

## TERMINAL 5 CARGO WHARF REHABILITATION, BERTH DEEPENING AND IMPROVEMENTS PROJECT

A public scoping meeting on the environmental impacts and other issues to be addressed in the Draft Environmental Impact Statement (DEIS) for the Terminal 5 Cargo Wharf Rehabilitation, Berth Deepening and Improvements Project was held on November 12, 2015 at the Hall at Fautleroy, 9131 California Avenue Southwest, Seattle. The SEPA scoping comment period began on October 22, 2015 and ended on November 23, 2015. Forty-eight members of the public attended the meeting. Three written comments were received and seventeen speakers provided comment at the scoping meeting. Seventy-nine comments were received via email or via the online open house website. A total of ninety-six comments were received during the scoping process. A list of both oral and written comments received is provided below.

### **Agencies**

Comment 1. City of Seattle Department of Transportation

Comment 2. King County Department of Natural Resources and Parks, Wastewater Treatment Division

Comment 3. Puget Sound Clean Air Agency #1

Comment 4. Puget Sound Clean Air Agency #2

### **Organizations/Businesses**

Comment 5. International Longshore and Warehouse Union (ILWU) 19

Comment 6. Puget Soundkeeper

Comment 7. West Seattle Transportation Coalition #1

Comment 8. West Seattle Transportation Coalition and Seattle Green Spaces Coalition #2

Comment 9. West Seattle Transportation Coalition and Seattle Green Spaces Coalition #3

Comment 10. [www.terminal5group.com](http://www.terminal5group.com) #1

Comment 11. [www.terminal5group.com](http://www.terminal5group.com) #2

## **Individuals**

- Comment 12. Anderson, Alex
- Comment 13. Andrus, Gregg
- Comment 14. Barker, Deborah
- Comment 15. Barnes, Linda
- Comment 16. Blackwell, JC
- Comment 17. Borrow, James
- Comment 18. Brush, JoAnn
- Comment 19. Buckingham, Linda
- Comment 20. Burke III, Hudson
- Comment 21. Burke, Sharon
- Comment 22. Carlson, Andy
- Comment 23. Carney, Eileen
- Comment 24. Cera, Nancy
- Comment 25. Chattin-McNichols, John
- Comment 26. Chitayat, Noam #1
- Comment 27. Chitayat, Noam #2
- Comment 28. Couch, Pauline
- Comment 29. Curry, Andrew
- Comment 30. Dantona, Dominick
- Comment 31. Davis, Patricia #1
- Comment 32. Davis, Patricia #2
- Comment 33. Davis, Patricia #3
- Comment 34. Davis, Patricia #4
- Comment 35. Davis, Patricia #5
- Comment 36. De Spain, Nancy

Comment 37. Dey, Mike  
Comment 38. Doan, Charles #1  
Comment 39. Doan, Charles #2  
Comment 40. Dunn, Kathleen  
Comment 41. England, Leonard  
Comment 42. Freeman, Michael  
Comment 43. Hubbard, Thomas  
Comment 44. Jacobs, Mark  
Comment 45. Johnson, Mark  
Comment 46. Kelleher, K.  
Comment 47. Kohmetscher, Mark  
Comment 48. Krueger, Ray  
Comment 49. Lee, Henry  
Comment 50. Manwaring, Jean  
Comment 51. Mills, Meredith  
Comment 52. Moore, Bret  
Comment 53. Noyes, Thomas  
Comment 54. Olson, Dennis  
Comment 55. Osborne, Ron  
Comment 56. Overbey, Simon  
Comment 57. Poor, Glen  
Comment 58. Price, Sharon  
Comment 59. Ptak, Tim  
Comment 60. Ptak, Victoria  
Comment 61. Robertson, Andrew  
Comment 62. Rusch, Roxane

Comment 63. Russell, Lesa  
Comment 64. Schwarzkopf, Kim  
Comment 65. Seppi, Arnold  
Comment 66. Shampain, Robert  
Comment 67. Swanson, Robert  
Comment 68. Sweigart, Wendy  
Comment 69. Thureson, Anne  
Comment 70. Tran, Kim  
Comment 71. Wang, Lin  
Comment 72. Ward, Larry  
Comment 73. Winocur, Marc  
Comment 74. Wojciechowski, James #1  
Comment 75. Wojciechowski, James #2  
Comment 76. Wojciechowski, James #3  
Comment 77. Wojciechowski, James #4  
Comment 78. Wojciechowski, James #5  
Comment 79. Wong, Eugene

**Transcript of November 12, 2015 Public Scoping Meeting**

Comment 80. Davis, Patricia #6  
Comment 81. Wojciechowski, James #6  
Comment 82. Johnson, Mark #2  
Comment 83. Lee, Henry #2  
Comment 84. Borrow, Jim #2  
Comment 85. Noyes, Thomas #2  
Comment 86. Barker, Deb #2

Comment 87. Puget Soundkeeper #2

Comment 88. Krueger, Ray #2

Comment 89. Rusch, Roxane #2

Comment 90. Borrow, Jim #3

Comment 91. Davis, Patricia #7

Comment 92. Barker, Deb #3

Comment 93. Noyes, Tom #3

Comment 94. Rusch, Roxane #3

Comment 95. Johnson, Mark #3

Comment 96. Krueger, Ray #3



City of Seattle

Edward B. Murray, Mayor

Department of Transportation

Scott Kubly, Director

November 23, 2015

Paul Meyer  
Port of Seattle  
Environmental Review and Permitting  
P.O. Box 1209  
Seattle, WA 98111

Dear Mr. Meyer:

Thank you for the opportunity to comment on the scope of your Environmental Impact Statement (EIS) for the Terminal 5 Cargo Wharf Rehabilitation, Berth Deepening and Improvements Project. Please see the attached for a list of issues the Seattle Department of Transportation would like to see addressed in the EIS—our primary concern is the impacts the project could have on future transportation operations in West Seattle, Harbor Island, and the West Seattle Bridge Corridor roadways between West Seattle and I-5.

We look forward to coordinating with the Port of Seattle and the Seaport Alliance as you continue to design and evaluate the impacts of your project.

Sincerely,

A handwritten signature in black ink that reads "Ron Borowski".

Ron Borowski  
Freight Program Analyst  
Transportation Operations Division

Cc: Mark Bandy, Director, Transportation Operations Division  
Bill LaBorde, Sr. Policy Advisor, Policy and Planning Division

**City of Seattle Department of Transportation**  
**Comments on the Scope of Environmental Impact Statement (EIS)**  
**Terminal 5 Cargo Wharf Rehabilitation, Berth Deepening and Improvements Project**  
**November 23, 2015**

**Background**

An Environmental Impact Statement (EIS) provides an objective analysis of the likely significant environmental impacts, feasible alternatives, and measures that would avoid or minimize adverse environmental impacts. The document will identify probable significant impacts, mitigation measures and licenses (none identified at this time).

The Terminal 5 Cargo Wharf Rehabilitation, Berth Deepening and Improvements Project is a major undertaking with long term implications. Seattle has had several historic instances of substantial traffic, truck and emergency vehicle delays in advance of T-5 due to Port operations. New traffic generated by the project should avoid degrading future operations on roadways and at intersections in West Seattle and on Harbor Island. Appropriate mitigation measures should be identified and committed to.

At the same time Seattle wants to maintain the velocity and efficiencies of Port truck movements, SDOT expects that truck mobility and freight rail access be maintained, if not improved, for West Seattle and Harbor Island non-port industrial uses, including those along Spokane St, W Marginal Way, and E Marginal Way.

Since the proposed action is expected to increase marine volumes, size of ships, container volumes, truck volumes, potential freight (truck and rail) noise, external overnight truck parking demand, truck peaking, and revised truck and rail access, the EIS should place substantial emphasis on transportation and noise impacts, and appropriate mitigation.

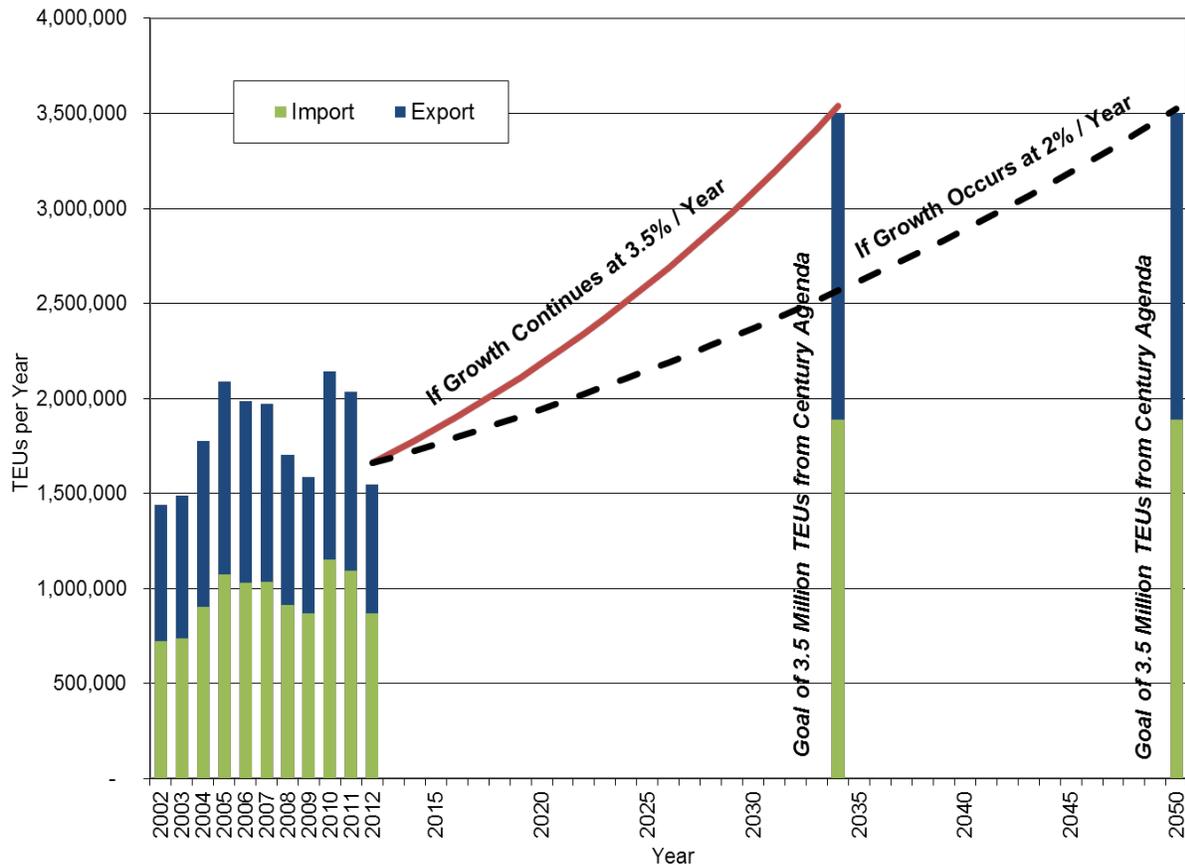
1. Population Growth Will Continue. West Seattle's population was 86,800 persons in 2010, 14% of Seattle's population. Population is growing, as evidenced by extensive multi-family unit development, similar to overall city growth.
2. Traffic Demand:
  - West Seattle Bridge carries 93,000 vehicles per day (vpd) (2013 SDOT Traffic Flow Map).
  - Spokane Street Viaduct carries 77,200 vpd.
  - Lower Roadway carries approximately 13,100 vpd across the East Duwamish Waterway.
  - S Spokane St east of SR 99 carries approximately 9,200 vpd.
3. Traffic Growth. The West Seattle Bridge corridor has the highest traffic demand out of all city streets. The combined upper and lower roads accommodate up to 106,000 vehicles per day.
  - Traffic growth on West Seattle Bridge and Spokane Viaduct expected to increase 26-33% over 20 years, a portion of which will be over the next five years (Seattle Freight Access Project, 2015).
  - Truck traffic is projected to grow 72% on Spokane St Viaduct over 20 years.
  - West Seattle is an access constrained community with limited connections to Seattle and South King County; road capacity is fixed.
  - The City of Seattle does expect to increase east/west street capacity in the future on the West Seattle Bridge, Spokane St Viaduct Lower Roadway and Swing Bridge.

4. Modal priorities on Lower Spokane St don't favor residents and businesses. West Seattle trips take a lesser priority to other modal priorities of ships, trains and trucks institutionalized by the Coast Guard, Federal Railroad Administration and International Trade:
- Trains cross and occupy city streets when they need to, whether on mainline or local tracks.
  - Larger ships sailing schedules determine when Spokane St Swing Bridge opens to marine traffic.
  - Port customers bring their ships in and out as demand and conditions permit, generating truck traffic and congestion on various segments of S Spokane St.
  - Past, present and future - Port truck related queues form at various times due to terminal processing conditions and management decisions.
  - Cumulative modal conflicts make Lower Spokane St a very difficult route to take. It's unreliable. S Spokane St is a street with cumulative traffic impacts.
  - The Port has asked City to allow heavier trucks on Lower Spokane St roadways and Duwamish River Crossings west of E Marginal Way as part of the Port's Duwamish area Heavy Haul Network.

#### **Planning Horizon**

- What planning horizon will be used in the environmental assessment, including transportation demand and analysis elements? Could planning horizons accurately reflect the expectation of the Port of Seattle Century Agenda assumptions for varying growth rate assumption for increase in container activity and associated ground transportation demand?
- Can multiple planning horizon years be used to accurately address the anticipated conditions in the mid-term, 2035, regional planning horizon year of 2040, and 2050 extended forecast of agenda achievement? See Figure 1.
- How are the EIS alternatives consistent with the Port of Seattle Growth long term growth goal of achieving 3.5 million twenty foot equivalent units (TEUs) per year?
- Identify what the 2015 Container Terminal Access Study (CTAS) findings and recommendations are that apply to the expansion of T-5 functions, transportation demand and transportation impacts.
- Discuss data and input from the CTAS.
- Trip generation and distribution from assumed site developments.
- Evaluate the cumulative demand on city streets for traffic, trucks from combined port terminals (T-5, 18 and 115), and marina functions.

**Figure 1. Container Forecast**



Source: Port of Seattle Century Agenda, and Seattle Industrial Areas Freight Access Project, 2015

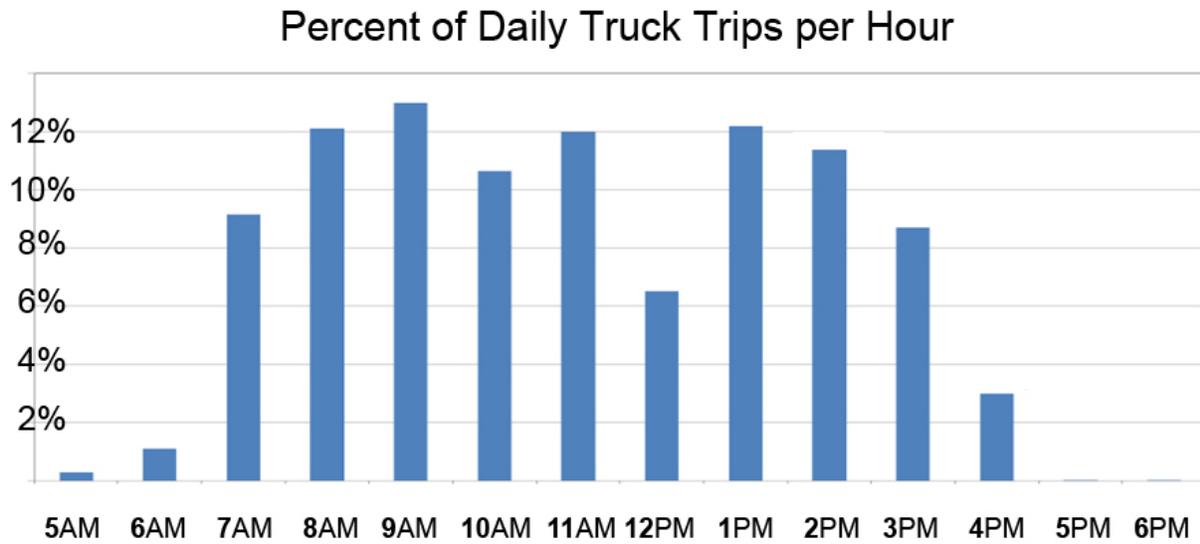
**Traffic Queues**

- SDOT goal is minimize if not eradicate Port related truck queues and congestion at all times on streets approaching and adjacent to T-5 from all directions, S Spokane St, West Marginal Way S, SW Admiral Way, and Harbor Ave SW. Unfortunately, there had been the need to police trucks approaching T-5 in order to respond to traffic safety issues, congestion and the inability of the city to open the Swing Bridge for marine traffic because trucks were queuing on the bridge proper. Measures had been taken at the time by the city, enforcement staff, the terminal operator and the port to seek solutions. See Figure 2 on typical truck queuing activity.
- Serious queues have also occurred when system data processing capacity has malfunctioned and during periods when labor actions and work slowdowns, that have backed up traffic on Interstate 5.
- Super ships (new super-post-Panamax ships (15,000+ TEUs)), more than twice the size of existing ships (6-8,000 TEUs), could arrive two at a time at T-5, increasing the extent of truck demand peak periods and congestion on city streets. Annual cargo volume may remain the same even if Terminal 5 is served by increased capacity vessels. However, potential changes in loading and unloading operations that could occur due to the use of larger capacity ships, or other technology changes that are presently unknown, would be important to analyze and evaluate.
- Determine how proposed increase in ship sizes, container crane capacity and wharf handling equipment can create sharper peaking in the in volume of trucks. Evaluate how truck peaking in and

out of the terminal can increase, evaluate monthly and daily peaking expectations and measures to maintain truck and container processing without compromising the approach streets and river crossings.

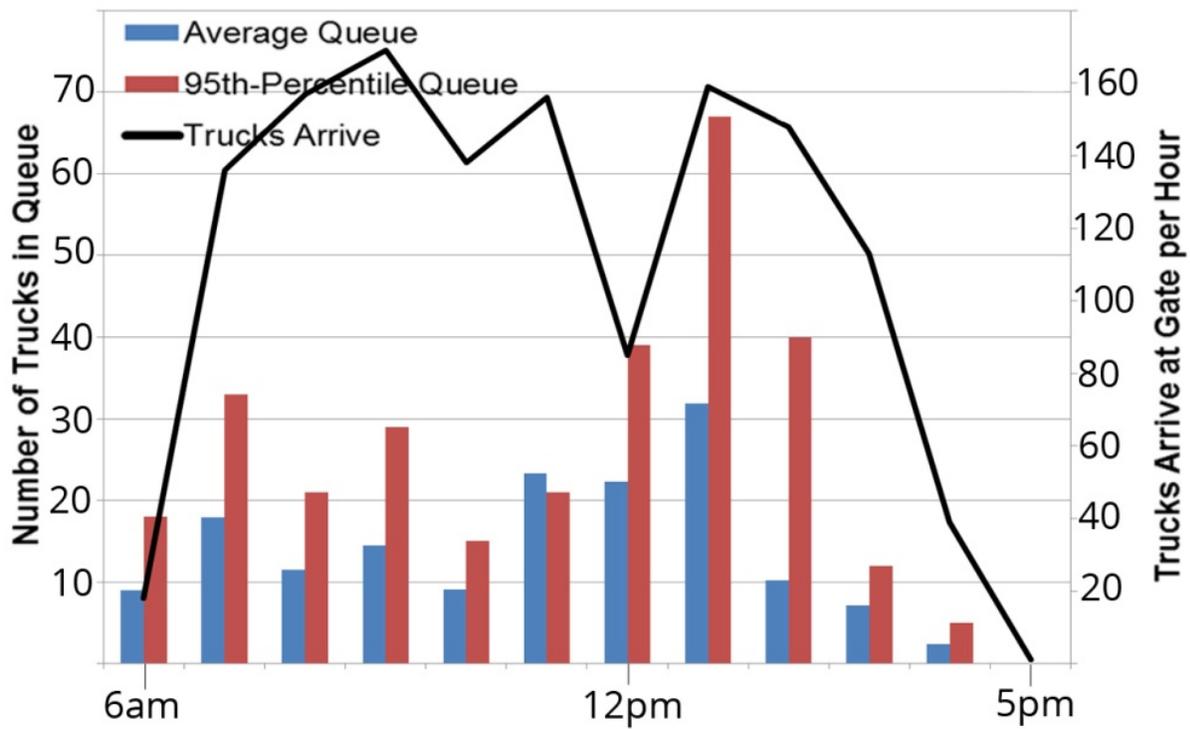
- Determine the cumulative traffic impacts of increased traffic and congestion created on streets, rail lines and street crossings by increased container, bulk and other freight movements generated by T-5, T-18 and T-115 through the planning horizons chosen for the assessment.
- Evaluate how openings of the Lower Spokane St Swing Bridge would be affected by truck demand peaking and variations in operational hours to accommodate that truck peaking.
- Determine how the Port would achieve this. Actions could include relocation of queue storage to Port terminals and other non-arterial street locations. For example, the Port of Tacoma maintains a queue storage (hold and release) facility on the Port property. Other strategies that should be evaluated include:
  - Explore the possibility for queuing in other area public right of way and Port properties
  - Increase the staffing of the security check point processing functions by adding security staff and processing equipment
  - Relocate trucks to other available T-5 gates
  - Determine if higher technology applications can speed truck throughput
  - Institute protocol between city, port and terminal operator to identify and manage queues through a chain of command process for notification and queue management
  - Keeping the gates open during lunch periods
  - Implementing a reservation system to reduce congestion
  - Open the gates during off-hours, and to take advantage of low peak demand and conflicts with other traffic. Include expanding “hoot owl” gate operations
  - Evaluate expanded use of on-dock rail for container shipment, including expansion of on-dock capacity and measures to operate the rail functions more efficiently. Develop procedures for handling reoccurring commercial vehicle backups on city streets: prepare response plans, and pre-plan staging areas, traffic control, etc.
  - Additional measures such as extra staffing, flexible staff schedules, extended gate hours could be implemented by the terminal operator to prevent all queuing during peak periods
  - Manage the ship arrival schedules for the larger ships in order to avoid egregious truck demand peaking and congestion on city streets and state highways
  - Traffic evaluations should be done for time periods that reflect all traffic demand outside T-5. Besides performing traffic analysis for the typical commuter peak periods, Seattle requests that similar level of additional analysis be performed for Port truck arrival and departure peak periods, which experience has indicated are not aligned with typical peak periods. For example, see Figure 3 for this recent chart on future queues prepared for T-18, an adjacent terminal.

Figure 2 Distribution of truck arrivals at all Port terminals by time of day



Source: Terminal 18 Bathroom Facility Study, 2015

Figure 3 **Future Queues**



Source: Terminal 18 Bathroom Facility Study, 2015

### **Emergency response**

- Evaluate the impact for the various planning horizons that truck and rail movements will have on emergency response capability to T-5 and land uses along the routes servicing T-5 between SR 99 and West Seattle, including the Harbor Island fuel tank farms. Discuss how minimum agency response time property access can be maintained to land uses along the approach routes.
- Incident management - Port should consider sharing Class C tow truck capability to clear disabled larger vehicles on T-5 and on vicinity arterial streets.
- Describe how communications interconnect between fire, police and other emergency providers and how communication protocols can be improved among agencies.

### **State and Regional Plans**

- Address relationship to the state freight plan network (including first- and last-mile connections)
- Address recommendations in recent Industrial Area Freight Access Project and current Freight Master Plan networks.
- Consider impacts to planned systems in the analyses
- Evaluate how the project supports the implementation of the State and regional freight plans for highways of significance and first- and last-mile connectors.

### **Intelligent Transportation Systems**

- Transportation evaluation should include a specific Intelligent Transportation Systems (ITS) element as potential mitigation measures that the Port, in coordination with other agencies, could implement to improve traveler information, and decrease travel delay. This is a category that holds great promise to improve the velocity of freight through the Seattle south harbor area.
- Provide ITS data readers and Variable Message Sign (VMS) messages at locations where drivers can make and execute decisions to take another route to bypass chokepoints.

### **Overnight Truck parking**

- Evaluate project demand impacts of overnight parking for trucks, chassis and trailers off-site in the Seattle vicinity.
- Identify measures that could be implemented to minimize port truck equipment parking in adjacent residential areas and in South Seattle over all.

### **Bicycle and Pedestrian**

- Coordinate project with enhanced at-grade crossing – Alki Trail connections at five-way intersection (Delridge Way SW/Chelan Ave SW/SW Spokane Street/W Marginal Way SW and Port of Seattle Terminal 5).
- Evaluate measures to improve truck through put and safety in locations with pedestrian and bicycle facilities and activity.
- Evaluate the safety and travel time impacts on bicyclists and pedestrians imposed by both port trucks and trains along the West Seattle trail. Identify mitigation measures.
- Undertake evaluation of a pilot project to determine the feasibility of installing truck-only lanes on Lower Spokane St; and if deemed feasible, implement modifications to roadway channelization, install traffic signal and signing modifications and provide detection and VMSs.
- Evaluate Lower Spokane St chokepoints relationships and determine if travel blockages can be better coordinated between cumulative impacts of rail, trucks, and bridge openings.

### **Truck Traffic Management**

- Develop procedures for handling reoccurring commercial vehicle backups on city streets: prepare response plans, and pre-plan staging areas, traffic control, etc.
- Proceed with a Port/City agreement to develop better communications and protocols at the agency management and enforcement levels to deliver robust interagency cooperation with truck queue management and dispersal.
- Provide permits to the Port of Seattle for traffic control functions on adjacent City streets.

### **Incident Management**

- Effective incident management of accidents and congestion events is an ongoing need. Travel incidents may be created by vehicle breakdowns, collisions, and enforcement functions. Competition with other transport modes also creates unanticipated and unscheduled congestion incidents. These include West Seattle Swing Bridge opening events for marine traffic, mainline track street closures to accommodate passenger and freight trains, other local area train movements to service local business, and truck backups on Port terminal access routes.

### **Vertical and horizontal clearances**

- Evaluate if there will be Port movement impacts on current and future streets and structures with inadequate vertical and horizontal clearances. Describe how over-dimensional and over-weight trucks and cargos could be accommodated. Identify mitigation measures for expected impacts.

### **Enforcement**

- Explore cross-training Port commercial vehicle enforcement (CVE) officers with City and Washington State Patrol (CVES) in joint operations near and around the Port to reduce equipment violations and protect the City's road and bridge infrastructure.
- Describe public safety resources required to maintain safety and security based on proposed level and type of landside and marine activities.

### **Bridges**

- Coordinate with the Coast Guard and recreational marine traffic to provide the bridge operators with increased advance notice of request to open Swing Bridge.
- Coordinate with working vessel operators that are frequent users of the Swing Bridge to determine planned sailing times. Develop a relationship that will provide early warning and coordination of bridge openings should there be a traffic incident in progress.
- 1<sup>st</sup> Ave S Bridge openings - evaluate how truck traffic demand would increase on State highways serving T-5, including I-5, 1-9, SR 99, SR 509 and SR 519. Evaluate the traffic impacts of 1<sup>st</sup> Ave S bridge openings for marine traffic and the effect of the openings on port generated traffic.

### **East Marginal Way and Spokane Grade Separation**

- During the past multi-year City/Port project work program, the City identified the future need for a second lane to accommodate future increased truck volumes. This was identified in the project Memorandum of Agreement for Port transfer of the facility to the City of Seattle.

### **Rail**

- Both the Class 1 BNSF and UP Railroads have lead tracks that cross East Marginal Way south of Spokane St with connections to West Seattle. All container trains destined to or from T-5 or T-18 use these lead tracks. In addition, local industries in West Seattle and on Harbor Island also receive train shipments (e.g., rail barge, steel mill).

- Describe how many trains would be projected, their length, speed and time they could block public and private crossings.
- Evaluate freight and passenger train volumes projected to increase on the rail mainline
- Evaluate on dock and approaches rail capacity. Identify measures to increase rail productivity to accommodate ground transportation function, commensurate with reductions in future truck demand.
- Evaluate how train volumes will increase, possibly including coal, oil, natural gas and other energy commodity trains, and longer trains, increasing the mainline crossing blockage times, increasingly impacting Lower Spokane St travel reliability.
- Discuss the projected number of daily trains that would serve T-5. Describe their length, travel speed and length of time public and private crossing may be blocked.
- Abandoned rail tracks are a problem. Rail tracks cross city streets in several locations. Evaluate rail tracks that the Port owns or has responsibility for, and identify measures to remove abandoned rail and improve road conditions.
- Improve paving at rail crossings on Port access routes.
- Evaluate added demand on mainline and timing for two new east/west overcrossings.
- Evaluate rail advisory warning system to provide train blockage information to emergency services and general public about train blockage and clearance.
- Several non-mainline tracks located under the Spokane St Viaduct are often blocked by rail cars serving local businesses for extensive periods of time, resulting in unpredictable, lengthy traffic delays.
- Evaluate the process and capability for providing event data reports to the Washington State office of the Federal Railroad Administration (FRA) in order for FRA to enforce the federal maximum 20 minute train blockage rule at all South Seattle street/rail crossings.

### **Noise**

- Identify the frequency and noise impacts generated by trains that had been recently servicing T-5, and project the train volume and noise generation for future trains. Provide a profile of time of day noise will be generated and the impact on populations in West Seattle, South Seattle and greater Seattle. Describe measures to reduce train noise during evening and early morning hours.
- Determine if public and private track crossings can be closed to reduce the noise generation. Evaluate the impact of closures on the redevelopment potential of industrial properties by having potential rail access be limited or eliminated.
- Identify if nighttime container operations would generate noise impacts on nearby and upland land uses.

### **Employee Access**

- Identify projected employee parking demand and how it would be accommodated. Explore non-personal vehicle measures that may be initiated to reduce this parking and encourage alternative transportation capabilities.

### **Heavy Haul Network Permit**

- Evaluate the projected increase in demand for Heavy Haul Network permits, and heavy haul travel routes, for the EIS evaluation horizons. Determine average and peak period volumes of permitted vehicle trips and their route assignment on city streets. Identify roadway structures that would be located on the network.

- Determine the appropriate cycle of bridges and roadways load and condition assessments to monitor the impacts and improvement needs of the Heavy haul Network.

### **Public Transportation**

- Determine impacts during project construction and over the long term on transit services on the upper and lower Spokane St corridor roadways.
- Seattle supports the future expansion of higher capacity transit by rail modes. Determine if the T-5 project would impact the feasibility and cost management of high capacity transit implementation to serve West Seattle.
- Evaluate the feasibility of a vigorous transportation demand program for T-5 permanent and temporary employees to satisfy work trips by means beyond use of personal vehicles.
- Determine impacts to West Seattle Water Taxi. Determine if there will be impacts on Water Taxi routes, travel times and on-time performance related to variation in marine traffic management with the anticipated larger ships.
- Coordinate T-5 project development phases with available planning and design for the West Seattle High Capacity Transit linkage improvements.

### **Construction**

- Fully describe construction period truck, rail and marine transportation impacts and mitigation measures.

### **Regional Connections**

- Identify WSDOT plans for future I-5/ Spokane St interchange modifications. Clarify WSDOT plans and anticipate timelines for improvements.
- Improve guide signing and dynamic message signing on regional and state highways approaching T-5 and other Port terminals.

### **Restrooms**

- Evaluate projected bathroom facility demand and identify measures to maintain safe and convenient access to all T-5 workers whether they be on-site for a full shift or if they are temporary workers servicing the Port's functions.

### **Air Quality and Idling**

- The EIS should forecast air quality emissions and identify measures to minimize those emissions by limiting truck idling while trucks are waiting in line, both internally and external to the terminal.
- Provide detailed assumptions for fleet composition (road, rail, marine), traffic operations, and ongoing terminal activities to be used to evaluate likely greenhouse gas emissions

### **Mitigation**

- East Marginal Way Grade Separation and Argo Yard Truck Access, Phase 2, identify the timing for road capacity increase associated with the grade separation necessary to accommodate future truck demand. This need was identified during the preparation of the transfer agreement from the Port to the City for the grade separation.
- Evaluate the need for waterway crossing capacity expansion that would mitigate truck and rail congestion and avoid truck queuing on city streets.
- SDOT proposes that one mitigation measure would be to evaluate Lower Spokane chokepoint between I-5 and SW Admiral Way to determine if rail, truck, and bridge opening blockages can be

better managed and coordinated to avoid cumulative impacts of current and future uncoordinated random events by all three freight modes. The mutual objective would be for the lower Spokane St route to permit more efficient movement, and accommodate the increased travel demand by Pacific Rim trade and city population growth.

