Docket EF-131590

Tesoro Savage CBR
Scoping Comment
#30930

THE
WATERFRONT

December 18, 2013

Via email to efsec@utc.wa.gov and U.S. Mail

Stephen Posner
Interim EFSEC Manager
Energy Facility Site Evaluation Council
P.O. Box 43172
1300 S. Evergreen Park Dr. SW
Olympia, WA 98504-3172

RECEIVED
DEC 19 2013
ENERGY FACILITY SITE
EVALUATION COUNCIL

RE: Tesoro-Savage Energy Distribution Terminal, Docket EF-131590
SEPA Scoping Comments

Dear Mr. Posner,

The following comments are submitted on behalf of Columbia Waterfront LLC on the scope of the State Environmental Policy Act ("SEPA") review required for the proposed Tesoro-Savage Energy Distribution Terminal, a proposed crude-by-rail oil handling, storage, and shipping facility ("Tesoro-Savage Facility"). We thank you for extending the deadline for submitting comments.

Columbia Waterfront LLC is the developer of a new waterfront community, The Waterfront, scheduled to break ground in Vancouver, Washington in early 2014. The Waterfront is located a less than 2 miles east of the proposed distribution terminal and immediately adjacent to the Port of Vancouver's spur rail line, which Tesoro intends to use to deliver some 360,000 barrels of oil per day to the proposed oil handling facility. See Exhibit A (General Vicinity Map).

We are deeply concerned about the Tesoro proposal to construct a new facility to receive crude oil by rail, store it on site, and load it on marine vessels for shipment to West Coast refineries and possibly overseas. The proposed facility would allow for 2.16 million barrels of oil to be stored on the banks of the Columbia River, posing significant risks to the health, welfare and economic future of Vancouver and its residents. A project of this magnitude and importance deserves careful review and consideration of the wide range of potential impacts it may have on the natural and built environment. This comment letter focuses primarily on potential impacts from the proposal on the built environment. A list of additional impacts that should also be analyzed in the EIS, including impacts to the natural environment, is also included as Exhibit F. The EIS should assess available means to mitigate these impacts, and the Council should condition any recommendation for approval on the effective mitigation of all significant environmental impacts. WAC 197-11-660. To the extent that mitigation measures are ineffective

in addressing the impacts of the proposal, the Council should recommend denial of Tesoro's application. *Id.*

I. Background

A. The Waterfront Project

The Waterfront project, and along with it the public goals for a sustainable future for downtown Vancouver, are directly threatened by the Tesoro proposal. The Waterfront will transform a Brownfields area --- the former Boise Cascade mill site --- into a vibrant urban community.[1] Envisioned as a live-work-play community, The Waterfront will reclaim a significant piece of the city landscape and reconnect Vancouver to its roots along the banks of the Columbia River. The Waterfront will include a new 7 acre Waterfront Park on land to be dedicated to the City by Columbia Waterfront LLC, which has also committed to providing initial park improvements including a waterfront trail linking to and extending the existing Columbia River Renaissance Trail. See Exhibit B (The Waterfront site location map). The project consists of up to 3,300 residential units of several types to create a socially and economically diverse community; more than 800,000 square feet of office space; 250,000 square feet of retail space including restaurants, specialty shops and services to support residents and visitors; and a 200 unit hotel. Exhibit B. The community is designed to be friendly for pedestrians and bicycles and will provide convenient access to downtown Vancouver and mass transit.

Situated between downtown Vancouver and the Columbia River, the project site comprises more than 32 acres, including 28 acres owned by Columbia Waterfront LLC and 4 acres leased from the Port of Vancouver.

Columbia Waterfront LLC acquired the property in 2008 and worked closely with the City and Port to create the master plan for development.

The Waterfront will reshape Vancouver's identity and aid in the ongoing revitalization of downtown, while the property, long closed to the public, will be reopened for all to explore. See Exhibit C. In considering approval for The Waterfront master plan in 2009, City staff found the development to be in compliance with the City's Comprehensive Plan and "that the public interest, health, safety, and general welfare will be served" by development of The Waterfront project.[2] The City Council approved the master plan for The Waterfront in December 2009.[3]

1. Economic impact from waterfront redevelopment

[1] More information regarding The Waterfront is available at: http://thewaterfrontvancouverusa.com/.
[2] City of Vancouver, Staff Report and Recommendation to the Planning Commission, Vancouver Waterfront Development, PRJ 2008-02040 (Oct. 27, 2009).
[3] Ordinance No. M-3936.

