a magnitude 9.0 Cascadia Subduction Zone earthquake, the potential consequences of that event and the resources needed to respond to that event.

In addition, Section 3 of SB 1567 requires the EQC to adopt a comprehensive set of rules for a seismic risk mitigation implementation program. The legislation requires that the rules for the program be “based on risk.” Rules adopted by EQC must include, but are not limited to:

- (a) Rules for the required content of seismic risk mitigation implementation plans and rules for approval by the Department of Environmental Quality of seismic risk mitigation implementation plans.
- (b) Provisions for training, response exercises, external peer reviews, inspections and tests in order to verify the ability of the facility to sustain safe conditions and respond to uncontrolled releases of hazardous materials from the bulk oils or liquid fuels terminal due to an earthquake.
- (c) Requirements to minimize harmful impacts to local communities and natural resources due to uncontrolled releases of hazardous materials from the bulk oils or liquid fuels terminal due to an earthquake and its associated direct and indirect impacts, including fires and flooding.
- (d) Requirements for the inspection of bulk storage tanks at bulk oils or liquid fuels terminals.
- (e) Design and construction standards for new bulk storage tanks constructed at bulk oils or liquid fuels terminals.
- (f) Design and construction standards for seismic mitigation of existing bulk storage tanks, piping and related structures constructed at bulk oils or liquid fuels terminals.
- (g) Provisions requiring the proper installation of seismically certified generators to power critical operations, or at a minimum, the installation of electrical hookups for emergency generators.
- (h) Provisions for the review of seismic vulnerability assessments and seismic risk mitigation implementation plans by state agencies with expertise in earthquake hazards, risk mitigation or emergency preparedness or management.
- (i) Provisions requiring the owner or operator of a bulk oils or liquid fuels terminal to submit seismic vulnerability mitigation implementation plan updates to the department:
- (j) Provisions establishing a fee calculated to cover the costs to the department of reviewing seismic risk mitigation implementation plans and seismic risk assessments, less any federal funds received by the department for those purposes.
- (k) Provisions establishing grants or other financial assistance to owners or operators of bulk oils or liquid fuels terminals for improvements to existing infrastructure, provided that federal funds are made available to the department for that purpose.

Section 6 of SB 1567 establishes a Seismic Risk Mitigation Fund for the purpose of funding DEQ’s review of seismic vulnerability assessments and seismic risk mitigation implementation plans and for providing grants or other financial assistance to owners and operators of terminal facilities for improvements to existing infrastructure.

Section 10 of SB 1567 requires that all current owners or operators of terminal facilities covered under the legislation must submit seismic vulnerability assessments no later than June 1, 2024. Section 3 of the legislation, which requires terminal facilities to implement a seismic

risk mitigation implementation plan based on those vulnerability assessments, becomes effective on that same date.

Section 11 of SB 1567 contains additional detailed provisions which requires the Oregon Department of Energy to develop an energy security plan. The details of that section of SB 1567 are not directly related to the DEQ's duties or the agency's current rulemaking process, and therefore are not included in this outline of the legislation.

### **Conclusion**

SB 1567 is a major step forward for the State of Oregon in taking action to study, evaluate and create mitigation measures to deal with the risks created by fossil fuel terminal facilities in the event of a major earthquake in the region. The Oregon DEQ is tasked with a substantial amount of work needed to create the rules necessary to properly implement the new regulatory program. The agency's currently ongoing rulemaking process presents a good opportunity for CSE and other interested members of the public to participate in and hopefully have a positive influence that process.