- Evaluate truck-only lanes on Lower Spokane St, W Marginal Way and E Marginal Way S, south of Spokane St for feasibility and impacts.
- Maintain institutional quarterly operation management meetings for agencies to exchange data and evaluate measures to improve general, port and multimodal traffic flow.

### **Institutional Responsibilities**

- Identify what the decision making and implementation role is for the Northwest Seaport Alliance as pertains to the future of the T-5 property improvements, management and operations.
- The notice and determination was issued by the Port of Seattle. Thereafter, the Northwest Seaport Alliance sponsored a scoping meeting on November 12, 2015 in West Seattle. The on-line project information is sponsored by the Alliance. The Notice referred to this site for the current online Open House: <http://t5eis.publicmeeting.info/>
- When viewing this on-line meeting site, it appears to be sponsored by the Alliance, and not the Port of Seattle. Responsibilities are unclear.
- Is the Alliance also responsible for the EIS process or is that responsibility limited to the Port of Seattle?
- Is the Alliance responsible for defining alternatives, impacts and mitigation measures for each alternative as described above?
- Would the Alliance be responsible for committing to the mitigation measures and meeting the expectations of City of Seattle licenses or other approvals?
- Is the Port of Seattle responsible for the action or is it the direct or shared responsibility with the Alliance?
- Should the City of Seattle be communicating then with the Alliance in all matters, in addition to the Port?

### **Closing**

SDOT requests that given the importance of the West Seattle Bridge corridor, both upper and lower roadways, to the quality of life of Seattle's residents that the Port, City and participating agencies cooperate in instituting an annual review of travel performance and prepare an annual report to respective elected officials, along with recommendations on improving and mitigating degradation in safety and performance. Several performance measures have already been identified in the Seattle Industrial Areas Freight Access project that can serve as the foundation for these assessments, which was recently completed by the Seattle and Port partnership in 2015.



**King County**

Department of Natural Resources and Parks

**Wastewater Treatment Division**

King Street Center, KSC-NR-0500  
201 South Jackson Street  
Seattle, WA 98104-3855

November 20, 2015

Paul Meyer  
Port of Seattle  
P.O. Box 1209  
Seattle, WA 98111

Environmental Impact Statement Scoping Comments for Terminal 5 Cargo Wharf  
Rehabilitation, Berth Deepening, and Improvements Project

Dear Mr. Meyer:

The King County Wastewater Treatment Division (WTD) has reviewed the Determination of Significance and project information for the Port of Seattle's proposed Terminal 5 Cargo Wharf Rehabilitation, Berth Deepening, and Improvements Project. There are multiple WTD conveyance facilities within and adjacent to the proposed project area. The Renton Effluent Transfer System, Section 9, is located on the Terminal 5 property. The following facilities are adjacent to the south and west end of the Terminal 5 property: the Delridge Trunk, the West Seattle Pump Station and Force Main, the Harbor Regulator Station and combined sewer overflow pipelines, the Chelan Regulator Station, and the West Duwamish Interceptor. In addition, WTD may have permanent easements or similar property rights for these conveyance facilities.

WTD is requesting that the Port of Seattle consider the potential impacts of the proposed project on these and other wastewater facilities when identifying and analyzing the impacts of project alternatives. WTD would need to be assured the right to maintain and repair our facilities, and, in the event that a facility must be relocated, new permanent easements may need to be provided.

WTD is also requesting that the Port of Seattle submit design drawings and other project information for review as design development continues so that King County staff can assess the project's impacts. Information should be sent to:

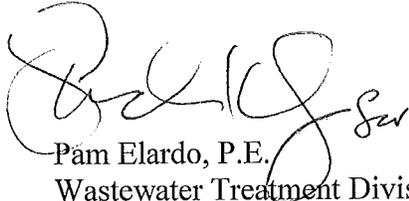
Mark Lampard  
King County Wastewater Treatment Division  
201 S. Jackson St., Suite 508  
Seattle, WA 98104

Paul Meyer  
November 20, 2015  
Page 2 of 2

Mr. Lampard can also be contacted at 206-477-5414, or [mark.lampard@kingcounty.gov](mailto:mark.lampard@kingcounty.gov).

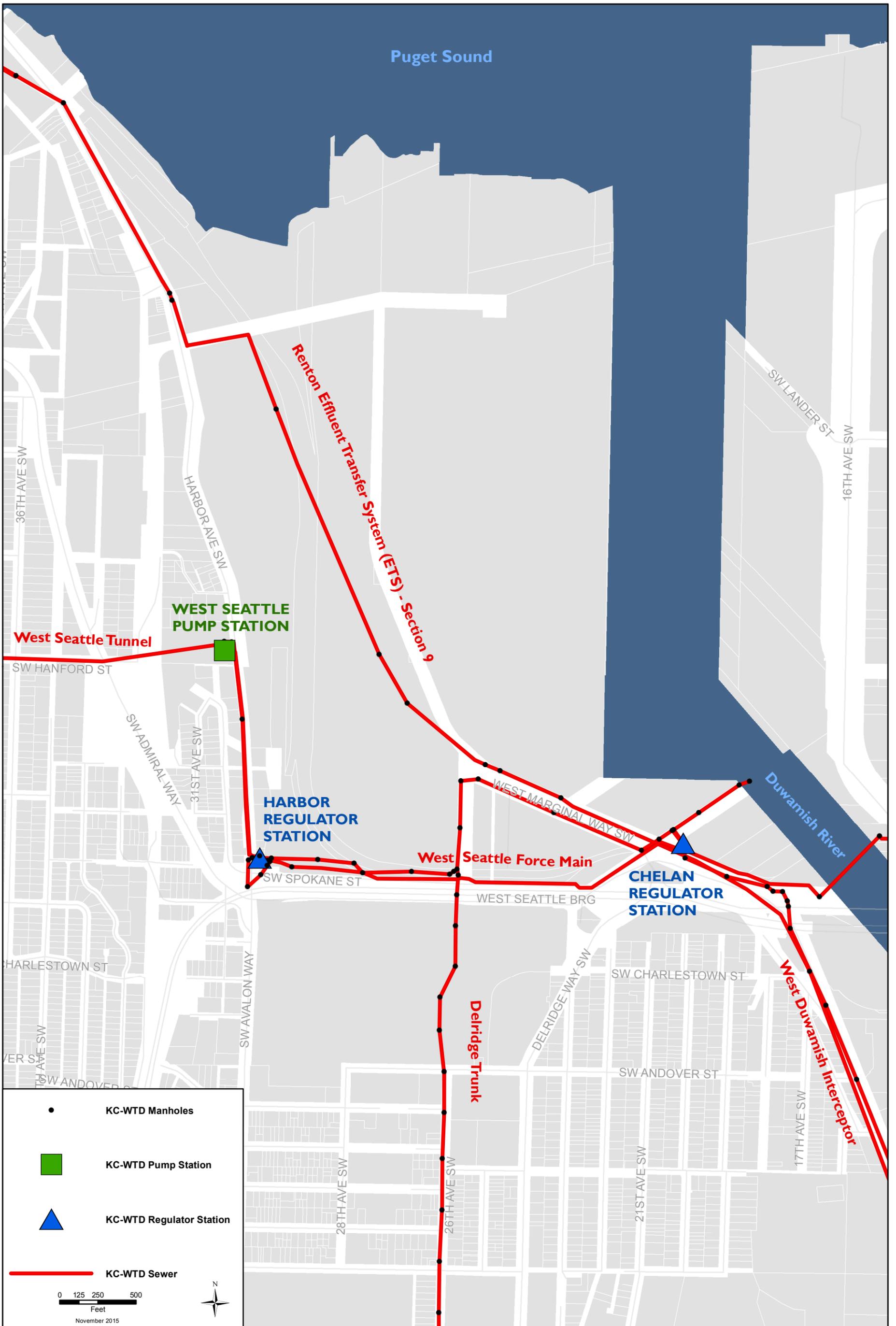
Thank you for the opportunity to review and comment on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Pam Elardo". The signature is stylized and cursive, with a large initial "P" and "E".

Pam Elardo, P.E.  
Wastewater Treatment Division Director

Enclosure



**From:** [Kathy Strange](#)  
**To:** [Port Sepa](#)  
**Cc:** [Gedlund, Janice \(NWSA\)](#); [Meyer, Paul](#); [Andrew Green](#)  
**Subject:** Scoping Comments for Terminal 5  
**Date:** Monday, November 23, 2015 5:14:26 PM  
**Attachments:** [image001.jpg](#)  
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[image004.jpg](#)  
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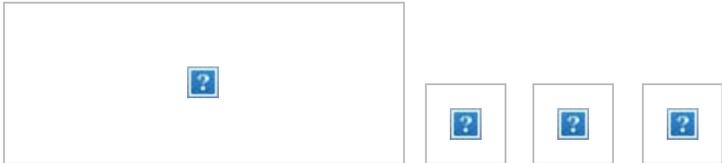
Please see our attached letter that shows our intent to provide scoping comments on the Terminal 5 EIS before the end of December.

Please let me know if you have questions.

Thank you,  
Kathy

**Kathy Himes Strange, P.E., M.S.**

Manager, Technical Analysis  
206.689.4095 | Toll free 800.552.3565 | [KathyS@pscleanair.org](mailto:KathyS@pscleanair.org)  
1904 Third Avenue, Suite 105 | Seattle, WA 98101



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November 23, 2015

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Paul Meyer  
Manager, Environmental Permitting and Compliance  
Port of Seattle  
P.O. Box 1209  
Seattle, WA 98111

Re: *Terminal 5 Environmental Impact Statement Scoping*

Dear Mr. Meyer,

Thank you for the opportunity to provide scoping comments on the Terminal 5 Improvements Environment Impact Statement.

As discussed, the Puget Sound Clean Air Agency will provide input before the end of December, to help ensure that this project and its alternatives stay true to the intent of the Northwest Ports Clean Air Strategy.

Our input will identify priority pollutants to be included in any air quality modeling, including diesel particulate matter. We will also include recommendations on the geographic scope of air emissions to be included in the analysis.

We look forward to working with you to ensure that any improvements to Terminal 5 protect air quality and the health of our communities.

Sincerely,



Andrew Green  
Director, Air Quality Programs



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Seattle, WA 98101-3317

December 24, 2015

Paul Meyer  
Manager, Environmental Permitting and Compliance  
Port of Seattle  
P.O. Box 1209  
Seattle, WA 98111

Re: *Terminal 5 Environmental Impact Statement (EIS) Scoping*

Dear Mr. Meyer,

Thank you for the opportunity to provide scoping comments on the Terminal 5 Improvements Environment Impact Statement (EIS).

*Priority Air Pollutants*

We focus our comments on four priority pollutants associated with this project: diesel particulate matter (DPM), fine particulate matter (PM<sub>2.5</sub>), nitrogen dioxide (NO<sub>2</sub>), and greenhouse gases (GHG). DPM is a known carcinogen and drives cancer risk from air pollutants in the Puget Sound region – there is no known safe exposure threshold for DPM. PM<sub>2.5</sub> and NO<sub>2</sub> are harmful criteria pollutants associated primarily with primarily cardiac and respiratory effects. For DPM, PM<sub>2.5</sub>, and NO<sub>2</sub>, it’s important to understand how local emissions and concentrations could be impacted as a result of this project and its alternatives. We prioritize greenhouse gases because deep CO<sub>2</sub> emissions reductions will be necessary across all sectors of the economy to meet the state’s climate goals. In this letter, we collectively refer to the four as priority pollutants.

*Highly Impacted Communities*

This project and its alternatives will take place adjacent to greater Duwamish communities that we have identified as “highly impacted communities.” Residents in these communities experience higher exposure to air pollutants, face greater socioeconomic barriers to access decision-making processes, and experience worse health outcomes than other areas of our jurisdiction. We prioritize reducing harmful air pollutant emissions to improve public health in these areas.

To help ensure that this project and its alternatives protect our highly impacted communities and stay true to the intent of the Northwest Ports Clean Air Strategy, we request the following be included in the EIS for this project:

*An Emissions Inventory, Air Quality Modeling, and Evaluation of Health Impacts*

Priority pollutants should be inventoried and modeled for at least the peak construction year, the first full year of operation, and the first year of eventual peak capacity operation.

For geographic scope, inventories and subsequent modeling should include the emissions from:

- Ocean Going Vessels in transit within 10 kilometers of Terminal 5
- Ocean Going Vessels hoteling – with variations of shore power availability
- Harbor vessels
- Cargo Handling Equipment – with variations of hybrid electric
- Drayage truck traffic within 5 kilometers of the Terminal
- Rail traffic within 5 kilometers of the Terminal

Air quality modeling should include the concentrations for priority pollutants DPM, PM<sub>2.5</sub>, and NO<sub>2</sub> (and its associated oxides of nitrogen) resulting from this project and its alternatives. Air quality modeling should explicitly include the point of maximum impact within the modeling domain for the priority pollutants for all alternatives. For temporal resolution, modeling results should include the annual average and maximum daily (24 hour average) concentrations for DPM and PM<sub>2.5</sub>, and annual average and maximum hourly concentrations for NO<sub>2</sub>.

Based on modeling concentration results, annual DPM cancer risk should be estimated based on the California Office of Environmental Health Hazard Assessment unit risk factor for DPM. The Agency also requests quantification of PM<sub>2.5</sub> health impacts as a result of this project and its alternatives. Tools such as EPA's *Benefits Mapping and Analysis Program (BENMAP)* or *Co-Benefits Risk Assessment Screening Model (COBRA)* can be used to identify and evaluate these impacts.

*An All-electric Alternative*

The Agency requests that an all-electric alternative be identified and evaluated as part of the EIS, to reduce harmful DPM emissions and subsequent exposures over the lifetime of this project.

*Mitigation and Monitoring*

The EIS should discuss mitigation (emissions reduction) commitments for priority pollutants. These should be identified for both construction phase as well as long-term operation, and should include how all mitigation will be monitored over the lifetime of the project.

We look forward to working with you to ensure that improvements to Terminal 5 protect air quality and the health of our highly impacted communities.

Sincerely,



Andrew Green  
Director, Air Quality Programs

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: ILWU Local 19, Comments on scoping, EIS Terminal 5 Port of Seattle - Persak, John  
**Date:** Friday, November 20, 2015 2:39:17 PM  
**Attachments:** [T5 scoping letter.pdf](#)

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-----Original Message-----

From: John Persak [<mailto:john.m.persak@gmail.com>]  
Sent: Friday, November 20, 2015 02:29 PM  
To: Port Sepa  
Subject: ILWU Local 19, Comments on scoping, EIS Terminal 5 Port of Seattle - Persak, John

Dear Paul Meyer,

Attached are ILWU 19's comments concerning the scoping of the EIS for the Terminal 5 modernization.

Best,

John Persak

Paul Meyer, Port of Seattle,  
Environmental Services,  
P.O. Box 1209, Seattle, WA 98111  
SEPA.p@portseattle.org

November 20th, 2015

Dear Mr. Meyer;

This letter represents our comments on the scoping for the EIS on Terminal 5 at the Port of Seattle. The International Longshore and Warehouse Union (ILWU) Local 19 represents the longshore workforce employed at Terminal 5 in the Port of Seattle for operations involving the loading and unloading of marine cargo, and other activities. Our workforce has been employed at Terminal 5 under a coastwise collective bargaining agreement, the Pacific Coast Longshore Contract Document (PCLCD) and its local supplement agreements for many decades. Our current employment at Terminal 5 is with Foss Marine and Jones Stevedoring. Our union workforce has helped employers thrive at Terminal 5 in the past, including American President Lines, Eagle Marine Services, Westwood, and many other parties to our coastwise agreement. ILWU Local 19 members and other workers have a direct economic interest in the future of Terminal 5 and the design of the project and the impacts on our workforce and employment opportunity.

Terminal 5 has been established as a marine terminal since 1916, and it is in the best interest of our local, regional, and state economy that it remain so. As our region grows, Washington State will need to maintain and expand its marine terminal footprint to accommodate the future growth of the State, the Northwest and interior US economy, and the population growth of Puget Sound. With this, we need improvements in first-last mile corridors to accommodate this growth. In our view, compromising the ability to increase productivity this and other aspects of the local maritime shipping business will hurt our economy, reduce living wage employment, deplete local and state tax revenue, and reduce the effectiveness of this economic driver in the rest of the local economy. Handling increased container volumes through both the Port of Seattle and Tacoma is crucial in meeting these needs.

Additionally, we request that project study shall include Terminal 5 as a non-automated facility as an Alternative 4. In our view, public funds should not be expended to promote the elimination of jobs at Terminal 5 through automation, through intent or unintended consequence. Automation is beyond the scope of what has customarily been discussed in public, and maintaining public trust in the Port of Seattle and the NW Seaport Alliance in Seattle is as crucial as ever.

In our view, the scoping of the EIS should include direct impacts and mitigation concerning the operations at Terminal 5 as a perpetual going concern.

We would ask that the following be included for consideration in the scoping of the Study:

1) Traffic:

Traffic near the entrance of Terminal 5 is challenging, and is a choke point due to geologic constraints and the current built environment (e.g. limited road access due to waterways and hills, current problems with Spokane/West Marginal/Delridge intersection, etc.)

- a) What will be the impacts on the desired container throughput of Terminal 5 by projected increased traffic flow to and from West Seattle (particularly during commute times) on the lower Spokane St. Bridge, East Marginal Way, and other freight corridors, in relation to the current design of ingress/egress at T5?
- b) What will be ample infrastructure mitigation to prevent the encroachment of existing and future traffic patterns on container and other marine operations, including the use of first/last mile freight routes to and from Terminal 5?
- c) What will be ample infrastructure mitigation to preserve resiliency in the supply chain for Terminal 5 during peak cargo movement times on and off the facility, when it occurs at the same time as peak commute hours of cars, transit, and bicycles?

2) Land Use:

The City of Seattle's Department of Planning and Development (or its functional successor) may up-zone industrial lands and buffers, grant variances, and make adverse decisions impacting land use in areas that are buffer zones around Terminal 5, due to language in their 2035 Comprehensive Plan update that does not adequately address the finite resource of industrial land. Similar decisions could impact freight routes to and from Terminal 5 at its desired capacity.

- a) What will be ample mitigation to ensure that permitted and legal future uses of non-marine and non-industrial areas will not come into conflict with the established use of Terminal 5 at the desired maximum container throughput levels?
- b) What are the potential land use changes in and around Terminal 5 that will undermine operations at the the desired maximum throughput capacity, and how will operations adapt to that changing zoning environment?

### 3) Emissions:

The Port of Seattle and the City of Seattle have both made commitments toward reducing the human impacts on the environment, including climate change and air quality.

a) How will the modernization of Terminal 5 stay within the spirit of these goals, while not negatively impacting jobs and cargo movement?

b) How will the upgraded facilities accommodate the use of cleaner equipment and other practices that are beneficial to the health and safety of the workforce, if a prospective or future tenant wished to use these cleaner technologies? Examples: “Cold Ironing” for ship shore power; LNG fueled vehicles; hybrid vehicles. How will the project be designed to accommodate all of these if a terminal operator, shipping company, or other entity wished to utilize this greener technology?

### 4) Noise Impact:

Ambient noise is a hazard to our workforce. It has also been the subject of complaints from residents west of the current facility, which may cause adverse action that would negatively impact operations and reliability.

a) How will the completed upgrades to Terminal 5 accommodate a reduction of noise in operations that may improve the health and safety of the workforce?

b) How will the completed project ensure that operations can fall below the noise threshold that will minimize potential complaints concerning the legal and permitted adjacent uses, while not compromising the health and safety of our workforce under OSHA, WISHA, and established patterns under the collective bargaining agreements?

### 5) Economic Impact, Jobs:

a) How will the upgrades of Terminal 5 impact direct job growth or job loss for traditional longshore work directly on the Terminal?

b) How will these upgrades impact direct job loss or job growth in relation to desired throughput?

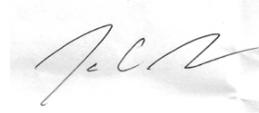
### 6) Funding by other entities:

The City of Seattle’s and the State of Washington’s resources to mitigate for the protection of cargo movement to and from Terminal 5 is finite.

a) What would be the impact to operations at Terminal 5 if funding levels by SDOT and WSDOT did not increase to mitigate impacts on Terminal 5 operations by regular traffic problems per above?

Thank you for your time, effort, and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Gross", is written over a light gray rectangular background.

Jason Gross

Vice President,  
ILWU Local 19  
3440 East Marginal Way  
Seattle WA 98124  
(206) 467-4839

cc: Dan McKisson, ILWU Puget Sound District Council, ILWU Locals 52, 98, 23 & 9;  
Inland Boatmen's Union, Puget Sound Region; Sailors Union of the Pacific.

**From:** [Chris Wilke](#)  
**To:** [Port Sepa](#); [Meyer, Paul](#)  
**Cc:** [Sophia Ressler](#)  
**Subject:** Terminal 5 EIS Scoping comments  
**Date:** Monday, November 23, 2015 7:15:37 PM  
**Attachments:** [Puget Soundkeeper Comments T5 EIS Scoping .pdf](#)

---

Thank you for accepting comments from Puget Soundkeeper.

Please see attached.

Thank you

Chris Wilke  
206-297-7002



November 23, 2015

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130 Nickerson Street,  
Suite 107  
Seattle, WA 98109

P 206.297.7002  
F 206.297.0409

[www.pugetsoundkeeper.org](http://www.pugetsoundkeeper.org)

Paul Meyer  
Manager, Environmental Permitting and Compliance  
Port of Seattle  
P.O. Box 1209  
Seattle, WA 98111

Dear Mr. Meyer

Thank you for accepting comments from Puget Soundkeeper (Soundkeeper) regarding the scoping for Port of Seattle's Environmental Impact Statement (EIS) for the redevelopment of its Terminal 5 facility. Puget Soundkeeper submits the following comments on behalf of its 3,000 members supporters and volunteers who care deeply about the health of the Sound.

With the redevelopment of Terminal 5, the Port has a golden opportunity to "get it right" with regard to environmental protection. The Terminal 5 site and surrounding area at the mouth of the Duwamish River have seen a long history of environmental damage in terms of habitat loss and toxic pollution, and the Port has a responsibility to use this opportunity to mitigate past harm and prevent future harm. Because the terminal is situated at the mouth of an important river of strong ecological and cultural importance, getting it right is especially paramount in this case. Puget Sound is a web of interconnected parts, and the impacts on the Duwamish River and Elliott Bay directly affect Puget Sound as a whole, including our cherished natural resources.

In addition to its environmental mission and public commitment to sustainability, the Port is a taxpayer-funded public agency and has a duty to uphold the public trust in protecting our environment. This EIS process is an important piece of that and Puget Soundkeeper applauds the Port's decision to do a full EIS at this site.

Puget Soundkeeper supports maintaining a robust working waterfront, however the use of our waterways comes with responsibility for protecting the integrity of our shared waters. Puget Soundkeeper urges the Port to develop strong environmental protections as it re-envision the future use of its facilities.

**Stormwater pollution prevention.** This is perhaps the biggest opportunity to protect water quality in the redevelopment of Terminal 5. The Port should study the environmental benefit of opening the new container Port with a fully operational state-of-the-art stormwater treatment system. Stormwater pollution is the number-one source of toxic pollution to Puget Sound, and industrial sites like terminal 5 often contain significant concentrations of pollutants such as dissolved



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heavy metals like copper and zinc, toxic petroleum hydrocarbons (PAHs), and fecal coliform bacteria. Due to heavy use by mechanized equipment, the pollutant concentrations are typically higher than surrounding municipal stormwater. For this reason, industrial sites are held to a high standard under the Industrial Stormwater General Permit (ISGP), issued by Department of Ecology. Under the ISGP, facilities are required to implement best management practices, monitor discharges and implement adaptive management to ensure discharges do not cause or contribute to violations of water quality standards. When pollution exceeds benchmarks for three quarters in a calendar year, stormwater treatment becomes a requirement of the permit.

Based on the past performance of Terminal 5 and other container terminals in the area, it is highly unlikely that the Port or its tenant will achieve the numeric standards of the ISGP without implementing treatment. Indeed, nearby Terminal 18 and Terminal 46 are currently installing advanced stormwater treatment systems, and have incurred additional costs due to litigation and in terms of disruption to their operations. Meanwhile pollution to Puget Sound persisted for years until the issue was resolved. Proactive compliance is clearly the way to go, plus a fully functional stormwater treatment system would also be attractive to a potential tenant.

The Port can go a long way to erase the uncertainty of ISGP compliance and can benefit Puget Sound by ensuring that adequate treatment is installed and operational when the new tenant begins operating. Of particular concern will be ensuring that all outfalls receive treatment and ongoing monitoring. The Port may want to study the possibility of consolidating some outfalls, as each one will be held to the standards under the ISGP and would require a separate treatment system. When determining the number of outfalls, the Port must include the wharf apron, which hangs over the water and presents additional challenges.

Please study the mitigation necessary for fecal coliform and other bacterial pollution. Seattle's container port facilities tend to exhibit extremely high levels of fecal coliform bacteria and this has contributed to the impairment of adjacent waterways. In addition, most Seattle-area container ports contain "hide storage areas" which routinely leak organic pollutants from decaying uncured animal hides and this likely attracts rodents, which can be sources of pollution. Does the Port intend to stage animal hide containers at Terminal 5? If so, the Port should consider the feasibility of draining this particular area to sanitary sewer and not to stormwater, as the pollutant levels can be substantially higher.

**Spill Prevention.** Due to the presence of heavy equipment which will need periodic fueling and maintenance, the Port should consider a robust spill



prevention and response plan and a means to ensure that land-based spills do not reach Puget Sound or the Duwamish River

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**Toxic sediments.** Due to the long history of industrial use at Terminal 5, the Port should study the possibility of existing legacy pollutants being mobilized during the construction and/or dredging process. What steps will the Port take to ensure that toxic sediments are not mobilized and released to surface water due to groundwater injection, exposure to stormwater or dredging? What possible effects might sea-level rise play on releasing legacy pollutants? Does the port have a long-range plan for sea level rise?

**Air Quality.** The Duwamish Valley is documented to have the worst air quality in the state. What steps will the Port take to minimize additional air pollution due to vessels, heavy equipment and trucks on the site? The Port should consider requiring cleaner burning fuels for equipment, shore power for vessels, and if vehicle (truck) exhaust could be minimized with the stationary staging of trucks for all Port facilities in the area, it would cut down on idling and would also present an opportunity to provide sanitation for truck drivers.

**Sewage, bilge water and ballast water.** The Port should study the environmental benefit of providing pump facilities for vessel sewage, as well as contaminated bilgewater and ballast water. In addition to the sanitation needs of vessels calling on the Port, other commercial vessels may need increased access to sanitary pump-outs in the near future. The state is moving forward with its plans for a no discharge zone (NDZ), which presents a challenge for some vessels because on-board treatment and discharge of vessel sewage would be disallowed under an NDZ. Could the Port use Terminal 5 as a place for commercial vessels to pump their waste, much like it does at its marinas for recreational boats?

**Habitat.** Estuaries represent critical habitat for salmon species, in particular ESA-listed Chinook salmon. Are there habitat improvements/mitigation that the Port could undertake that will improve estuarine salmonid habitat in the area?

Thank you for considering our comments.

Chris Wilke,  
Puget Soundkeeper & Executive Director

---

From: Martin Westerman [artartart@seanet.com]  
Sent: Thursday, July 30, 2015 6:31 PM  
To: del Fierro, Sally  
Subject: Westerman - West Seattle Transportation Coalition follow-up from July 23 meeting

Greetings Ms. del Fierro,

Thank you again for joining us at last Thursday's West Seattle Transportation Coalition meeting. And congratulations to the Port of Seattle on winning federal approval for the Tacoma-Seattle Ports partnership initiative.

At the meeting, Ms Bookout and Mr. Blomberg provided good information to us, and we want to continue the conversation to get fuller and/or complete answers to questions we posed during and before the meeting. The questions include the following related to transportation:

- \* Which stakeholder groups has the Port included in conversations about improving the WS Bridge Transportation Corridor -- the bridges and roads between the WS hill and I-5 that carry 106,000 vehicles a day?
- \* To help alleviate surface traffic pressure and freight-blocking congestion on the low and high bridges, would the Port be willing to invest money in infrastructure improvements to benefit commuters?
- \* Has the Port explored other funding options, such as Seattle impact fees, per-truck fees, and others with the city, county, state and federal governments to help pay for transportation infrastructure improvements?
- \* Beyond street-level crossing gates at intersections, what options has the Port explored to reduce train horn noise? As many noted, the port existed before residential neighborhoods were built around it, so we expect neighborhoods will compromise to help keep the port's business operations healthy.
- \* Is the Port willing to join with Nucor, the Delridge community and others in urging the Seattle Dept. of Transportation to upgrade its signal control system for the Chelan 5-way intersection, or is this initiative already underway with SDOT?
- \* Regarding traffic impacts of the \$230M Terminal 5 expansion: Your experts indicated the Port is moving operations westward to the more-efficient, ship-to-rail facilities on T5, away from less efficient docks to the east, and that increased operations on T5 will not impact Harbor Island vehicle traffic on the low or high bridge, though it appears T5 operations will significantly increase multi-modal traffic. Concurrently, West Seattle's population and vehicle traffic are increasing, putting additional congestion pressure on the WS Bridge Corridor. What studies has the Port conducted, or does it plan to conduct to affirm it will cause no additional traffic impact? Apparently, the Port believes its dock-to-rail system, coupled with its infrastructure improvements and queuing plan will reduce truck traffic and relieve pressure on Harbor Island.

Information we learned at the meeting indicated that the Port:

- \* has lost import-export market share for one of America's fastest-growing cities, because it may not have adequately kept up with industry developments and competition, nor advocated adequately for itself,

- \* hasn't been able to partner well with Seattle city departments on which it depends, nor with surrounding residential communities,
- \* wants to be an economic driver, but
  - \* doesn't seem to know what is the optimum ship size to focus on serving. Post-Panamax ships will be few, mid-range ships will be more numerous, so should the Port also build, and perhaps lead the market in short-sea shipping capacity? (Boeing's example may be instructive: it abandoned the idea of concentrating on giant planes, and found success in mid-sized aircraft such as 737, 757 and 787),
  - \* is finding "good jobs" eliminated by automation and efficiency upgrades, e.g., dock-to-rail systems are eliminating dock-to-truck-to-rail jobs, Also, the Port plans to phase out its less productive and obsolete operations. Where will the Port and our area's economy replace those lost good-paying jobs, and counteract the area's trend toward income polarization?

How may we continue this conversation? I'm and any of my WSTC board colleagues are happy to meet with relevant experts and commissioners, on- or off-site to learn the details we seek. We agree to keep conversations confidential, in cases where proprietary or competitive information is discussed.

As a Peninsula-wide organization dedicated to addressing transportation and mobility issues for Seattle's largest constituency -- the 100,000 people living in the 10 square mile area between the Duwamish River and Puget Sound, we see ourselves as a significant stakeholder, not an adversary in the Port's decision- and policy-making. We strongly support the Port of Seattle's success. At the same time, we strongly encourage private and public sector leaders and agencies to assure that infrastructure and mobility improvements keep pace with development in West Seattle, Harbor Island, SODO and Georgetown.

All the best,

Martin Westerman

Board Member, West Seattle Transportation Coalition and Seattle Green Spaces Coalition Seattle, Washington / 206-938-3847 (H/O), 206-427-9039 (C) "Primum bellaria edite, somnite ubi mortui"

PS -- Was the Patricia Davis who occupied the front corner seat at our meeting the former Port Commissioner?  
[[https://www.nwseaportalliance.com/sites/default/files/nwsa\\_emailfooter700x100.png](https://www.nwseaportalliance.com/sites/default/files/nwsa_emailfooter700x100.png)]

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All e-mail communications with the NW Seaport Alliance are subject to disclosure under the Public Records Act and should be presumed to be public.