The Waterfront will be an economic engine for the City and Clark County. The construction of The Waterfront project is estimated to generate over 4,580 direct full time equivalent (FTE) jobs over the construction period, paying an estimated $244 million in labor income ($53,400 per employee), and contributing $318 million in value-added output. Johnson Economics, Estimated Economic and Fiscal Impacts of the Tesoro-Savage Facility on The Waterfront Vancouver Development and Downtown Vancouver 6 (Dec. 2013) (Exhibit D). Indirect and induced impacts from construction activities will create an additional 2,600 FTE jobs, $108 million in labor income, and $187 million in value-added output, with the total impact on Clark County from construction activities totaling over $927 million. Exhibit D.

Once completed, ongoing business activity at The Waterfront will generate an estimated 1,364 direct jobs, contributing $64.8 million in annual labor income and $59.6 million in value-added output to the Clark County economy. Indirect and induced impacts are expected to create an additional 679 permanent jobs paying $25.9 million in labor income. The total annual output associated with the ongoing operations at The Waterfront is estimated to be in excess of $185.5 million per year and be sustained into the foreseeable future. Exhibit D.

Economists have also estimated that The Waterfront will generate over $31 million in tax revenues during the construction period, while recurring tax revenues are estimated at $6.5 million per year including property taxes, lodging related taxes, sales taxes and employee-based business taxes. The net present value of these recurring tax revenues is estimated to be approximately $96 million. Exhibit D.

2. Timing of waterfront redevelopment

The development of The Waterfront is not speculative or remote. The EIS must therefore consider the likely impacts of the Tesoro proposal on The Waterfront development. The Waterfront master plan was approved in 2009, and the project is proceeding with permitting, having obtained preliminary subdivision approval as well as City approval of the shoreline management permits for the park. The City is currently finishing the Waterfront Access Project, a $45 million public-private investment that will provide ready street and sidewalk access to The Waterfront from the City's existing downtown core along Esther and Jefferson Streets. With the Waterfront Access Project and associated infrastructure improvements scheduled for completion by the end of 2013, on-site road-building at The Waterfront is scheduled to begin in the summer of 2014, funded by a combination of state Transportation Improvement Board grant funds, City investments, and developer contributions. Building construction will begin in 2015.

B. The Tesoro Proposal

Tesoro Savage Petroleum Terminal LLC ("Tesoro") has proposed to construct and operate a facility at the Port of Vancouver to receive crude oil by rail, store the oil on site, and load up to

an average of 360,000 barrels per day onto marine vessels for delivery primarily to West Coast refineries. Tesoro Application for a Site Certificate ("ASC") at 2-86. At build-out, as many as six loaded unit trains per day, each approximately 7,800 feet in average length (1.47 miles) and containing approximately 100 to 120 tank cars of crude oil, would be delivered to the facility by rail. ASC at 2-91, 4-431. Thus, as many as 12 trains per day would travel through downtown Vancouver and along tracks immediately adjacent to the Columbia River and The Waterfront. See Exhibit B. Up to 2.16 million barrels of oil, or 90.72 million gallons of oil would be stored at the facility at any one time, and 131.4 million barrels or 5.5 *billion* gallons of oil would move through the facility on an average annual basis. ASC at 2-104. For context, the proposed Tesoro oil terminal apparently would have the capacity to handle nearly 5% of the entire United States oil production,[4] or over 43% of the proposed capacity of the controversial Keystone XL pipeline.[5] Tesoro proposes to handle all this oil in a facility located on the banks of the Columbia River in a metropolitan area of over 2 million people.[6]

1. Information gaps

Tesoro's application lacks critical pieces of information necessary to complete a full assessment of the environmental impacts from the proposal. These information gaps must be filled as part of an adequate "detailed statement" of the proposal's environmental impacts, RCW 43.21C.030(c), and "to ensure that SEPA's policies are an integral part" of the Council's decision-making process. WAC 197-11-400(1).

Tesoro's application indicates oil will initially come by train from "Midwest oil fields,"[7] most likely from the Bakken formation of North Dakota. Tesoro, however, does not identify the source of the heavier crude oils proposed for transport and storage in Phase 2 of the project. Tesoro indicates that crude oil will be shipped "primarily," but not exclusively, to West Coast refineries. ASC at 2-206. Since U.S.-sourced crude oil generally cannot be legally shipped overseas, the implication is that some of the oil shipped from the Tesoro facility would likely be of Canadian origin and destined for foreign markets. Tesoro may, in fact, be planning to use the terminal to receive, store and ship heavy crude from the Canadian tar sands. This suspicion is heightened by statements in the ASC indicating that some of the oil handled at the facility will

