

ORDINANCE NO.

*Readopt remanded Ordinance No. 189807 to restrict bulk fossil fuel terminals (Ordinance; Amend Title 33, Planning and Zoning)

The City of Portland ordains:

Section 1. The Council finds:

General Findings

1. The rapid development of fossil fuel resources in the western U.S. and Canada has resulted in numerous facility and infrastructure projects proposed to transport coal, diluted bitumen, natural gas, propane, or other fossil fuels through the West Coast.
2. Fossil fuels pose risks to safety, health, and livability, including mobility of people, other freight, and other commercial vehicles.
3. The State of Oregon and the greater Pacific Northwest are vulnerable to powerful subduction zone earthquakes that occur with periodic frequency along the Juan de Fuca and North American plates.
4. In the past, both the Huu-ay-aht First Nation peoples and the Makah tribe shared similar stories of lost land and peoples as a result of these earthquakes and tsunamis which scientific research has matched with Japanese tsunami records and on-the-ground geologic field research to reconstruct the Cascadia earthquake of 1700. This research shows that subduction zone earthquakes have occurred along the Pacific Northwest with relative regularity over the last 10,000 years, and if averages from past events are predictive, the region could be overdue for another powerful subduction zone earthquake.
5. Many of the city's buildings and critical infrastructure were built before the city's seismic exposure was widely understood. This infrastructure includes Oregon's primary liquid fuel storage facilities, the Critical Energy Infrastructure (CEI) hub, which is located in northwest Portland and receives 90 percent of the state's liquid fuel supply either via pipeline or marine vessel. Most of the storage tanks within the CEI hub have been built prior to any design and performance lessons learned from the damaging Great Alaskan earthquake of 1964 and the many other documented earthquakes that followed.
6. The CEI hub is vulnerable to failure in the event of subduction zone earthquake. A 2012 Oregon Department of Geology and Mineral Industries (DOGAMI) Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub report states that a magnitude 8 or 9 Cascadia Subduction Zone earthquake would impact the CEI Hub with: ground shaking; liquefaction (soil behavior phenomenon in which a saturated sand softens and loses strength during strong earthquake ground shaking); lateral spreading (where surficial soil permanently moves laterally due to earthquake shaking); landslides; coseismic settlement (where the ground surface is permanently lowered due to seismic

shaking); and bearing capacity failures (when the foundation soil cannot support the structure it is intended to support). The study also notes that, at the time, only three existing storage tanks were known to have addressed liquefaction vulnerabilities.

7. The Portland Bureau of Emergency Management's Mitigation Action Plan (MAP) identifies how natural hazard events like floods, landslides, and earthquakes might affect the City of Portland. The Portland area has experienced numerous earthquakes in the past, ranging from Magnitude 4.5 to 9.0. Portland is certain to experience seismic events in the future. Many of Portland's fossil fuel storage tanks were built before seismic design requirements in building codes were adopted.
8. Most of Portland's industrial districts, especially those areas with river access, are located in areas with a high probability of liquefaction, as documented by the 2018 DOGAMI Earthquake Regional Impact Analysis. Fossil fuel infrastructure poses considerable risks in the event of a major earthquake as documented by the Portland Bureau of Emergency Management's 2016 Critical Energy Infrastructure Hub Study; the 2012 DOGAMI Earthquake Risk Study for Oregon's Critical Energy Infrastructure Hub report; the 2019 Portland State University Critical Energy Infrastructure Hub Fuel Tank Seismic Assessment, and the 2022 Multnomah County/City of Portland Impacts of a Cascadia Subduction Zone Earthquake on the CEI Hub.
9. Coal contains toxic heavy metals, including mercury, arsenic and lead, and exposure to these toxic heavy metals is linked to cancer, birth defects and other health problems.
10. A Union Pacific train carrying oil from North Dakota to Tacoma derailed in Mosier, Oregon on June 3, 2016, spilling 42,000 gallons of crude oil, igniting a fire, and leading to the evacuation of one-quarter of the town's residents.
11. Tribal communities in Oregon and Washington have expressed concerns about the safety risks of fossil fuel infrastructure and the related threats to human health, cultural heritage, and environmental quality.
12. The City's 2015 Climate Action Plan (adopted by Resolution 37135) identifies the need to establish a "fossil fuel export policy that considers lifecycle emissions, safety, economics, neighborhood livability and environmental impacts" (Climate Action Plan, action 3G, page 69).
13. The City committed in its 2015 Climate Action Plan to advancing policy and programs to reduce local fossil fuel use both in the City's own operations and through community-wide initiatives.
14. In Resolutions 36959 and 36962 adopted in 2012, the Council expressed opposition to coal trains traveling through Portland until a programmatic, comprehensive, and area-wide Environmental Impact Statement and comprehensive Health Impact Assessment are completed.