**From:** Martin Westerman [mailto:artartart@seanet.com]

**Sent:** Friday, August 21, 2015 4:15 PM

**Comment 8**

**To:** del Fierro, Sally

**Cc:** Amanda Kay Helmick (smyliegrl@gmail.com)

**Subject:** Re: Westerman - West Seattle Transportation Coalition follow-up from July 23 meeting

Hi Sally,

Thanks for letting us know that things are still in process. We look forward to discussing our chief concern -- efficient mobility on the corridor between the West Seattle hill and I-5, in our next conversation with the Port. A few other questions have come up on the interim for us:

- If we're reading the SEPA note correctly, the Port appears to be saying that until they get some idea of the new tenant's expected volume of containers, they can't do any real evaluation of impacts,
- At the last WSTC meeting, Mr. Blomberg seemed to say that the Port doesn't anticipate exceeding the 650,000 TEU capacity limit with the new ships expected at T5. So, coupled with ship-to-rail operations, he does not expect future truck traffic to & from T5 to increase above current levels. Thus, T5 operations will not affect West Seattle commuter traffic between the hill and I-5. Is this true?
- Is there a chance that the 650,000 TEUs will be exceeded, and has the Port made a contingency plan for this, just in case? If yes, could the Port do analysis against that worst case scenario and back it off once they get real numbers?
- carbon pricing is key element missing from Olympia transportation bill. Is the Port willing to incorporate externality values, such as efficiency and productivity losses due to congestion, & include their pricing in its calculations, to get true costing of any transportation plan they offer for the WS Bridge Transportation Corridor?
- I see too many negatives associated with consolidating more on more cargo on fewer & fewer, bigger & bigger ships, even if it appears to improve economies of scale. For starters, lack of diversity in shipping increases risk (from climate change-driven heavier seas, and concentrating cargo in fewer hands -- one loss at sea is equivalent of losing several ships), reduces competition, reduces ports of call (for good and ill), requires huge port investments, increases freight road traffic (and publicly-borne road wear & tear

costs, commuter traffic congestion, pollution), increases security risks, and is anti-environmental (Guatemala canal, anyone? plus un-accounted-for externality costs).

- Would you clarify what Ms. Bookout meant when she said the Port has involved the community as it has developed its plans?

Thank you again for attending our last WSTC meeting, and a good weekend to you.

Martin Westerman

Board Member, West Seattle Transportation Coalition and Seattle Green Spaces Coalition

Seattle, Washington / 206-938-3847 (H/O), 206-427-9039 (C)

"Primum bellaria edite, somnite ubi mortui"

## West Seattle Transportation Coalition

The WSTC applauds and thanks the Port for deciding to pursue a full EIS for the T5 upgrades as the surrounding environment has changed dramatically since the last version in 1996. We request the Port include some important transportation-related issues/options be studied to help mitigate the impacts that are likely to occur with this important project. WSTC wishes to be a partner with the Port to optimize the efficiency of cargo operations while minimizing and potentially improving the already difficult civil transportation issues that the peninsula endures.

Specific requests for items to be included in the T5 upgrade EIS scope:

- Port should work with WSDOT to determine the effect of peak freight traffic from the Spokane Viaduct to I-5 AND SR99 both north and south.
- Looking at additional grade/route separation from normal non-commercial traffic - especially during peak commute periods. Study options should include adding more ramps/separated routes.
- Estimating what the peak commercial road usage looks like during work week. What do the peak volumes look like and when might they occur during the day/night?
- Providing analysis of train vs truck traffic and what routes are expected to be used by the trucks. Team with SDOT to study freight-only lanes on lower Spokane St.
- What thresholds they're going to use to determine required mitigation for WS resident commutes? Suggest SDOT to set the thresholds or hold Council responsible to set the thresholds.
- Study options should include the use of the east terminals. Are there potential offsets to T5/WS impacts available by using those terminals under certain conditions or times?
- Synchronize the Port's EIS work with SDOT's list for the West Seattle Bridge - Duwamish Waterway project list.

EMAIL:

WESTSEATTLETC.ORG  
BOARD@~~WESTSEATTLETC.ORG~~

**From:** Patricia Davis [mailto:tapestry4@gmail.com]

**Sent:** Tuesday, November 10, 2015 11:40 PM

**To:** 'Craig Kenworthy' <CraigK@pscleanair.org>; 'Mario Pedroza' <MarioP@pscleanair.org>; 'Laurie Halvorson' <LaurieH@pscleanair.org>; 'Kathy Strange' <KathyS@pscleanair.org>; AndrewG@pscleanair.org; 'Amy Fowler' <AmyF@pscleanair.org>; Gedlund, Janice <Gedlund.J@portseattle.org>

**Cc:** 'Schuster, Cindy' <Schuster.Cindy@epa.gov>

**Subject:** FW: Terminal 5 SEPA, EIS scoping - public comment

Hello PSCAA, EPA and Ms. Gedlund at POS

Attached is our letter with regard to Terminal 5 EIS scoping. It has been sent to [SEPA.p@portseattle.org](mailto:SEPA.p@portseattle.org) and DPD as well.

Also please view our newly generated website requesting PERMANENT air and noise monitoring at Terminal 5. We are requesting temporarily monitoring prior to **any** construction, and then permanent thereafter. Due to conflict of interest we are seeking PSCAA to be the enforcing agency for the air quality monitoring. Please read the attached letter and also visit our newly created website. We will be getting this issue out to West Seattle community in the upcoming weeks and months.

[www.terminal5group.com](http://www.terminal5group.com)

thank you  
patricia davis

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**From:** Patricia Davis [mailto:tapestry4@gmail.com]

**Sent:** Tuesday, November 10, 2015 11:24 PM

**To:** Patricia Davis

**Subject:** Terminal 5 SEPA, EIS scoping - public comment

TO: SEPA.p@portseattle.org  
FROM: Patricia Davis  
DATE: November 10, 2015

## TERMINAL 5 EIS SCOPING - PUBLIC INPUT

Where to start? I have written this letter in my head so many times. The issues at hand are obvious: air pollution, noise pollution, public health and planet wellbeing. Those issues are huge and long lasting. People die, animals die and the planet gets 'sick' from pollution. Does money drive our ethics? Where is the balance point? Where are the personal ethics in each person?

I remember something I read that meant a lot to me and has guided my life: **"IF ONE PERSON HAS BREATHED EASIER BECAUSE OF YOU"** ....(then you have had a well lived life).

I expected that meant helping others (humans, animals, and earth life forms) to have a better life because of my influence. I never imagined it would actually become literal and that today I am asking the Port of Seattle to help us all 'breathe easier because of you'. What does you mean? It means each of us. It means me.....and it means you (who is reading this).....you who will influence the outcome. Does someone, and the planet, breathe easier because of *you*?

Philosophically many educated people contemplate 'who' they are. That is complicated and ageless contemplation. Certainly we are our 'ethics'. Without a doubt that is at the core of who we are. And that 'shows up' in what we chose to be most important. What could possibly be more importantly than health and the long term well being of the planet itself? Nothing. We must - each of us individually - influence the outcome. It done one decision at a time. We are at one of those decisions now: Terminal 5

I call upon you to support our community in getting cleaner air, less noise, and for us to have a permanent online system to accomplish true results in those categories. Surely you can be a good neighbor and ethical earth steward. It's a choice. I am hopeful that each person reading this letter sees the wisdom of those types of choices. Choices for health and life.

I would like to take a moment to share with you a verbal survey I have been doing. I have personally asked many, many members of our neighborhood these open ended questions about the time Terminal 5 was operational:

1. Did you **smell diesel** where you live? The response, so far, has been consistently **'yes'**.
2. Did you ever **lose sleep from noise** generated by Terminal 5 and related activities? The response has been consistently **"yes!"** along with people stating they have had to close their windows in the summer (from both air pollution and noise from Terminal 5). Many of these people went into personal experiences of expression of anger about having to endure noise and air pollution from Terminal 5 and related activities. Lots of upset people actually. Many found it hard to sleep even with their windows closed due to excessive noise from equipment and trains.
3. Do you know where to report air pollution or noise pollution? Rarely does anyone know **'who'** to report to.

Terminal 5 and related activities have created very prominent and deep problems with regard to air and noise pollution.

Port of Seattle erroneously reported in their Environmental Checklist (part of DPD file for proposed project #30190710 that even at full operational levels they had no complaints about noise and air quality. That is flatly not true. I, personally, made repeated multiple complaints to PSCAA. Additionally, many people in this community have tried - in vain- to get noise complaints handled. The truth is that Terminal 5 has bothered our community a great deal. We have suffered under massive air pollution as well as illegal noise levels.

Additionally, it is perplexing and vexing to be told Terminal 5 is slated to be the *"go to Terminal"* in the Seattle-Tacoma area. Why is that? The Port came into our already high density residential AFTER it was high density residential. As a result we have to endure excessive air and noise pollution. Now we are being asked to withstand even more than before. "Taller" ships put those stacks even closer to our hilltop. We are being offered to carry a heavy burden here.

A burden that can damage or kill us early. That is serious and we need serious mitigation and resolution of air pollution and noise pollution impacts. We need air quality monitoring (on site and in impacted neighborhoods). We need online 'real time' 24/7 air quality and noise data. We need an effective method of placing complaints online and getting effective enforcement of air and noise laws. We need penalties to offenders such as restriction of use, or monetary fines. We need protection and enforcement of air and noise from Terminal 5 and related activities. That is a top priority.

How can we accomplish this?

### **1) Air Quality Data and Enforcement**

- a) if permit is granted, then prior to **any** work, temporary air quality monitoring equipment shall be installed at Terminal 5 and impacted neighborhoods. Equipment shall be monitored and maintained by Puget Sound Clean Air Agency (PSCAA). They shall provide 24/7 'real time data to the public online; provide complaint methods; and visible enforcement documentation.

Thereafter said equipment and processes shall be made permanent  
The Port shall fund this activity permanently. (Note: given the staggering losses in evidence in Port Annual Reports - such as selling cranes to Total Terminal - the Port can certainly afford to fund the monitoring of their impact on our community and the planet.

### **2) The legal power of Port of Seattle leases with their Tenant**

Most certainly the Port can write Leases that require meeting air quality and noise standards. Also that their Lease comply with, or exceed, the *Northwest Ports Clean Air Strategy Implementation goals*.

If the Northwest Ports (eg: WA and BC) form a unified alliance whereby all ships must comply with air and noise standards in order to dock - then there should be no lost income (eg: shippers cannot 'port shop' in WA or BC to avoid clean air and noise enforcement.

The City of Seattle prides itself in being a forerunner in the country on issues of being green and environmentally progressive. We are the Emerald City green.

We look to the Port of Seattle to step up and join us in cleaning up the air and greatly reducing the profound negative impacts that Terminal 5 and related uses impose on our high density residential neighborhoods.

We should look to the Port of Long Beach, CA as a model of what a clean and green Port looks like. Why not Seattle as well? Why not start with Terminal 5 since it borders such high density residential? Recall that the high density residential of was in place here *prior* to Terminal 5 activities.

We also ask that you take a hard look at the railroad aspects of Port activity and seek ways to reduce rail activity below us. Most certainly the "upland" portions of Terminal 5 are extremely close to our homes. Also realize that water carries sound and we have that issue to deal with here as well as the topographical issue that Terminal 5 air pollution flows up the hill to our homes. I have personally viewed black diesel flowing uphill directly myself - many times.

We need a quieter, cleaner Terminal 5. We are hoping that your 'best self' will value and support the deep need for that. For our health, and that of our children. For the long term health of the environment and our planet. Each choice we make plays into that future. We are hopeful of your integrity and that you will step forward with a cleaner and quieter Port.

Please see our newly generated online petition at [www.terminal5group.com](http://www.terminal5group.com)

Patricia Davis, 2313 Walnut Ave SW, Seattle, WA 98116 (upwind of T5)

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 EIS public scoping comment PUBLIC COMMENT  
**Date:** Friday, November 13, 2015 7:18:27 AM  
**Attachments:** [terminal5eisscoping.piledriving.11.11.2015.docx](#)

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**From:** Patricia Davis [<mailto:tapestry4@gmail.com>]  
**Sent:** Wednesday, November 11, 2015 04:17 PM  
**To:** Port Sepa  
**Subject:** FW: Terminal 5 EIS public scoping comment PUBLIC COMMENT

Please include the attached comment letter with the public scoping data with regard to  
TERMINAL 5 EIS scoping  
thank you  
Patricia Davis

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**From:** Patricia Davis [<mailto:tapestry4@gmail.com>]  
**Sent:** Wednesday, November 11, 2015 4:16 PM  
**To:** Patricia Davis  
**Subject:** Terminal 5 EIS public scoping comment PUBLIC COMMENT

TO: SEPA.p@portseattle.org  
FROM: Patricia Davis  
RE: Terminal 5 EIS scoping  
DATE: November 11, 2015

It is essential that 'state of the art' methods and materials be used for the pile driving portion of this project. Using 'state of the art' materials to significantly decrease pile driving sound is critical and essential.

Additionally there should be restrictions on hours of operation for pile driving that respects our needs for sleep at night and relief from the mentally jarring activity of pile driving

It would be valuable to have all pile driving and activities that generate noise cease by 9 pm - at the latest. Most families and working people are getting to bed at those times.

Pile driving should not begin earlier than 8 a.m. during the week. Ideally 9 a.m. Weekends should certainly allow sleep in time and pile driving not taking place prior to 9 a.m. and being completed and quiet by 9 pm.

Every conceivable effort must be made to reduce the impact of the pile driving.

Please advise us at the meeting specifically how you plan to mitigate the noises from pile driving in particular, but also equipment and construction (including those positioned in the water)

Also please advise - specifically at our meeting tomorrow Nov 12 in W. Seattle - how the Port intends to contain diesel, exhaust, and air pollution from equipment used onshore and offshore.

If a permit is granted for Terminal 5 we are requesting that there *immediately* be installation of temporary air monitoring equipment until permanent installation of said air monitoring equipment is completed by PSCAA.

Additionally, if a permit is granted for Terminal 5 we are requesting the *immediate* installation of noise monitoring equipment; 24/7 'real time' noise level data available to the public online; an online public complaint method; and 'proof' and documentation of enforcement actions taken. We are extremely concerned about the noise from construction, as well as operations thereafter.

It is very urgent and required that Terminal 5 and perimeter (relative to Terminal 5 direct and indirect impacts) have air quality monitoring, and noise containment . We need public data, public reporting, effective enforcement, and penalties for non-compliance.

Thank you

Patricia Davis  
[www.terminal5group.com](http://www.terminal5group.com)

cc: Diane Sugimura, DPD via PRC email method. Proposed project # 3019071  
Craig Kenworthy and other PSCAA staff  
Cindy Schuster, EPA

Please include a copy of this letter with the [www.T5EIS.publicmeeting.info](http://www.T5EIS.publicmeeting.info) file

thank you

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: My main concern is peak hour traffic. Three facts, then my comment: 1) West Seattle has already surpassed the "urban village" growth projections for 2020 and much more development i  
**Date:** Monday, November 23, 2015 11:56:27 AM

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Alex Anderson <[ajanderson33@yahoo.com](mailto:ajanderson33@yahoo.com)>

<https://e12.envirolytical.com/communication/view/180754>

My main concern is peak hour traffic. Three facts, then my comment:

- 1) West Seattle has already surpassed the "urban village" growth projections for 2020 and much more development is occurring.
- 2) During rush hour the "5 way intersection" near the Terminal 5 entrance is gridlocked, even with the Terminal idle.
- 3) When roads are near capacity, small additional increases in volume can have outsize impact on congestion and travel times.

So my traffic comment would be to consider the hundreds of new units being built in Alaska Junction, and the fact that small increases in traffic volume can cause large increases in congestion for already full roads.

My other concern is noise. I live west of California Ave, and even that far away the trains blasting their horns is loud enough to be disruptive. Please consider looking at train track/crossing upgrades that would allow for less honking.

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: To T5 Project Team: Until truck and rail transportation access to T5 is significantly improved, all rework of the T5 terminal will be for naught. Take a look at similar-sized terminals in Ta  
**Date:** Friday, October 30, 2015 2:10:31 PM

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Gregg Andrus <[grandrus@comcast.net](mailto:grandrus@comcast.net)>

<https://e12.envirolytical.com/communication/view/167647>

To T5 Project Team:

Until truck and rail transportation access to T5 is significantly improved, all rework of the T5 terminal will be for naught. Take a look at similar-sized terminals in Tacoma, Oakland, Los Angeles and Long Beach. Are the successful and growing operations limited by road and rail restrictions? Road and rail infrastructure to T5 simply must be dramatically improved. Also suggest including T18 in the transport infrastructure improvement plan, unless you want to see SSAT give up and vacate.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: TRANSPORTATION SECTION - - CLARIFY "SITE VICINITY" TO MEAN FROM THE PROJECT SITE TO THE NB AND THE SB INTERSTATE-5 CORRIDOR BECAUSE THIS IS THE AREA OF IMPACT. - CLARIFY  
**Date:** Sunday, November 22, 2015 4:59:59 PM

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DEBORAH BARKER <DJB124@EARTHLINK.NET>

<https://e12.envirolytical.com/communication/view/180607>

TRANSPORTATION SECTION -

- CLARIFY "SITE VICINITY" TO MEAN FROM THE PROJECT SITE TO THE NB AND THE SB INTERSTATE-5 CORRIDOR BECAUSE THIS IS THE AREA OF IMPACT.

- CLARIFY THE EXISTING NON-VEHICULAR TRANSPORTATION LINE CORRIDORS AND THEIR AT-GRADE LOCATIONS BETWEEN T-5 AND I-5.

- ADD DISCUSSION ON POTENTIAL WEST SEATTLE BASED ST-3 (SOUND TRANSIT - 3) IMPROVEMENTS TO THE EIS. INCLUDE DISCUSSION OF PROPOSED LIGHT RAIL AND BRT CROSSING LOCATIONS OVER DUWAMISH RIVER. ST-3 INFORMATION MAY CHANGE DEPENDING ON FUTURE SOUND TRANSIT BOARD DECISIONS AND THIS EIS MUST MAINTAIN CURRENT INFORMATION ON THIS TOPIC SO AS TO NOT ADVERSELY IMPACT REGIONAL TRANSIT GOALS NOR DISRUPT ANY PENDING IMPROVEMENTS.

-INCLUDE DISCUSSION OF THE POTENTIAL FOR T-5 AND ST-3 SHARING A NEW BRIDGE CROSSING OVER THE DUWAMISH RIVER.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: To Whom It May Concern, Thank you for the opportunity to comment on the Terminal 5 Environmental Impact process. We are a family living in single family housing on North Admiral, d  
**Date:** Sunday, November 22, 2015 3:44:05 PM

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Linda Barnes <lindasbarnes@comcast.net>  
<https://e12.envirolytical.com/communication/view/180605>  
To Whom It May Concern,

Thank you for the opportunity to comment on the Terminal 5 Environmental Impact process. We are a family living in single family housing on North Admiral, directly above the hill from Terminal 5. We are 4th and 5th generation Washingtonians and committed to the economic vibrancy that is part of our heritage. We have generations of family members who worked the Port of Seattle.

Living along the harbor, we are already impacted by ship engines, railroad noise, and congestion from ships moving up the Duwamish. We understand the importance of these activities yet we would like to see appropriate mitigation so that our quality of life does not deteriorate.

Specifically, we would need to have noise abatement between 9pm and 5 am Monday through Friday and 9pm-8am Saturday and Sunday. This would include rail noise, tractor noise, and ship engines.

Traffic congestion along Avalon, Harbor Avenue, the West Seattle Freeway, and the lower bridge would need to be reconsidered. Currently, the lower bridge opens for ship traffic at any hour and causes substantial delays during peak commuter hours. This would need to be addressed including changing the times that the lower bridge could be opened for ships to minimize traffic congestion and allow bike riders, like myself, to commute into the city.

Lastly, alternative forms of transportation should be considered. Right now, using the water taxi is an option but parking is near impossible and the bus routes are limited. The water taxi also has reduced hours of operation during evening and winter hours. Additional options for commuters would be helpful to reduce single occupancy vehicles.

Thank you for the opportunity to comment.

Best,  
Linda

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Please consider the impact on neighbors who have worked hard to establish homes in West Seattle and have lived here for decades. Noise pollution from port traffic - We are  
**Date:** Saturday, November 21, 2015 8:41:55 AM

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JC Blackwell <jclaireb25@gmail.com>

<https://e12.envirolytical.com/communication/view/180597>

Please consider the impact on neighbors who have worked hard to establish homes in West Seattle and have lived here for decades.

Noise pollution from port traffic -

We are justifiably more concerned about noise pollution from a 24/7 year-round working port than Magnolia residents were about the seasonal cruise ship terminal in their neighborhood. That said, cruise ships are much quieter than trains and are less frequent at night. As it is, we endure ever increasing buzz of traffic noise from the bridge due to the population growth in West Seattle. At a minimum, please apply the same standards and requirements to Terminal 5 that were put in place for Pier 91, including quieter back up alarms.

Air pollution from the ships in port -

Cruise ships use shore power while in the port of Seattle to reduce air pollution. Many homes in our neighborhood were built and have been occupied since the early to mid 20th century. Most do not have air conditioning. We need to open our windows but what will we be breathing? Please establish a standard that air quality will be monitored and violations addressed promptly.

Traffic concerns -

Unless one is traveling south, the West Seattle high level bridge is the primary outlet and bottleneck for all forms of traffic. My personal experience is that busses are already standing room only during commute hours both directions. Still traffic continues to increase to the point that residents must leave home earlier and earlier in order to get to work on time. The stop and go pace of the cars, trucks, and busses on the bridge adds to the noise and air pollution the residents of West Seattle are experiencing. Please implement strategies to divert traffic from the already congested travel routes that West Seattle residents must use.

Lastly, please establish a hotline for residents to register complaints and concerns about potential violations occurring at Terminal 5 during construction and operation.

Thank you for your consideration of your fellow tax-paying citizens.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I have several environmental concerns regarding the proposed modification of Terminal 5 marine cargo facilities: 1) An increase in the number of shipping containers off and on-loaded will inc  
**Date:** Monday, November 23, 2015 2:00:09 PM

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James Borrow <[jim@jimborrow.com](mailto:jim@jimborrow.com)>

<https://e12.envirolytical.com/communication/view/180847>

I have several environmental concerns regarding the proposed modification of Terminal 5 marine cargo facilities:

- 1) An increase in the number of shipping containers off and on-loaded will increase the number of containers being transferred by short haul truck to the rail yards to the east of the Duwamish waterway. This will markedly increase the already severe traffic congestion on the West Seattle high and low bridges and will markedly increase the air pollution from the idling short haul trucks used to haul the shipping containers. To date, no provision has been made to handle the increased traffic. At a minimum, the proposal to modify (expand) cargo handling capacity at Terminal 5 should be denied unless the Port of Seattle and the Seattle Dept of Transportation can provide a solution to handling the increased traffic. My solution would be to use already tested technology to build an aerial tramway between Terminal 5 & the rail yards, allowing shipping containers to avoid city streets altogether. The aerial tramway would carry the containers over the West and East waterways. Shipping containers at either end would be moved with electric ponies, similar to the units used to move aircraft at airports or at the rail yard the containers could be loaded directly onto railcars. The benefits of such a system include speeding up the entire process of off and on loading cargo, thus minimizing ship turnaround time, minimizing the traffic impact of the terminal expansion and reducing air pollution, which in turn decreases the number of illnesses caused or exacerbated by truck exhaust pollutants. The carbon footprint of the port would be dramatically decreased.
- 2) Insist that the ships docked in Seattle use shoreside power. This apparently already is required for cruise ships in Seattle and is a requirement at a number of other major West Coast ports. Using shoreside power reduces air pollutants that impact not only dockworkers, but adjacent residential areas. Shoreside power that is tied into our public power grid also is quieter.
- 3) Minimize rail noise. Use available technology to create a no horn zone & take action to minimize the screeching of steel wheels on rail as well as the coupling and uncoupling of rail cars.
- 4) Use already existing technology to minimize light pollution and redirect light to the ground, away from the residential neighborhoods facing Terminal 5. To date, there hasn't been an attempt to control light pollution, which is inexcusable, sloppy design.
- 5) Establish permanent monitoring of noise and air pollution generated by Terminal 5 activities to ensure compliance with State and Federal standards.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I have been a West Seattle resident most of my life, grew up here, and am now back living in my parents home, that they had for over 35 years. West Seattle has changed over the years, with many apart  
**Date:** Monday, November 16, 2015 9:47:16 AM

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JoAnn Brush <[bjbrush@comcast.net](mailto:bjbrush@comcast.net)>

<https://e12.envirolytical.com/communication/view/179757>

I have been a West Seattle resident most of my life, grew up here, and am now back living in my parents home, that they had for over 35 years. West Seattle has changed over the years, with many apartment complexes, and increased population. The environment impacts of the proposed expansion of Terminal 5 will have a definite impact on the residents of West Seattle. First - INCREASED TRAFFIC. There is only one way out of West Seattle, heading towards I-5 and the downtown core. It has become a nightmare to leave West Seattle, anytime before 10:30 in the morning, and even at that time it can be a mess. With increased trucks on the road during the mornings, things will be backed up more than ever, with no place to go, except gridlock.

The port needs to fund and make improvements to Terminal 5 for the ships to have SHORE POWER. The exhaust from the ships will greatly increase air pollution and West Seattle will be affected the most, the exhaust will come right up the hill.

There also needs to be put into effect a QUITE ZONE for trains going back and forth to Terminal 5. I can hear the trains on Spokane Street nightly and I live Northwest on the site.

I'm very disappointed on the Port of Seattle, that they are not addressing these issues for the residences of West Seattle. I hope it isn't just a money issues, to get Terminal 5 going again, but unfortunately the way the city is going, does not surprise me that the general population is ignored.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: As a neighbor of Terminal 5, I am concerned about a number of environmental impacts related to the proposed modifications. These include but are not limited to air pollution, traff  
**Date:** Monday, November 23, 2015 9:56:27 AM

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Linda Buckingham <[lsbucking@gmail.com](mailto:lsbucking@gmail.com)>

<https://e12.envirolytical.com/communication/view/180627>

As a neighbor of Terminal 5, I am concerned about a number of environmental impacts related to the proposed modifications.

These include but are not limited to air pollution, traffic congestion, noise pollution, water quality issues, light and glare.

Thank you in advance for addressing my concerns during the evaluation process.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Traffic, noise and cost are main issues, having very big impacts for Seattle people. As a long time West Seattle resident (55yrs) I have seen many changes to the T-5 area. When Lockheed, Wyckoff and P  
**Date:** Monday, November 16, 2015 12:46:28 PM

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Hudson Burke III <>

<https://e12.envirolytical.com/communication/view/179771>

Traffic, noise and cost are main issues, having very big impacts for Seattle people. As a long time West Seattle resident (55yrs) I have seen many changes to the T-5 area. When Lockheed, Wyckoff and Port were all doing business there in the 60's-80's traffic was not a problem because I-5 moved. Today I-5 moves at a snails pace and population increase to West Seattle from a poorly thought out city push of new builds adding thousands of units to WS junction area makes today's times much different. There has been very little infrastructure improvements to handle increased traffic from build-up and now city wants to add truck traffic from T-5 project to area and I-5. Harbor island traffic is terrible today when ships are in port leaving lower bridge useless for commuters at those times. Heavy Haul corridor will do little for any traffic improvement as increase in vehicle and truck traffic is growing quicker than road capacity. Once Bertha gets done even more traffic will be using surface area streets as Bertha does little for most do to limited ingress/egress through out area and will have tolls.

Noise from trains today is bad where I live west of Junction. We are awakened regularly in the early morning hours 3-4am. It has gotten much worse (louder) in the last few years as more trains travel through area and more buildings are built bouncing the sound around.

I see this T-5 project as a bad idea for Seattle people and area. Cost far out way any positives. Very few real new jobs will be created as truckers and long-shore workers move to work. Impacts to area will be huge from increased traffic and noise. Cost to taxpayers flat out crazy as Port is already one of the biggest if not #1 subsidized ports in the nation. Port should focus on moving all working terminals to east waterway and along Alaskan way. Much closer to train loading yard and much less impact for all if increased capacity is really needed. All I see with this project is more of the Seattle government mentality " We Are The Biggest " putting cost and function-ability at bottom of list.

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#); [Blomberg, George](#)  
**Subject:** FW: question and comment  
**Date:** Thursday, October 29, 2015 11:56:27 AM

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**From:** sharonburke@netzero.net [mailto:sharonburke@netzero.net]  
**Sent:** Wednesday, October 28, 2015 04:14 PM  
**To:** Port Sepa  
**Subject:** question and comment

Dear Mr. Meyer,

I received a document entitled "Withdrawal of SEPA Determination of Non-Significance (DNS) of Proposed Action. . ." in the mail yesterday. I'm not entirely sure why I received this, so I can only assume it is because I live in a neighborhood that may suffer detrimental effects should the Terminal 5 Cargo project be approved. I have to say that the document itself is somewhat Orwellian in its use of jargon and techno-speak and despite being reasonably intelligent, I'm not sure what to make of it. I suspect that there was a legal requirement for public disclosure, but I can't help but wonder if this tough-to-follow document is actually an attempt to do just the opposite (i.e. not get the public involved). In any case, I see that there is a public meeting scheduled on Nov 12, but in the event that I cannot make that meeting, I'm wondering how else I might be able to get up to speed on what is going on. I doubt that I'd be able to decipher the Scoping Document mentioned any better than this "Withdrawal of SEPA Determination. . ." document. I live in the Admiral area of West Seattle and I do have serious concerns about:

Noise (particularly the low frequency type) - there is too much low frequency noise already where I live and I am already wearing ear plugs at night just to sleep.

Environmental Health, Air, Water, Plants & Animals - damage to these areas in the name of progress always causes more economic costs, health risks, quality of life decline in the long run.

Sincerely,  
Sharon Burke

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Comments Pier 5 comments from Carlson, Andy  
**Date:** Monday, November 23, 2015 3:51:26 PM

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**From:** Andy Carlson [mailto:[acarlson@drizzle.com](mailto:acarlson@drizzle.com)]  
**Sent:** Monday, November 23, 2015 02:35 PM  
**To:** Port Sepa  
**Subject:** Comments Pier 5 comments from Carlson, Andy

ANDY CARLSON

3206 SW Spokane St., Seattle, WA 98126

E-mail: [acarlson@drizzle.com](mailto:acarlson@drizzle.com) Port of Seattle Pier 5

Recommendations and Observations

Port of Seattle - NWSA

Regards,

I attended the meeting on November 12 and will be providing recommendations and observations about impacts that need to be considered with this expansion project. Our family has lived in West Seattle for over 20 years, these recommendations are provided with a detailed understanding of this neighborhood

I intend to be brief and concise, but consider these issues Major impacts that need consideration:

- Train Traffic in and out of Pier 5. Pier 5 is expected to transfer 200% more freight than the East terminal. Possibly 10-20 additional trains a day meaning 20-40 bridge crossings on the single train bridge spanning the West waterway.

Impact:

This waterway is a busy commercial and recreational waterway additional train traffic will block access to all up river marine traffic past Pier 5. This train bridge takes 40-70 minutes per crossing. How will this be addressed?

Impact:

Noise, In addition to the Sounding (at each Street crossing) the trains are loud and can be heard for miles. Horn noise is unacceptable and quiet zones needed at all crossings. We can hear the trains moving both in and out of the port from South Seattle

Impact

Train blocking, roadway access. It is obvious that large trains will be blocking many of the streets and businesses in the area. As we can assess the bridge "Down Time" we can also anticipate the blocking impacts to business and residence.

- Truck Traffic. West Seattle is a large area and is now sharing an onramp access with I-5 North, South and 99 with the existing commercial traffic. Our roads are now congested causing backups that fill both bridges and migrate into all West Seattle neighborhoods. Dedicated access is needed for residence.

As I am sure you are aware Pier 5 is a complex issue and I look forward to further discussion.  
Regards

Andy Carlson

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: The idea that the port could propose tripling the capacity at Pier 5 without a need for an eis until the neighbors got involved is ridiculous. The whole presentation sounded very poorly prepared.&#13  
**Date:** Monday, November 23, 2015 4:05:38 PM

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Eileen Carney <[eileen@gmnameplate.com](mailto:eileen@gmnameplate.com)>

<https://e12.envirolytical.com/communication/view/180897>

The idea that the port could propose tripling the capacity at Pier 5 without a need for an eis until the neighbors got involved is ridiculous. The whole presentation sounded very poorly prepared.

