



August 19, 2014

Response to Comments - Columbia Pacific Bio Refinery Spill Contingency Plan

Columbia Pacific Bio-Refinery operates a crude oil transfer facility located in Clatskanie, Oregon and is subject to oil spill contingency planning requirements under ORS 468B.345 through ORS 468B.390. Columbia Pacific Bio-Refinery submitted an oil spill contingency plan to DEQ for review and approval in accordance with the statute. The plan outlines how the company will prepare for dealing with a spill, what the company must provide in terms of emergency response resources, and how the company will conduct clean-up operations along with other agencies. The plan covers spills in Oregon waters including the Columbia River. DEQ completed review of the proposed plan pursuant to ORS 468B.360 and reached a preliminary conclusion that the plan satisfied the applicable regulatory requirements.

Pursuant to Oregon Administrative Rules OAR 340-141-0190, DEQ conducted a public comment period for Columbia Pacific Bio-Refinery's oil spill contingency plan from Jan. 9, 2014 through April 11, 2014. DEQ received comments from 23 individuals regarding the oil spill contingency plan. DEQ responses to the public comments are summarized below. In some cases comments from several individuals on the same topic have been grouped together to avoid repetitive responses.

- 1. The combined threat of Bakken Crude Oil and Ethanol is greater than the threat of one product spilled individually because when ethanol mixes with crude oil, pollutants such as PAHs can be extracted from the crude and then becomes miscible in the water column.**

Based on information provided by Columbia Pacific Bio-Refinery, they do not transfer crude oil and ethanol simultaneously.

- 2. The parent company may not be able to pay for a cleanup associated with an oil spill. Oil spill liability insurance needs to be examined.**

Oregon requirements for proof of financial responsibility are provided in ORS 468B.390 as required by Section 1016 of the federal Oil Pollution Act of 1990. Prior to U.S. Coast Guard approval of the spill contingency plan under federal laws, a facility must provide financial proof as required by Section 1016 of the OPA. DEQ has entered into an agreement with the U.S. Coast Guard to certify that facilities in Oregon have provided proof of financial responsibility. The Coast Guard has approved Columbia Pacific Bio-Refinery's spill contingency plan and related financial responsibility proof. In addition, the submittal agreement for the oil spill contingency plan dictates that in the event of a spill, the qualified individual listed in the plan will have the authority to obligate expenses towards a cleanup.

- 3. The Oil Spill Contingency Plan does not adequately describe the sensitive environment surrounding the Terminal.**

Requirements for environmental variables to be described in a contingency plan are provided in OAR 340-141-0140(29). Rather than incorporating these descriptions, Columbia Pacific Bio-Refinery simply referenced the Northwest Area Contingency Plan and the relevant Geographic Response Plans for the areas at risk in Section 2.4 of their plan. DEQ has accepted this practice for other plans since facility specific plans must be coordinated with the Northwest Area Contingency Plan.

- 4. Public and private resources in the area have not been identified, such as agricultural lands**

and irrigation intakes. Plan states that the facility will wait until a spill occurs prior to seeking knowledge of local resources.

As previously noted, Columbia Pacific Bio-Refinery referenced the Northwest Area Contingency Plan for this information. Public resources are identified and protected under the Northwest Area Contingency Plan. In the event of a spill, the incident management team would prioritize protection of other resources including agricultural lands and irrigation intakes depending on specific spill conditions.

5. The plan states that the facility is an ethanol refinery. It is a crude oil shipping terminal.

The facility has the capability to transfer crude oil or ethanol production.

6. In the Emergency Response Action Plan volumes of throughput are incorrect on page 19.

DEQ's review is based on the requirements found under ORS 468B.300 for oil spill contingency planning. Mention of throughput is not a requirement of this section. The facility is required to be prepared for a worst case discharge. At Columbia Pacific Bio-Refinery this volume is 8,041,075 gallons.

7. The plan does not explain how much oil is currently shipped, or how much it may ship in the future.

Oil spill contingency plans regulated under ORS 468B.300 require DEQ to consider the type and volume of oil stored at a facility. For planning purposes, DEQ has elected to use the worst case discharge volume, which is defined as the volume of the largest tank at the facility. At Columbia Pacific Bio-Refinery this volume is 8 million gallons.