[4] U.S. Energy Information Agency, Crude Oil Production Statistics, *available at*: http://www.eia.gov/todayinenergy/detail.cfm?id=10171 (indicating 7.505 million barrels of total U.S. production per day in August 2013).
[5] U.S. Dep't of State, Keystone XL Pipeline Evaluation Process Fact Sheet 2012, available at: http://keystonepipeline-xl.state.gov/draftEIS/205549.htm
[6] U.S. Census Bureau, Annual Estimates of the Population of Metropolitan and Metropolitan Statistical Areas: April 1, 2010 to July 1, 2012, *available at*: http://www.census.gov/popest/data/metro/totals/2012/.
[7] ASC at 2-206.

not be "pipeline-quality" and will need to be heated to allow for the oil to flow properly from the rail tank cars to the storage tanks and then to the tanker ships.[8]

The EIS must identify the source of the non-pipeline quality crude that will be delivered to the facility to ensure that the full range of the proposal's impacts can be understood. If Tesoro intends to allow crude oil or diluted bitumen from the Canadian tar sands to be handled at the facility, the EIS must take this into account and analyze the full range of environmental impacts, including climate change impacts, associated with tar sands extraction, transport, processing, and combustion.

In addition, Tesoro has not identified which West Coast refineries or other destinations to which the crude oil will be shipped. This omission makes it impossible for the Council to assess both impacts from the proposed shipping activities impossible and potential alternatives. For the EIS to be sufficient, the applicant must provide the destinations for oil shipped from the proposed Tesoro terminal.

Publicly available copies of Tesoro's lease agreement with the Port of Vancouver contain significant redacting that further inhibits a full assessment of the proposal's impacts.[9] For example, Paragraph 8.E has a number of redactions regarding the timing for handling certain numbers of barrels per day and also gives Tesoro the option of developing a second facility if certain redacted benchmarks are met. ASC at 2-81.23. Paragraph 2.D.2 allows the Port to terminate the lease if it is not satisfied that Tesoro is prepared to begin construction by a certain time – which is also redacted. ASC at 2-81.14. In Exhibit E, key dates that Tesoro has to meet for construction commencement and completion have been redacted. ASC at 2-81.106. The definition of "Rail Facility for Unit Trains" is defined as a facility "capable of unloading more than [redacted] bpd of crude oil from trains." ASC at 2-81.109. Additional exhibits are omitted entirely from the lease attached to the ASC, including the Tenant Environmental Questionnaire (Exhibit H), New Product Approval Process (Exhibit I), Rail Operations (Exhibit J), and Health and Safety (Exhibit L).

These redactions and omissions make it impossible to fully assess the Port's potential economic stake in the deal and the maximum amounts of oil permitted to be moved through the site. While Tesoro states that the facility is currently designed for 360,000 barrels per day, the redactions indicate that Tesoro may have undisclosed plans to expand the facility beyond this stated limit. The EIS needs to fully consider the full scope of Tesoro plans, and the Council should require Tesoro to provide an unredacted version of its lease and all of its exhibits to prevent Tesoro from impermissibly piecemealing the environmental review for its proposal.

[8] ASC at 2-87, 2-96, 2-161.
[9] ASC § 2.2.2, at 2-81.

2. Impact of the terminal on the future of Vancouver

The Waterfront project, which will be approximately the size of Portland's Pearl District, is the realization of a dream to reconnect the City of Vancouver with the Columbia River, and provides an opportunity to revitalize the City's economy through the development of a mixed use, sustainable, urban, waterfront community. See Exhibits B, C. It will provide lasting benefits to the community, including parklands, trail development, housing, sustainable job creation, and a permanent source of tax revenue.

In contrast, the Tesoro proposal would provide only short-term profits, temporary jobs, and an ephemeral boost in tax revenues to the City and the Port. With an initial ten year lease term followed by two five year options, the oil terminal is "designed for an anticipated lifetime of 20 years."[10] Yet there is no guarantee that the facility will even operate for the full 20 year period. Numerous factors could shorten the facility's operating lifespan by reducing its profitability, including volatility in international oil markets, the potential for pipeline construction to undercut oil-by-rail as an economically viable means of transporting crude oil, the potential for climate change regulations to further reduce the viability of such rail transport, and the inevitable decline in oil production from the Bakken formation. According to statements from the Port of Vancouver's Executive Director, "[t]he Port of Vancouver believes the market is solid for ten [10] years."[11] This type of short-lived project is not worth either the long-term impacts to the City's prospects for sustainable economic development or the risks of environmental catastrophe that the oil terminal would bring.