So the eis is essential--to understand the effect of noise pollution, air pollution, transportation problems, dredging problems, train noise problems for the people who live above the pier.

After the presentation I realize that this this project is based on the need for people at the port to keep their jobs and is really, truly not necessary.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I would like the EIS to address the cumulative loss of air quality that these large container ships will perhaps diminish. I live within an estimated 0.5 miles from the south end of terminal 5 and no  
**Date:** Monday, November 23, 2015 9:34:09 PM

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Nancy Cera <[cera.wax@outlook.com](mailto:cera.wax@outlook.com)>

<https://e12.envirolytical.com/communication/view/181205>

I would like the EIS to address the cumulative loss of air quality that these large container ships will perhaps diminish. I live within an estimated 0.5 miles from the south end of terminal 5 and not far from Nucor Steel, their sulfur dioxide and other emissions, as well as the West Seattle Bridge. My house is located uphill from terminal 5 where I will be affected by the sounds, reverberations, air quality during construction and for perpetuity. Beyond this local area, dredging contaminants and trucking them to Southwest Washington is morally unconscionable as well as the impact on Port Angeles and other communities.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: We want the broad spectrum back up alarms, we want the entrances to the t5 area with RR crossing barriers to eliminate the train horns, and we want shore power.  
**Date:** Wednesday, November 04, 2015 4:15:39 PM

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John Chattin-McNichols <[johnc-m@comcast.net](mailto:johnc-m@comcast.net)>

<https://e12.envirolytical.com/communication/view/168397>

We want the broad spectrum back up alarms, we want the entrances to the t5 area with RR crossing barriers to eliminate the train horns, and we want shore power.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Hello, I am writing this comment as a concerned Admiral Neighborhood resident living close to Terminal 5. Given the proximity of many residents to the Terminal, I believe it necessary  
**Date:** Sunday, November 15, 2015 9:40:55 PM

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Noam Chitayat <[noam.chitayat@gmail.com](mailto:noam.chitayat@gmail.com)>  
<https://e12.envirolytical.com/communication/view/179737>

Hello,

I am writing this comment as a concerned Admiral Neighborhood resident living close to Terminal 5. Given the proximity of many residents to the Terminal, I believe it necessary for the EIS to study the noise impacts that the modernization project, as well as the subsequent tenant activity, will have on the surrounding neighborhood.

As it is certain that the work being done at the Terminal will generate significant noise, the Port should require the use of noise shields for impact construction work. In addition, construction and shoreline deepening work should be strictly limited to the DPD's standard time-of-day limits in order to reduce impact to residents after typical work hours.

The modernization project has significant promise, but the Port should take care to mitigate the impact on surrounding neighborhoods before proceeding.

Thank you for your time,  
Noam Chitayat

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 Modernization EIS (Proposed project #3019071) Email from Chitayat, Noam  
**Date:** Tuesday, November 17, 2015 10:51:43 AM

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**From:** Noam Chitayat [mailto:noam.chitayat@gmail.com]  
**Sent:** Sunday, November 15, 2015 10:00 PM  
**To:** Port Sepa  
**Subject:** Terminal 5 Modernization EIS (Proposed project #3019071) Email from Chitayat, Noam

Hello,

I am writing this comment as an addition to one that I have already left through the Terminal 5 Improvements Feedback form.

There are many residents living in close proximity to Terminal 5. There are many potential sources of emissions and vibrations that we are concerned about. These include:

- Construction activity for Terminal 5 modernization
- Truck and train activity for loading/unloading ships in the Terminal
- Ships idling at the terminal for long stretches of time in order to generate power

There are mitigation steps that can be taken in order to protect the nearby neighborhood and environment from being impacted too negatively.

Please require that shore power be installed and used by ships at the terminal. This will reduce vibrations and air pollution.

As well, please consider creating a Quiet Zone for trains that are transporting cargo to and from the Terminal. As the intention for the Terminal is to run 24/7, and train horns are extremely noisy even from large distances, train horns should not be used in regular day-to-day activity. This can be facilitated through the installation of crossing arms at intersections.

Finally, please ensure that there is permanent noise monitoring so that we can ensure that tenants are held accountable for significant violations of noise regulations.

It is extremely important that the EIS carefully studies noise, vibration and air pollution impacts to the surrounding habitat and neighborhood. There is a significant population of the city that would be seriously impacted if we do not take careful steps to mitigate these issues from the outset.

Thank you for your time,  
Noam Chitayat

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 Environmental Review - Casey, Marti; Couch, Pauline; Lee, Henry and Kim  
**Date:** Monday, November 23, 2015 11:58:22 AM

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**From:** Marti Richardson Casey [mailto:[marti@caseycommunications.net](mailto:marti@caseycommunications.net)]  
**Sent:** Saturday, November 21, 2015 11:39 PM  
**To:** Port Sepa  
**Cc:** Pauline Couch  
**Subject:** Terminal 5 Environmental Review - Casey, Marti; Couch, Pauline; Lee, Henry and Kim

**From:** Pauline Couch <[jpcouch80@gmail.com](mailto:jpcouch80@gmail.com)>  
**Date:** November 21, 2015 at 11:13:44 AM PST  
**To:** Marti Richardson Casey <[marti@caseycommunications.net](mailto:marti@caseycommunications.net)>  
**Subject: Re: Terminal 5 Environmental Review Comments Due Monday Nov 23rd**

My family moved to Alki in 1938 and I graduated from West Seattle in 1952. My husband's family history goes back to 1901 and he graduated from West Seattle in 1950.

About 13 yeas ago while walking with a school friend in Jack Block Park we saw a sleeping sea lion on the beach and a bit further, were fascinated by a rock fill underway. A diver was guiding the crane operator. My first thought was of the Shoreline Management Act, but then Seattle has a history of landfill to gain industrial land, going back to Ballast Island.

Terminal 5 is an insidious creeping monster laying at the base of our front porch that spews air, water, noise, and light pollution over one of Seattle's loveliest living spaces. It is a step backwards for the city's health to continue its use. Granted folks should have been proactive before 2015, but now we have had history of the grim affects.

The beast has drones that clog the West Seattle Freeway with drivers demanding mayhem if not given right of way, or worse, driving incautiously causing hours of disruption.

The Port sprawl is insidious, destroying the well being of too many when the livability and health should be the goal of government. Cleaning up industrial pollution after the health of a community is compromised is inhumane. South Park is an example.

Further pollution: land, air, water, noise added to danger and inconvenience is a step backwards for the cities health.

Perhaps housing would be an alternative. There is rail to connect to a comprehensive system. There could be a grocery/drug store, dry cleaners and ? for that area again. It would take pressure off the motorways and take the pressure off neighborhoods being closed in by apartments.

Respectfully,

Pauline Couch

 [Henry and Kim Lee, West Seattle Junction](#)

If you have ever been concerned about the air pollution, light glare, train noise, or traffic congestion generated by Terminal 5 (185 acre seaport adjacent to West Seattle Bridge and Harbor Ave), the Port of Seattle wants to hear from you by Monday, Nov 23rd. The Port needs public comments to focus their environmental review for the upcoming Terminal 5 expansion.

<http://t5eis.publicmeeting.info/feedback...>

	<p><b>Port of Seattle Terminal 5 Improvements</b> The port is committed to listening to stakeholders and working with them to iden... <a href="http://T5EIS.PUBLICMEETING.INFO">T5EIS.PUBLICMEETING.INFO</a></p>
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[Nov 21 in General to 9 neighborhoods](#)

[View or reply](#)

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You can also reply to this email or use Nextdoor for [iPhone](#) or [Android](#)

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This message is intended for [marti@caseycommunications.net](mailto:marti@caseycommunications.net).  
[Unsubscribe or adjust your email settings](#)

[Nextdoor, 760 Market Street, Suite 300, San Francisco, CA 94102](#)

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: 6000 TEU to 18000 TEU = more truck traffic, and hazardous emissions to anyone downwind of the facility, primarily lower income residents near the Duwamish river and residents of West Seattle. What mit  
**Date:** Sunday, November 22, 2015 4:04:45 PM

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Andrew Curry <a\_curry1@yahoo.com>

<https://e12.envirolytical.com/communication/view/180606>

6000 TEU to 18000 TEU = more truck traffic, and hazardous emissions to anyone downwind of the facility, primarily lower income residents near the Duwamish river and residents of West Seattle. What mitigation strategies will be put in place to mitigate these harmful pollutant hazards? Will ships also run their engines while in port or will the port of Seattle take the lead and provide (and require) electrical plug in capabilities for ships docked at T5? Does cargo handling and optimization include working with trucking companies to mitigate the traffic problems they cause to the region? Has the Port of Seattle considered working with rail companies to mitigate the rail engine pollution, noise pollution as they horn off at every street crossing, and traffic mitigation strategies for the increased container volume? What resilience measures to local critical infrastructure, upon which the Port will rely such as electricity, roads, bridges, waterways, sewer, will be taken to mitigate vulnerabilities to earthquake and other natural hazards, as well as potential security threats to T5, if any require local police and fire responses, for example? With regard to lighting and glare, is the Port going to utilize down lighting at a minimally intrusive height and range, and consider the impact on migratory birds of leaving these lights on at all times even when port operations are minimized? Has the Port considered the T5 expansion as an opportunity to improve its existing environmental impact in coordination with ongoing efforts in Seattle to address climate change? Has the port reviewed opportunities to plant more trees around the facility, as appropriate, to reduce wind flow and subsequent toxic inhalation of fumes from increased truck, forklift, and ship traffic?

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I have serious concerns about the proposed Terminal 5 modifications. The top issues for me, as a resident of West Seattle, are: 1) Increased train activity and noise from the train horns, wh  
**Date:** Monday, November 23, 2015 8:25:42 PM

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Dominick Dantona <3831 34th Ave SW>

<https://e12.envirolytical.com/communication/view/181203>

I have serious concerns about the proposed Terminal 5 modifications. The top issues for me, as a resident of West Seattle, are:

- 1) Increased train activity and noise from the train horns, which are loud and interrupt sleep
- 2) Air pollution to the surrounding community due to lack of shore power, requiring ships to run their diesel engines while docked
- 3) Spikes in traffic jams from truck traffic, especially with ships at double the TEU capacity of the previous ships in Terminal 5
- 4) Water quality concerns, as outlined from a high-level by Chris Wilke, Executive Director of Puget Soundkeeper, during the 11/12 meeting
- 5) Light pollution to the surrounding community

There was a lot of song-and-dance at the meeting about why this is necessary and good for the community. I don't understand how this will benefit us or why it's necessary. Terminal 18 is already stated to be ready to handle up to 14,000 TEU, and the environmental impacts are a major concern.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: It would be appreciated if you could make this site more (to use your words up above to us): concise printing this uses too much ink (color) and has waaaay too many white spaces.  
**Date:** Sunday, October 25, 2015 9:21:30 PM

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patricia davis <tapestry4@gmail.com>

<https://e12.envirolytical.com/communication/view/141402>

It would be appreciated if you could make this site more (to use your words up above to us): concise

printing this uses too much ink (color) and has waaaay too many white spaces. (waste of paper and ink)

I would be great if you make a printer friendly version without the graphics and pictures that simply has text and data for the public.

Please advise if you can do that. For a visual presentation - fine. For a webpage - fine. For people wanting to print the facts and material - not so fine.

thanks

please advise - I do not want to forward this much 'irrelevant layout/design' to others - just the facts

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Please advise -via email: tapestry4@gmail.com 1) Can public comments be made online? If so, how/where (I assume not via this little comment block?) 2) What is  
**Date:** Sunday, October 25, 2015 9:30:18 PM

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patricia davis <tapestry4@gmail.com>

<https://e12.envirollytical.com/communication/view/141403>

Please advise -via email: tapestry4@gmail.com

- 1) Can public comments be made online? If so, how/where (I assume not via this little comment block?)
- 2) What is the role of DPD in this EIS?
- 3) Can comments be made to DPD as well?
- 4) Does DPD see all your comments received?

thank you

please replay asap

patricia davis, north admiral

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: do you have a "receipt" method for comments received? are you making all the comments you receive available online/to the public? When I press "submit"  
**Date:** Sunday, October 25, 2015 9:32:09 PM

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patricia davis <tapestry4@gmail.com>

<https://e12.envirolytical.com/communication/view/141404>

do you have a 'receipt' method for comments received?

are you making all the comments you receive available online/to the public?

When I press 'submit' I do not get a specific confirmation right after that my submission was received. Can you add that so we know it does not disappear?

patricia davis, north admiral

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Cc:** [Thomas, Brenda](#)  
**Subject:** FW: W Seattle meeting - sound and communication problems  
**Date:** Tuesday, November 17, 2015 10:43:33 AM  
**Attachments:** [T5soundissuesatmeeting11.132015.docx](#)

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**From:** Patricia Davis [<mailto:tapestry4@gmail.com>]  
**Sent:** Friday, November 13, 2015 02:10 PM  
**To:** Port Sepa  
**Subject:** W Seattle meeting - sound and communication problems

Hello - please read the attachment regarding much needed changes with regard to sound/audibility issues; and communication interface between Port of Seattle staff and our community responders.  
Thank you  
Patricia Davis

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**From:** Patricia Davis [<mailto:tapestry4@gmail.com>]  
**Sent:** Friday, November 13, 2015 1:40 PM  
**To:** 'Patricia Davis'  
**Subject:** Emailing: T5soundissuesatmeeting11.132015.docx

TO: SEPA.p@portseattle.org  
FROM: Patricia Davis  
DATE: Nov. 13, 2015

RE: Sound, audibility, microphone use and hearing 'everyone' precisely

At the West Seattle meeting last night (11/12/15 The Hall at Fauntleroy) there remains significant sound issues that hopefully will be resolved prior to the EIS hearings which will be even more complex and technical

1) The Port staff (other than the female Moderator in front at the podium) were speaking too quietly, and did not get up close enough to the microphone to be heard by everyone in the room. It is **essential that they be heard all the way to the rear of the room.** In looking at the attendees last night - many are/were older. There can be hearing issues in that group. Perhaps the younger group uses online more? Please ensure that the sound can be heard by older individuals as well. Many of the more complex and deep presentations from our community residents are older. They must hear what you say and the precise statistics being offered out. (ADA issue?)

2) There was significant equipment noise (heating and air conditioning equipment that came on frequently) near where one of the large speaker stands was located (near the sound equipment itself) When the motors came on with that equipment it made it even more difficult to hear.

Suggestions:

- 1) Have **four** large speakers, on stands instead of two and position some in the rear of the room.
- 2) Have the sound technicians at the rear of the room so they can ensure the entire room can hear what is being said - precisely and clearly
- 3) Please *ask* (repeatedly as speakers change) if those in the rear can hear.
- 4) Have Port staff put their mouths closer to the microphone and speak up more loudly in generally. We want to hear every word and get the statistics precisely. Might also be helpful to have an overhead situation where they can write down numbers (eg: how many containers are planned? how many ships?)

how many trains? how many train tracks? Although some is mentioned in the Environmental Checklist - we want to be able to see the Port staff *ensure* that we have the 'numbers' for our questions asked in person. That we can hear and see what is being said by the Port. That is basic and should not have to be asked for (twice now).

It is 2015..... we have such amazing presentation and microphone systems. Let's ensure people can hear you , and hear each other. Get the technology.

Please **ensure** (via sound checks prior to starting, and checking in with the audience, and increase the volume on quiet voices)**the audience can hear - all the way to the rear.** Maybe it is even an ADA issue? Hearing impaired? So I **will request that the Port present with ADA/hearing impaired criteria please at all future meetings with regard to Terminal 5.**

Speaking of wanting to be able to hear: we also want to be able to hear our community members - fully. It was downright outrageous that when the sound technician presented the woman (Moderator at the podium) with a 'live' portable microphone to give to those asking the Port questions that she took it, refused its use, and set it on her podium. That is highly offensive. Instead she took it upon herself to summarize the questions (in her own words - which already alters what was said exactly) on her microphone and have the Port respond (note: the response was difficult to hear many times). Additionally the community member would then spontaneously ask a question about the Port response, and the Port rep. would reply (without the female Moderator stating to the rest of us **what** the citizen said). That dialogue was completely lost to many. What did our community member ask? Who knows? Give the people their own microphone in the Q and A. We want to hear each other - not only the Port. We deserve to be heard and not rushed, dismissed, and summarized by the Moderator.

This situation became so annoying that I spoke up and specifically asked the female Moderator - allow our community to have the microphone as they asked their questions so we could hear **their** words and question exactly. I asked her not to 'summarize' her perception of the question. I asked that we be able to hear what our community is asking about and concerned with. She

never allowed that to take place, so we suffered under her unreasonable control of the process (in many ways).

To add 'insult to injury' (meaning in addition to having difficulty even hearing at 100% what was being said.....and her not allowing a microphone for the Q and A... it got even worse.

We were, in my opinion, 'bullied' by the Moderator once we were allowed time to speak (from the sign up list). Many people have difficulty speaking in public. Statistically, it is a common fear. Our public is not professional speakers. Not only did the Moderator interrupt the train of thought by letting speakers know 15 seconds was left, but then she had a gall to simultaneously speak over the person trying to complete their thought. Given we had an hour and essential 8 to 10 people that wanted to speak to the community and Port we were not in a dire time management situation (eg: hundreds of people, and dozens signed up to speak).

Although it is understood that people need to have some constraints on their speaking time, allowing **30 second to a minute more to complete a concept** should be allowed in such a small group. We do not need to be cut off at the precise 'dot' of 3 minutes. It is simple respect for our community and the fact that we are not only speaking to the Port of Seattle - but we are speaking to each other. We want to know - as a community - what other people are concerned with and we want to hear them as well .....not just the Port.

We want to be treated with courtesy and respect. **We want our own microphone in the audience in the Q and A in the future.**

We do not want to be bullied around. We want some basic respect shown to the fact that we are citizens taking our precious, personal time to figure out this situation. We took our free time to come to the meeting (as compared to being paid by Port and others there). We deserve a microphone, and some minimal respect for a few seconds more of time. Geez !

Also it was interesting to note that the microphone at the podium was highly effective and easier to hear than the floor stand microphone for the public. It

is requested that the Port ensure the same quality of audibility for the public as they afford for themselves.

It also might be useful to place a (large - so it can be seen without glasses) ipad with a timer on a chair facing the public speaker upfront (we are not professionals) so we can visually see the time left. That would avoid having our thought flow 'jolted' and 'interrupted' by the Moderator - let alone her inclination to treat the public like a cattle call with rigid 'to the second 'cutoffs' and her audacity to bully the speaker by immediately, simultaneously, talking over the speaker and pressuring the thought process of the speaker.

Perhaps you could supply us with a less dictatorial and more respectful Moderator next time. All of us want to respect time, but again: 30 seconds more is not going to destroy anything (we ended up with time to spare anyway)

The Moderator said that if there was extra time after each person spoke one time that we could sign up again in the entry. Great, but why do we have to leave the room and go into the entryway (thereby missing out what is being said) to do that? Why not place the speaker sign-up sheet at the rear of the room - clearly marked with a pen?

Also if you will identify **with a sign on the entry table** 1) the sign in sheet for attendees versus 2) the list for those who want to speak, it would be appreciated. Therefore we don't have to rely on the table staff to do so. It would also allow citizens new to this process to 'see' they can sign up to speak.

On the more positive note: The location was a good selection. The light refreshments were tasty. Thank you. The two males that spoke in front has a nice style to their personality (but need to speak much louder and clearer). The materials and displays were useful and appreciated. The signs outside were well positioned, easy to see and read, and saved time out in the heavy rains.

Regretfully this meeting was selected on the same night as the Comprehensive Plan meeting and that is not ideal when our community has more than one important land use event to attend at the same time. If you check with the West Seattle Blog (Tracy) she is pretty up on West Seattle events

The EIS is going to be a very complex step in this process. Please ensure that these problems with audibility and equipment are solved; that Port presentation staff speak up loud and clear; and hopefully a different Moderator than does not dismiss our right to hear and speak, and one who does not treat speakers and our residents like a military machine. We do not have to 'stop at an exact' dot. We should be able to complete our thoughts without being talked over !

Patricia Davis

I

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Please advise how many public scoping meetings for the EIS at Terminal 5 will be held and what those dates and locations are. Hopefully you are not having meetings in the month of D  
**Date:** Tuesday, November 10, 2015 11:55:48 PM

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patricia davis <tapestry4@gmail.com>

<https://el2.envirolytical.com/communication/view/179174>

Please advise how many public scoping meetings for the EIS at Terminal 5 will be held and what those dates and locations are.

Hopefully you are not having meetings in the month of Dec. due to the holidays and many people on vacation.

Is there an online location where I can EASILY view the letters that you have received so far? If so, please provide the exact link.

Thank you  
patricia davis

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: As concerned neighbors, close to Terminal 5, we would like to see a Quiet Zone at Terminal 5, to eliminate the need for the trains to blow their horns all night. In addition, the Port of Seattle (POS)  
**Date:** Wednesday, November 11, 2015 11:14:58 PM

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Nancy De Spain <nadespain@yahoo.com>

<https://e12.envirolytical.com/communication/view/179235>

As concerned neighbors, close to Terminal 5, we would like to see a Quiet Zone at Terminal 5, to eliminate the need for the trains to blow their horns all night. In addition, the Port of Seattle (POS) should be required to install shore power at Terminal 5, like other major port terminals so that these mega ships will not be running their diesel engines for days while they unload and reload; resulting in a low frequency vibration that comes up the hill, affecting our neighborhood, along with the diesel exhaust. Terminal 91 has shore power so the people of Magnolia don't have to put up with the noise and dirty air; the people of West Seattle deserve the same considerations.

The POS does not address the impact to air quality once Terminal 5 is operating again. Taken directly from page 10 of POS SEPA No 15-03 the specific operating characteristics of larger capacity vessels serving Terminal 5 are unknown at present. It is anticipated that larger capacity vessels would result in fewer vessel calls with longer duration stays at the facility. However, the specific number and duration of vessels calls and the maneuvering and at berth air emission performance of vessels cannot be predicted at this time. The means and methods for future cargo discharge and loading activities cannot be predicted. Thus, until more specific information is available, it is not possible to analyze any changes to air emissions and production of noise.

Since the POS cannot address the impact to air quality in SEPA, I contend that this Environmental Impact Statement address air quality. There are potentially other ways for the POS to answer the amount of pollutants during operation of Terminal 5. Perhaps a study of the operations on Terminal 30 along the East Waterway could lead to possible projections of air pollutants. Terminal 30 is already berthing super post-panamax ships.

In regards to the noise sections of SEPA (p .23-24, POS SEPA No 15-03) there needs to be un-waiverable conditions for the POS to conduct impact construction work and OPERATIONS of Terminal 5. Impact construction such as pile driving during evenings, weekends and holidays HAVE TO BE PROHIBITED for neighbors to get rest. Safe guards to ensure the Port's compliance to SMC 25.08 needs to be in place. A suggestion would be to have designated points of contact and phone numbers for noise complaints. The SEPA checklist does propose measures to reduce and control noise impacts. These proposed noise mitigation techniques must be transferred and condition into the new master use permit. Examples of noise mitigation from the POS SEPA NO 15-03 include using properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turning off idle equipment. Substituting hydraulic or electric models for impact tools such as jack hammers, rock drills, and pavement breakers could reduce construction and demolition noise. Electric pumps may also be specified if pumps are required. Although as safety warning devices back-up alarms are exempt from noise ordinances, these devices emit some of the most annoying sounds from a construction site. An essential construction noise mitigation measure would be to require that all construction equipment is fitted with ambient-sensing alarms that broadcast a warning sound loud enough to be heard over background noise but without having to use a preset, maximum volume. Another alternative would be to use broadband backup alarms instead of typical pure tone alarms. Such devices have been FOUND TO BE VERY EFFECTIVE in reducing annoying noise from construction sites.

My recommendation is to condition these noise mitigating requirements as part of the master use plan.

The SEPA discusses that construction will take place on liquefiable soil. Liquefiable soil is fill dirt and unstable during seismic activity. Liquefiable soil will amplify the earth vibrations stemming from the pile driving. Nowhere in the POS SEPA 15-03 does it address the geological effects of two years of pile driving. Additional shifting of hillside homes already in designated slide zones could occur. Costly civil lawsuits to recover damages against DPD and POS could come in the future if homes are damaged due to the ground vibrations of pile driving. It is DPD's responsibility to ensure the protection of the environment and public safety from rogue construction projects in environmentally critical areas (SMS 25.09.020). Please have the POS study the impacts of pile driving.

The POS SEPA 15-03 does not address the issues of light and glare affects to the surrounding areas. Please limit the areas, angles, and intensity of illumination originating from the new cranes. Look at having covers over the lights so it is not disruptive to surrounding neighborhoods and air traffic.

Thank you

## TERMINAL 5 IMPROVEMENTS COMMENTS



THE NORTHWEST  
SEAPORT ALLIANCE

The Northwest Seaport Alliance is proposing modifications of the existing marine cargo facilities at Terminal 5 and is preparing an environmental impact statement (EIS). The study will evaluate potential impacts to: Earth, Air, Water, Plants, Animals, Energy and Natural Resources, Environmental Health, Noise, Aesthetics (including light and glare), Historic and Cultural Resources, Transportation, and Public Services.

Public comments as part of the Scoping process are being sought until:  
**Monday, November 23, 2015.**

Name: MIKE DEY

Mailing Address (City, ZIP): 9105 FAUNTLEROY WAY SW, SEATTLE  
WA 98136

E-mail: MSDEY5@AOL.COM

**Comments are being accepted until Monday, November 23. Ways to comment include:**

- This comment card (please provide to a Port of Seattle representative)
- Visit the Online Open House at [T5EIS.publicmeeting.info](http://T5EIS.publicmeeting.info)
- E-mail: [SEPA.p@portseattle.org](mailto:SEPA.p@portseattle.org) (please include your mailing address)
- Attend the Public Meeting: Thursday, 11/12, 5:30 – 8:30 pm, at the Hall at Fauntleroy, 9131 SW California Ave, Seattle, WA 98136

Comments (continue on back if needed):

*I recognize the importance of the port & what they over-see as an additional source of income and jobs for Seattle. What about use of Terminal 5 as a centralized ferry terminal. It would provide a steady source of income for the port from the state?*

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: T-5 is still poorly located: ingress/egress is constricted through urban and industrial traffic congestion choke points. Neither rail switching nor truck routing can avoid the delays endemic to this  
**Date:** Friday, October 23, 2015 11:00:20 AM

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charles doan <cedoan@comcast.net>

<https://e12.envirolytical.com/communication/view/127190>

T-5 is still poorly located: ingress/egress is constricted through urban and industrial traffic congestion choke points. Neither rail switching nor truck routing can avoid the delays endemic to this site. Potential users will take note of this and the pre-emanent carriers will not be easily induced. Suggest you invest those big bucks (\$) on a site not encumbered by such established urban developments that have subsequent to the original development of T-5 left it a stranded relic of a by-gone era.

You have to realize the importance of this transportation connection, in todays operations the dock, cranes and backup areas are only a fraction of the equation. Look at the infrastructure the San Pedro Bay ports had to create to ensure that what they could accomplish on the waterfront was not lost because they were unable to move the cargo on land.

**From:** charles doan <[info@nwseaportalliance.com](mailto:info@nwseaportalliance.com)>

**Date:** November 19, 2015 at 8:42:50 AM PST

**To:** [manderson@portoftacoma.com](mailto:manderson@portoftacoma.com)

**Subject:** Form submission from: Contact

**Reply-To:** [cedoan@comcast.net](mailto:cedoan@comcast.net)

Submitted on Thursday, November 19, 2015 – 8:42am

Submitted by user: Anonymous

Submitted values are:

Name: charles doan

Email: [cedoan@comcast.net](mailto:cedoan@comcast.net)

Subject: General information

Message: I have commented to you previously about the folly of investing in the T-5 development. You seem to be concentrating on simply the terminal infrastructure and equipment – all very nice if the end result would generate a customer. You neglect to consider that a nice terminal is only that.

There is a lot more to shipping containers thru to destination, like rail and truck operations. T-5 is in a closet and you can't get around its geography, the land-side bottlenecks will discourage any potential carrier interested in moving their freight expeditiously.



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All e - mail communications with the Port of Tacoma are subject to disclosure under the Public Records Act and should be presumed to be public.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Will ships have to run their engines while docked? I am concerned about air and water pollution impacts if this is the case. Will rail and truck traffic increase? I am concerned about freight truck tr  
**Date:** Wednesday, November 11, 2015 12:42:53 PM

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Kathleen Dunn <dunkathy@gmail.com>

<https://e12.enviolytical.com/communication/view/179204>

Will ships have to run their engines while docked? I am concerned about air and water pollution impacts if this is the case. Will rail and truck traffic increase? I am concerned about freight truck traffic conflicts with the Alki Multi Use Trail, a main arterial for connecting West Seattle to greater Seattle by foot and bicycle. I live 2 blocks from Puget Sound and I am concerned that rising seal levels caused by global warming will threaten my home. This project should be designed with the absolute minimum carbon foot print from ships, trains and trucks. Design should include facilities to not only maintain but also enhance/maximize and encourage low carbon impact transportation options like walking, biking and mass transportation to include bus rapid transit and light rail, because it separates major destinations between homes, jobs and schools. A flyover for the Alki Multi Use Trail and a bike/pedestrian route suspended from the upper West Seattle Bridge connecting upper West Seattle (Alaska and Admiral Junctions) with Georgetown/Sodo/East Duwamish destinations should be considered.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: What is being planned to alleviate traffic congestion caused by loading and unloading cargo. This was a problem when this facility was operational a few years ago. It will be a larger problem with t  
**Date:** Wednesday, October 28, 2015 5:43:38 PM

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Leonard England <[leon@leonardengland.com](mailto:leon@leonardengland.com)>

<https://e12.envirolytical.com/communication/view/167481>

What is being planned to alleviate traffic congestion caused by loading and unloading cargo. This was a problem when this facility was operational a few years ago. It will be a larger problem with the larger loads of cargo that are planned. The existing infrastructure is inadequate to handle the volumes of cargo traffic that will be generated, even with recent improvements. I would suggest that an entirely separate conduit for truck and train movement to major arterials must be devised to eliminate the impact to already heavy local traffic conditions.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I have lived and owned a house in West Seattle for 30 years. The middle class jobs created at Pier 5 have given me and other families a good living though out our working ca  
**Date:** Sunday, November 22, 2015 10:10:54 AM

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Michael Freeman <[airalki@yahoo.com](mailto:airalki@yahoo.com)>

<https://e12.envirolytical.com/communication/view/180601>

I have lived and owned a house in West Seattle for 30 years.  
The middle class jobs created at Pier 5 have given me and other families a good living  
though out our working careers.

These are jobs which support many businesses in West Seattle.

I make my income from foreign shippers which dock in Seattle., Not from my West Seattle neighbors..

Seattle is a deep water working port which helps supply the needs of our Country.

We Do Not need more Apartments Built at Pier 5, Which equals much more traffic congestion in this area.

How's that morning commute working out for Yeah?

Sincerely Michael Freeman

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 Cargo Wharf Rehabilitation comment from Thomas Hubbard  
**Date:** Friday, November 06, 2015 9:19:27 AM  
**Attachments:** [T-5.docx](#)

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**From:** Tomasi Hubbard [mailto:tomasihubbard@gmail.com]  
**Sent:** Wednesday, November 04, 2015 08:13 AM  
**To:** Port Sepa  
**Subject:** Terminal 5 Cargo Wharf Rehabilitation

Attached are my comments on the environmental impact statement for the T-5 Cargo Wharf Rehabilitation. I will not be able to attend the public meeting, but I look forward to reviewing your responses to the concerns I have raised.

Thomas Hubbard  
4847 California Ave SW #405  
Seattle, WA 98116

4847 California Ave SW #405  
Seattle, WA 98116  
[tomasihubbard@gmail.com](mailto:tomasihubbard@gmail.com)

November 3, 2015

Paul Meyer  
Environmental Review and Permitting  
Port of Seattle  
P.O. Box 1209  
Seattle, WA 98111

Re: Terminal 5- Cargo Wharf Rehabilitation

Dear Mr. Meyer:

Thank you of the opportunity to comment on the proposed rehabilitation of the Terminal 5 (T-5) facility. Due to prior commitments, I will not be able to attend the public meeting on November 12th. However, I do have several concerns regarding the proposed project that should be addressed by the environmental impact statement (EIS). It should analyze the impacts of past and future activities in and adjacent to T-5 and their effects on water and sediment quality as well as the resident and migratory species in the Duwamish estuary and Elliott Bay.