8. Global should notify nearby landowners and farmers in the event of an oil spill.

Requirements for notifications are specified in OAR 340-141-0140(11), which includes government officials. In most cases, local emergency responders would be notifying residents in proximity of a facility of any safety hazards and ordering evacuations where appropriate. The incident command comprised of state and federal on-scene coordinators would coordinate with local fire and hazmat teams to ensure that affected landowners were notified and aware of the spill.

9. The spill prevention countermeasure and control plan is inadequate to cover the prevention obligations under OAR 340-141-0160 because it is intended to satisfy less stringent federal requirements.

OAR 340-141-0160(2) states that spill prevention countermeasure and control plans, operations manuals and other spill prevention documents prepared to meet federal requirements may be submitted to DEQ to satisfy Oregon's requirements. DEQ accepts plans, manuals and other documents that meet or exceed Oregon's requirements. DEQ has read and reviewed Columbia Pacific Bio-Refinery's spill prevention countermeasure and control plan to evaluate whether it has met or exceeded state requirements under OAR 340-141-0160. Currently the plan is in substantial compliance with all requirements under the rule.

10. A site risk analysis is not included in the spill prevention countermeasure and control plan as required by OAR 340-141-0160(3)(i).

A site risk analysis was completed and reviewed by a licensed professional engineer as required by OAR 340-141-0160(i). This includes parts of the spill prevention countermeasure and control plan as well as additional documentation found in appendices D & F.

11. The plan does not explain how it will achieve the "best achievable protection" against oil spills or why the plan minimizes damage to the "maximum extent practicable" as required by OAR 340-141-0160(1). Plan must explain why it exceeds these standards, not just meet them.

OAR 340-141-0160 is meant to evaluate the oil spill contingency plan as a whole to question whether the plan could be used effectively to respond to an oil spill. DEQ evaluates plans on a wide range of criteria

and has determined that the oil spill contingency plan meets and in some instances exceeds planning standards.

12. The plan does not address a worst case spill from the facility.

The planning volume for this oil spill contingency plan is 8,041,075 gallons. This is the volume of the largest tank at the facility, which meets DEQ Spills program planning volume for a worst case spill.

13. The plan does not contain sufficient information about Global's firefighting capabilities.

Firefighting is considered an emergency response and is regulated by state and local fire departments. DEQ's responsibility is pollution prevention and mitigation.

14. Protocols for the use of non-toxic firefighting foam are not discussed. The amount of firefighting foam is not discussed.

Firefighters may use whichever product most effectively extinguishes a fire. DEQ encourages fire districts to stock less toxic alternatives, but the fire chief bears the overall responsibility for firefighting tactics and equipment to protect public safety and private property.

15. Data about the breakdown of firefighting foam in the environment is not discussed.

Firefighting foam is not required to be discussed in the spill contingency plan.

16. Fire can cause more environmental damage than an oil spill. Firefighting is not discussed in the plan adequately.

Firefighting tactics and equipment are not under the authority of DEQ to regulate, however firefighting tactics are addressed in Section 2.3.2 of the plan.

17. The amount of oil moved through the facility is excessive and exceeds all scientific codes.

Oil spill contingency planning rules do not restrict the volume of petroleum that a facility is allowed to move through the facility.

18. The recent reclassification of Bakken crude oil as a Group II Packing Group makes the risk of fire greater than the risk of an oil spill, and therefore the spill contingency plan does not protect the public or the environment.

Firefighting hazards are not addressed by DEQ but fall under the authority of state and local fire agencies.

19. The tanks on the property were designed to store ethanol, but now they store crude oil. Crude is much heavier and this could cause the tanks to collapse or rupture.

Tanks are inspected under API-653 standards and are inspected by both a professional engineer and the Environmental Protection Agency on a regular basis. DEQ does not specifically regulate tank construction or design.

20. Tanks should be built inside of secondary containment or dikes. (TM) The slope within the diked area should not exceed one percent. The diked area must be greater than the total volume of oil stored at the facility. Alarms should sound if the tank is filled to 90 percent, with an automatic cutoff at 95 percent.