II. General Scope of the Proposal to be Evaluated in the EIS

In adopting SEPA, the Washington legislature declared the protection of the environment to be a core state priority. RCW 43.21C.010. SEPA states that "[t]he legislature recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment." RCW 43.21C.020(3). This policy statement "indicates in the strongest possible terms the basic importance of environmental concerns to the people of the state." *Leschi v. Highway Comm'n*, 84 Wn.2d 271, 279-80 (1974).

The core of SEPA is a requirement to fully analyze projects with a significant impact on the environment. RCW 43.21C.031(1). An EIS is required for any action that has a significant effect on the quality of the environment. WAC 197-11-330. The Council has already made a determination that the proposal is likely to result in significant environmental impacts, and that an EIS is required. Washington State Energy Facility Siting Evaluation Council, Determination

[10] ASC at 2-109.

[11] Minutes from Port of Vancouver Commission Meeting (Oct. 22, 2013).

of Significance Scoping Notice, Docket EF-131590 (Oct. 1, 2013). Areas identified for analysis in the EIS include "Geology and Soils; Vegetation, Fish, and Wildlife; Environmental Heath, Noise, Risk of Fire or Explosion, Releases or Potential Release of Toxic or Hazardous Materials; Land and Shoreline Use, Population, Housing and Employment; Historic and Cultural Preservation; Aesthetics; Transportation: Vehicular, Waterborne, and Rail Traffic; Public Services and Utilities." EFSEC, Determination of Significance Scoping Notice, Docket EF-131590. Columbia Waterfront LLC supports a thorough analysis and review of these significant potential impacts.

A. The "proposal" to be reviewed under SEPA includes the use of the Port of Vancouver's internal rail infrastructure for oil delivery.

However, the EIS must also properly define the scope of the "proposal" to be evaluated through the environmental review process. WAC 197-11-060(3)(a). A "proposal" includes all actions that are "related to each other closely enough to be, in effect, a single course of action," where they "(i) [c]annot or will not proceed unless the other proposals (or parts of proposals) are implemented simultaneously with them; or (ii) [a]re interdependent parts of a larger proposal and depend on the larger proposal as their justification or for their implementation." WAC 197-11-060(3)(b).

The use of the Port's rail infrastructure for oil by rail deliveries is an integral, interdependent part of the Tesoro proposal to be evaluated in the EIS. The Port's rail infrastructure begins on Parcel 48843000[12] at the juncture of the Port's spur line and the BNSF main line. The entire length of the Port internal rail infrastructure is used to connect the oil terminal to the BNSF railway energy distribution system, and the use of this infrastructure for oil-by-rail delivery must be treated as an integral part of the Tesoro-Savage "proposal" and analyzed in the EIS. See Exhibit A.

B. The "proposal" to be reviewed should also include integral oil-by-rail transportation actions.

The potential impacts from transportation of crude by rail and by vessels must be analyzed in the EIS, because they are both "related activities" and "indirect effects" under SEPA.

The proposed terminal will not and cannot go forward without the delivery by rail of crude to the facility. Tesoro should not be permitted to avoid environmental review for the transportation of more than 130 million barrels of crude oil annually by narrowly defining the scope of its proposal so as to exclude these transportation activities. WAC 197-11-060(3)(a) (requiring agencies to "make certain that the proposal that is the subject of environmental review is properly defined"). Since the operations of the oil terminal are dependent upon oil-by-rail

[12] West Vancouver #2 Public Levee, Amos Short DLC, 4.01A.

deliveries, the terminal operations and rail transportation actions are "related to each other closely enough to be, in effect, a single course of action," where neither action will proceed in the absence of the other. WAC 197-11-060(3)(b). Appropriate environmental review requires an analysis of the impacts of all the activities related to a proposal[13] The EIS must evaluate the environmental impacts from the full scope of the Tesoro "proposal," including the impacts from railroad transportation of crude oil to the Port of Vancouver site.

Similarly, the impacts of oil trains and marine vessels must be evaluated in the EIS as indirect impacts of the oil terminal itself. Under SEPA regulations, "[a] proposal's effects include direct and indirect impacts caused by a proposal." WAC 197-11-060(4)(d). The regulations explicitly direct that environmental impacts outside the jurisdiction of the deciding agency must be considered. WAC 197-11-060(4)(b). Thus, while the transportation of oil trains on the BNSF main line may be outside the scope of the Council's *regulatory* jurisdiction, the impacts of such transportation activities are fully within the scope of the *environmental review* required by SEPA.