The proposed project could have significant impacts on resident marine and estuarine plants and animals as well as migratory species such as chinook and Coho salmon that reside or migrate through the lower Duwamish and Elliott Bay. There are significant Tribal fisheries in the area impacted by the proposed development. The Duwamish estuary is important for migratory fish as they adapt to marine water as juveniles and re-adapt to freshwater as returning adults. Marine mammals such as harbor seals and orca whales inhabit the area. An octopus sanctuary is nearby and could be impacted by the rehabilitation and operation of T-5.

#### HISTORIC USES OF THE SITE

City of Seattle landfill. Part of T-5 was used as a City of Seattle landfill for many decades. What is known about the refuse that was discarded there? Landfill leachate is often acidic. With a low pH, heavy metals such as copper, lead, arsenic and zinc are soluble in water and groundwater. Groundwater quality and movement should be addressed by the EIS.

Steel mill scrap metal and slag. Part of the site was used to store scrap steel and steel mill slag for many decades. How much material is underneath T-5 and is any of it leaching into the groundwater and being transported to the Duwamish River?

Lockheed Shipyard operations and waste disposal. Part of the site was used by Lockheed Shipyard for many decades. What is the environmental legacy of their operations including anti-fouling paints, sand blasting waste, solvents etc.? Shipbuilding wastes were not regulated by the Washington Department of Ecology until the late 1980s. Prior to that, much of the waste generated by the shipyard was dumped into the Duwamish River and Elliott Bay.

Purdy Co. PCBs. Part of the site was occupied by a metal recycler which dumped PCB oil from electrical transformers into the City of Seattle storm drains on SW Florida St. Have the storm drains been thoroughly remediated? Is there any contaminated soil remaining underneath the pavement? Can the PCBs leach or move toward the Duwamish River and/or Elliott Bay?

Wyckoff wood treatment operations and waste disposal. For many decades, the Wyckoff Company treated poles, pilings and railroad ties with creosote. The company pled guilty of “midnight dumping” of creosote waste to the Florida St. storm drain which is now underneath the T-5 facility. Were the storm drains remediated? Were all creosote or wood treatment chemicals removed from the former facility? Were other treatment methods such as copper arsenate also used at the site?

Existing Contaminated Sediment. The EIS should address the existing contaminated sediment in the West Waterway and Elliott Bay, some of the most contaminated areas of the Duwamish Superfund site. Will re-development construction disturb and re-mobilize the existing contaminated sediment from previous industrial activities such as ship building, wood treatment, and metal recycling? What measures will be taken during construction to prevent the re-mobilization of the contaminated sediments and what best management practices (BMPs) will be used during construction – both on land and in the water?

## FUTURE LAND USES

Storm Drainage. Because the site drains in large water bodies, storm water quantity controls are not necessary, but what storm water controls, BMPs (structural and operational) will be implemented to ensure the storm water discharged into the river and/ or the bay will not be contaminated and adversely affect local and migratory species including chinook salmon?

Spill Control. What measures will be implemented to ensure that spill of petroleum products or the contents of containers will not discharge into the storm drains for T-5?

Longfellow Creek. T-5 is located above the mouth of Longfellow Creek, one of the few remaining salmon-bearing streams in the City of Seattle. What are the effects of culverting

the mouth of a stream? How long is the culvert? The Port has paved over the mouth of the creek and should be responsible for daylighting the mouth of the creek and re-establishing appropriate riparian vegetation to restore the ecological function of the section of Longfellow Creek that flows through Port property.

Thank you for the opportunity to comment on the scoping document. I look forward to reviewing your response to each of the items described above. Please include me in any future mailings or electronic communication regarding the proposed rehabilitation of T-5.

Sincerely,

Thomas P. Hubbard

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: - The Delridge/West Marginal Way/Chelan 5-way intersection needs to be evaluated - The Chelan Ave intersection just to the west of the 5-way intersection is broken (has been for years (WB cur  
**Date:** Sunday, November 22, 2015 7:20:49 PM

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Mark Jacobs <mjjmjj@msn.com>

<https://e12.enviolytical.com/communication/view/180609>

- The Delridge/West Marginal Way/Chelan 5-way intersection needs to be evaluated
- The Chelan Ave intersection just to the west of the 5-way intersection is broken (has been for years (WB curb lane keeps cycling to red, its an add lane)
- The Spokane Street EB to NB at SR-5 is currently broken, look at adding a lane to SR - 90 to facilitate a dual lane on-ramp
- Restrict operations to avoid commuter street peak hours
- No truck queue storage on City streets
- Incorporate ITS to inform motorists when ships are arriving/departing and truck activity is anticipated (aka like WSDOT informing of construction activity)

**From:** Port Sepa

**Sent:** Tuesday, November 24, 2015 9:09 AM

**To:** Meyer, Paul

**Subject:** FW: Comments - Terminal 5 Improvements comments from Johnson, Mark

**Comment 45**

**From:** Mark [<mailto:topspin23@gmail.com>]

**Sent:** Monday, November 23, 2015 11:50 PM

**To:** Port Sepa

**Subject:** Comments - Terminal 5 Improvements comments from Johnson, Mark

1. Homes (windows, walls) surrounding T-5 need to be sound-proofed, at port of seattle expense, just like the homes surrounding the Sea-Tac airport.
2. Put treatment plan in place for stormwater runoff to comply with Clean Water Act.
3. Shore-side electricity needs to be put in place so that ships do not use ship engines while idling at the berth while cargo is loaded/unloaded.
4. The intersection at West Marginal Way SW (immediately adjacent to the Chelan Café) needs to have railroad crossing noise alarms, drop-down arms, and flashing lights installed. The section of railroad track from T-5 all the way eastward past Chelan Café (approx. 1/2 mile) needs to be designated a "railroad horn-free zone" just like currently exists along Alaskan Way in front of the Port of Seattle headquarters. The multiple crossings across the railroad just east of Chelan Café (that lead to Terminal 6, 7, 8 etc) need to be closed off and forced to use the railroad crossing at West Marginal Way SW (immediately adjacent to the Chelan Café).
5. All terminal handling equipment (toppicks, etc) operating at T-5 needs to have lower-decibel, ambient-sensing backup alarms.
6. The glare from the lights at T-5 needs to be reduced from current levels. Light intensity needs to be variable.

Thank You.

Mark Johnson

3414 34th Ave SW

Seattle WA 98126

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Larger vessels and increased yearly cargo volume= more truck and train traffic with increased air and noise pollution More surface runoff contamination More risk from toxic contamin  
**Date:** Wednesday, November 11, 2015 9:35:52 PM

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K Kelleher <[kkelle@nwlinc.com](mailto:kkelle@nwlinc.com)>

<https://e12.envirolytical.com/communication/view/179233>

Larger vessels and increased yearly cargo volume= more truck and train traffic with increased air and noise pollution

More surface runoff contamination

More risk from toxic contaminated, or terrorist activity via containers

Need shore power and sewer service to vessels while in port

Truck and train traffic patterns or roads need to be established that do ,not add to the already overloaded West Seattle bridge

Storm water and runoff Ned to be mitigated

Evaluate noise, air environmental issues from neighborhoods not just port including Harbor ave and N Admiral

# TERMINAL 5 IMPROVEMENTS COMMENTS



THE NORTHWEST SEAPORT ALLIANCE

The Northwest Seaport Alliance is proposing modifications of the existing marine cargo facilities at Terminal 5 and is preparing an environmental impact statement (EIS). The study will evaluate potential impacts to: Earth, Air, Water, Plants, Animals, Energy and Natural Resources, Environmental Health, Noise, Aesthetics (including light and glare), Historic and Cultural Resources, Transportation, and Public Services.

Public comments as part of the Scoping process are being sought until:  
**Monday, November 23, 2015.**

Name: MARK KOHMETSCHER

Mailing Address (City, ZIP): 3021 36<sup>th</sup> Ave SW  
SEATTLE WA 98126

E-mail: MAKDHM@COMCAST.NET

**Comments are being accepted until Monday, November 23. Ways to comment include:**

- This comment card (please provide to a Port of Seattle representative)
- Visit the Online Open House at [T5EIS.publicmeeting.info](http://T5EIS.publicmeeting.info)
- E-mail: [SEPA.p@portseattle.org](mailto:SEPA.p@portseattle.org) (please include your mailing address)
- Attend the Public Meeting: Thursday, 11/12, 5:30 – 8:30 pm, at the Hall at Fautleroy, 9131 SW California Ave, Seattle, WA 98136

Comments (continue on back if needed):

Health (both Physical & Mental) should take priority. Air & noise pollution priority - things as simple as Railroad Crossing Gates to allow a ~~horn~~ horn free Existence, and Shore power to limit diesel engine use, Electric Mobility of containers.

From a state financial perspective: why would state of Washington want to fund impact a highly congested area. Not to mention the high real estate value of this area. It makes no sense to send it to less congested areas i.e. Tacoma, Everett. This would allow Seattle to evolve into a real city (eg. San Francisco & New York thrive without cargo).

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: 1. SDOT has prepared a list of 27 project in a report titled West Seattle Bridge / Dumanish Corridor with several projects aimed to improve access for freight traffic including one dedicated freight I  
**Date:** Thursday, November 12, 2015 7:54:41 PM

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ray krueger <raykrueger@earthlink.net>

<https://e12.enviroltyical.com/communication/view/179682>

1. SDOT has prepared a list of 27 project in a report titled West Seattle Bridge / Dumanish Corridor with several projects aimed to improve access for freight traffic including one dedicated freight lane. Please consult that list to address future traffic congestion along Spokane St.
2. The current city council transportation committee chairman has expressed support to talk with the port regarding installation of quiet zones along Spokane St to mitigate noise pollution.
3. With the prospect of increasing TEU traffic by a factor of 3 (500,000 to 1M) with a fully engaged T-5 operator, the emissions will increase at least by 3 times. We will alert the regional air quality monitoring agency to take baseline measurements before the new operator begins operations and expect mitigation efforts to include shore power and conversion of the truck operators' fleet to 50% CNG by 2025.

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: EIS Scoping Comments from Henry Lee  
**Date:** Friday, November 20, 2015 11:04:45 AM

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**From:** Henry Lee [mailto:henrylee206@gmail.com]  
**Sent:** Friday, November 20, 2015 10:18 AM  
**To:** Port Sepa  
**Subject:** EIS Scoping Comments from Henry Lee

Paul,

As we've discussed on number of occasions, here is what I would like the EIS to cover.

- 1) The rail infrastructure and if it can handle 1.6 million TEUs.
- 2) Shore power to reduce low frequency vibration and air pollution
- 3) Broadband ambient sensing backup alarms for the heavy equipment to reduce noise pollution.
- 3) Train quiet zone established at the rail yard entrance to Terminal 5.
- 4) Natural salmon habitat issues caused by the dredging
- 5) Permanent noise and air pollution monitoring with a hotline for citizen complaints.
- 6) Look at the option of retrofitting the homes closest to T5 for noise. The precedence has already been set when Sea-Tac expanded and it was an option mentioned by our newest Port Commissioner.

Short and to the point. Enjoy reading the numerous other comments. Have a nice day and look forward to seeing the draft EIS.

Cheers,  
Henry Lee  
3323 33rd Ave SW  
Seattle, WA 98126

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Lived at 1733 Victoria Ave SW 1964 to present. Street is on the hillside just north of Terminal 5. Noise from ship/ dock activity bounces off the bank into the house. It is  
**Date:** Monday, November 23, 2015 5:02:06 PM

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jean manwaring <[jmanwaring63@gmail.com](mailto:jmanwaring63@gmail.com)>

<https://e12.envirolytical.com/communication/view/180905>

Lived at 1733 Victoria Ave SW 1964 to present.

Street is on the hillside just north of Terminal 5.

Noise from ship/ dock activity bounces off the bank into the house.

It is possible to direct noise away from then hillsides above. Salty's Restaurant consulted with U of Wa noise experts to direct summer band sounds away from the homes on hillside.

Technology exists to do this.

Ship and dock lights can be shielded to direct light to the docks not the hillsides.

Technology exists for this.

Other ways need to be developed to warn workers other than the constant beep as vehicles move about.

Air pollution is an increasing problem as the city grows. Port should demand ships at Terminal 5 meet high and best air pollution controls

Monies and citizen efforts have been spent to clean up the Duwamish River. Terminal 5 if developed will have a negative impact on the clean up. Plans need to be in place to assure this doesn't happen.

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 project  
**Date:** Saturday, October 31, 2015 5:06:23 PM

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-----Original Message-----

From: Meredith Bricken Mills [<mailto:meredith11@earthlink.net>]  
Sent: Thursday, October 29, 2015 04:26 PM  
To: Port Sepa  
Subject: Terminal 5 project

My total support for the detailed Environmental Impact Statements now required for the Terminal 5 project.  
Responsible government — yes!

Meredith Mills

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: As a West Seattle Admiral District resident, the proposed Terminal 5 project is extremely concerning. When Terminal 5 was in operation, the noise and air pollution was enough to make me and my family  
**Date:** Monday, November 23, 2015 12:58:10 PM

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Bret Moore <[info@stringbreak.com](mailto:info@stringbreak.com)>

<https://e12.envirolytical.com/communication/view/180838>

As a West Seattle Admiral District resident, the proposed Terminal 5 project is extremely concerning. When Terminal 5 was in operation, the noise and air pollution was enough to make me and my family leave our home when ships were in port. The prospect of an extended dredging and construction project, followed by resumed operations with larger vessels and increased road and rail traffic, all without a clear understanding of or solutions for environmental impact, is unacceptable.

Concerns to consider and address in any plan:

- Noise and air pollution from ships idling in port. The hum of ship engines running while in port prevents sleep and mental concentration, and goes on night and day. The lack of shore power in the proposed plan is an oversight and should be a requirement for any operation in Terminal 5. It is not sufficient to presume that future tenants will cover this cost. The noise and air pollution that results from ships idling while in port is oppressive to local residents and not ecologically friendly. Seattle should be a standard bearer for green approaches to industry. Investing substantial taxpayer dollars to create a home for large ships to dock while running engines to maintain power does not reflect what I believe our city stands for. Please conduct a full assessment of expected noise and air pollution levels from Terminal 5, and make shore power a requirement for any Terminal 5 development project.

- Impact of any rail expansion on road transportation. Existing train traffic is a bottleneck for road travel in and out of West Seattle, particularly in the SoDo district. The Viaduct replacement/SR99 tunnel project will dramatically increase traffic through SoDo, making it a primary point of access to downtown from West Seattle and likely creating significant traffic congestion. Other potential development in SoDo (such as a proposed sports arena) would drive even more traffic into the area. If the Terminal 5 expansion includes additional rail lines and activity to service more ships, this would potentially make it even more difficult to get access to downtown from West Seattle and compound impending traffic congestion. Traffic impact scenarios should be assessed including patterns after tunnel project completion, where access to downtown goes through SoDo.

- Environmental & geological risk of construction. The impact of a significant construction project to nearby land and houses should be studied. For hillside homes and areas where mudslides and erosion are a concern, the potential for destabilization of the landscape needs to be understood. An extended construction project to renovate Terminal 5, including pile driving and dredging, could have destabilizing effect on the surrounding area.

From statements at the public hearing on November 12, it seemed that the Port plans to put much of the responsibility for how the terminal would be operated on the tenants, with many questions left open based on how the tenants choose to run the terminal. The environmental impact study needs to fully consider any potential scenarios that might be under tenant control, and requirements should be established around what the tenant will and will not be allowed to do based on the environmental impacts, particularly as relates to my three concerns above.

Thank you.  
Bret Moore

November 23, 2015

**Attention:** Paul Meyer,  
Port of Seattle – Environmental Services  
P.O. Box 1209, Seattle, Washington 98111

Dear Mr. Meyer:

I am writing to you to hereby offer my comments for the scope of analysis in the Draft Environmental Impact Statement (DEIS) for this project pursuant to notice from the Port of Seattle seeking public input on proposed improvements to Terminal Five (“T-5”). Thank you for the opportunity to comment on this important project.

Understandably the ultimate conception of this project, should it be achieved, could offer significant benefits to the port’s efforts to grow its international container business volumes and increase market share. However this promise will come with significant detrimental impacts to the West Seattle community in terms of substantial additional traffic on the road and rail network, negative air quality impacts, noise impacts as well as water quality and other related environmental impacts and concerns. Furthermore the current road and rail infrastructure in and adjacent to T-5 is woefully inadequate to accommodate the projected growth that the port suggests will occur under DEIS Alternatives Two and Three.

The transportation element of the T-5 DEIS will need to clearly demonstrate the necessary transportation infrastructure investments required to improve the road and rail network necessary to accommodate this substantial growth in container traffic projected to come through T-5. It will of course be in the port’s interest to demonstrate to potential T-5 terminal tenants that “landside” transportation infrastructure will be able accommodate this projected facility growth. Clearly current infrastructure conditions in and around T-5 in West Seattle will not accommodate this substantial growth proposed by the port.

This comment letter starts with a brief summary of the proposed “No Action” and two “Action Alternatives” for the T-5 DEIS analysis in order to confirm the specific proposed actions for the port’s T-5 terminal improvement project and the necessary environmental assessment. Please confirm that the summary of action items and forecasts for T-5 container volumes are correct here so that it is clear that I understand the specific details under each “action” alternative.

This letter proceeds with my suggestions for T-5 DEIS transportation element analysis work items. The scope and scale of this proposal for Terminal Five in West Seattle will necessitate extensive transportation analysis in order how to demonstrate how either of these two action alternatives could be implemented by the port. There are considerable and substantial potential detrimental impacts to the local community in West Seattle that could result from this action by the Port of Seattle and I will offer thoughts and suggestions in this regard as well.

## **Scope of the Proposal for T-5 DEIS Analysis**

According to the public notice released by the Port of Seattle as well as public information from the DEIS scoping meeting at the Fauntleroy Community Center on November 12<sup>th</sup>, 2015, it is my understanding that Port proposes three alternatives for analysis in the T-5 DEIS:

1. **Alternative One:** “No Action”
2. **Alternative Two:** Pier strengthening, new container handling equipment, increased cargo capacity
3. **Alternative Three:** Pier strengthening, new container handling equipment, building relocation to free-up container storage space, additional loading tracks in intermodal yard, increased cargo capacity.

Although it isn't clearly noted in the Port of Seattle's Public Scoping Notice under SEPA (“Issuance of New SEPA Determination of Significance ((DS)) And Request for Comments on Scope of Environmental Impact Statement (EIS) for Terminal 5 Cargo Wharf Rehabilitation, Berth Deeping and Improvements Project”) as to how much additional cargo in the form of import containers could pass through Terminal Five under Alternatives Two and Three, Port staff at the **November 12<sup>th</sup>, 2015** Public Scoping meeting reported that the approximate container volumes under Alternative Two would be between 650,000 and 1.2M Twenty-Foot Equivalent units (TEUs) annually, whereas the approximate annual container volume projection under Alternative Three at T-5 would be between 1.2M and 1.8M TEUs.

Please confirm that these are indeed the correct annual container forecasts for Port's two proposed action alternatives. They are substantially higher than the previous annual volumes of 650,000 TEUs that had previously been permitted for the T-5 facility in West Seattle. These proposed projections, if correct, will substantially overwhelm the existing transportation infrastructure, both at the T-5 facility within Port property and on the adjacent neighborhood road and rail infrastructure. These facilities are woefully inadequate to serve this volume of freight throughput from T-5. These proposed volumes will serve as the basis for the extensive transportation analysis and mitigation assessment that will need to be undertaken in the DEIS for the T-5 Improvement Project.

## **Transportation Analysis in the DEIS**

In order for the overall analysis and findings within the T-5 Expansion Project DEIS to be credible, it is essential that the transportation analysis to be well organized, meticulous, thorough in its analysis and clear in terms of demonstrating that all facets of transportation impacts and demands from the two proposed development alternatives have been identified. The sheer scale and scope of these two proposed alternatives are significantly greater than the volume of business that was served by T-5 when it previously operated under a ceiling (permitted) volume of 650,000 TEUs annually.

As previously mentioned the existing road and rail infrastructure within and to West Seattle are utterly insufficient to serve this substantial growth in demand that is proposed by the Port at T-5. The transportation analysis will need to clearly document the shortcomings in the existing transportation infrastructure and also show what improvements will be needed in the future to serve this growth at T-5 and how it will be paid for.

The transportation analysis in the T-5 Redevelopment DEIS will need to clearly demonstrate how the Port proposes to improve the road and rail transportation infrastructure that will be needed to accommodate this substantial proposed growth at T-5. It should also consider other future growth that is occurring in West Seattle, especially the considerable projected growth in population and urban densification that will occur over the next 20 years (and is presently happening as well). Consideration of land-use changes and growth projections in the Seattle 2035 Comprehensive Plan (update) will also be important to include in the T-5 Redevelopment DEIS in order to demonstrate how this analysis is consistent with, and fits into, long-range comprehensive plan forecasts for West Seattle.

The long-range forecasting effort for container traffic growth under Alternatives Two and Three should also be coordinated with regional forecasting efforts underway at the Puget Sound Regional Council (PSRC) with their long-range regional transportation plan update (Long-range regional growth plan – PSRC Destination 2040 and their long-range transportation plan – Transportation 2040).

### **T-5 DEIS Rail Operations and Infrastructure Analysis**

Based upon the presentation from Port of Seattle officials at the **November 12<sup>th</sup>** Public Scoping meeting in West Seattle, it appears that the T-5 Redevelopment Alternatives Two and Three assume a large role for rail in serving the considerable growth in import container traffic that would occur under these two scenarios. This raises a number of serious questions for the scope of T-5 DEIS transportation analysis.

The previous function of T-5 (and that which it was permitted for) saw a ceiling of 650,000 annual TEUs passing through the T-5 documents and onto the local road and rail network for forwarding onto local, regional and national markets. Although the rail traffic out of the Terminal 5 facility would vary somewhat with the timing of container ship arrivals and unloadings, railroad equipment and crew availability, rail operational issues (availability of mainline rail operating slots for example), and other factors, the number of container trains generated from each container ship call at T-5 in West Seattle typically varied from three to five total trains per container ship (depending also of course on ship size, number of containers unloaded and so forth) that would operate out of T-5.

The size and scale of these container trains operating out of T-5 would vary somewhat, but it wasn't unusual for the typical container train to be 6,000 feet or so in length. It would often be necessary for trains of this length to "double" the yard when assembling their trains, meaning the first half of the train would have to pull out of the T-5 rail yard out to along West Marginal Way (and block the T-5 grade-crossing access proximate to the W. Marginal Way / Spokane Street intersection) and then "double" back to connect up to the second section of the train, pump up the train (brake) air and then depart Terminal 5 and West Seattle. This type of train operation was quite disruptive to the local neighborhood owing to extensive grade-crossing blockage and the use of the train air-horns (noise impact) during these train movements.

Under the current infrastructure and style of train operations, this situation will get appreciably worse under the container growth scenarios suggested under Alternatives Two and Three, never mind the fact that the current level of rail infrastructure existing at the T-5 terminal, adjacent to T-5 in West Seattle up to the (west) Duwamish waterway lift bridge and on to south Seattle and the Argo Yard connection to the north-south UP/BNSF Railway mainline is completely insufficient to serve these future demand levels implied by container forecasts under Alternatives Two and Three.

Therefore, the transportation analysis for the T-5 Redevelopment DEIS will need to identify and address a number of key questions and issues related to rail infrastructure and operations:

1. In the “No-Action” Alternative (Alternative One), the transportation analysis should present detailed information about how many container trains were operating under the previous throughput level of 650,000 annual TEUs (i.e. explain what the “baseline” condition is in terms of daily, weekly or monthly number of container trains operating out of T-5 to serve that level of traffic). This will help the reader understand what the current/previous condition was for container train traffic out of T-5 and it will serve as a baseline for comparative purposes of future development alternatives.
2. For T-5 Re-development Alternatives Two and Three and the forecasted container traffic under each alternative (1.2M TEU and 1.2 -1.8M TEUs respectively), what will this mean in terms of total train traffic for each alternative? What does this mean in terms of how many additional annual, monthly, weekly and daily trains would operate under Alternatives Two and Three? In other words, how many more container trains will be operating out of T-5 under these two alternatives in comparison to the baseline (“No-Action”) alternative?
3. What are the operational characteristics of these additional (new) container trains operating under development Alternatives Two and Three (length, weight, switching and operational characteristics inside and outside of the expanded T-5 facility? To the extent it is possible to assess and present, what would be the expected schedule of operations for these additional trains operating in and out of the redeveloped T-5? Day time operation? Night time? Early mornings? Etc. Or, is it not possible to specifically analysis this point because of variable container ship calls at T-5? There will no doubt be a substantial increase in container traffic in and out of T-5 under these two development alternatives and the operational characteristics and impacts of increased train traffic will need to be addressed in great detail in the DEIS transportation analysis.
4. How does the current rail infrastructure within and outside of T-5 perform in serving rail traffic demand? What improvements and additions to rail infrastructure both within and outside of T-5 will be necessary to accommodate this future growth under Alternatives Two and Three? (Second/third mainline rail track to connect to T-5 terminal, New Duwamish Waterway Bridge, Rail infrastructure improvements to the “ondock” rail facilities at T-5, etc.)? This will be major transportation issue to analyze in the DEIS. There should be specific supporting information (tabular project summaries with rail project cost-estimates, etc.) to document what specific rail infrastructure projects will be needed to accommodate this (substantial) additional rail traffic coming out of T-5. There should also be discussion about funding sources and responsible parties to implement these needed rail infrastructure projects.
5. How (have?) the Class I railroads been consulted about this future redevelopment proposal for T-5 in West Seattle? How do they see the rail network evolving to serve this future growth in demand? How will this growth in rail intermodal traffic from the expanded T-5 interface and fit into other growth in mainline rail traffic in the Pacific Northwest?

6. Have the Class I railroads provided any tentative commitments to participating and/or funding these necessary rail infrastructure improvements identified in the transportation analysis in the T-5 Redevelopment DEIS?
7. What are the assumptions for the future growth of T-5 import container traffic under Alternatives Two and Three in terms of mode share between the rail and road (truck) modes? Although no specific commitments were mentioned by the Port of Seattle officials at the **November 12<sup>th</sup> DEIS** Public Scoping meeting, it appears there is the expectation that majority of the new container traffic through the improved T-5 terminal will be transloaded directly from container ships to waiting trains (as opposed to leaving the T-5 facility on a container truck). What are the assumptions for the “mode split” between rail and road for increased container volumes under Alternatives Two and Three? This is a key question for the transportation analysis in the DEIS!
8. With respect to comment seven above, I suggest the transportation analysis in the DEIS should consider different scenarios for the mode split of container traffic between the rail and road modes. For example, one scenario could assess a scenario where 95 percent of the containers under the alternatives will operate out of T-5 on the rail mode and only five percent will be truck trips. Another scenario might evaluate a 90 (or 85 or 80) percent rail mode option, with the remaining percentage operating out of T-5 on trucks.
9. The transportation assessment in the DEIS should discuss and analyze in some detail the consequences of failure to achieve the various mode splits (rail/truck) in the scenarios suggested above in comment # eight. What if the analysis in the DEIS ultimately supports Alternative Three which would permit up to 1.8M annual TEUs to pass through T-5 in the next 20 years with 95 percent of these containers to be transported out directly out by rail, rather than truck and this mode split does not actually occur? What are the consequences in terms of additional truck trips, should this mode-split scenario not be achieved?
10. How will the already substantially overburdened and congested local/regional arterial roadway and highway network accommodate all of these additional truck trips that would result should the port’s rail mode-split assumptions above not be achieved? Presumably the tenant(s) who are interested in (potentially) having their ships serve a redeveloped T-5 will want assurances that their containers will be able to get to market and won’t be stuck in ever increasing levels of local and regional traffic congestion?
11. Will both railroads have access to serve the redeveloped T-5 facility in West Seattle? Or will some of the shipping lines that serve the redeveloped T-5 facility have to “dray” their container traffic over to the BNSF Railway’s Seattle International Gateway (SIG) intermodal gateway yard via the truck mode over in the SODO district of South Seattle (proximate to the Starbucks’ headquarters). In this scenario, a substantial number of truck trips to the BNSF Railway’s SIG gateway will be quite problematic in terms of already overloaded local arterial network in West Seattle and the lengthy delays in accessing the SIG gateway in Seattle’s SODO neighborhood.

What will this mean in terms of additional truck traffic to/from the West Seattle T-5 facility in an already overly congested local arterial network to/from West Seattle?

12. What service commitments will the two Class I railroads have with (potential) terminal operators at the redevelopment T-5 in West Seattle? Or is this considered “confidential” information at this point that is part of ongoing negotiations with potential tenant(s)? What is process to communicate this point with the greater public at the appropriate time so there is understanding of this point and its impact on rail operations and West Seattle?
13. Based upon the detail rail operations and infrastructure analysis suggested in comments one through nine above, what are the expected impacts to the local community in terms of air, noise, vibration, road traffic impacts and other related concerns and how will these impacts be mitigated should either Alternatives Two or Three be recommended to move forward? This will be a very important part of the Environmental Impact and Mitigation analysis piece of the T-5 Redevelopment DEIS.
14. The transportation analysis within the T-5 Redevelopment DEIS should present, discuss and carefully consider proposing institution of a quiet-zone in and adjacent to the redeveloped T-5 facility so that the substantial increase in the train traffic that would occur under Alternatives Two and Three will not be an ongoing and substantial burden to the West Seattle community. The FRA has an established technical process for implementing “Quiet Zones” such that the railroads won’t have to constantly blow their horns when approaching/crossing rail grade crossings during train operations (and constantly disrupting the neighborhoods with this noise).

Further information on the FRA “Quiet Zones” can be found at

<https://www.fra.dot.gov/Page/P0104> and <https://www.fra.dot.gov/eLib/Details/L03055>.

The Port must carefully consider and apply this opportunity if either of these two alternatives moves forward into development owing to substantial and detrimental noise impacts to the local community!

If the port determines that an FRA “quiet zone” isn’t feasible for the T-5 terminal redevelopment project, they must clearly explain the rationale for this decision and why it wouldn’t work for the West Seattle community. The Port of Seattle apparently made previous commitments to the West Seattle community regarding the abolition of train horn noise so that the community would not be impacted by this negative effect, however this commitment on the port’s part was never fulfilled. The port must do a better job responded to, and mitigating this issue, should either development Alternative Two or Three move forward.

## **Truck / Roadway Impacts Analysis**

For the purposes of ensuring a credible and reasonable analysis of trucking operational and roadway impacts within and adjacent to T-5 as part of this redevelopment proposal, this analysis will need to be coordinated with transportation and land-use planning efforts that the city of Seattle is undertaking as part of its Seattle 2035 Comprehensive Plan update. The Port's transportation analysis should also be cognizant of and consistent with regional freight and transportation planning efforts underway with the PSRC's Transportation 2040 update currently getting underway by the PSRC.

The PSRC is also developing a regional freight model in addition to its regional, four-county travel-demand model and this should be consulted and considered to the extent possible. The Port of Seattle staff is no doubt aware of these local/regional transportation planning efforts and relationship to this port proposal, but it is important to mention this for the official record nonetheless.

As for the truck and roadway operational analysis under development Alternatives Two and Three, there will need to be a detailed traffic analysis section on truck operations and demands (how many more truck trips generated under each alternative?) for increased truck traffic in the future condition and their impacts on the already over congested local and regional network?

Furthermore, what level of roadway and infrastructure improvements will be necessary to support the future growth in truck trips out of the redeveloped T-5 in West Seattle and how will these improvements be funded and when will they be implemented? These are all key issues and questions that will need to be addressed in the transportation analysis of the T-5 Redevelopment DEIS.

A considerable increase in future truck traffic in and out of a redeveloped T-5 in West Seattle will be a major detrimental transportation (and environmental) impact to the West Seattle community and must be addressed (and mitigated) in the transportation analysis and environmental mitigation sections of the T-5 Redevelopment DEIS !

## **Closing**

Again, thank you for the opportunity to comment on key issues related to the Port of Seattle's proposed redevelopment of Terminal Five in Seattle. As previously mentioned, while there is an opportunity for the Port of Seattle to repurpose and redevelop Terminal Five to respond to the evolving market needs in the global shipping industry and further the potential market share for the port's international import container business, this will not occur without considerable cost and major impacts to the West Seattle Community. The DEIS must carefully consider and balance these tradeoffs and concerns as they relate to, and impact, the West Seattle community.