15. Resolution 37168, adopted November 12, 2015, expressed the City Council’s opposition to the “expansion of infrastructure whose primary purpose is transporting or storing fossil fuels in or through Portland or adjacent waterways.” It also expressed the Council’s intent not to restrict improvements in safety, efficiency, or seismic resilience; the provision of service directly to end users; or infrastructure that will accelerate the transition to non-fossil fuel energy sources.
16. Resolution 37289, adopted May 20, 2017, established a goal to meet 100 percent of community-wide energy needs, including transportation fuels, with renewable energy by 2050.
17. With Resolution 37494, adopted June 30, 2020, the City Council declared that a human-made climate emergency threatens our city, our region, our state, our nation, humanity, and the natural world, and that such an emergency calls for an immediate mobilization effort initiating greater action, resources, and collaboration that prioritizes frontline communities to restore a safe climate.
18. The Climate Emergency Declaration (Resolution 37494) further resolved that the City of Portland will adopt new policies and development standards to further prevent expansion of new fossil fuel infrastructure, reduce fossil fuel consumption, reduce the risk to the community and the environment, and encourage the adoption and use of clean, renewable fuels, including but not limited to updating the Renewable Fuel Standard.
19. The 2035 Comprehensive Plan sets policy direction (Policies 4.75 and 4.76) to encourage disaster-resilient development and specifically to reduce natural hazard risks to critical energy and transportation infrastructure in Portland Harbor.
20. The first step in making the current situation better is to ensure that the situation does not get worse. Continuing to allow the unlimited increase in fossil fuel terminal storage tank capacity within a high-risk area increases the risk to the surrounding industrial district and the Willamette River. The Fossil Fuel Terminal Zoning (“FFTZ”) amendments are a regulatory approach to limit the size of new fossil fuel terminals and prohibit the expansion of fossil fuel storage tank capacity at existing fossil fuel terminals, with limited exceptions, which will be an improvement compared to the current regulations that allow for unlimited growth in fossil fuel terminals.
21. These Zoning Code amendments create a new land use category with development standards that limit the size of new terminals and prohibit the expansion of fossil fuel storage tank capacity at existing terminals.
22. The amendments promote major benefits to human health and safety, environmental health, and resilience, with minor impacts to economic prosperity and equity.
23. The code restrictions on fossil fuel terminal development will limit potential financial risks from a major accident involving fossil fuel infrastructure.

24. The amendments will limit the risk of potentially catastrophic safety risks associated with fossil fuel infrastructure.
25. The amendments will allow for the continued operation at existing fuel terminals but prohibit expansion of fossil fuel storage tank capacity with some exceptions, and limit the size of new terminal development.
26. The amendments will restrict development of fossil fuel terminals consistent with City and State objectives on climate change and public safety. While fossil fuels like natural gas and propane have the potential to replace higher-carbon fuels, substituting these fuels for higher-carbon fuels does not begin to approach the goal of net-zero carbon emissions by 2050 established by the City of Portland or the State of Oregon's 75% reduction goal.
27. In Resolution 37168, the City Council expressed support for accelerating the transition to non-fossil fuel energy sources. As part of that transition, the Oregon Department of Environmental Quality (ODEQ) is implementing the Oregon Clean Fuels Program, which requires a 10 percent reduction in average carbon intensity by 2025.
28. The City Council has considered applicable policies, as described in Exhibit A, to determine that this ordinance on the whole complies with the 2035 Comprehensive Plan and on balance is equally or more supportive of the goals and policies of the 2035 Comprehensive Plan than the current regulations. In reaching this conclusion, City Council has weighed and balanced competing policy directions. In particular, the Council finds that:
 - a. Statewide Planning Goal 7 (Natural Hazards) and 2035 Comprehensive Plan Goal 4.D with Policies 4.79 and 4.80, requires reducing risk to people and property from natural hazards. The FFTZ amendments further these goals and policies because by limiting the risks of storing large volumes of hazardous materials in an area with moderate to high susceptibility to an earthquake. In addition, Multnomah County and the City of Portland commissioned a study of the impacts of fuel releases due to a Cascadia Subduction Zone (CSZ) earthquake. This study found that between 94.6 million and 193.7 million gallons of material could be released in the event of a CSZ earthquake, which could cause between \$359 million to \$2.6 billion in damages.
 - b. Policy 6.48 provides direction to limit fossil fuel terminals to what is necessary to serve the regional market. The City Council considered the BPS memo on the future demand for petroleum in Oregon out to the year 2050. The BPS forecast for Oregon, based on the US EIA regional forecast, calculates an approximate 11 percent increase in total petroleum consumption to 390,000 billion BTU in 2050. However, petroleum consumption in Oregon peaked in 1999 at 395,000 billion BTU, which is less than the 2050 consumption forecast. Also, the US EIA forecasts for petroleum includes the volumes of fuel ethanol and biodiesel blended with motor gasoline and distillate fuel oil, respectively. New storage tank capacity can be built to accommodate the increased consumption of renewable fuels under an exception in the code amendments. In addition, most (66%) of the increased consumption of petroleum in 2050 can be attributed to the 25,000 billion BTU increase in jet fuel consumption. New storage tank capacity can be