"[I]mplicit in the statute is the requirement that the decision makers consider more than what might be the narrow, limited environmental impact of the immediate, pending action. The agency cannot close its eyes to the ultimate probable environmental consequences of its current action." *Short v. Clallam Cnty.*, 22 Wn. App. 825, 834 (1979). For example, when considering a government action, a SEPA document must also consider the effects of private growth that may be encouraged by this governmental action. *Id.* The agency's obligation to consider the indirect impacts of the Tesoro oil terminal compels consideration of both upstream and downstream impacts, including indirect impacts from the transportation of oil by rail to the terminal, as well as from the terminal to undisclosed destinations via marine vessels.

The EIS must consider all direct and indirect impacts of the proposal, including but not limited to the environmental impacts from (1) the estimated 3,426 annual oil train trips (including returns) necessary for the transportation of the oil from North American oil fields to the Tesoro facility, and (2) the estimated 730 marine vessel transits (including returns) used for the transportation of the oil from the facility down the Columbia River, through the Pacific Ocean, and to West Coast refineries. ASC at 4-431.

Furthermore, such an analysis would be consistent with the state's treatment of similar transport by rail facilities. In light of the obligation to consider both direct and indirect impacts under SEPA, the Department of Ecology has required evaluation of upstream and downstream environmental impacts from the proposed Gateway Pacific Terminal. For this coal export facility, the agency is requiring, among other things:

[13] Wash. Dep't of Ecology, State Environmental Policy Act Handbook, Pub. # 98-114 ("SEPA

- A detailed assessment of rail transportation impacts in Whatcom County near the project site, specifically including Bellingham and Ferndale.
- An assessment of how the project would affect human health, including impacts from related rail and vessel transportation in Whatcom County.
- An evaluation of greenhouse gas emissions from terminal operations, and rail and vessel traffic.
- An assessment of how the project would affect human health in Washington.[14]

To ensure consistent application of SEPA, the Council should follow Ecology's treatment of the Gateway Pacific Terminal project with respect to the Tesoro project's potential impacts on The Waterfront, the City of Vancouver and Clark County. Thus, the Council should require (1) a detailed assessment of rail transportation impacts on Vancouver; (2) a vessel traffic study for examination of impacts in U.S. territorial waters, including a detailed risk analysis to determine the risk of an oil spill, as well as other marine traffic-related issues; (3) a detailed human health assessment covering terminal operations, as well as impacts from related rail and vessel transportation in the City and Clark County; and (4) an evaluation of greenhouse gas emissions from terminal operations, and rail and vessel traffic.

III. Specific Factors Related to the Built and Human Environment

The EIS must "describe the existing environment that will be affected by the proposal, analyze significant impacts of alternatives including the proposed action, and discuss reasonable mitigation measures that would significantly mitigate these impacts." WAC 197-11-440(6)(a). The SEPA regulations provide a broad scope of the "elements of the environment" to be considered in the EIS. WAC 197-11-444. The following discusses some of the specific elements of the environment that must be evaluated in the EIS for the Tesoro proposal. While these comments focus on impacts to the City of Vancouver and The Waterfront project, the attached Exhibit F identifies additional factors that must also be evaluated in the EIS.

A. Land Use

The master plan for The Waterfront's mixed use urban community was developed through a public process and in close collaboration between the project developer, the City, and the Port of Vancouver. Recognizing the critical importance of The Waterfront to Vancouver's future, the

---

Handbook"), 11–12 (2004).

[14] Press Release, Whatcom County, Washington State Department of Ecology, U.S. Army Corps of Engineers (Oct. 2, 2013), available at: http://www.eisgatewaypacificwa.gov/sites/default/files/content/files/EIS-PressRelease-73113.pdf#overlay-context=resources/press-room.

City, the developer, BNSF, and state and federal agencies have collectively invested $45 million in transportation improvements to facilitate the development of The Waterfront.

Increased oil train traffic immediately adjacent to The Waterfront site will cause various impacts that conflict with the development of The Waterfront in accordance with the approved master plan, including noise, vibration, aesthetics, and risk of spills. Further, the oil train traffic will conflict with the City of Vancouver's plans for development of a Waterfront Park, as user experience at the Waterfront Park will be detrimentally affected by the impacts described above. The EIS must fully assess the compatibility of the Tesoro proposal and its associated oil train traffic with the land use plans for The Waterfront and the Waterfront Park, not just the land use plans for the immediate area of the proposed terminal.

B. Recreation

The master plan for a new 7 acre Waterfront Park along the Columbia River shoreline was recently was approved by the Vancouver City Council.[15] The Waterfront Park will include a half-mile long extension of the existing Waterfront Renaissance Trail, multiple gathering areas, seating, open lawn, a pedestrian pier, a floating fishing pier, and areas for both informal and formal performances. The Grant Street Plaza and Pier would extend 100 feet beyond the shoreline, and the overwater portion would provide views of Mount Hood, the Portland West Hills, and potentially the proposed Tesoro oil terminal. A variety of funding sources have made the Waterfront Park possible. In addition to its commitment to dedicating the 7 acres of shorefront property for the Waterfront Park, Columbia Waterfront LLC has committed $3 million for park improvements. Over $2 million federal and state grant funds have also been secured.