If the Port of Seattle is truly interested in being "a good neighbor" to its taxpaying citizens in West Seattle, the port will carefully consider the concerns and issues raised by the citizens of West Seattle during this public scoping comments process and it will demonstrate good will and seriousness of purpose in responding to the concerns of the citizens of West Seattle raised during this public scoping comment process.

As per the request in the Port of Seattle's SEPA Scoping public notice, my contact information is provided below.

Thank you,



Thomas A. Noyes

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**Contact Information for Thomas A. Noyes:**

**Home Address:**

3215 38<sup>th</sup> Avenue SW  
Seattle, Washington 98126 – 2241

Home Telephone :

Cell-phone:

E-mail: [Thomas\\_Noyes@comcast.net](mailto:Thomas_Noyes@comcast.net)

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Proposed Terminal 5 Expansion  
**Date:** Friday, November 13, 2015 7:25:27 AM

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**From:** Denny Olson [mailto:dennyoneputt@hotmail.com]  
**Sent:** Wednesday, November 11, 2015 03:05 PM  
**To:** Port Sepa  
**Subject:** Proposed Terminal 5 Expansion

I am offering comments to the Port of Seattle regarding the expansion of Terminal 5 and request that you give serious consideration to the impact of the families that live in the neighborhood. From what I understand the vision for Terminal 5 will be a robust terminal for the largest cargo vessels, larger cranes to load and unload ships, more trains and trucks to transport the containers and that this activity would go on around the clock.

1. **NOISE.** Please put in safeguards to restrict the level of noise, especially between 7PM and 7AM. If more trains are flowing into the terminal, I believe it is the Port's responsibility to put in traffic signals or automated drop down crossing arms to stop cars, when necessary, so trains will not be blowing their whistles whenever they impede traffic. Believe me, trains whistles are piercing and it's the last thing to need to hear you're in bed trying to sleep.

I also believe it is the Port's responsibility to install shore power so these big ships don't have to have their engines running on idle. The hum from their running and the associated vibrations can be felt by residents in West Seattle. I do not want to hear the humming of these large vessels around the clock.

2. **LIGHT.** I am anticipating even more lighting on Terminal 5. When designing the placement of lighting fixtures please keep in mind the residents who live nearby. Aim for a balance to mitigate the harsh lighting to residential neighbors with the need to keep activity on the terminal safe.

3. **POLLUTION.** Before the super large ships can dock at Terminal 5 I presume there must be a deepening of the channel in the West Waterway. I am concerned this will distort and/or dislodge the habitat of salmon returning to spawn. In addition, there will be a stirring up of the bottom and most likely the release of toxics that have been settled there for years. Both of these potential disruptions and impending pollutions need to be carefully examined before moving forward.

I'm unable to attend the public meeting at the Hall at Fauntleroy on Nov. 12th but trust that you will receive my input with the serious intentions in which it is offered. I have lived in West Seattle all of my adult life and recognize that a good portion of my property taxes go to

support the Port's activity. Please listen to us homeowners and do the right thing that is fair to all.

Thank you.

Dennis Olson  
3316 - 35th Ave. SW  
Seattle, WA 98126

-----Original Message-----

From: EnviroLytical - Port of Seattle Terminal 5 Improvements [<mailto:info@envirolytical.com>]

Sent: Tuesday, November 24, 2015 9:30 AM

To: Shultz, Mick; [pxander@soundearthinc.com](mailto:pxander@soundearthinc.com); Meyer, Paul

Subject: New Communication: Finally to see the two ports working together and a solid plan for getting our value out of T5! To keep a working port is critical to our economy and this is virtually the only way to do so.&

Ron Osborne <[rosborne@farmersagent.com](mailto:rosborne@farmersagent.com)>

<https://e12.envirolytical.com/communication/view/181212>

Finally to see the two ports working together and a solid plan for getting our value out of T5!

To keep a working port is critical to our economy and this is virtually the only way to do so.

my home since 1987 overlooks the Port and I look forward to seeing commerce return to it.

If West Seattle residents want to complain about traffic this petition the city to freeze the unbridled growth of urban density in our small community.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: As a concerned citizen and neighbor of the Port of Seattle's Terminal 5, I am writing to raise concerns about the noise impacts. Please study the amount of train noise and train  
**Date:** Monday, November 23, 2015 11:09:38 PM

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Simon Overbey <[simon@upnut.com](mailto:simon@upnut.com)>

<https://e12.envirolytical.com/communication/view/181206>

As a concerned citizen and neighbor of the Port of Seattle's Terminal 5, I am writing to raise concerns about the noise impacts.

Please study the amount of train noise and train horns that is caused by an operational Terminal 5. For mitigation, please implement a horn-free quiet zone along Marginal Way and S Spokane similar to what is already in place at Port of Seattle Headquarters at Pier 66 along Alaska Way. The train quiet zone would consist of automated drop down crossing arms.

Require ON SITE / perimeter air quality and noise monitoring.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Terminal 5 improvement. 1. The provision of shore power for visiting vessels. Should the provision and use of shore power be mandated to keep ships from idling their engines whil  
**Date:** Thursday, November 19, 2015 3:32:54 PM

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Glen Poor <[glenpo42@hotmail.com](mailto:glenpo42@hotmail.com)>

<https://e12.envirolytical.com/communication/view/180263>

Terminal 5 improvement.

1. The provision of shore power for visiting vessels. Should the provision and use of shore power be mandated to keep ships from idling their engines while in port?
2. The vehicles that transport containers from gantry cranes to the on-dock rail rolling stock can be deisel or electric. what is the contribution toward noise and pollution should these be diesel? What would be the saving if these were electric machines? What would the impact be if they were both electric and unmanned as we see in modern terminals operating in Georgia, Virginia and in Norway? My understanding from those working in the shipping industry that these ports are both more efficient in time and energy as well as much quieter.
3. Any railway operations in a dense transport location will contribute to the noise and pollution generated in that location. Long trains of rail cars cause delays at all intersections resulting in local traffic idling. This location has a high density of diesel articulated trucks. How long will the trains be? If operated at night to reduce the traffic impact, then we should consider the noise associated with running rail cars at night. The safety requirement to blow horns as a signal when crossing intersections has substantial impact to the neighbors of the terminal when done at late or early hours.
4. Should the development be required to provide an overpass for rail traffic for access to the terminal so as to reduce both the traffic and noise contribution of the on-dock rail.
5. I don't know if this question can be addressed in an environmental impact statement. However I do wonder how the development of terminal 5 intersects with the much discussed idea of bringing light rail commuter transit into West Seattle.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: "Densify the rail yard"---I'm hopeful that this would not mean that more trains would be located on Pier 5. The trains are very hard to live with when they are so close to neighborhoods.  
**Date:** Friday, November 20, 2015 8:27:44 PM

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Sharon Price <[jasprice@isomedia.com](mailto:jasprice@isomedia.com)>

<https://e12.envirolytical.com/communication/view/180596>

"Densify the rail yard"---I'm hopeful that this would not mean that more trains would be located on Pier 5. The trains are very hard to live with when they are so close to neighborhoods. Their loud horns wake us up at all hours of the night and if I'm outside during the day, the echo of their horns bouncing off the undersides of the W. Seattle Bridge is deafening. Now that the Pier is not getting much use, we're down to just the shuttling of train cars from the steel mill, and that is just during the day, and horn noise is nominal. That's the way it was when we bought our house in 2000.

"Air Quality"---As I am helping raise 3 toddler grandchildren, I really worry about the lack of clean air around here. For the most part I keep the kids in the house or drive to the "Y" 2 miles south to avoid the sooty air. The soot coats the north side of our house, my blueberries and tomatoes, the screens when we open the windows in the summer (we don't have air-conditioning), and everything else outside. I have called the Port in the past to complain of black smoke from ships and tugs. Just this week a large yellow boat that has been tied up to P-5 recently sent out billows of black smoke. At least this time the wind was blowing it north towards the Port's offices instead of south into neighborhoods. The more trucks trains and boats we have working from P-5 the more bad air for those of us who live around it. I really think we need to insist that shippers do what they have to do to use shore power/cold ironing, and we need to have the electrical hook-ups available. Other major ports are converting, so in the future we would be in step with a greener port operation. Years ago with a meeting of the city council, neighbors, and a rep from the Port, we were told that when the pier was constructed next to Magnolia it would have hook-ups and then the Port would start providing them on the other piers. Well, Magnolia got their shore power, but not us. Any future improvement on the piers including p-5 should have this built in.

P-5 has ships, tugs, trains, trucks all contributing to the local air pollution, and they should be monitored and restricted in what they can emit.

Construction of P-5 improvements will require additional machinery which will regrettably most likely use fossil fuels and add pollution---it would be a healthy idea to study how that could be minimized.

"Noise"---The noise from the P-5 trains has been unbearable. Yes, we've had train noise from the steel mill, but during the day, infrequent, and not loud. I have phoned and written a number of complaints. Again, when about 35 neighbors met with the city council rep, Tom Rasmussen, and a Port rep, we were told the national train regulations were the law of the land and the Port couldn't do anything about it. However, by the Port's own offices in the Belltown area, the trains only use bells instead of booming horns and crossing arms. At our meeting we were told it would be too expensive to add crossing arms to all the roadways along Spokane and West Marginal Way, but that is exactly one reason the horns are so awful---there are just too many crossings. However, as was pointed out at that meeting, some of the crossings aren't necessary. Anyway, the crossing arms need to be installed to lesson the number of times the horns are blasted, and bells used instead of horns. Another way to deal with this major problem is for the Port to not allow the trains that serve P-5 to run between 10pm and 6am.

How about using the quiet backup warning system on the equipment on P-5 that doesn't radiate throughout the area? They're using it on the machinery at the steel mill at very little cost.

I'm also worried about the pile-driving and other noise that could be a part of the construction of improvements. I hope the hours of the noisy operations will be limited to daytime and minimized where possible. The pile driving could also shake our house which is directly in front of P-5 and on a steep slope.

"Transportation"--- We already have increased use of the W. Seattle Bridges from the thousands of new condos and apartments being constructed in W. Seattle, and having more trucks on the roads and bridges because of construction projects on P-5 and for more containers coming on larger ships, will really stress our transportation options. From W. Seattle we have to cross the Duwamish River, so our options are limited.

"Plants and Animals"--- The Duwamish is the only river to the Puget Sound running through Seattle. For years there

have been lawsuits, clean-up work parties, tests, etc. (a lot of time money and work) in an effort to clean up the river. The natives have had an uphill battle for their fishing rights. I can only think that the dredging for the P-5 expansion would make the river a difficult place for the salmon native plants and other living river organisms to survive. The effects of the pile driving could be negative for the Duwamish inhabitants, too. The Sound Keepers group has been working for years to help restore the river.

"Historic and Cultural"--- I have watched a very busy fishing industry by the native Indians in the Duwamish mouth on the east side of P-5. If all this pier disruption goes on to make improvements and then we have the enlargement of P-5 to the east with wider boats, isn't the Indian right to fish disrupted? Wouldn't their salmon catch be hindered?

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: The expansion of Terminal 5 would impact my life in several ways. The first issue would be noise. As it is the train noise at my house has become almost unbearable. I have always l  
**Date:** Sunday, November 22, 2015 2:14:15 PM

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Tim Ptak <[timpak@yahoo.com](mailto:timpak@yahoo.com)>

<https://e12.envirolytical.com/communication/view/180602>

The expansion of Terminal 5 would impact my life in several ways.

The first issue would be noise. As it is the train noise at my house has become almost unbearable. I have always lived near trains, as a child growing up in Chicago we lived next to the elevated track's and then in my teen years there was a freight line that was just beyond my back yard. The last couple years the noise from this line has increased to an unacceptable level. The engineers will blow the horn until the air supply is exhausted all day and night. I have recorded 120 db from my porch, it's alarming. The added train traffic will make living in my house extremely unpleasant.

The next issue would be the trucks. My neighborhood is already packed with trucks parked for the night surrounded by bottles filled with urine. It's gross. My wife doesn't feel safe walking to the buss because she has to walk through that mess. It's already too congested here and I haven't heard of a reasonable proposal for how to get the up to 1.2 million new containers out of West Seattle. If rail is the solution depending on that 100 year old bridge seems ridiculous. I don't see how you could depend on that relic to handle to load of an 18,000 TEU ship. If that bridge is the answer then that leads to another issue. I am a recreational boater and moor my boat in the Duwamish. When the bridge is down we are prevented from entering or leaving the river, it is we are too often left waiting and because the bridge tender has to walk the length of the bridge every time it raise's and lowers this can be a lengthy event.

The thought of diesel generators running nonstop while the ships are docked is also concerning. We already have some of the worst air pollution in Wa state and that will just add to it. We're live in West Seattle, this shouldn't even be an option. The negative effect this will have on the residents is completely unacceptable.

As you neighbor I hope you will consider my issues.

Tim Ptak

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Please include the following in the scope of the environmental impact study. Train noise including signal crossing and the proposed impact of increased train traffic. The possibility of a quiet zone or other separation of road and rail traffic to facilitate a reduction of horn soundings.  
**Date:** Sunday, November 22, 2015 10:22:14 PM

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Victoria Ptak <[victoria@vain.com](mailto:victoria@vain.com)>

<https://e12.envirolytical.com/communication/view/180610>

Please include the following in the scope of the environmental impact study.

Train noise including signal crossing and the proposed impact of increased train traffic. The possibility of a quiet zone or other separation of road and rail traffic to facilitate a reduction of horn soundings.

General noise reduction studies including coupling and train horns. Shore power must be installed to reduce engine noise.

In keeping with the ports mission to be a getaway to a greener economy the increased pollution and it's potential effect on human and marine life needs to be studied. Boat, truck and train traffic along with cars ensnared in the increased congestion will have substantial impact on health and environment.

More information is needed on the impact to the fish, birds and marine mammals.

Train bridge closure increases at the level needed to facilitate the proposed train traffic increases will have a major negative impact to recreational and commercial marine operations on the lower Duwamish and up river. The delays for a train crossing require dangerous maneuvering in a swift moving tidal river and extended idling noise and pollution while waiting for the train.

Spokane St. and West Marginal need a traffic analysis done before expanding operations at Terminal 5. There must be a separation of port and public traffic.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I would like to comment in favor of Alternative #3. I think that fully re-developing Terminal 5 to its maximum capabilities is the best solution for our waterfront and to maintain Seattle and the Paci  
**Date:** Friday, October 23, 2015 3:22:06 PM

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Andrew Robertson <[drobertson1987@gmail.com](mailto:drobertson1987@gmail.com)>

<https://e12.envirolytical.com/communication/view/141363>

I would like to comment in favor of Alternative #3. I think that fully re-developing Terminal 5 to its maximum capabilities is the best solution for our waterfront and to maintain Seattle and the Pacific Northwest as a primary destination for International trade. Our waterfront has been a primary piece to the puzzle in this region for over 100 years, it supports jobs in transportation, manufacturing, warehousing and a whole host of other parts in our economy. If we value the character, of not only our city, but our region, in maintaining good, high paying, working class jobs, we must support this modernization. The best way to do this is to bring Terminal 5 up to date in a way that won't require more updates in the future, but fully brings it into the 21st century. Please move towards Alternative #3, thank you for your consideration.

**From:** [roxerusch@gmail.com](mailto:roxerusch@gmail.com)  
**To:** [Port Sepa](#)  
**Cc:** [Meyer, Paul](#)  
**Subject:** Public Scoping Comments T-5 Rusch  
**Date:** Monday, November 23, 2015 1:23:53 PM  
**Attachments:** [Comments Written Scope of EIS Rusch.docx](#)

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As a West Seattle resident, I submit the attached timely EIS Scoping comments regarding the Port of Seattle's Terminal 5 Modernization Project. I thank the Port for soliciting these important comments to inform the preparation of the draft EIS. I look forward to reviewing the draft EIS in Spring of 2016.

Roxane Rusch  
3311 SW Hinds Street  
Seattle

**Comment 1: Scope of EIS Must Consider CUMULATIVE IMPACTS**

For decades, West Seattle neighborhoods have been nuisanced with the *cumulative effects* of air, water, noise, and traffic pollution. Specifically, 24 hour Port operations have exceeded the conditions of their DPD issued MUP as well as the spirit and promises of their 1994 Environmental Impact Statement. An EIS should be prepared “whenever more than a moderate effect on the environment is a reasonable probability. Further, “*cumulative impacts*” are defined as the “past, present, and reasonably foreseeable impacts” of a proposal. It is clear, NOT SPECULATIVE, that this upsizing will ultimately result in two Post Panamax ships simultaneously hoteling at Terminal 5. Although the Seaport Alliance has discretion to determine the scope of the **Environmental Impact Study elements** to be analyzed, Agencies are required to review together “closely- related” proposals which cannot proceed independently. The Port as Lead Agency should not piecemeal consideration of cumulative impacts to neighbors west and south of the project both during construction and full operations.

Assure there is not sequencing of the permitting process and intentional segmentation to avoid a comprehensive review of the cumulative effects of this project as required by SEPA and interpreted in Seattle Municipal Code.

**Comment 2: - Consider the Construction Phase of the Modernization of Terminal 5 as a Major Public Project**

The Terminal 5 Modernization Project should be considered a **Major Public Project** and residents afforded the benefits of significant relief of the substantial impacts. Major public project" means a project for a public facility as defined in SMC Title 23 (25.08.168), the construction of which the Administrator determines is likely to be of at least six months duration, and is likely to have a substantial impact on the public safety, health and welfare and the provision of public services, including transportation services.

**Comment 3: - Adequately evaluate Public nuisance noise.**

The scope of the EIS must adequately evaluate "**Public nuisance noise**". This means any unreasonable sound which annoys, injures, interferes with or endangers the comfort, repose, health or safety of an entire community or neighborhood, although the extent of damage may be unequal. (SMC 25.08.280).

The scope of the EIS must adequately address measures to reduce land use compatibility noise impacts. To address the potential for exposure of residences and other sensitive land uses to incompatible environmental noise, consider adoption of a policy that recommends that residences and other sensitive land uses be separated from freeways, railways and ports and other active industrial facilities where exterior noise environments exceed 65 dBA Ldn. If sensitive land uses are proposed in such areas, a policy addressing the need for additional mitigation strategies should be considered to achieve an interior noise performance standard of 45 dBA, Ldn.

The EIS should suggest strategies that could help to accomplish this including coordination with WSDOT on noise wall construction where Port activities are adjacent to and have line of sight impacts on

**Public Scoping Comments R. Rusch**  
**Terminal 5 Modernization**

residential areas; Retrofit adjacent residences with use of appropriate building materials such as walls and floors with an STC rating of 50 or greater as necessary to achieve this performance standard/use of acoustically rated additional building materials (insulation and windows); Site design measures, including use barriers to minimize exposure to noise sources, and use of buildings as noise barriers.

*Noise Reduction during Pile Driving.* The EIS must suggest strategies to reduce Construction-Related Noise and Vibration Impacts, to address the rate of adverse noise impact from impact pile driving adjacent to sensitive land uses or adverse vibration impacts. Seattle Noise Ordinance should be updated to require best practices for noise control, including “quiet” pile-driving technology (such as pre-drilling of piles, use of sonic or vibratory drivers instead of impact pile drivers, where feasible); and cushion blocks to dampen impact noise from pile driving). The EIS must study the use of noise suppressing pile-driving systems (with silencing kit or sound insulation system or an equivalent silenced hammer) capable of limiting maximum noise levels at 50 feet from the pile driver or less, during installation of piles. Enforce the DPD time-of-day limits for construction.

*Broadband Alarm Use* - The EIS must study back-up alarm remedies. It should *require* Broad Band ambient sensing backup alarms on all heavy and light duty equipment through the course of the construction project and during ongoing operations. This approach is consistent with today’s industry standard since the more contained signal emitted to workers will result improved situational awareness, higher safety levels (OSHA approved), and less hearing loss to workers and eventually operational teams on-site. They are required by the City of Seattle on all new projects.

*Rail Horn Noise* – Newer trains transiting the Terminal(s) area have a default horn mechanism that does not allow for feathering the horn blast. Additionally, the horn must be discharged at every un-armed crossing. The installation and use of crossing arms at West Marginal Way intersection will negate horn blast requirements while improving safety to workers, rail employees and residents transiting the area. *Note:* Although the original EIS predicted train noise pollution and promised mitigation and application for waiver, these were never pursued. Give West Seattle residents the same no horn crossing status already enjoyed across from the Port of Seattle Headquarters and promised to residents in 1994.

**Comment 4: IMPACT CATEGORIES**

**Comment 4 a: Climate Change must be fully studied as an Impact Category**

Ports are a large source of regional nitrogen oxides (NOx), particulate matter (PM), sulfur oxides (SOx), toxic emissions and Greenhouse gases (GHG) (e.g. carbon dioxide CO<sub>2</sub>) and their precursors. These are criteria pollutants – pollutants that are so significant that Ambient Air quality standards have been established based upon the short / long term human health effects associated with exposure.

“Climate” is an element of the environment identified in SEPA. The Port, as Lead agency, has discretion to determine if climate change impacts are likely and how they should be addressed. Consideration of climate impacts should be part of a cumulative impact analysis in an EIS. Port of Seattle updated its SEPA resolution in 2011(in Resolution 3650, as amended) to include a methodology for climate change impacts. Port of Seattle is a member of the Climate Registry. The Port of Seattle can only address criteria pollutant impacts in a defensible manner when **Climate Change is fully studied as an Impact Category.**

New climate change legislation, Vehicle emission regulation and EPA standards are in place and forthcoming. Seattle has always been known to be a progressive city with commensurate values. Assumptions used in the scope of the EIS should be rigorous enough to not only reflect these clean air

## Public Scoping Comments R. Rusch Terminal 5 Modernization

standards with this modernization but to exceed those standards and become a GREEN model for other ports and international partners.

**Specifics:** The EIS should require the analysis of both Stationary and Mobile Source Port-Related Emission via an Inventory as a basis for understanding population health risk, proposing mitigation and containment strategies and developing reduction goals during construction and with ongoing operations.

Outdoor air pollution can be caused by small fine particles (PM2.5) and ground level ozone that comes from car and truck exhaust, construction dust and equipment, ships, trains, and tug emissions. When inhaled, it can lead to chest pain, coughing, shortness of breath, and may worsen chronic respiratory diseases such as asthma. Breathing polluted air can increase doctor and emergency department visits, result in hospitalizations, and sometimes cause premature death. Particulate matter and ozone are two pollutants that are a concern to people with asthma. In Washington, these are monitored by the State Department of Ecology and Clean Air Agencies. But the scope of the EIS should monitor air quality in the 3 miles dispersion radius of the industrial zone rather than accept the monitoring metrics of more distal locations.

A Terminal 5 **port-related emission inventory** is necessary to properly assess the impacts of the proposed port upsizing project and the planned growth in marine activity (Post Panamax Ships hoteling and average annual growth factors). An inventory provides the baseline from which to create and implement emission mitigation strategies, set regional containment and reduction goals, and track performance over time. It can also serve to inform efficiency tactics and improve “turn” time. This green efficiency will result in improved customer satisfaction of tenants.

The Port has the current ability to accomplish this regional inventory. Methods are in current scientific literature in partnership with the American Association of Port Authorities (AAPA) and the EPA (Ongoing updates to *Current Methodologies in Preparing Mobile Source Port-Related Emissions Inventory*; EPA). Additionally, Port of Seattle GHG Emissions Quantification Methodology from SEPA Resolution 3650 should be used. POS methodologies include; on-road mobile sources, non-road mobile sources, stationary combustion, industrial processes, fugitive emissions, construction emissions, employee commute, water use and wastewater emissions.

Without an inventory of the stationary and mobile source emission emanating from the **port as a complete entity**, it is difficult to assess opportunities for emission reductions and to quantify reductions over time. The inventory should include mobile emission sources at the planned improved port, including oceangoing vessels (OGVs), harbor craft including dredging equipment, and cargo handling equipment (CHE), as well as other land-side mobile emission sources at the port, such as rail/locomotives, including on-port /off-port switching emission, on-port /off-port Line Haul, and on-road/on-highway vehicles. The scope of the EIS must include a qualitative assessment and disclosure of criteria pollutants from transportation of cargo-based commodities as manifested in the Seattle metropolitan region. This requires the Port Boundaries for such an inventory include land-side boundary to be the length of the heavy haul corridor for trucks and length of the rail network for rail-based cargo and on the ocean side, at a minimum the *first 25 nautical miles* from where the pilot boards the ship for entry into port.

This inventory would go a long way to removing significant impediments to better environmental and efficient performance at Terminal 5 and improve the health and safety for residents west and south of TERMINAL 5. The Port of Seattle should proactively address air quality issues with transparency as they

**Public Scoping Comments R. Rusch  
Terminal 5 Modernization**

quantify proposed emissions of both mobile and stationary sources *comprehensively* and develop a port environmental management system (EMS) to systematically reduce hazardous emissions.

**Comment 4b: Study the Development of a Clean Air Action Plan including an *Environmental Ship Index Incentive Program***

The Port of Seattle must develop a comprehensive **Clean Air Action Plan** after completion of a **Stationary and Mobile Source Port-Related Emission Inventory**. The specifics of this inventory have been previously commented upon in Comment 4a. This Clean Air Action Plan must mandate the use of shore power. It must also include a **Voluntary Environmental Ship Index (ESI) Program** to reward vessel operators for reducing Diesel Particulate Matter (DPM) and nitrogen oxide (NOx) emissions from their ocean going vessels (OGVs) in advance of regulations. This program must reward operators for going beyond compliance by bringing their newest and cleanest vessels to the Port and demonstrating technologies onboard their vessels. This is essential to population health and welfare for the citizens of West Seattle and areas south of Terminal 5.

**ESI is an international clean ship indexing program** developed through the International Association of Ports and Harbors (IAPH) World Ports Climate Initiative (WPCI). IAPH/WPCI seeks international collaboration among ports and shipping lines to reduce air emissions, greenhouse gases, and promote sustainability. Shipping lines voluntarily register their vessels in the ESI program and provide quarterly data updates. Registration is free of charge. ESI registration, vessel operators first need to provide basic information about their company. Once a company account has been established, operators can register as few or as many of their vessels as they want. Each vessel registered in the ESI receives a score based on performing better than IMO regulations. For each vessel, the operator must upload the following information to the ESI website to obtain an **ESI score**.

- NOx Points: o Rated power, and rated engine speed (rpm) as well as actual NOx emissions (g/kWH) for the vessel's main and auxiliary engines. (This information is contained in the vessel's EIAPP Certificate.)
- SOx Points: o Amount and fuel sulfur content per bunkering event for heavy fuel oil, marine gas oil (MGO)/marine diesel oil (MDO) between 0.5 and 1.0 percent sulfur and MGO/MDO less than 0.5 percent sulfur. (This information is contained in the vessel's bunker delivery notes)
- Confirmation that the vessel is (or is not) 'OPS ready' (i.e. is the vessel capable of using onshore power supply (OPS) also know as Alternative Marine Power)
- CO2 Points: o Confirmation that the vessel has (or does not have) an Ship Energy Efficiency Management Plan (SEEMP)

The greater the ESI score the larger eligible incentive.

[http://www.wpci.nl/projects/environmental\\_ship\\_index.php](http://www.wpci.nl/projects/environmental_ship_index.php) to learn more about ESI Program.

**Comment 4c: EIS should study the Impact category of Socioeconomics**

The goal of the **Growth Management Act** was to promote comprehensive land use planning through cooperation between citizens, communities, local government and private sector. As such, development of urban growth areas should be sufficient and consistent with the urban growth that is projected to occur for the succeeding 20 year period. The **Impact Category of Socioeconomic** would include the direct, indirect, and cumulative impacts on taxpayers, populations and communities in the combined project site corridor vicinity. Specifically, socioeconomic impacts should include:

## Public Scoping Comments R. Rusch Terminal 5 Modernization

**Avoidance of Administrative and Operational Waste** The EIS should evaluate proposed **Port design for operational efficiency**. It should answer the question as to whether the planned design promotes optimal slot cost, efficiency in unloading vessels, moving containers through yards, and expediting the departure of containers by truck and intermodal rail. Recommendations should assume efficiency at 30 or greater moves per hour, and explore options for automating yard, gate and on-dock rail operations needed for a green AND competitive edge.

**Economic Viability** In light of Terminal 5 as a discretionary port, the EIS should evaluate the **Cost Benefit** to community and taxpayers including ability of Terminal 5 to be self-sufficient, ability to generate a sustained profit margin without taxpayer subsidy, forecast for the scale of discretionary cargo, consistency with national export strategy, and benchmarking against lead performers on the East and West Coast. A specific question that should be answered is does this modernization create redundant capacity between Seattle and planned modernization in Tacoma ports.

**Undue Harm Benefit** The communities of West Seattle and areas south have been continuously exposed to noise, pollution, port and other industrial operations already in place. The Port of Seattle has previously made the *erroneous assumption this is an acceptable state going forward*. **The EIS should not!** For example, the Lower Duwamish River is one of the most industrialized waterways in Washington State. Previous industry located on these remedial areas included steel fabrication, a rail yard, small businesses along Spokane Street and the West Seattle landfill. A variety of contaminants were produced from these industries including steel slag, polychlorinated biphenyl's (PCBs), total petroleum hydrocarbons (TPHs) and various metals. EPA required extensive studies of the risks to people, fish, and wildlife, and require the potentially responsible parties (PRPs) to pay for the river cleanup. Public agencies, including the Port of Seattle, King County, and the City of Seattle, have already been identified as polluters, or PRPs, who will bear the costs of cleaning up the River.

The residents and habitat of West Seattle and adjacent areas south will bear an inordinate burden with the upsizing of Terminal 5. This project is occurring in the backdrop of unprecedented West Seattle residential growth and density, placing further strain on an already taxed infrastructure. The EIS must analyze the modernization project in light of the transformation of the area from an industrial to a mixed industrial / residential area. To demonstrate the residential intent, in the past two decades, the City of Seattle has approved thousands of single family and multi-family building permits adjacent to this purported industrial area with neither commensurate improvements to transportation (traffic, bridge, and parking) infrastructure, nor reduction in air, salt and river water, noise, (rail, ship generator, steel production, and other hazardous emission) pollution **to levels enjoyed by other of the city's residents**. The additional pollution it will create as designed is both unwanted and unnecessary. The EIS should analyze threats to our health, and environment. Analyzing this project in the larger context of Growth Management plan, SEPA intent, the new science of global warming, Seaport Alliance economies of scale, and State and Federal Environmental Protection would yield a superior consensus driven outcome with long lasting green legacy and future marine industry job creation.

**Comment 5: Dredging as a Risk to be analyzed** Conducting an EIS to examine the effects on the Elliott Bay Duwamish River Ecosystem from dredging 29,800 cubic yards of sediment and conducting maintenance dredging. The analysis should examine the consequences and cumulative effects of this entire project and like projects in the adjacent areas as a part of the city's commitment to cleaning up Elliott Bay and the Duwamish River on a permanent basis.

**Specifics:** Dredging is never without its risk of re-contamination, and re-suspension of toxins thereby increasing toxicity mobility and volume at the surface. This results in unnecessary exposure of the

**Public Scoping Comments R. Rusch  
Terminal 5 Modernization**

habitat and thus communities to increased carcinogens and higher cancer risk. The EIS should include civil engineering “modeling” of the effects of changes to increased salinity, acidity, stress to underwater plants, grasses, and sea and marine life. It should also evaluate both the effect of rising sea levels and Duwamish bank steepening due to -58 deepening leading to potential upstream and downstream impacts such as erosion.

**Sources of known contamination should be fully characterized and planned for** with extensive testing to include bioaccumulation testing. This characterization will aid in anticipating the special handling required for each of these materials in advance to protect the deep sub-tidal aquatic areas. **Source controls** should be analyzed as the first component of the remedy and **source control components should be in place** prior to other components like dredging. **Sediment specific remedies** need to be specifically addressed. It is well documented that even with advance sampling that significant in-field changes can happen and core sample results do not always predict the real extent of contaminants. The EIS **needs to analyze disposal alternative plan** for disposal at a suitable offshore site. The EIS should analyze options beyond short term deepening and include an integrated and clear plan for long term effectiveness and permanence in protecting the environment via the multiple dredging episodes from multiple projects. The EIS should analyze methods to **meet state sediment quality limits on a permanent basis**. Analyze methods for an ongoing water quality and habitat restoration monitoring plan that can be reviewed by the public. This must include sediment concentration levels monitoring as well as tissue level in benthic biota. The quality of the water must be monitored in 300 feet based on tidal direction outside of dredge boundaries especially in hot spots.