built to accommodate the increased consumption of jet fuel under an exception in the code amendments. Also, storage tank capacity can be added for non-fuel petroleum products.

The short-term forecast for the Oregon Clean Fuels program shows increasing robust growth in the consumption of renewable (non-fossil) fuels.

The April 2022 ODOT revenue forecast shows flat to declining sales of motor fuels and increased trucking activity and weight-mile tax revenue growth. Both of these trends are similar to the trends in the 2019 forecast.

The 2020 Portland Harbor Marine Cargo Forecast prepared by BST Associates is the most recent and most Portland specific marine cargo forecast. It documents a 2040 reference case with a declining annual growth rate that results in a total volume of 2.1 million metric tons of petroleum products, which is less than what flowed through the Portland terminals in 2010.

Therefore, the City Council finds the liquid fossil fuel storage tank capacity that exists today in Portland, with the allowed exceptions, is adequate to serve the future regional market.

The City Council considered the Lighthouse Energy Consulting memo on the natural gas infrastructure that found that NW Natural's 2018 Integrated Resource Plan (IRP) identified natural gas resources that could meet the forecasted peak day demands over that 20-year period covered by the IRP. The additional peak day capacity does not rely on new or expanded natural gas infrastructure in the City of Portland. Therefore, the City Council finds the natural gas storage tank capacity that exists today in Portland is adequate to serve the future regional market.

The City Council recognizes that Portland's fossil fuel terminals handle 90 percent of the fossil fuel for the State of Oregon and Southwest Washington and will continue to do so for the foreseeable future as part of a transition to a zero-carbon economy. These changes support the retention of existing fossil fuel terminals by designating them as a limited use that allows the terminals to continue to operate and invest in upgrades and supports opportunities for growth through exceptions, such as aviation or renewable fuels. Further, the use limitations provide flexibility to FFTs to replace, reconfigure or repurpose existing storage tank capacity to increase safety and serve the future regional market, especially in terms of changing commodity types such as the increased use of renewable fuels and jet fuel.

Therefore, the City Council finds that limiting the expansion of fossil fuel storage tank capacity at the existing facilities limits risk from a major earthquake, which outweighs any uncertainty in the future forecasts or any policy interpretation to provide unlimited opportunity to add storage tank capacity to accommodate any

potential future increase in fossil fuel consumption.

- c. Statewide Planning Goal 9 (Economic Development) and 2035 Comprehensive Plan Goal 6.C with Policies 6.20 and 6.36, among others, provide for the retention and growth of businesses, especially those in the traded sector. The City Council interprets these policies apply to the economy in general, rather than specific types of business. These changes and restrictions only apply to a narrowly defined new land use category, Bulk Fossil Fuel Terminals, and do not have a significant effect on the other allowed uses in industrial and employment zones. There are no changes proposed to the Comprehensive Plan or Zoning Map that will impact the overall size or intensity of development in the industrial and employment areas of Portland. These amendments are narrowly constructed to apply to one class of businesses that make up a small portion of the city, regional and state economy. Further, these regulations only limit future expansion of fossil fuel storage tank capacity at these fossil fuel terminals, with some key exceptions, and designate these businesses as a limited use that allows their continued operation.
 - d. Guilds Lake Industrial Sanctuary (GLIS) Plan policies provide direction to maintain, protect and enhance businesses in the sanctuary. This plan was adopted in 2001 and does not address the need for resiliency in a high and medium liquefaction susceptibility area. The City Council interprets these policies to apply to the GLIS as a whole and not individual businesses. The City Council interprets the legislative intent of the GLISP is to maintain the area as an industrial sanctuary and to prohibit incompatible land uses. The FFTZ amendments do not include map changes, nor do they allow for new incompatible land uses that could undermine the viability of the industrial sanctuary. These regulations apply to only one type of business that makes up a minority part of the businesses found in GLIS. The remaining industrial uses to continue to operate under current regulations. The impact of the limits on fossil fuel terminals is mitigated by designating existing fossil fuel terminals as a limited use that allows the terminals to continue to operate and make upgrades and supports limited enhancement through a number of exceptions to the storage capacity restrictions.
29. Ordinance No. 188142 was appealed to the Oregon Land Use Board of Appeals (LUBA). LUBA issued a decision upholding two assignments of error in *Columbia Pacific Building Trades Council et al v. City of Portland*, LUBA Case No. 2017-001, July 19 2017).
 30. LUBA's decision was appealed to the Oregon Court of Appeals, which overturned LUBA's decision which was affirmed in part and reversed in part in *Columbia Pacific Building Trades Council v. City of Portland*, 289 Or App 739 (2018).
 31. The Oregon Court of Appeals decision was appealed to the Oregon Supreme Court, which denied review in *Columbia Pacific Building Trades Council v. City of Portland*, 363 Or 390 (2018).