The EIS must include consideration of the full range of impacts that the Tesoro proposal will have on recreational activities at the future Waterfront Park and along the full length of the existing Waterfront Renaissance Trail. The Tesoro facility, including the oil trains along the BNSF main line and the Port of Vancouver spur line, will likely have noise and odor impacts on the Waterfront Park that will negatively impact recreation activities at the Waterfront Park, and must be considered in the EIS. Train noise and odors[16] may also limit the appeal of festivals, farmers markets, and concerts planned for the Waterfront Park, negatively impacting user experience. Due to a slight bend in the Columbia River between the Waterfront Park and the Tesoro oil terminal, the oil terminal may also be visible from the Waterfront Park and its piers, and noise from the oil tanker loading facility will travel unmuffled across the water to the

[15] Minutes of Vancouver City Council Meeting (Nov. 4, 2013).

[16] High concentrations of hydrogen sulfide, with its "characteristic rotten egg odor with an odor threshold as low as 10 parts per billion or even less," in the crude oil proposed for delivery to the facility are a particular concern. ASC at G-28.

Waterfront Park. Noise, odor, and visual impacts analysis included within the EIS should specifically evaluate impacts from passing trains and the oil terminal activities on the Waterfront Park.

C. Transportation

The EIS must include an evaluation of the impacts of the Tesoro facility on railroad transportation. At a minimum, the proposal will result in a significant increase in train traffic through Vancouver and past The Waterfront. In 2012, the Port averaged about one unit train every two days.[17] At full build-out, "[c]ounting the return trips of empty trains, facility operations will result in up to 12 trains per day and 3,426 trains per year on the section of the BNSF rail lines that serve the Port." ASC at 4-431. This means that up to 17.7 miles of new oil train cars will travel through downtown Vancouver daily, with significant impacts on local transportation systems that must be considered in the EIS.

D. Aesthetics

The Tesoro proposal will have significant aesthetic impacts on the City of Vancouver and The Waterfront. The oil terminal loading and unloading operations may be visible from the Waterfront Park, including the Waterfront Renaissance Trail and the Grant Street pier. Oil trains passing through downtown Vancouver will be visible from numerous downtown locations, including the existing Vancouver City Hall. These mile and a half long oil trains will also be visible from The Waterfront property, including numerous residential structures planned for the site and the Waterfront Park. Hydrogen sulfide odors from the oil cars are also likely to cause aesthetic harms to The Waterfront.

The EIS must include visual and odor impact analyses that clearly document the aesthetic impact of the oil terminal facilities on the Waterfront Park and the Grant Street Pier planned for the Columbia Waterfront property. Visual and odor impacts on The Waterfront community and Vancouver City Hall from passing oil trains must also be assessed in the EIS.

E. Public Services

With up to 12 unit trains per day needed to meet the demand of the Tesoro-Savage facility, significant impacts on public services in Vancouver and communities throughout the state are likely to occur. In particular, there are 18 private and 8 public at-grade crossings within the City of Vancouver. Thus, emergency services, including ambulances, fire trucks and police vehicles, will face significant delays in access to parts of Vancouver and other communities bisected by

[17] A. Corvin, Port of Vancouver Jockeys for Oil Transfer Terminal, The Columbian (June 23, 2013), available at: http://www.columbian.com/news/2013/jun/23/oil-transfer-terminal-port-of-vancouver-jock/.

rail lines used for the oil trains. Emergency services to some residential areas along the Columbia River could be completely cut off for long periods of time by lengthy, slow-moving or stopped oil unit trains.

The SEIS must include a complete evaluation of the effects of the oil trains on emergency response time. Specifically, the SEIS must include estimates of total response time delays for ambulances, fire trucks, and police vehicles during the 10 to 20 year estimated life of the Tesoro-Savage Facility. Inevitably, delayed emergency response time will lead to medical complications, loss of life, and property damage. Quantitative analysis should be employed to estimate the economic cost of delays in emergency service response time, as well as the number of lives likely to be lost as a result of such emergency response delays.

