

Attachment D – Event Scenarios Used in Impact Analysis

DEIS Table 4-13. Potential Event Scenarios Used in Impact Analysis¹

Event Scenario	Proposed Facility	Rail Transportation	Vessel Transportation
Small to medium crude oil spills	Contained within secondary containment on land and by booms in water. A spill of crude oil reaching the Columbia River is assumed to spread up to 1 RM.	Entire rail corridor study area (0.5 mile on each side of the rail line) is assumed to be potentially affected. A spill slick of crude oil on the Columbia River is assumed to spread 1 RM.	A spill slick of crude oil on the Columbia River is assumed to spread up to 2 RMs.
Large to very large crude oil spills	A large crude oil spill slick reaching the Columbia River is assumed to spread up to 7 RMs. It is assumed that the very large spill (1 storage tank: ~375,000 bbl) would be completely contained within a bermed area with an impermeable liner. ²	Entire rail corridor study area (0.5 mile on each side of the rail line) is assumed to be potentially affected. A spill slick of crude oil on the Columbia River is assumed to spread up to 13 RMs.	A spill slick of crude oil on the Columbia River is assumed to spread 125 RMs (to or beyond the mouth of the Columbia River).
Small fire event	A small fire event is assumed to be controlled within the proposed Facility boundaries.	Derailment of one railcar with associated small fire is assumed to be controlled within the immediate area.	Accident resulting in an oil spill and associated small fire is assumed to be quickly controlled and would affect the immediate area surrounding the vessel.
Large explosion and fire event	A large fire and/or explosion not easily controlled could project debris or spread fire beyond the proposed Facility boundaries; a small wooded area to the northwest would be vulnerable to fire.	Derailment of multiple railcars could result in explosions of multiple railcars, with debris and large fire that spread beyond the immediate area.	An accident resulting in an oil spill and associated large fire that would not be easily controlled.

Notes:

1 All assumptions of spill slick spread along the Columbia River are rounded distances based on Table 41 in Appendix J.

2 This EIS identifies additional measures as mitigation to impose adequate factors of safety for berms surrounding the storage tanks to ensure that they remain intact during and after a Maximum Credible Earthquake and aftershock as discussed in Section 3.1.

bbl = barrels, RM = river mile

ATTACHMENT D