There are no spill prevention countermeasure and control rules for the slope of the containment area. The containment area is sufficient to contain the single largest tank and has been signed off by professional engineer. The volume that an alarm is set to is contingent upon several factors, however high level alarms with audible or visual indicators are required and are installed at Columbia Pacific Bio-Refinery and comply with industry standards.

21. All transfer hoses should have a safety lockout and automatic shutoff in the event of a pressure loss.

The U.S. Coast Guard is the primary agency responsible for regulating transfer hoses. The Coast Guard has stated that Columbia Pacific Bio-Refinery is currently in compliance with 33 CFR 154, which includes transfer hose regulations.

22. There should be an emergency boat that could be launched to contain oil in the event of an oil spill on the Columbia River.

The oil spill contingency plan describes that Columbia Pacific Bio-Refinery has a response boat stationed on site with 6,000 feet of containment boom available immediately. Columbia Pacific Bio-Refinery is a member of the Clean Rivers Cooperative, which also has a response boat on site that is stored on land and available for immediate launch.

23. The company should assume all of the costs of a cleanup and be required to monitor the affected areas for five years.

Federal and state law both require that the responsible party pay for all costs associated with an oil spill cleanup. Federal and state on-scene coordinators have the overall responsibility to determine when a cleanup has been finalized.

24. Documentation of ownership and liability is not sufficient to ensure that in the event of a spill, financial resources are adequate to cover the cost of a cleanup.

The submittal agreement filled out by Columbia Pacific Bio-Refinery accepts responsibility for any potential spill and guarantees that the company has the power to obligate funds towards a cleanup.

25. There is no consideration in the plan for adjacent industrial activities or future activities such as a methanol plant which could also cause a spill and pollute the area.

Oregon statutes governing spill contingency planning requirements under ORS 468B do not include provisions for contingency plans to consider future facilities that could also cause a spill. In practice, however, where multiple facilities are located in proximity to each other, DEQ will evaluate whether individual plans have been coordinated to ensure respective response strategies and tactics are complimentary of one another. If another facility is constructed and operating, then the update to the plan would need to complete this coordination step.

26. Risk from earthquakes, Tsunamis, wind storms, floods, or erosion are not discussed.

Siting of the facility is approved by the local land use authority and is beyond the scope of oil spill contingency planning. While natural events such as earthquakes, tsunamis and floods could cause an oil spill, the plan addresses spill prevention countermeasures and controls regardless of the cause (manmade or natural).

27. Bakken oil is known to be more corrosive and volatile; more discussion needs to occur regarding the physical condition of the facility and whether it can safely store and transport Bakken crude.

Oil spill contingency plans require that a facility conduct a site risk analysis which considers all factors that may contribute to an oil spill including corrosion, tank construction and design, and other factors. The facility is inspected to API-653 standards and certified by a professional engineer, meeting DEQ requirements.

28. Given the unique hydrology of the area, all spills should be reported regardless of whether they are greater than or lesser than 42 gallons.

Spills to soil which are less than 42 gallons are not required to be reported to the Oregon Emergency Response System unless there is an ongoing release that will exceed 42 gallons in a 24 hour period. All spills regardless of volume must be cleaned up. Spills of any size to waters of the state must be reported immediately, including spills which impact ground water.

29. A water quality permit should be a prerequisite of the oil spill contingency plan.

Oregon Revised Statute 468B on spill contingency planning applies to facilities regardless of whether the facility needs a water quality discharge permit or not. Water Quality permits cover the discharge of wastewaters or contaminated stormwater to surface water or to the ground. Columbia Pacific Bio-Refinery has coverage under a stormwater permit from DEQ currently, and Port Westward operates a wastewater treatment plant under a DEQ water quality permit for sanitary sewer and industrial wastewater discharges from tenants.

30. Spill kits with a 55 gallon recovery capacity are not sufficient to contain a spill of several million gallons.

Columbia Pacific Bio-Refinery must have the ability to respond to spills of any size. Small spills are commonly cleaned up with a small spill kit, while larger spills require equipment, vehicles and manpower that may exceed what is reasonable to store onsite. This equipment is available within hours of a spill as required by OAR 340-141-0150.

