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Portland Planning and Sustainability Commission
1900 SW 4th Avenue, Suite 7100
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Submitted in person and via mail to: psc@portlandoregon.gov

**RE: Columbia Riverkeeper Comment Opposing Proposed Draft Terminal 6
Environmental Overlay Zone Code Amendment**

Dear Portland Planning and Sustainability Commission Members,

Columbia Riverkeeper (Riverkeeper) has deep concerns about a proposal to ship large volumes of liquid propane through the City and down the Columbia River. We urge the City to deny a proposed code amendment for the environmental overlay zone, a change that would facilitate the construction and operation of a large propane export terminal at the Port of Portland's Terminal 6. The information available to the City at this time is insufficient to fully address the potential environmental, public safety, and economic ramifications of Pembina Marine Terminals' proposed propane terminal. As a result, the City should not approve an amendment that allows propane (a hazardous substance) to be transported through environmental zones, limited to regulations of those zones. We urge the Planning and Sustainability Commission ("Commission") to use this opportunity to assess whether the underlying Pembina proposal warrants a change to the City's environmental overlay zone because the proposed amendment is being tailored to specifically suit Pembina's proposal at Terminal 6.

As an initial matter, the scope of Pembina's proposal and its impact on the surrounding community and environment are unclear. Pembina has indicated that it would ship over 36,000 barrels of propane per day, necessitating 3-4 loaded unit trains of liquid propane each week. Yet, Pembina has also expressed a desire to expand its project, at least doubling its size to 72,000 barrels per day of propane. On September 13, 2014 Pembina's Chief Executive Officer, Mick Dilger spoke about expansion goals, telling the *Oregonian*, "We would love to see this double in supply, but our high blue sky case would be that it would get to 72,000 barrels a day."ⁱ The proposed amendment to the environmental zone would open the door, not just for Pembina's initial facility, but also for the proposal to expand to a much larger propane export terminal in the future. Accordingly, by expanding the terminal, Pembina would increase the number of trains

carrying liquid propane and very large liquid petroleum gas (LPG) tankers transiting the Columbia River. The analysis of the proposed amendment to the environmental zone should take into account the full scope of how the project may impact the Columbia at full build-out.

Regardless of the ultimate design of the facility, Columbia Riverkeeper is concerned that the proposed amendment will allow the Pembina project to proceed despite a demonstrated lack of details about the potential public safety impacts of the project. Transport and storage of large volumes of liquid propane pose a potential public safety risk to people who live on Hayden Island, nearby users of Smith and Bybee lakes, and boaters on the Columbia River. The analysis provided by the City suggests that basic investigations about the impact of a large propane release, fire, and/or explosion are still underway. The public deserves an opportunity to vet independent, reliable estimates of the impact of a full loss of containment in one or more storage tanks of propane, one or more rail cars carrying propane through Hayden Island or elsewhere, and an LPG tanker on the Columbia River. Because Pembina has not yet provided basic information about the risks from its facility, the City should not proceed with a code amendment.

Although the City's report asserts that a large fire or explosion is a low-probability event, the consequences of an accidental or intentional release of propane could be catastrophically large, extending over a mile from the site from the initial impacts and secondary fires. Residents of Hayden Island have already identified the safety of houseboat residents and others as a primary community concern, and those who live near the proposed route for propane shipments may also face increased risks from fires or explosions that could result from a rail-related propane release. At the very least, there is insufficient information at this time to conclude that the terminal can safely co-exist with nearby homes, businesses, boaters, and visitors to the areas near Terminal 6.

Moreover, the City should not proceed with an amendment allowing the shipment of propane through the environmental overlay zone because the shipment and storage of large volumes of propane may overwhelm emergency response resources in the area. As noted in the staff's report on the zoning code amendment, existing industrial facilities pose a risk of fires and explosions, particularly in the case of a large seismic event. Because a seismic event could trigger multiple, simultaneous problems at facilities handling hazardous materials along the Columbia River and throughout Portland, it is critically important for emergency response plans to be robust throughout the region. Indeed, due to its wet, sandy soils, the Rivergate district is particularly prone to soil liquefaction during a large earthquake. Any problem with the Terminal 6 Pembina proposal would be compounded for emergency responders having to deal with simultaneous emergencies arising from nearby liquefaction in petroleum facilities along the Willamette River.

The staff report indicates that an Emergency Response Plan (ERP) will be developed for the Pembina terminal, but offers little specific information about what resources would be

required for the proposed project. The lack of detailed emergency response planning for the Pembina proposal undermines the Commission's ability to weigh the impact of allowing the transport of propane via pipe at the Pembina facility. The information included in the staff report is sufficient, however, to raise concerns that the project could severely strain emergency response capabilities in the event of a catastrophic propane fire and explosion. Indeed, the report indicates that, "depending on the size of the release and weather conditions, additional steps may include establishing roadblocks, notifying adjacent neighbors, or implementing shelter-in-place and/or evacuations of potentially affected areas." Without further detail, and recognizing that these steps may become necessary, the City should not proceed with the proposed amendment which would allow Pembina to build a facility that poses significant potential risks to the surrounding community.