32. On October 5, 2018, LUBA remanded *Columbia Pacific Building Trades Council et al v. City of Portland*, LUBA Case No. 2017-001 to assignments of error that LUBA sustained and were either affirmed or not challenged on appeal to the Court of Appeals.
33. On December 18, 2019, the City adopted Ordinance No. 189807 to readopt the Fossil Fuel Terminal Zoning Amendments to address issues raised in LUBA's remand order. The Zoning Code amendments were similar to the changes adopted in 2016, except for a few minor adjustments to reconcile the Fossil Fuel Terminal Zoning Amendments with subsequent changes to the Zoning Code that were adopted since 2016.
34. Ordinance No. 189807 was appealed to the Oregon Land Use Board of Appeals (LUBA). LUBA issued a decision remanding the ordinance for additional findings in *Columbia Pacific Building Trades Council et al v. City of Portland II*, LUBA Case No. 2020-009, October 20, 2020).
35. A general notification of the June 30, 2022, City Council public hearing on the remand of Ordinance No. 189807 was sent to the City's legislative notice list, the fossil fuel terminal property owners, and the parties to the appeal.
36. On June 30, 2022, the Portland City Council held a public hearing and received testimony on the re-adoption of the fossil fuel terminal zoning restrictions.
37. The City Council concludes that large fossil fuel terminals represent a risk to people, property and the natural environments that the City Council finds as a compelling reason to limit future risk by limiting the size of new facilities and prohibit the expansion fossil fuel storage tank capacity at existing facilities. Continuing to allow an unlimited increase in storage capacity at FFTs in a moderate- to high-risk area would be less supportive of the 2035 Comprehensive Plan than adopting the FFTZ amendments.

NOW THEREFORE, The Council directs:

- a. Adopt Exhibit A as additional findings.
- b. Amend Title 33, Planning and Zoning, as shown in Exhibit B, Fossil Fuel Terminal Zoning Amendments, Remand Report, dated June 8, 2022.
- c. Adopt the commentary in Exhibit B, Fossil Fuel Terminal Zoning Amendments, Remand Report, dated June 8, 2022, as legislative intent and further findings.
- d. Adopt Exhibit C. LUBA Record for *Columbia Pacific Building Trades Council et al v. City of Portland II*, LUBA Case No. 2020-009, as additional evidence.
- e. The Bureau of Planning and Sustainability shall report to City Council no later than December 31, 2023 on the implementation of this ordinance, including:
 - the number and description of any requests by existing terminal operators to upgrade and replace storage capacity at their facilities;
 - the number and description of building permits issued for fossil fuel tanks between 125,000 and 2 million gallons;
 - the trends in fossil fuel energy use and non-fossil energy use in Oregon;

- the status of local and state regulatory proceedings that may improve seismic resilience of fossil fuel storage infrastructure; and
- information on compliance with the Oregon Clean Fuels Program.

f. City Bureaus, including BDS, PBEM and Fire, shall work with the State of Oregon to develop policy options to require seismic upgrades of storage tanks within a firm deadline for replacement of older, unsafe tanks.

Section 2.

The Council declares that an emergency exists due to the fact that Portland is currently at risk of a major earthquake; therefore, this ordinance shall be in full force and effect from and after **July 31, 2022, at 11:59 P.M.**

Section 3.

If any section, subsection, sentence, clause, phrase, diagram, designation, or drawing contained in this Ordinance, or the plan, map or code it adopts or amends, is held to be deficient, invalid or unconstitutional, that shall not affect the validity of the remaining portions. The Council declares that it would have adopted the plan, map, or code and each section, subsection, sentence, clause, phrase, diagram, designation, and drawing thereof, regardless of the fact that any one or more sections, subsections, sentences, clauses, phrases, diagrams, designations, or drawings contained in this Ordinance, may be found to be deficient, invalid or unconstitutional.

Passed by the Council:

Mary Hull Caballero
Auditor of the City of Portland
By

Deputy

Mayor Ted Wheeler

Prepared by: T. Armstrong
Date Prepared: June 8, 2022