31. Skimmers, filters, booms, etc., need to be located on site, not stored elsewhere.

Columbia Pacific Bio-Refinery maintains contracts with several oil spill response companies who must be able to provide specific amounts of equipment on site within a specified time period. Oregon law has defined these benchmarks in OAR 340-141-0150, set at one-hour, two-hour, six-hour, 12-hour, and 24-hour intervals. DEQ has verified that all equipment required would be available at the specific time frames as required by law.

32. The Lower Columbia Geographic Response Plan is inadequate to address the threat of an oil spill from a facility such as Columbia Pacific Bio-Refinery. The Geographic Response Plan assumes oil will be moving downriver from Longview, when it could move upriver from Columbia Pacific Bio-Refinery because of tides.

The Geographic Response Plan for the area around Columbia Pacific Bio-Refinery is known as Map #5. The plan takes tidal conditions into consideration. Map #5 of the plan is currently under review and will be updated to include the presence of Columbia Pacific Bio-Refinery's facility.

33. The facility should be subject to third party monitoring of water and soil quality to ensure compliance with spill laws.

Oregon statutes govern spill contingency planning requirements under ORS 468B, and do not include provisions for third party monitoring of waters and soil quality to ensure compliance with spill laws. However, oil sheens on rivers are often reported to Oregon's Emergency Response System, and incidents are investigated by DEQ's spill program to determine the source and cause, and actions are taken to mitigate the release.

- 34. An oil spill presents a threat to all of the salmon that migrate anywhere within the Columbia River system. The plan does not adequately discuss salmon. Bakken crude is more toxic to salmon than conventional oil. Juvenile salmonids on Crimms Island, close to the facility, would be affected by a spill and are not covered by the geographic response plan.**

Any oil spill presents the possibility of toxicity to salmon and other aquatic organisms. The Northwest Area Plan is integrated into the Columbia Pacific Bio-Refinery Oil Spill Contingency Plan. The wildlife response section of the plan can be found at:

<http://www.rrt10nwac.com/Files/NWACP/2014/Section%209310.pdf>.

The Northwest Area Contingency Plan is responsible for preventing and responding to the threat of oil spills in the Columbia River. The states of Oregon and Washington coordinate with federal agencies to prepare geographic response plans for all navigable waters within their jurisdictions. The geographic response plan for the area around Columbia Pacific Bio-Refinery is known as Map #5, and response strategies are currently under review to ensure that environmentally sensitive areas are identified, studied and protected.

- 35. The Emergency Response Action Plan lists crude oil as the product transferred at this site, but it is actually Bakken crude oil, which is more dangerous. This should be stated.**

Oregon regulations require a facility to describe the type of petroleum and the oil group associated with it. In the case of Bakken crude, the plan appropriately describes the oil as Crude Oil, Group II. This information is sufficient to supply oil spill responders with enough basic information to initiate response to an oil spill and undertake appropriate safety precautions.

- 36. The plan should describe how often oil is loaded and how much oil goes through the facility.**

Information in this oil spill contingency plan is limited to oil spill planning response. Oregon law mandates that a facility plan for an oil spill of the largest magnitude, regardless of day to day operations.

- 37. Normal daily throughput is not discussed in the oil spill response plan. The number of rail cars is also not discussed.**

Information in this oil spill contingency plan is limited to oil spill planning response. Oregon law mandates that a facility plan for an oil spill of the largest magnitude, so regardless of day to day operations, a facility will have the resources needed to respond to a spill.

- 38. Bakken crude oil needs more booms and pumps than normal crude oil when spilled, and the plan should reflect that.**

The best available information on Bakken crude oil indicates that it will behave in a similar fashion to a spill of diesel fuel, however with a larger amount of volatile organic compounds and polycyclic aromatic hydrocarbons. It is expected that existing booms, pumps, and skimmers will be sufficient to clean up Bakken crude oil, although increased focus will be spent on air monitoring in work areas.