Because the public safety and potential impacts of a large propane spill, fire, and explosion remain unknown, the impact on sensitive environmental resources in the area are also unclear. The staff's report states, "Operation of a propane terminal would increase the risk that valuable wildlife habitat resources and functions are lost in the event of an accident or disaster."ⁱⁱ We agree that impacts on protected resources in the environmental zone face serious risks because of the potential for an accidental or intentional release of propane that results in a spill, fire, or explosion. An explosion and fire would harm wildlife in the area, not just at the terminal but also in nearby wildlife areas, the Columbia River's Oregon Slough, and Hayden Island.

Furthermore, during non-emergency operation, the propane terminal could also disrupt wildlife habitat in the environmental zone and nearby areas. Pembina's proposal involves industrial equipment that will generate noise, light, and air pollution. For example, the terminal incorporates a flare stack that would be used in the case that the terminal needs to quickly burn off large volumes of propane. And the presence of diesel locomotives and large LPG tankers will create light, noise, and air pollution. Ultimately, the City's report presents inadequate information to support its conclusion that development impacts on the site can be mitigated to acceptable levels.

For Riverkeeper members and others who routinely use the Columbia River, Pembina's proposal causes serious concerns about disruptions to River users. The staff report acknowledges, "recreational boaters and other boat traffic on the Oregon Slough may have limited access at certain times of the month while the ships are being loaded." The report goes on to describe how, depending on the outcome of the U.S. Coast Guard's safety analysis, vessels may be required to stay away from incoming, outgoing, and docked LPG tankers visiting the Pembina terminal. The staff report gives a range of potential security zones, but the U.S. Coast Guard has not yet offered a recommendation for how large zones around LPG tankers might be. The City should consider that the U.S. Coast Guard recommended 500-yard moving security zones around liquefied natural gas (LNG) tankers at proposed terminals in Bradwood and Warrenton, OR. Similar zones for the Pembina terminal could be very disruptive. The City

should not pave the way for propane transport in environmental zones, particularly if that change could impact boaters on the busy Oregon Slough.

Frustratingly, the report offers a conclusion that seems unsupported by its own analysis and by the lack of U.S. Coast Guard information. The report states, "Boating access impacts due to a security zone around a ship can be mitigated through alternative routes or by requesting permission to pass through the security zone." Based on the analysis provided in the report, we do not believe the City has adequate information about the impact of security zones around LPG tankers to conclude that the impact to recreational boaters can be mitigated. For instance, the circumstances in which boats will be allowed to pass through security zones are very unclear because the U.S. Coast Guard has not yet produced its analysis of the project. Additionally, Pembina's CEO has stated the company's desire to double the project, increasing the potential days of interference from LPG tankers from six to twelve each month. We urge the City to reject the environmental zone amendment because the terminal has the potential to impact boaters on the Columbia River, and the potential impact could grow if the terminal expands.

The proposed Pembina terminal has the potential to increase significantly Portland's overall greenhouse gas pollution emissions. The report for the draft environmental zone code amendment offered some analysis of how the propane terminal would add to the greenhouse gas pollution emissions of the City, but it stopped short of looking at the overall picture. Because propane is produced in association with natural gas and hydraulic fracturing ("fracking"), the climate impact of propane exports cannot be considered without looking at the overall lifecycle of its production, transport, liquefaction, shipment, and regasification and use. The shipment of propane across the Pacific in tankers that burn bunker fuel, alone, will add a significant carbon penalty to the use of the fuel. We urge the City to deny the environmental zone amendment, at least until more can be learned about the full, lifecycle climate impacts of propane production and shipment.

In conclusion, we urge the Planning and Sustainability Commission to recognize the profound, unresolved public safety and environmental issues that remain with the Pembina propane project, and we ask the City to reject the proposed code amendment that would allow the project as a limited use in the environmental overlay zone. If the Commission and the City choose not to reject the code amendment at this time, we urge the City to provide additional information before making its decision about changes to the environmental overlay zone. Specifically, because the change is tied to the Pembina propane terminal proposal, we ask that the City provide the public with more details about emergency response planning, the impacts of a large accidental or intentional propane spill and fire, the results of the U.S. Coast Guard's analysis of vessel traffic and safety, and the impact on the environment of shipping huge quantities of liquid propane. When more detailed information becomes available, we encourage the Commission and the City to provide additional opportunities for public review and input on the proposed environmental zone code amendment.

Sincerely,



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ⁱ Ted Sickinger, Oregonian. "Pembina Chief Provides First Details on Proposed Propane Export Terminal in Portland." September 13, 2014.

http://www.oregonlive.com/business/index.ssf/2014/09/pembina_chief_provides_first_d.html#incart_related_stories

ⁱⁱ Staff Report on proposed zone code amendment. December 12, 2014. P. 29.