F. Noise and Vibration

The oil trains travelling to the Tesoro-Savage facility will pass through numerous Washington communities, including the City of Vancouver. Noise analysis should be conducted as part of the SEPA environmental review to quantify the noise impacts of these trains on the affected communities. At The Waterfront, 10 of the 22 city blocks and numerous residential structures will be within 100 feet of both the BNSF main line and the Port of Vancouver spur line on which the oil trains are proposed to pass. See Exhibit B. An assessment of train noise including engine noise, vibrations, horn noise, and brake noise should be included as part of the EIS. This should include quantitative modeling of the noise generated by the trains at a location 100 feet south of the juncture between the BNSF main line and the Port of Vancouver spur line.

The noise assessment should not only document the maximum noise anticipated to be generated by the oil trains, but should assess the timing, duration and frequency of the noise. Particular attention should be paid to the frequency of trains that will be traveling through the City of Vancouver during night hours.

G. Health and Safety

1. Risk of explosion

The Tesoro proposal presents numerous health and safety risks to the people of Washington. Among the most concerning is the significant risk of an explosion occurring along the oil train route or at the facility itself. Again, 10 of the 22 city blocks comprising The Waterfront will be within 100 feet of both the BNSF main line and the Port of Vancouver spur line. See Exhibit B. The risks to The Waterfront and downtown Vancouver must be fully assessed in the EIS.

As the number of oil trains travelling on North American railroads has increased over the past few years, the number of catastrophic accidents has also increased. Several recent examples of

train accidents show that the safety of oil-by-rail is not assured and must be assessed in the EIS.[18] On July 6, 2013, the risk of oil-by-rail caught the world's attention when a train carrying crude oil derailed, causing multiple explosions and a large fire that killed 47 people and left the town of Lac-Megantic, Quebec in ruins. While the investigation into that disaster is ongoing, initial reports from the Canadian Transportation Safety Board indicate that at least some of the Bakken crude being transported was significantly more volatile than labeled, and that "t[t]he lower flash point of the crude oil explains in part why it ignited so quickly once the Class 111 tank cars were breached."[19] In response, U.S. regulators launched Operation Classification, known as "The Bakken Blitz," "an inspection operation to verify that crude oil is being properly classified in accordance with federal regulations."[20]

Prior to this explosion, the American Association of Railroads (AAR) had petitioned the Pipeline Hazardous Materials Safety Administration (PHMSA) to adopt more stringent requirements for Class 111 (DOT-111) rail cars used to transport more volatile crude oils.[21] When the railroad industry itself specifically requests stricter regulations regarding the design of tank cars used to transport volatile crude oil, it is clear that the current regulations are inadequate to ensure the safe transport of crude oil along American railways and through cities and towns, such as Vancouver. Industry subsequently voluntarily adopted stricter standards than required by federal rules for new tank cars carrying more volatile classes of crude oil, the CPC-1232 standard.[22] AAR has estimated that while there are approximately 19,000 DOT-111 cars in service that meet the CPC-1232 standard, approximately 78,000 DOT-111 cars in service do not meet that standard.[23]

---

[18] In one recent example, eleven tank cars carrying crude oil burst into flames after derailing in rural Alabama on November 8, 2013. E. McCallister, Train Carrying Crude Oil Derails, Cars Ablaze in Alabama, REUTERS (Nov. 8, 2013), available at: http://www.reuters.com/article/2013/11/08/us-crude-train-explosion-idUSBRE9A70Q920131108.

[19] Transportation Safety Board of Canada, Rail Safety Advisory Letter 13-13 (Sept. 11, 2013), available at: http://www.tsb.gc.ca/eng/medias-media/sur-safe/letter/rail/2013/r13d0054/r13d0054-617-13-13.asp.

[20] C. Quarterman, PHMSA Administrator, U.S. Dep't of Trans., Rail Safety is a National Priority (Sept. 4, 2013), available at: http://www.dot.gov/fastlane/rail-hazmat-safety-national-priority.

[21] Petition P-1577 (discussed in Comments of the American Association of Railroads and the American Short Line and Regional Railroad Association, Docket No. PHMSA—2012—0082: Hazardous Materials: Rail Petitions And Recommendations to Improve the Safety of Railroad Tank Car Transportation (RRR) ("AAR Comments"), available at: http://www.scribd.com/doc/186006741/PHMSA-ANPRM.

[22] AAR Comments at 3.

[23] *Id.* at 10–11.