- 39. The plan provided online was not complete. Several pages were missing or blacked out.**

Several pages have been redacted from the online version to exclude sensitive security information at the request of the U.S. Department of Homeland Security. This information included evacuation plans, specific piping diagrams, and bomb threat response measures. Personal home phone numbers for facility employees were also redacted.

40. A narrative describing worker duties, facility operations, rail car safety devices, chemical storage areas, and steps for unloading crude oil from railcars is not a part of the plan and needs to be.

Federal law prohibits Oregon and all other states from regulating railroads, rail lines, and rail cars, so this information is not included in the oil spill response plan.

41. DEQ training guidelines do not specify that facilities and responders train for the possibility of fire, explosion, or working in a hazardous atmosphere containing carbon monoxide, sulfur dioxide, etc.

Training for the specific hazards associated with a facility is overseen by the Occupational Safety & Health Administration. DEQ conducts regular drills with all regulated facilities to coordinate training between the facility and all relevant agencies. This includes the appointment of a safety officer who has the responsibility to ensure that oil spill responders and the general public are updated with all relevant information, including atmospheric hazards to keep safety as the top priority.

42. Using flashlights to satisfy requirements that call for the facility to have the ability to identify the size of a spill at night are insufficient.

During a transfer both the dock and the barge being loaded are required to be well lit. Flashlights used by Columbia Pacific Bio-Refinery staff supplement this lighting. In the event of a spill, additional lighting could also be brought in by oil spill responders under existing contracts.

43. DEQ should require Columbia Pacific Bio-Refinery to keep more resources on site and commit funding for local emergency responders. Facility should have the equipment on site to respond to a spill of the full 8-million-gallon potential spill. Oil spill response organizations are only required to respond 12 hours after a spill. This is inadequate.

Requirements for amounts of response equipment and response times can be found in OAR 340-141-0150. Columbia Pacific Bio-Refinery is required to have all equipment and personnel on site to cover the first hour of an oil spill response. After this first critical hour, equipment and response personnel may be cascaded in from increasingly farther distances at the two-, six-, 12- and 24-hour marks. As an oil spill moves under the influence of current, tidal and wind forces, this staggered equipment deployment allows for responders to get ahead of a spill to protect sensitive areas.

44. Why is DEQ's spills program being scaled back at a time when more facilities are being added to the region?

DEQ's spills program has the same staffing as two years ago.

45. Are the barges hauling oil away from the facility required to be double hulled?

Yes. All vessels involved in the bulk transport of petroleum products on the Columbia and Willamette rivers are required to be double hulled.

46. How much additional traffic on Hwy 30 will be caused by trains, and how does that affect the local economy and the environment?

Oregon statutes governing spill contingency planning requirements under ORS 468B do not include provisions for DEQ evaluating traffic outside of the facility. Additionally, federal law prohibits Oregon and all other states from regulating railroads, rail lines, and rail cars.

47. The trains are very quiet when they roll through town.

DEQ appreciates you taking the time to comment.

48. Can landowners/farmers immediately downriver be notified in the event of a spill so that we can stop our irrigation pumps in time to save our crops?

In the event that a spill affects or threatens to affect an adjacent landowner, that person, persons, or company will be notified as soon as practicable.

49. Can DEQ require that areas with irrigation pumps be boomed first?

DEQ's mission in spill response is to protect human health and environmentally sensitive areas. Therefore we may not prioritize the protection of specific business interests or agricultural areas exclusive of human and environmental health criteria. The Clatskanie River where the irrigation pumps are located is an environmentally sensitive area protected by two booming strategies that would be deployed with priority in the event a spill could potentially move downriver.

50. There is a fresh water intake very close to the docks at Port Westward which feeds the Port of St Helens. How will this be protected in the event of an oil spill?

The water intake at Port Westward is a high priority for protection and will be included in the changes to Map #5 in the Geographic Response Plan.

51. DEQ shouldn't allow for railcars with explosive crude oil to move crude through our communities which have been proven to be problematic in the past.

Federal law prohibits Oregon and all other states from regulating railroads, rail lines, and rail cars. DEQ has no authority under Oregon statutes to restrict materials transported by rail.