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DEPARTMENT OF ENVIRONMENTAL QUALITY

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FILING CAPTION: Fuel Tank Seismic Stability Rulemaking

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RULES:

340-012-0064, 340-012-0140, 340-300-0000, 340-300-0001, 340-300-0002, 340-300-0003, 340-300-0004, 340-300-0005, 340-300-0006, 340-300-0007

ADOPT: 340-012-0064

RULE TITLE: Fuel Tank Seismic Stability Enforcement Classification of Violations

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Fuel Tank Seismic Stability Enforcement Classification of Violations rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

(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)

AMEND: 340-012-0140

RULE TITLE: Determination of Base Penalty

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: Adding penalties for violations of the Fuel Tank Seismic Stability Program rules.

RULE TEXT:

(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

ADOPT: 340-300-0000

RULE TITLE: Context

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Context rule for the Fuel Tank Seismic Stability Program

RULE TEXT:

(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)

ADOPT: 340-300-0001

RULE TITLE: Purpose and Applicability

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Purpose and Applicability rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

(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)

ADOPT: 340-300-0002

RULE TITLE: Definitions and Acronyms as used in this Division

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New rule for Definitions and Acronyms as used in this Division

RULE TEXT:

- (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)

ADOPT: 340-300-0003

RULE TITLE: Seismic Vulnerability Assessment Requirements and Timeline

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Seismic Vulnerability Assessment Requirements and Timeline rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

- (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 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.
 - (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 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 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) 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)

ADOPT: 340-300-0004

RULE TITLE: Risk Mitigation Implementation Plan Requirements, Timeline and Approval Criteria

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Risk Mitigation Implementation Plan Requirements, Timeline and Approval Criteria rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

(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 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 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) Measure improving facility structural integrity;

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

(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, & 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 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)

ADOPT: 340-300-0005

RULE TITLE: Reporting Requirements and Inspections

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Reporting Requirements and Inspections rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

(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 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)

ADOPT: 340-300-0006

RULE TITLE: Program Administration and Compliance Fees

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New Program Administration and Compliance Fees rule for the Fuel Tank Seismic Stability Program.

RULE TEXT:

- (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)

ADOPT: 340-300-0007

RULE TITLE: DEQ Review and Approval of Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans

NOTICE FILED DATE: 05/26/2023

RULE SUMMARY: New DEQ Review and Approval of Seismic Vulnerability Assessments and Risk Mitigation Implementation Plans for the Fuel Tank Seismic Stability Program.

RULE TEXT:

- (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)