In light of the Lac-Megantic disaster, the AAR has requested that federal standards be tightened beyond the existing voluntary CPC-1232 standards.[24] In written testimony provided to the PHMSA, AAR stated that the proposed revisions to the tank car standards "would significantly decrease the probability of a release in an accident."[25] Specifically, the improvements would reduce the probability of releases by increasing puncture resistance, reduce releases from top fittings and bottom outlets, and require thermal protection to reduce the probability of a tank car rupture resulting from fire. The industry has further expressed support for "retrofitting existing cars and an aggressive phase-out schedule for cars that cannot meet retrofit requirements."[26]

In September 2013, the PHMSA issued an Advance Notice of Proposed Rulemaking, a first step towards tightening the DOT-111 regulations for tank cars carrying hazardous liquids, such as crude oil.[27] However, the outcome of such regulatory efforts, including the critical issue of whether existing cars will be rapidly retrofitted or phased out of service, remains uncertain.

While Tesoro has not identified the exact source of the oil proposed for delivery to the Port of Vancouver facility, much of the oil will likely be sourced from the Bakken formation, the source of the oil which exploded in devastating fashion in Lac-Megantic.[28] Given industry and regulatory recognition that current safety standards are insufficient, the EIS must take a hard look at the risk of an explosion from a 120-car oil train carrying highly volatile (Packaging Group I) crude oil in pre-2011 Class 111 cars in the event of a train derailment or collision. This analysis should take into account the densely populated areas traversed by the proposed oil trains, including The Waterfront. See Exhibit B. Potential impacts from such a derailment and explosion that must be assessed include air quality impacts, water quality impacts, human health impacts, and transportation impacts.

There is also a risk of explosion during transfer and storage activities on the Port site. The EIS must assess the impact of an uncontrolled fire in one or more of the large ASTs. In particular, human health impacts on Port of Vancouver workers, residents of the Fruit Valley neighborhood, and residents in The Waterfront and downtown Vancouver areas must be assessed under different environmental conditions, including various wind directions and speeds.

---

[24] After the Lac-Megantic explosion, Canadian regulators have also called into question "the adequacy of Class 111 tanks cars for use in transporting large quantities of low flash flammable liquids." Transportation Safety Board of Canada, Rail Safety Advisory Letter 13-13 (Sept. 11, 2013).

[25] *Id.* at 8.

[26] *Id.* at 11.

[27] U.S. Dep't of Transp., Pipeline Hazardous Materials Safety Administration, Hazardous Materials: Rail Petitions and Recommendations To Improve the Safety of Railroad Tank Car Transportation (RRR), 78 Fed. Reg. 54849 (Sept. 6, 2013).

[28] Transportation Safety Board of Canada, Rail Safety Advisory Letter 13-13 (Sept. 11, 2013).

In addition to the inherent risks of explosion associated with handling large volumes of flammable, volatile liquid crude oil, the Port of Vancouver site is located in a seismically active region "capable of producing earthquakes of magnitude (M) 9 or greater." ASC at 2-192, 3-228. Further, the proposed site is "located in a high liquefaction-susceptible soil area." ASC at 3-233. The EIS must fully assess the risks of a large-magnitude earthquake on the Tesoro project site, and the potential for fire, explosion, or oil spill as a result of an earthquake. Particular attention must be paid to the risk of soil liquefaction, and the potential for resulting structural damage to both on-site oil trains and oil storage tanks.

2. Toxic air emissions

The Tesoro proposal involves the daily handling of 360,000 barrels of oil, requiring the transfer of oil from approximately 400 to 480 train cars to the onsite oil storage tanks. Tesoro accepts that handling such large quantities of oil will inevitably lead to emissions of toxic air pollutants. In the aggregate, two and a half *tons* of Hazardous Air Pollutants will be discharged annually by the facility's normal operations, including Acetaldehyde, Benzene, Carbon Monoxide, Cyclohexane, Naphthalene, and many others. ASC at 5-476 to 5-477 & Fig. 5.1-14.

Mitigation measures should be considered in the EIS to reduce the potential for such emissions, including confining oil transfer activities to indoor facilities with emissions capture and control technologies. While mitigation measures could potentially reduce the emissions from the proposed facility, the Council must recognize that toxic air emissions cannot be completely mitigated, and that some emissions will be inevitable.

The EIS must also take a hard look at the potential impacts of increased emissions of air pollutants from the Tesoro facility on Port workers, as well as Vancouver residents. Particular attention must be paid to impacts on the nearby Fruit Valley neighborhood, as well as on the thousands of workers and residents planned for The Waterfront community.

The oil trains used to deliver oil to the Port of Vancouver will also generate emissions due to the combustion of diesel fuel. A full assessment of the emissions from these trains must be included within the scope of the EIS. This assessment should include a detailed assessment of the potential impact of emissions from the trains on the health and welfare of the residents of the City of Vancouver and The Waterfront community.

H. Human environment

The EIS must include a detailed examination of the impacts of the Tesoro proposal on the local economy. While Tesoro's proposal suggests that up to 110 jobs may be created for a period of 10