**Same Contractor** Also, as concerned citizens, the EPA Duwamish penalty is illustrative of another requirement that should analyzed. **The contractor for dredging and Material Management and Disposal should be one in the same**. Without such an arrangement, accountability for results and long-term outcomes and monitoring will be difficult if not impossible. Failure to have an alternate plan for debris management in terms of time and disposal can add significantly to the project cost.

**Comment 6: Intermodalism Impact Assessment** –“ Intermodalism” is a system whereby standard sized cargo containers are moved seamlessly between different modes of transportation. The EIS should undertake a more thorough integrated assessment of intermodal capability to include truck and rail trip generation and the adequacy of the infrastructure resulting from simultaneously unloading of two Super Post- Panamax ships.

**Roxane Rusch, West Seattle Resident**

**3311 SW Hinds Street**

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: THE FOLLOWING ISSUES SEVERELY IMPACT "Earth, Air, Water, Plants, Animals, Energy and Natural Resources, Environmental Health, Noise, Aesthetics, Public Services, and Utilities". We urge the  
**Date:** Monday, November 16, 2015 8:53:59 AM

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lesa russell <timlesa111@comcast.net>

<https://e12.envirolytical.com/communication/view/179739>

THE FOLLOWING ISSUES SEVERELY IMPACT "Earth, Air, Water, Plants, Animals, Energy and Natural Resources, Environmental Health, Noise, Aesthetics, Public Services, and Utilities". We urge the following to minimize this impact:

- 1) Include the Federal Railroad Agency's procedures for creating "Quiet Zones" where the trains don't have to blow their horns and putting in lights and crossing arms
- 2) Installing shore power so the ships can plug in rather than run their diesel engines polluting and sending out Low Frequency Vibration into our homes

-----Original Message-----

From: EnviroLytical - Port of Seattle Terminal 5 Improvements [<mailto:info@envirolytical.com>]

**Comment 64**

Sent: Thursday, November 12, 2015 5:15 PM

To: Shultz, Mick; [pxander@soundearthinc.com](mailto:pxander@soundearthinc.com); Meyer, Paul

Subject: New Communication: What does bigger draft mean? Where is the culvert for LongFellow Creek and how will that be effected? Why not use the other terminals along east marginal? &

Kim Schwarzkopf <[seaweedtoasted@gmail.com](mailto:seaweedtoasted@gmail.com)>

<https://e12.envirolytical.com/communication/view/179678>

What does bigger draft mean?

Where is the culvert for LongFellow Creek and how will that be effected?

Why not use the other terminals along east marginal?

What is an upland improvement?

How will the trucks get in and out?

What will be the potential cargo?

How loud will the construction and the industry be in the valley?

What is the current air quality?

Who is on the NWsa?

What does "earth" mean under elements?

Tell us more about historic/cultural mean and how will that be considered?

Are the Duwamish people involved?

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Based on the information given in the scoping meeting, I do not see the need for Terminal 5 as it is a discretionary berth. My conclusion is the only reason to keep Terminal 5 is so several Port of  
**Date:** Monday, November 16, 2015 11:18:08 AM

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Arnold Seppi <[arnieseppi@yahoo.com](mailto:arnieseppi@yahoo.com)>

<https://e12.envirolytical.com/communication/view/179768>

Based on the information given in the scoping meeting, I do not see the need for Terminal 5 as it is a discretionary berth. My conclusion is the only reason to keep Terminal 5 is so several Port of Seattle/Seaport Alliance bureaucrats can keep their jobs--an unacceptable reason to keep Term 5.

If, in fact, if we do keep it active, the air quality, noise and water quality need to be monitored closely. I want the berthed ships to plug in to shore power rather than spew out toxic exhaust smoke and shake the hill side with their idling engines. In the past Terminal 5 created a very unhealthy living climate for my neighbours and my family.

Thanks for you prudent consideration.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I lived through the controversy regarding the Port of Long Beach, CA with the post-panama and other ships that sat in port for days with their engines running. The amount of pollution and the associa  
**Date:** Sunday, November 22, 2015 7:15:46 PM

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Robert Shampain <shampers@aol.com>

<https://e12.envirolytical.com/communication/view/180608>

I lived through the controversy regarding the Port of Long Beach, CA with the post-panama and other ships that sat in port for days with their engines running. The amount of pollution and the association of community health effects were enormous. I urgently do not want the same situation within blocks of where my family and I live.

**From:** Port Sepa  
**Sent:** Monday, November 30, 2015 1:19 PM  
**To:** Meyer, Paul  
**Subject:** FW: Terminal 5 comment from Robert C. Swanson

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**From:** Robert Swanson [<mailto:robertcswanson@comcast.net>]  
**Sent:** Thursday, November 26, 2015 03:54 AM  
**To:** Port Sepa  
**Subject:** Terminal 5 comment from Robert C. Swanson

As a weekly visitor to West Seattle I drive past Terminal 5. In studying the planned expansion and potential use of that property, I was very concerned that an Environmental Impact Study ("EIS") was not going to be done before major activity increased there. I am asking that an extensive EIS be done prior to work beginning on the expansion.

From my reading of the proposed expansion, 35,000 cubic yards of material will be dredged out of the Duwamish waterway, shore power would not be required thus allowing for ships to idle and pollute the air in the area, 4,500 pilings would be installed and not provide noise mitigation for any of the movement of large trains and trucks. Economic growth and utilizing the property at Terminal 5 can happen while minimizing the impact on the neighborhoods and quality of the environment. Those considerations should be considered in a comprehensive EIS.

Thank you.

Robert C. Swanson  
10051 45th Avenue NE  
Seattle, WA 98125  
[robertcswanson@comcast.net](mailto:robertcswanson@comcast.net)

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: 1. As a concerned neighbor of the Port of Seattle's (POS) Terminal 5, I am writing to raise concerns that the March 2, 2015 POS SEPA No 15-03 checklist is incomplete and does not address the following conditions which jeopardizes public health and well-being.  
**Date:** Wednesday, November 11, 2015 11:02:27 PM

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Wendy Sweigart <[wssweigart@yahoo.com](mailto:wssweigart@yahoo.com)>  
<https://e12.envirolytical.com/communication/view/179234>

1. As a concerned neighbor of the Port of Seattle's (POS) Terminal 5, I am writing to raise concerns that the March 2, 2015 POS SEPA No 15-03 checklist is incomplete and does not address the following conditions which jeopardizes public health and well-being.
2. The POS does not address the impact to air quality once Terminal 5 is operating again. Taken directly from page 10 of POS SEPA No 15-03 the specific operating characteristics of larger capacity vessels serving Terminal 5 are unknown at present. It is anticipated that larger capacity vessels would result in fewer vessel calls with longer duration stays at the facility. However, the specific number and duration of vessels calls and the maneuvering and at berth air emission performance of vessels cannot be predicted at this time. The means and methods for future cargo discharge and loading activities cannot be predicted. Thus, until more specific information is available, it is not possible to analyze any changes to air emissions and production of noise.

Since the POS cannot address the impact to air quality in SEPA, I contend that the Environmental Impact Statement to address air quality is necessary. There are potentially other ways for the POS to answer the amount of pollutants during operation of Terminal 5. Perhaps a study of the operations on Terminal 30 along the East Waterway could lead to possible projections of air pollutants. Terminal 30 is already berthing super post-panamax ships.

3. In regards to the noise sections of SEPA (p .23-24, POS SEPA No 15-03) there needs to be un-waiverable conditions for the POS to conduct impact construction work and OPERATIONS of Terminal 5. Impact construction such as pile driving during evenings, weekends and holidays HAVE TO BE PROHIBITED for neighbors to get rest. Safeguards to ensure the Port's compliance to SMC 25.08 needs to be in place. A suggestion would be to have designated points of contact and phone numbers for noise complaints. The SEPA checklist does propose measures to reduce and control noise impacts. These proposed noise mitigation techniques must be transferred and condition into the new master use permit. Examples of noise mitigation from the POS SEPA NO 15-03 include using properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turning off idle equipment. Substituting hydraulic or electric models for impact tools such as jack hammers, rock drills, and pavement breakers could reduce construction and demolition noise. Electric pumps may also be specified if pumps are required. Although as safety warning devices back-up alarms are exempt from noise ordinances, these devices emit some of the most annoying sounds from a construction site. An essential construction noise mitigation measure would be to require that all construction equipment is fitted with ambient-sensing alarms that broadcast a warning sound loud enough to be heard over background noise but without having to use a preset, maximum volume. Another alternative would be to use broadband backup alarms instead of typical pure tone alarms. Such devices have been FOUND TO BE VERY EFFECTIVE in reducing annoying noise from construction sites.

My recommendation is to condition these noise mitigating requirements as part of the master use plan.

4. The SEPA discusses that construction will take place on liquefiable soil. Liquefiable soil is fill dirt and unstable during seismic activity. Liquefiable soil will amplify the earth vibrations stemming from the pile driving. Nowhere in the POS SEPA 15-03 does it address the geological effects of two years of pile driving. Additional shifting of hillside homes already in designated slide zones could occur. Costly civil lawsuits to recover damages against DPD and POS could come in the future if homes are damaged due to the ground vibrations of pile driving. It is DPD's responsibility to ensure the protection of the environment and public safety from rogue construction projects in environmentally critical areas (SMS 25.09.020). Please have the POS study the impacts of pile driving.
5. The POS SEPA 15-03 does not address the issues of light and glare affects to the surrounding areas. Please limit the areas, angles, and intensity of illumination originating from the new cranes. Look at having covers over the

lights so it is not disruptive to surrounding neighborhoods and air traffic.

Wendy S Sweigart  
Nancy A De Spain  
3402 SW City View St  
Seattle, WA 98126

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: I live above Terminal 5 in North Admiral. This project will mean 3 years of increased noise and air pollution during construction, and probably more when full operation occurs.. At minimum there need  
**Date:** Monday, October 26, 2015 4:14:13 PM

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Anne Thureson <[annethur@comcast.net](mailto:annethur@comcast.net)>

<https://e12.envirolytical.com/communication/view/145155>

I live above Terminal 5 in North Admiral. This project will mean 3 years of increased noise and air pollution during construction, and probably more when full operation occurs.. At minimum there needs to be an additional environmental impact study.

**From:** [EnviroLytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication I am in favor of the EIS studying these following topics. 1) Shore power to reduce low frequency vibration and air pollution 2) Broadband ambient sensing backup alarms for  
**Date:** Friday, November 20, 2015 10:10:02 AM

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Kim Tran <[kim.tran.lee@gmail.com](mailto:kim.tran.lee@gmail.com)>

<https://e12.envirolytical.com/communication/view/180368>

I am in favor of the EIS studying these following topics.

- 1) Shore power to reduce low frequency vibration and air pollution
- 2) Broadband ambient sensing backup alarms for the heavy equipment to reduce noise pollution.
- 3) Train quiet zone established at the rail yard entrance to Terminal 5.
- 4) Permanent noise and air pollution monitoring with a hotline for citizen complaints.

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: To whom it may concern, I'm writing to ask that the EIS carefully study the air pollution impacts of the projected activity at Terminal 5. Instead of allowing ships to idle thei  
**Date:** Sunday, November 15, 2015 9:47:49 PM

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Lin Wang <lw7y@hotmail.com>

<https://e12.envirolytical.com/communication/view/179738>

To whom it may concern,

I'm writing to ask that the EIS carefully study the air pollution impacts of the projected activity at Terminal 5. Instead of allowing ships to idle their engines at the terminal (which generates significant air and noise pollution), mandate the installation and usage of shore power for ships that come in. They are currently in use in many other US ports and significantly reduce air pollution. This also removes the impact of low-frequency vibrations on nearby residents.

With so many people living close to Terminal 5, it's extremely important that the right steps are taken to ensure that the health of the surrounding environment and residents won't be seriously harmed by this project. Please ensure that noise and air pollution are carefully studied and that safeguards are in place to protect us before moving forward with this project.

Thanks,  
Lin Wang

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: 1. Dust emissions can be deal with by rain or water spray. Remove dirt by barge if you have enough. One barge load or more. Disposal landside up north where SPU is getting rid of the CSO tunnel spo  
**Date:** Monday, October 26, 2015 4:12:13 PM

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Larry Ward <larryw@pacificfishermen.com>

<https://e12.envirolytical.com/communication/view/145154>

1. Dust emissions can be deal with by rain or water spray. Remove dirt by barge if you have enough. One barge load or more. Disposal landside up north where SPU is getting rid of the CSO tunnel spoil.

2. Truck container traffic - Consider running an elevated container conveyor to a point in SODO to reduce road miles going to the companies that unstuff the containers. A possibility is to create in SODO a single container unstuffing operation that would be shared by some or most of the companies use to unstuff containers they would man their own section and fill trucks at that location. The Heavy Haul corridor for those that do not want to share and play well with others.

This would get truck traffic off Harbor Island reducing emissions and noise. The container convey should be two tracks so that stuffed containers or empties are transported from SODO rail yard and the container unstuffing location to the terminal.

3. Pedestrian and bicycle access in an industrial zone is unsafe and uses valuable space that should be for cargo. The City cannot require it on Port owned property where it conflicts with the Port mission of creating jobs and income for the County. Any such request would have to come from the County and show a greater benefit than the jobs and income that the Port could provide. It can only be a deadend viewing location not a transportation corridor and it will have to be fenced to keep the public from getting hurt.

4. the major issue will be the amount of light that is required during loading and unloading. Led lighting recommended particularly bright directional down lighting for work locations from the crane jib with lower level area safety lighting other places. Do not allow light to point at town in any direction.

**From:** [Envirolytical - Port of Seattle Terminal 5 Improvements](#)  
**To:** [Shultz, Mick](#); [Pam Xander](#); [Meyer, Paul](#)  
**Subject:** New Communication: Looking forward to seeing T5 up and running. Great local employment opportunities and a vital part of keeping the PNW ports vibrant. Maritime industry has so many indirect employment at living wage  
le  
**Date:** Saturday, November 21, 2015 2:22:59 PM

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Marc winocur <>

<https://e12.envirolytical.com/communication/view/180599>

Looking forward to seeing T5 up and running. Great local employment opportunities and a vital part of keeping the PNW ports vibrant. Maritime industry has so many indirect employment at living wage levels. Don't mind a bit of noise or lights. These are positive signs of local business progress and stability, not the evil that some would make it out to be.

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 Scoping: Train Noise from Wojciechowski, James  
**Date:** Monday, November 23, 2015 3:45:21 PM

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-----Original Message-----

From: James Wojciechowski [<mailto:jtvoj2@earthlink.net>]  
Sent: Monday, November 23, 2015 01:28 PM  
To: Port Sepa  
Subject: Terminal 5 Scoping: Train Noise from Wojciechoski, James

The 1994 EIS promised that train horn assaults on the neighbors would be limited because the Port would get a waiver for the West Marginal crossing at the entrance to Terminal 5. That never happened! Those living around Terminal 5 had 16 years of blasts from container train horns entering and leaving Terminal 5 at all hours of the day and night. And now the projections are for greatly increased train volumes at Terminal 5! Do not do another brush-off of a very serious problem.

The mitigation recommended is to create a rail "Quiet Zone" at the approaches to Terminal 5. The Federal Railroad Administration has provided the ability to create such Quiet Zones and Burlington Northern is ready and willing to help with the technical side of creating one.

It is just a matter of the Seaport Alliance (PoS) putting in the effort and coordination required to get it done. This re-alignment of the tracks and streets in that area needs to be done during the coming construction phase while Terminal 5 is not handling container traffic.

In addition to the horns, train activity at Terminal 5 did/will generate significant noise from train cars "coupling" and locomotives idling and accelerating. This is especially disturbing during the night hours when all the other background noises in the area diminish. Even though trains are immune from local control, this noise should be included in your analyses to give a correct picture of the "cumulative effects" of your planned expansion of Terminal 5.

James Wojciechowski  
3311 SW Hinds St.  
Seattle, WA 98126

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 EIS Scoping: Low Frequency Vibration- Wojciechowski, James  
**Date:** Monday, November 23, 2015 3:45:44 PM

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**From:** James Wojciechowski [mailto:jtwoj2@earthlink.net]  
**Sent:** Monday, November 23, 2015 01:33 PM  
**To:** Port Sepa  
**Subject:** Terminal 5 EIS Scoping: Low Frequency Vibration- Wojciechowski, James

Ships parked at the pier at Terminal 5 without shore power run their sizable generators (and sometimes their engines) for electricity and heat. Each ship does this for days at time while unloading/loading containers. Those engines and generators send out a Low Frequency Vibration into the neighborhoods. Low Frequency noise is felt as much as it is heard by humans. The dB scale commonly used is not an accurate measure of the impact it has on people when they are subjected to it for long periods of time.

In the 1994 EIS the noise from ship engines was brushed off with a ridiculous one-line statement that the noise would not be heard over the background noise in the area. That sentence showed a complete ignorance of 24 hour background noise cycle of the area surrounding Terminal 5. The daytime noise emitters go to very low levels at night, yet the ships produce their Low Frequency Vibrations at a constant level around the clock. So in addition to being annoying during the daytime, the LFV is especially intrusive at night when people are trying to sleep.

<http://mic.com/articles/91091/a-mysterious-sound-is-driving-people-insane-and-nobody-knows-what-s-causing-it#.TET0IzHos>

The obvious mitigation to this noise is to install and require shore power. Absent that, ships without shore power capability should be prohibited from running their main engines/largest generators except during arrivals and departures.

James Wojciechowski  
3311 SW Hinds St.  
Seattle, WA 98126

<http:t>

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 EIS Scoping: Air Pollution and Shore Power from Wojciechowski, James  
**Date:** Monday, November 23, 2015 3:44:41 PM

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-----Original Message-----

From: James Wojciechowski [<mailto:jtvoj2@earthlink.net>]  
Sent: Monday, November 23, 2015 01:34 PM  
To: Port Sepa  
Subject: Terminal 5 EIS Scoping: Air Pollution and Shore Power from Wojciechowski, James

The planned expansion of Terminal 5 operations will bring significantly increased amounts of air pollution into our neighborhoods. One easy mitigation of some of the diesel particulate emissions would be to replace diesel cargo handling equipment at the Terminal with electric equipment. This would help in reducing the health impacts to the community.

The emissions inventory can also be reduced by installing Shore Power at Terminal 5! With the number of port calls planned, there will be ships continually parked at the pier emitting diesel pollution into our air. This is unacceptable when there is a viable solution available. The argument we hear against Shore Power is that not enough ships are capable to accept the plug-in. That is just a snapshot of current conditions. Since every major West Coast container handling port is installing shore power (and some are requiring it's use), the number of ships so equipped will increase each year going forward. During this construction phase is the cost effective time to install Shore Power at Terminal 5.

We constantly hear that Shore Power will be made available "if the tenant requests it." Everyone knows that any tenant will not ask for Shore Power. The incentive for Shore Power is to protect the neighbors and terminal workers, not to provide an economic advantage. Businesses are not self-motivated to protect the community from pollution. Just having the power lines available for a Shore Power upgrade in the future is not acceptable. Since Terminal 5 is described as part of a "discretionary" port, the actual plugs need to be there and ready when a ship arrives that is Shore Power capable.

The argument that Shore Power is too expensive or not cost effective completely ignores the benefit side of the equation. The PoS (SA) has made a decision to move a large part of their operations to Terminal 5, which is tucked up against dense residential communities. They must mitigate the harm to the community that will result from their business decision to increase operations at Terminal 5.

James Wojciechowski  
3311 SW Hinds St.  
Seattle, WA 98126

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Terminal 5 EIS Scoping: Back-up Alarms and Quiet Equipment - from Wojcieszowski, James  
**Date:** Monday, November 23, 2015 3:48:29 PM

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-----Original Message-----

From: James Wojcieszowski [<mailto:jtwoj2@earthlink.net>]  
Sent: Monday, November 23, 2015 01:41 PM  
To: Port Sepa  
Subject: Terminal 5 EIS Scoping: Back-up Alarms and Quiet Equipment - from Wojcieszowski, James

As acknowledged in the 1994 EIS for Terminal 5, backup alarms are some of the most annoying noise sources coming out of the terminal. The resulting Master Use Permit required the use of ambient sensing back-up alarms combined with the requirement that quiet equipment be used. (the Port of Seattle never did get the equipment quieted to a level that didn't kick the alarms to maximum output) Ambient sensing pure-tone was the latest technology at that time. Since then, the leading edge in back-up alarms is the Broadband technology. It employs a broad spectrum sound that dissipates with distance better than those old pure-tone alarms. As a bonus, Broadband alarms have proved to be the safer choice.

Broadband alarms have been in use at port facilities throughout the United States and Europe for several years. The large Port of Houston is a perfect example, as well as the local Port of Olympia. Many Seattle companies have transitioned to Broadband and the City of Seattle's DPD is requiring them on noise sensitive projects. They are OSHA approved.

There is no safety reason to not require the use of these alarms during the construction phase as well as the operational phase at Terminal 5.

Even with ambient-sensing Broadband alarms, it is imperative that the equipment on which they are mounted emit a minimal amount of noise. If the equipment is loud, it will step the alarms up to their highest volume. Top-pick manufacturers such as Taylor offer a "quiet" version of their equipment. Without proper guidance, the new tenant will choose the cheaper model.

Back-up alarms are exempt from the Seattle Noise Ordinance. There should not be any reference to getting the alarm volumes into compliance with Noise Ordinance levels. By design, back-alarms have a sound that gets your attention. That noise is especially disturbing when it infiltrates into neighborhood. Rather than dB levels, it is the "characteristic" of the sound that is so annoying. Getting just below the Noise Ordinance levels is not the goal. Rather it is to make them as quiet as possible.

If Broadband is not accepted as the best way to eliminate back-up alarm annoyance, there are other technologies available that do not use sound to achieve a level of safety. Just make sure those antiquated pure-tone alarms are banned from Terminal 5.

James Wojcieszowski  
3311 SW Hinds St.  
Seattle, WA 98126

**From:** [James Wojciechowski](#)  
**To:** [Beckett, Kurt \(NWSA\)](#)  
**Cc:** [Meyer, Paul](#); [George Blomberg](#)  
**Subject:** Broadband Alarms  
**Date:** Saturday, November 14, 2015 4:06:14 PM  
**Attachments:** [Broadband.pdf](#)

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Mr. Beckett,

It was good to meet you at the scoping meeting the other night. I especially appreciated your positive comments on getting Broadband alarms at Terminal 5. It's been a long haul.

I've attached the latest report on the Broadband alarms vs the old pure tone alarms. It's a long one for those who like the technicalities. If you just read the first page and the last page you'll get the idea.

Thanks,  
Jim

# Which is Safer – Tonal or Broadband Reversing Alarms?

Peter Popoff-Asotoff (1), Jonathan Holgate (1) and John Macpherson (1)

(1) Noise Regulation Branch, Department of Environment and Conservation, Perth, WA, Australia

## ABSTRACT

Tonal reversing alarms have been identified as a source of noise annoyance to the community (DEC 2012). There has been a drive to replace tonal reversing alarms with broadband alarms. However, there has also been resistance in replacing the tonal with broadband alarms, due to perceived safety concerns. Many owners and operators of heavy vehicles believe that their tonal reversing alarm provides a safety system superior to the broadband alarm. Recently SafeWork Australia (2011a) issued their document Managing Noise and Preventing Hearing Loss at Work, within which ISO 9533:2010 is selected as the standard to measure audible reversing alarms on vehicles. In order to address the above safety concerns, the Noise Regulation Branch of WA's Department of Environment and Conservation (DEC) studied 21 DEC vehicles with tonal reversing alarms against the ISO 9533 Standard. Also tested were 5 vehicles from the City of Subiaco. The investigation found that a large proportion of the tonal reversing alarms tested failed to comply with the ISO 9533. Some of the tonal reversing alarms were then replaced with broadband alarms with the similar sound power levels. The test results demonstrate that all these broadband reversing alarms are able to meet the requirements of ISO 9533, when properly installed. This study also indicates that broadband reversing alarms are much less annoying at the distances further away (say further than 100 m), where the sound of the alarm is substantially merged in the background noise.

## INTRODUCTION

Audible reversing alarms have been in use in Australia for many years in mine sites, construction sites and industrial and commercial premises to warn persons nearby that a vehicle is reversing. Most of these alarms operate by emitting a pulsing 'tonal' sound that may be described as a 'beep-beep' sound. Aside from reversing mobile plant, beeper alarms are also used as start-up or movement alarms for some fixed plant.

Reversing alarms are necessarily loud, and the single frequency sound is not easily attenuated by transmission with distance, thus the noise can be annoying for receivers at considerable distances from the source where safety is not at risk. Noise Regulation Branch of the Western Australian Department of Environment and Conservation (DEC) has been encouraging consideration of 'broadband' reversing alarms as an alternative to the use of the more common 'tonal alarms'. The sound of a broadband alarm, although covering a range of higher frequencies where the ear is more sensitive, is much less intrusive by nature than the sound of a tonal alarm and tends to be masked by the background noise at a lesser distance. Broadband alarms by virtue of using a range of frequencies may provide improvements from a safety point of view, as they overcome some of the inherent limitations of single frequency tonal alarms, see Nélisse et al (2011).

This paper presents the results of a series of trials of reversing alarms on DEC vehicles at the Mundaring and Wanneroo Depots in June and September 2011 and further testing carried out in 2012 both on DEC and local government vehicles. The paper presents comparisons between the existing tonal beepers and newer broadband alarms and assesses the occupational safety performance of both types against the ISO 9533:2010 Standard. Additional assessments of audibility at various distances are used for comparison of environmental intrusiveness.

## Beeper as an Environmental Noise Source

Community noise complaints often involve the intrusive noise of alarms (DEC 2012), however the number of complaints alone is likely to underestimate community concern as it is likely that there is a general assumption that the alarms are required by legislation.

Audible safety warning devices currently have a conditional exemption from the WA environmental noise regulations (DEC 2003). Regulation 3 (c) states:

*Nothing in these regulations applies to...*

(c) *noise emissions from safety warning devices fitted to motor vehicles, mining and earth moving machinery, vessels and buildings if –*

(i) *it is a requirement under another written law that such a device be fitted, and*

(ii) *it is not practicable to fit a safety warning device that complies with the written law under which it is required to be fitted and emits noise that complies with these regulations...*

With regard to vehicle reversing alarms, only the Mines Safety and Inspection Regulations 1995 (Department of Mines and Petroleum 2011) (Regulation 13.3) specifically requires an audible safety warning system; in other words the exemption under regulation 3(c) only has clear application on mine sites.

Despite the tenuous link to the exemptions in regulation 3, beepers are commonly regarded as exempt from the environmental noise regulations on non-minesites, making it difficult for industry, the community and enforcement officers to determine their status and deal effectively with environmental noise complaints whilst ensuring safety considerations are not compromised.

### Beepers as a Safety System

The occupational safety and health legislation in WA requires a safe working system, but (apart from mine sites) does not specifically require mobile plant to be fitted with audible warning systems. The legislation does prohibit interfering with safety equipment. A review by Burgess & McCarty (2009) concluded that the occupational health and safety regulations in the various States of Australia only require that an effective warning device be incorporated, but not that it needs to be an audible alarm.

The national Model Work Health and Safety Regulations (Safe Work Australia 2011b) require powered mobile plant to have a warning device to warn persons who may be at risk from movement of the plant, but do not require audible reversing alarms. The Australian Design Rules for vehicles (Commonwealth of Australia 2006) do not require an audible reversing alarm, but (if one is fitted) excludes certain types of sound and specifies that the signal should be no louder than is necessary as a warning.

Given that tonal reversing beepers are not required as part of the workplace safety system, the question arises as to their effectiveness as a safety system. Nélisse et al (2011) states:

Two important factors may affect the effectiveness of backup alarms on workers safety. Firstly, the uniformity of the sound field behind the vehicle is not guaranteed, in particular for tonal alarms. Secondly, spatial localization of the alarm can be a problem, particularly for workers wearing hearing protectors.

This is a compounding issue because people who rely on sound for their safety - blind and visually impaired - have stated that the current 'tonal' beepers cause them distress and hinder them from concentrating on the process of navigating without the aid of sight. The Association for the Blind WA stated in communications to the DEC (Carol Solosy, Director Corporate Services, 2 June 2011):

Based on the anecdotal evidence, our O&M [Orientation & Mobility] Instructors are of the opinion that the tonal reversing signals currently used on vehicles don't provide much useful audio information; whilst they can be heard; listeners with a vision-impairment can't detect the proximity of the vehicle nor the direction in which it's travelling. Furthermore, our O&M Instructors have observed that clients either ignore the signal, believing it provides no relevant information or worse, are distracted by it, which then interferes with their ability to attend to other environment clues around them, with the potential to compromise their safety. Such responses can be influenced by a person's personality and travel skills.

There is a range of alternatives to the traditional 'beeper' capable of providing a safe system of work, while also reducing environmental noise impacts. Apart from broadband alarms, these include variable-level audible alarms ('smart alarms'); focused tonal alarms; non-audible warning systems (e.g. flashing lights, reversing cameras); proximity alarms; spotters or observers; and exclusion zones (Burgess & McCarty 2009). The above methods could be combined, where appropriate.

Burgess & McCarty considered that there may be two International Standards that are relevant for audible movement alarms. The two standards specify considerable difference in the levels of the alarms. The International Standard *ISO 7731:2003 Ergonomics- Danger signals for public and work*

*areas –Auditory danger signals* is intended to call attention to hazards or dangerous situations in public and work areas and essentially specifies levels that exceed the ambient noise level by 10 to 15 dB. This is considerably higher than the levels specified in *ISO 9533:2010 – Earth-moving machinery – Machine-mounted audible travel alarms and forward horns – Test methods and performance criteria* which requires the alarm to be equal to or greater than the ambient level and equates to a rise in the ambient level of 3 dB when the alarm is on. Details of the ISO 9533 criteria are below.

The difference in the emergence levels above ambient that the two alarm standards require would lead to considerable differences in their impact as environmental noise pollution on receivers other than those for whom the alarm is intended.

Burgess & McCarty (2009) consider that ISO 7731 is applicable to serious hazards such as fires, when 100% reliability is required for all those in threat and that ISO 9533 appears to apply to warnings near mobile plant on workplaces. It is possible that while ISO 9533 is more relevant for reversing alarms on general vehicles, ISO 7731 may also apply to DEC fire trucks in emergency situations.

### TEST METHODOLOGY

A series of tests were conducted on reversing alarms, starting with the DEC heavy fleet. The fleet consists of vehicles mainly used for fire control including trucks, front end loaders, bulldozers and graders; see Table 1 below for vehicle details. Each individual vehicle is numbered and T and B indicate whether a tonal or broadband alarm is fitted. Alarms are classified as Tonal or SA BBS which indicates a self-adjusting broadband alarm. The numeral is the highest alarm level at 1 m in dB(A).

Table 1. Vehicle/alarm List

No.	Vehicle	Alarm
01T	Lt/Med Fire Truck	Tonal
01B	Lt/Med Fire Truck	97SA BBS
02T	Lt Truck	Tonal
02B	Lt Truck	97SA BBS
03T	Prime Move & Trailer	Tonal
03B	Prime Move & Trailer	97SA BBS
04T	Front-end Loader	Tonal
04B	Front-end Loader	107SA BBS
05T	Bulldozer	Tonal
05B	Bulldozer	107SA BBS
06T	Grader	Tonal
06B	Grader	107SA BBS
07T	Lt/Med Fire Truck	Tonal
07B	Lt/Med Fire Truck	97SA BBS
08T	Lt/Med Fire Truck	Tonal
08B	Lt/Med Fire Truck	97SA BBS
09T	Medium Tipper	Tonal
09B	Medium Tipper	97SA BBS
10T	Front-end Loader	Tonal
10B	Front-end Loader	107SA BBS
11T	Medium Tipper	Tonal
12T	Light Fire truck	Tonal
13T	Light Fire Truck	Tonal
14T	Light Fire Truck	Tonal
15T	Front-end Loader	Tonal
16T	Light Truck	Tonal
17T	Lt/Med Fire Truck	Tonal
18T	Lt/Med Fire Truck	Tonal
19T	Medium Fire Truck	Tonal

20T	Medium Fire Truck	Tonal
21T	Multi-use Tractor	Tonal
22T	Path Sweeper	Tonal
23B	Rubbish Truck 1	87 BBS
24B	Rubbish Truck 2	87 BBS
25B	Rubbish Truck 3	87 BBS
26B	Rubbish Truck 4	87 BBS

In the initial set of tests on the DEC fleet the original tonal alarms fitted to ten different vehicles from the DEC heavy fleet were measured for existing sound levels, then new self adjusting (“smart” or “context sensitive”) broadband alarms were fitted in the same locations on the vehicles (where possible) and the measurements were repeated. The broadband alarms were Brigade Electronics bbs-tek SA series alarms and were chosen to approximate the level of the original alarms as estimated by the fleet safety officer, although the original alarms levels are unknown. The replacement models used were BBS 97SA which produces a range of levels from 77 dB to 97 dB; and BBS 107SA which produces a range of levels from 87 dB to 107 dB. These initial tests were specifically to gain experience in the placement of the alarms and to identify any obvious changes in level due to replacement with broadband alarms both in the vicinity of the vehicle and at a distance.

A recent publication (Safe Work Australia 2011a) has specified the use of ISO 9533:2010 as the appropriate standard for measuring how well an audible warning device is suited to a specific application when fitted to a vehicle. This standard was adopted as a measurement guide throughout this study.

ISO 9533 recommends that to work safely, workers must be able to hear warning signals above any other noise (ambient noise) at the workplace. For reversing alarms on mobile plant, Figure 1 below from ISO 9533 identifies the measuring locations to be used.

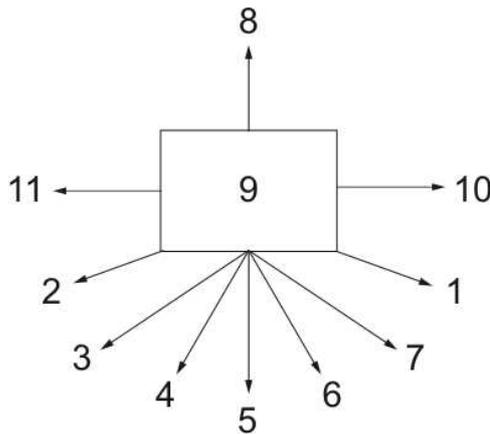


Figure 1. ISO 9533:2010 test measurement locations

Measurements were made in locations 1 to 7 as required in ISO 9533 for reversing alarms, measurements were also made at locations 10 or 11 and at two more positions at 25 m and 40 m directly behind the vehicle.

The exact position of the ISO 9533 measuring locations are as shown in the Table 2 below:

Table 2. ISO 9533:2010 test measurement locations.

Location <sup>1</sup>	Coordinate distances and direction				As measured from
	m				
1	0.7	Right	0.7	Rear	Right rear corner
2	0.7	Left	0.7	Rear	Left rear corner
3	4.9	Left	4.9	Rear	Rear centre
4	2.7	Left	6.5	Rear	Rear centre
5	<b>0.0</b>	<b>Centre</b>	<b>7.0</b>	<b>Rear</b>	<b>Rear centre</b>
6	2.7	Right	6.5	Rear	Rear centre
7	4.9	Right	4.9	Rear	Rear centre
8	0.0	Centre	7.0	Front	Front centre
9	Location of operator				Ear height
10	<b>0.0</b>	<b>Centre</b>	<b>7.0</b>	<b>Right</b>	<b>Right-side centre</b>
11	<b>0.0</b>	<b>Centre</b>	<b>7.0</b>	<b>Left</b>	<b>Left-side centre</b>
NOTE Text in <b>bold italic</b> indicates travel warning alarm test points					
<sup>1</sup> As per Figure 1					

There are two methods and performance criteria specified in ISO 9533. They both essentially require the noise level of the alarm at potential reception points to be at least as high as the noise from the engine under high idle.

Criteria Method 2 was chosen from this standard as the broadband alarms being substituted in these tests were self-adjusting types:

**7.5.1 General**

For tests conducted in accordance with 7.2 to 7.4, the criteria given in 7.5.2 to 7.5.4 shall be met for each test measurement location and alarm type.

**7.5.2 Reverse and travel warning alarm - Exterior test**

**7.5.2.1 General**

The A-weighted sound pressure level determined at test measurement locations 1 to 7 [see Figure 1] for the alarm activation test shall meet the sound pressure level criterion given in 7.5.2.2 to 7.5.2.3 as appropriate.

**7.5.2.2 Method 1 – Fixed sound level alarm**

The recorded values from “Alarm On” shall be greater than or equal to the recorded values from “Alarm Off” at each test measurement location.

**7.5.2.3 Method 2 – Self-adjusting sound level alarm**

The recorded values from “Alarm On” shall be a minimum of 3 dB greater than the measured values from “Alarm Off” at each test measurement location.

The standard also requires that the sound being measured be ‘spatially averaged’ by rotating the measuring device through a circle of approximately 260 mm radius approximately 1.2 m above the ground. In the first set of tests on DEC fleet this was not done as the meters were mounted on fixed tripods. In subsequent testing the method required by the standard was approximated by the measuring operator using the top of a tripod as a reference point and rotating the meter in their hand through a radius of approximately 260 mm whilst keeping the meter generally pointed at the vehicle under test. The standard describes a jig that can be constructed to achieve the spatial averaging however the method used is quicker and seemed to produce the expected results.

Observations and measurement results from the first set of tests indicated that the second set of tests should strictly follow the ISO 9533 spatial averaging requirement. These tests were done on further DEC heavy vehicles and rubbish trucks and a path sweeper from the City of Subiaco. The rubbish trucks all were fitted with broadband alarms while the sweeper was fitted with a tonal alarm.

The third set of tests were done using two tonal alarms and four broadband alarms set up on an area consisting of a num-

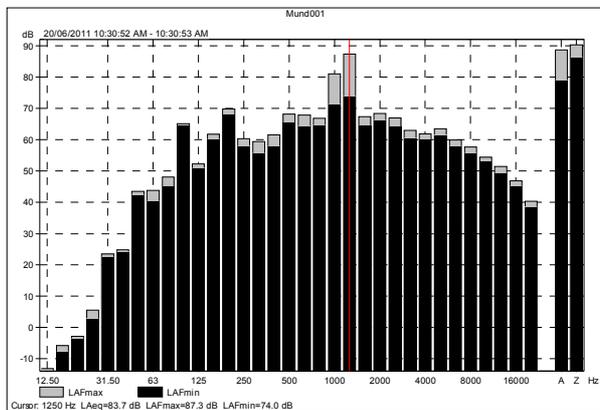
ber of large grassed playing fields. The alarms were mounted on a t-piece 1.2m above the ground with measurements made at 1m, 25 m 50 m 100 m, 200 m, 300 m and 400 m directly in front of the alarms.

The measurements were performed using up to seven Brüel & Kjaer types 2250, 2260 and 2270 sound level meters each recording one second logs, with full broadband and spectral statistics for each log. The standard requires  $L_{Amax}$  Fast measurement values and the statistical levels were also measured as Fast. Broadband 100 ms samples of Fast time-weighted levels were also obtained. The type 2250 and 2270 meters all had sound recording enabled.

The logged data measurements were extracted and tabulated to allow for a number of different analyses. Field notes and replaying of audio data (at the appropriate level) in the laboratory also enabled subjective assessments.

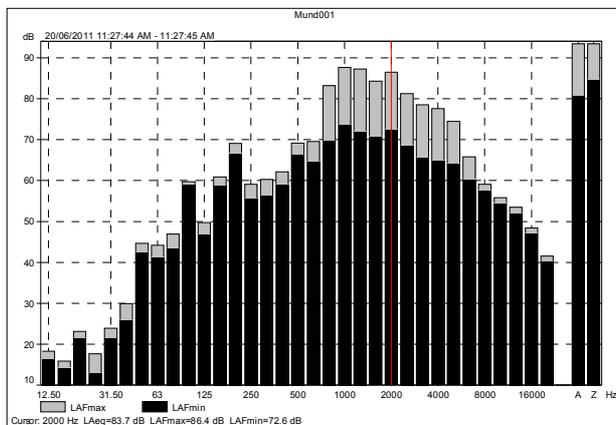
**RESULTS**

Examples of the spectral characteristics of the two different alarm types can be seen from the graphs in Figures 2 and 3.



**Figure 2.** Loader with tonal alarm spectrum (7m directly behind vehicle)

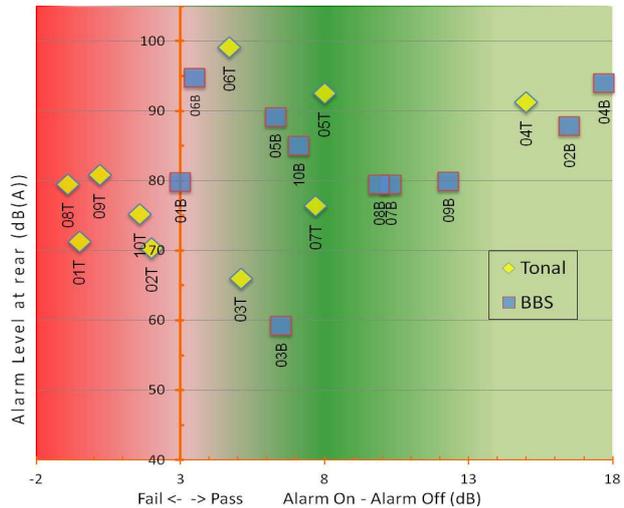
As the measurements were made with the vehicle engines running under high idle the bulk of the spectrum is due to the vehicle noise, with the tonal beeper in this case showing an obvious peak in the 1 kHz and 1.25 kHz bands.



**Figure 3.** Loader with broadband alarm spectrum (7m directly behind vehicle)

Figure 3 contains the same vehicle idling noise as in Figure 2 but shows that the spectral output of the ‘broadband’ alarm is spread over a range of frequencies from approximately 800 Hz upwards.

The results of the initial tests on the first ten vehicles listed in Table 1 (numbers 01 to 10, T and B indicates tonal or broadband alarms), which had their tonal alarms replaced with broadband alarms, are presented in Figure 4. This shows the level of the alarms in relation to a pass or fail of the criteria in ISO 9533. To simplify the results of measurements taken over a number of locations, in Figure 4 the alarm level is the level measured at location 5 (directly to the rear) and the ISO criteria measurement is the worst case value measured of all the positions measured.



**Figure 4.** Worst case ISO 9533 result compared with alarm level directly to the rear (Location 5).

These initial measurements indicate that:

- Five of the ten tonal alarms tested failed to meet the requirements of ISO 9533 that the alarm be 3 dB(A) above the noise level of the vehicle, and
- Seven of the ten broadband alarms performed better in terms of drop-off behind the vehicles. Of these broadband alarms six alarms were actually louder than the original alarms but five of these six still had better drop-off over the distance from 7m to 25 m.

Significantly, initial tests found that a number of alarms were poorly mounted on the vehicles and included - in addition to the ubiquitous off-centre rear mounting - mountings at locations inside almost completely sealed engine cowlings, at locations facing forwards under the vehicle in front of a cross member and on the side of the vehicle. Reversing alarms were also found located on the prime mover with the end of the attached trailer some 10 m further behind. Table 3 presents notes on poorly placed alarms from all test sets.

**Table 3.** Alarm placement information

No.	Alarm
02T	Tonal alarm was a taillight mounted unit
03T	Alarm fitted to prime mover only
04B	New alarm significantly louder than original.
09B	New alarm 10 dB(A) louder than original alarm
11T	Tonal Alarm facing forwards
12T	Tonal Alarm facing forwards
16T	Tonal Alarm in tail light fitting
19T	Tonal Alarm surrounded by machinery & baffles
21T	Tonal Alarm mounted in very heavy engine cowling with very few sound outlets

22T	Tonal Alarm mounted in engine cowling but directionally correct
23B	Alarm mounted near rear, facing sideways
24B	Alarm mounted in 'sealed box' by construction methods
25B	Alarm facing forwards from rear bumper
26B	Alarm mounted correctly but not centred

Initial comparison between measurements made to the rear and to the side of the vehicle for both tonal and broadband alarms showed little value under Method 2 of ISO 9533 as the measurements to the side can be significantly affected by noise from the engine, the varied placements of the alarms and the replacement of the original alarms with alarms of different overall level. Method 1 would produce a better result as the engine would be off, however would not test the ability of a smart alarm to adjust to the background levels.

The second set of tests was done only on the original alarms mounted on an additional set of DEC heavy fleet vehicles (numbers 11 to 21) and vehicles from the City of Subiaco (numbers 22 to 26). This set of measurements utilized spatial averaging performed according to ISO 9533 and showed the marked difference in the range of levels experienced with small changes in location. Figure 5 shows the modulation of the alarm pulses obtained while spatially averaging.

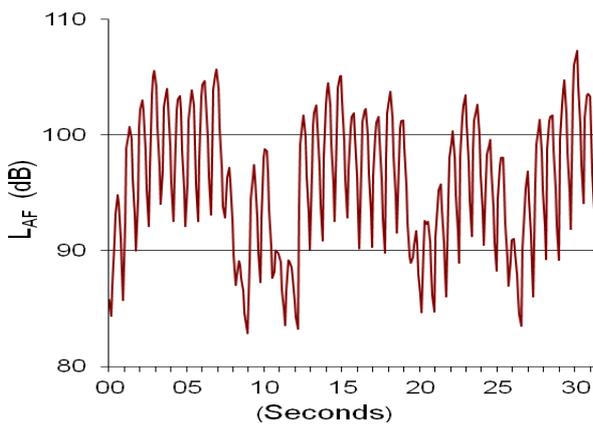


Figure 5. Variation in level shown while spatially averaging (tonal alarm at 7 m).

Figure 6 below shows the range of the modulation obtained while spatially averaging for a set of vehicles carrying tonal or broadband alarms. This chart is from measurements made at Location 5, 7 m directly behind the vehicle. It can be seen that the variation is significantly larger, up to 18 dB, for the tonal alarms than for broadband alarms and that the variation of the order of 10 dB found by Nélisse et al (2011) within the short range of approximately 1 m is an underestimation. It also can be concluded that the range easily extends out to at least 7 m behind the vehicle. It seems clear that that the pattern of sound behind a vehicle is very uneven for 'tonal' alarms and much more even for 'broadband' alarms.

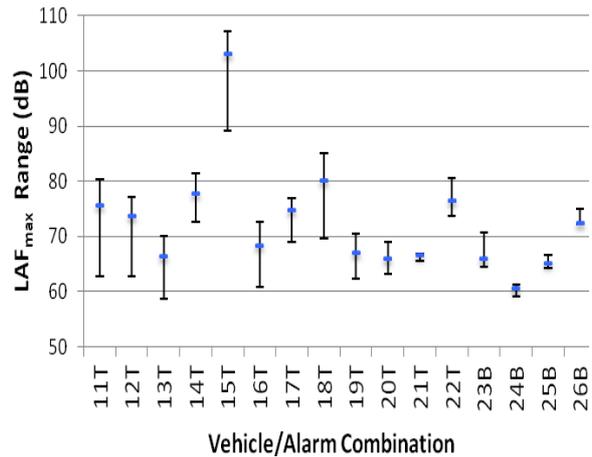


Figure 6. Modulation of spatially averaged signals of different alarms (7 m directly behind vehicle)

The variance found in the second set of measurements also indicates that the results of the first set of measurements, (without spatial averaging) may have resulted in an overestimation of the incidence of non-compliance with ISO 9533 as the static measurement location may have coincided with an alarm low point.

Following the second set of tests the proportion of alarms failing to meet the requirements of ISO 9533 (that the alarm be 3 dB(A) above the noise level of the vehicle) was found to be a possible eight out of twenty two tonal alarms, with a ninth and tenth being borderline. This represents a failure rate of 36% or more.

The third test, with the alarms set up on the playing fields, shows the effect of the two types of alarms as an environmental noise source. The measurements were made with a breeze of approximately 3 m/s, with occasional gusts up to 6 m/s, towards the measurement locations from the alarms. This is close to the wind speed chosen as part of the "default meteorological conditions" in the EPA Guidance Note No.8 (2007) for use in noise modelling for acoustic assessments in Western Australia. Extreme variation in level of the alarms with respect to the background under real environmental conditions proved difficult to quantify and field notes and listening tests of the recorded data in laboratory conditions provided a more useful result. Figure 7 shows the difference in rate of disappearance of the alarms with distance. Note that the assessments are done by active listeners and the level of perception by a casual listener is likely to be somewhat less.

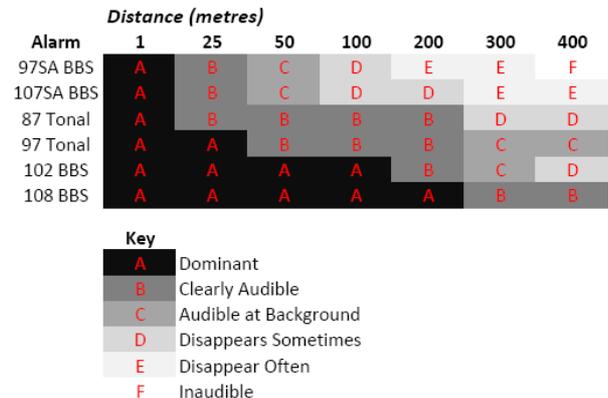


Figure 7. Rate of various alarms merging into the background with increased distance.

Broadband alarms were much more effective at reducing noise pollution when compared with tonal alarms. A broadband alarm operating at 97 dB was only just audible at 200 m and not at all audible at 400 m, while a tonal alarm at 97 dB was rated 'audible at background'. A tonal alarm at 87 dB rated 'disappears sometimes' at 400m – the same rating as a broadband alarm at 102 dB. However the louder broadband alarms were still audible at 400m, indicating that attention should be given to selecting alarms that are not unnecessarily loud.

## DISCUSSION

The results of the tests can be divided into two broad categories: occupational safety performance; and environmental noise performance. These are discussed below:

### Compliance with ISO 9533 (Movement Alarms)

To ensure that the replacement alarms meet acceptable standards, the existing tonal and replacement broadband alarms have been compared against the ISO 9533:2010 standard. The tests addressed two requirements of this standard: alarm level emergence above ambient and directional variability.

Some 30% of the tonal alarms failed the requirement that the alarm-on sound level pressure must be at least 3 dB higher than the alarm-off value for at least one location required by the standard. None of the 'broadband' alarms failed this test but it must be acknowledged that the 'broadband' alarms were the 'self-adjusting' type and hence would change their output to suit the background noise.

In many cases the placement of the alarms on the vehicles is likely to compromise the efficiency of the alarm as a warning device. Inspection of the locations of alarms on the vehicles indicates that their placement with regard to safety seemed to be secondary to the ease of placement and might have been forgotten with the later addition of purpose-specific equipment. This placement is critical regardless of the alarm type.

The high variability of the tonal alarm levels around the vehicles compared to broadband alarms hinders the ability of the hearer to locate the moving vehicle; this would presumably be compounded in situations where multiple vehicles are operating. As tonal alarms comprise a single frequency, the sound level is susceptible to additions and cancellations due to different signal pathways and the variations can occur over a dimension similar to a human head. For example, the wavelength at 1.25 kHz (the dominant frequency in the tonal alarm in Figure 2), is 27 cm. Presumably the spatial averaging procedure required in ISO 9533 is employed to deal with this variation, but would therefore imply a reliance on movement of the head (or the vehicle) to improve the signal source location in relation to a particular vehicle. Due to the wide range of frequencies in the sound source the variability of broadband alarms is much more limited and would seem to indicate an increased ease in their spatial perception.

It must be noted however that the tonal alarms, due to their prevalence and wide exposure, are already associated with danger by the general public and any alternative sound source will likely need an education program to achieve the same level of association with danger. This is easier to do for vehicles that are site-based than for areas accessed by the general public. The recent review by Burgess & McCarty (2009) concluded that broadband alarms have been successful on construction and mining sites both within Australia and internationally from the safety viewpoint.

It must be noted that it may be that, in a very noisy environment or an environment which contains similar broadband sources, the broadband alarm may prove to be ineffective under the criteria of ISO 9533 and the criteria in ISO 7731 may thus have more relevance for DEC fire trucks in emergency situations. This needs further investigation.

Although the tests were made with only a small number of vehicles a failure rate possibly up to 36% is a concern. The implication is that many 'tonal' alarms fitted to vehicles do not meet the ISO 9533 requirements. The fact that an alarm is fitted to a vehicle is therefore not necessarily an indication that a safe work system is being employed.

### Environmental Noise

The exemption for audible warning devices in the Western Australian noise regulations applies only where there is another written law which specifically requires an audible device and there is no practical alternative that complies. It is a common misunderstanding that all transport vehicles in WA have to be fitted with a reversing alarm, but this is only true of vehicles covered by the Mines Safety and Inspection Regulations 1995. Therefore in most circumstances in the instance of a complaint regarding reversing alarms the WA noise regulation metrics are relevant.

The WA noise regulations, as is similar in other jurisdictions, have penalties for noise sources that are considered to have certain annoying characteristics, such as tonality and modulation. These characteristics tend to persist in the noise emission over long distances and have no value to distant receivers as an alert to imminent danger. Broadband alarms tend to exhibit only modulation, while tonal alarms exhibit both modulation and tonality.

The range of frequencies in broadband alarms extends upwards towards the higher frequencies; these frequencies have a greater attenuation with distance through absorption in air. This, and the absence of tonality, means that a broadband alarm is more likely than a tonal alarm to comply at distant 'noise sensitive premises'.

Figure 4 shows that some of the replacement broadband alarms seemed unnecessarily loud for normal commercial use, even on heavy equipment. Selection of the appropriate level of alarm for the vehicle and its working environment is therefore important in managing environmental noise emissions. Further, manufacture of alarms with a wider self-adjusting range would be highly beneficial from an environmental noise point of view.

Figure 7 shows the relative attenuation of various alarms at distances from 1 m to 400 m. This diagram shows how the broadband alarms are quickly masked by the background noise, as long as they are appropriately selected (suited to purpose). On the other hand the tonal alarms were still clearly audible at great distances.

## CONCLUSIONS

The presence of a reversing alarm on a vehicle is not indication that a safe working system is being employed if compliance with the criteria in ISO 9533:2010 is an indication of the safety value of an audible alarm. Poor placement can diminish the effectiveness of any alarm and inspection of the alarm location can provide a first indication of whether the safety value has been compromised.

Relocation of an ill-placed alarm would be the appropriate time to consider its replacement with a broadband alarm as there are benefits both for safety and for the reduction of environmental noise.

The following should be considered during replacement:

- Use the lowest possible output 'broadband' alarm.
- Use a 'self-adjusting 'broadband' alarm.
- Ensure that the mounting position of the new alarm is 'ideal'.
- Consider installation of a second (possibly quieter) alarm at the back of the trailers attached to semi-trailers or indeed any long trailer as well as one on the prime mover.
- An alternative standard such as ISO 7731:2003 may apply to vehicles operating in high ambient noise or emergency situations.

## ACKNOWLEDGEMENTS

The assistance of various staff members at DEC Depots in Wanneroo, Mundaring and Jarrahdale, and the assistance of the City of Perth, the City of Subiaco and the Grounds Department of the University of WA is acknowledged. A special acknowledgement is given to Jason Dixon & Kelvin Liu for assistance in collecting all the data at various DEC and other sites.

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DEC – see Department of Environment and Conservation

EPA – see Environmental Protection Authority

**From:** [Port Sepa](#)  
**To:** [Meyer, Paul](#)  
**Subject:** FW: Comments for Terminal 5 EIS Scoping from Wong, Eugene W  
**Date:** Monday, November 23, 2015 12:00:16 PM  
**Attachments:** [image001.gif](#)  
[image002.gif](#)

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**From:** Eugene W. Wong [mailto:wong@lasher.com]  
**Sent:** Sunday, November 22, 2015 09:28 PM  
**To:** Port Sepa  
**Subject:** Comments for Terminal 5 EIS Scoping from Wong, Eugene W

The following timely submission is made with respect to the Port of Seattle's Environmental Impact Study ("EIS") for Terminal 5. The EIS requires that the Port undertake the EIS in a comprehensive manner while also incorporating the following:

1. Use of scientific, technical, and other experts from public, academic, and private sectors that are mutually selected by the Port and the general public.
2. In addition to the general public, incorporate the involvement and input of relevant public agencies like the EPA, Washington Department of Ecology, Washington Department of Fisheries, Puget Sound Clear Air Agency, and the DPD including its Noise Department as well as all tribes with an interest in the Duwamish Waterway and lands near Terminal 5.
3. To resolve conflicts in expert opinions through participation and input by the general public.
4. Engaging the general public sooner, providing public input and say at each step of the process, providing additional time for public input and decision-making, and making public comment/input periods a deliberative one.
5. Assess and mitigate noise/vibrations/resonance from ships, trains, machinery, pile-driving, and dredging. Steps to include extended and additional sound walls and baffling, regulation of engines and idling, installing and requiring shore power, installing and requiring broadband alarms, and installing and requiring quiet zones at train crossings.
6. Assess and mitigate pollution of the atmosphere, waterway, sea life, and other aspects of the environment.
7. Assess and mitigate light pollution, including without limitation, overhead terminal lighting as well as light emissions into the waterway that negatively affect sea life.
8. Assess and mitigate traffic congestion. West Seattle is already experiencing gridlock like congestion issues during the morning commute even though Terminal 5 is dormant. Adding truck traffic to the morning commute will not only make commuting even worse, trucks entering and exiting Terminal 5 will experience similar gridlock like conditions quashing the viability of Terminal 5 as an effective and efficient intermodal area. While some argue Terminal 5 has historic precedence as a container facility, times have changed and West Seattle has become a rapidly growing and even more substantial part of Seattle. This calls into question whether the Port should even continue to pursue the use of Terminal 5 especially with the Port of Tacoma being a larger intermodal facility with excess capacity and the alliance with the Port of Seattle.
9. Evaluate whether there are better uses for Terminal 5 other than as a container or intermodal facility.

[Eugene Wong](#)

**Eugene W. Wong**  
*Principal*



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1  
2 **DRAFT Terminal 5 Berth Improvements**  
3 **EIS Process - Public Scoping**

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5 **The Hall at Fauntleroy**  
6 **9131 California Avenue Southwest**  
7 **Seattle, Washington 98136**

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11 **5:30 p.m.**

12 **November 12, 2015**

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23  
24 **Reported by: Katie McGinnity Roberts, CCR**

25 **Washington State License No.: 3309**

1  
2 PUBLIC COMMENTS

3 <<<>>>

4  
5 **Comment 80** PATRICIA DAVIS: I'm going to need more than  
6 three minutes. I asked for five at the table. That's  
7 normally what's allowed publically. There's eight of  
8 us speaking and an hour -- let me express what I need  
9 to express. I would like to start the timer now.

10 PENNY MABIE: Please stop and let me  
11 respond. We're going to have three-minute  
12 commentaries. When we're done with everybody that has  
13 signed up and there's time for more, we'll have repeats  
14 and you can come up and have another three minutes,  
15 which will be a total of six.

16 PATRICIA DAVIS: I have studied the  
17 annual reports for the Port of Seattle. I have looked  
18 at the environmental checklist, which was 91 pages.  
19 What I have to say is hard to say in three minutes  
20 because it's a complex issue.

21 What I would like to say to the public is,  
22 this is huge. We do not have a way to predict who is  
23 going to be a tenant down there, and that's the  
24 scariest part of it.

25 When you take a look at the air and noise

1 aspects of this -- first, I want to let you know before  
2 my timer goes off that we have petitions at  
3 [www.terminal5group.com](http://www.terminal5group.com) to try to get air quality  
4 monitoring at the Port by Puget Sound Clean Air Agency  
5 and in our neighborhoods because, as we know, hot air  
6 rises.

7 We have big issues with rail. Part of the  
8 plans the Port is making is big time changes in rail,  
9 and it is loud and it is penetrating in our community.

10 I just want you to know that each side of  
11 Elliott Bay takes 5 feet digging down to take these  
12 containers, but it's on the east -- or the west side to  
13 take these ships.

14 We are getting railroaded in the biggest kind  
15 of way. So our only protection -- because I'm running  
16 out of time here -- is because we can't control the  
17 tenants, we need air quality equipment down there and  
18 in our impacted neighborhoods. We also need noise  
19 monitoring on time -- so these are both 24/7, real  
20 time, online reporting, online enforcement so no matter  
21 who is down there, we have a way to manage the air  
22 quality and the noise impacts. That's urgent.

23 Also, I want you to pay attention that we're  
24 kind of getting sold the dog and pony show here, in my  
25 opinion. Please read their annual reports. They bid

1 with a giant loss -- I'm thinking about \$7 million, was  
2 it, when you sold your cranes to Total Terminals on  
3 Terminal 46.

4 They're big business. We want them to pay for  
5 our air quality monitoring and our noise monitoring  
6 because it affects our health, our lives, our planet.  
7 It's big. We don't know what's going to go on down  
8 there. They can do whatever they want.

9 And that's what I want to say, where your  
10 power is as a Port isn't acquiescence to a tenant. I  
11 own rental property. I'm a landlord. It's a lease.  
12 You can tell the tenant, You have to hook up to shore  
13 power. You cannot pollute the air. You cannot break  
14 the noise laws. You have that under your belt legally  
15 to make your leases be respectful to our air and the  
16 excessive noise that goes on down there. I can't stand  
17 to think of more trains down there. It's horrible.

18 And, yes, you're not the only one. Upland is  
19 going to wipe us out. So this is huge. You're right  
20 underneath us.

21 Terminal 18's got more perimeter room. But  
22 then, again, if you want Terminal 5, where would you  
23 put the lowest? So we have to have air and noise  
24 protection.

25 <<<>>>

1 **Comment 81** JIM WOJCIECHOWSKI: I'll start with a  
2 general comment. The tone of this presentation is all  
3 about what's good for the Alliance. And I know they're  
4 a business, but I think a lot of you are here because a  
5 lot of their benefit is going to come out of our hide  
6 if it's not done right. What we're here to do is in  
7 the scoping to make them do it right.

8 I appreciate your comment that you want to be  
9 a good neighbor. Some of you used to know me know I  
10 have a history with trying to get the Port to be a good  
11 neighbor. Even when it's in writing with the violation  
12 of the permit, it takes years to get them to comply.  
13 When it comes to business, they're choose that over  
14 being a good neighbor. Maybe that's changed with the  
15 Alliance. I sure hope so.

16 Specifically since we're here for scoping, I  
17 wanted to encourage the consultant that's doing the EIS  
18 to not do what they did back in '94 and make statements  
19 like on page 464 of that EIS, Because ship noise is  
20 much lower than background sound, engine noise is not  
21 discernible now and will not be discernible in the  
22 future. They're talking about ships at the dock. I  
23 find that to be a ridiculous statement. And I hope the  
24 consultant will analyze that to a more thorough level.

25 Also, there was a promise to reduce train horn

1 noise. Train horn noise has been driving all of us  
2 nuts for years. Page 475, The Port is requesting  
3 special alliance with the city of Seattle stating the  
4 trains are required to use their horns when crossing  
5 the main section of West Marginal Way Southwest. Now  
6 that waiver was never applied for as far as I know.  
7 For 15 years, we've been hearing the train horns.  
8 They're talking about putting more of the cargo on the  
9 trains. That's how they answered the traffic people.  
10 It's going to be more trains, which means multiple  
11 crossings, horns all night, 24/7 -- especially if they  
12 go to 1.8 million TEUs. I'm hoping the consultant will  
13 do a more thorough job of evaluating what we need.  
14 Make a permit out of this. I hope the Alliance will  
15 honor the permit and treat us right. I'm running out  
16 of ammunition.

17 I know a lot of you are here for that point,  
18 to enforce the scoping to make them be a good neighbor.  
19 These are my viewpoints. I talked a little fast.

20 <<<>>>

21

22 **Comment 82** MARK JOHNSON: I'll try to be specific  
23 and to the point. Most of the issues have been  
24 addressed well.

25 The glare from the terminal, when you're up

1 high, when you're at the Duwamish viewpoint -- houses  
2 on the hill -- it looks like a Christmas tree lit  
3 pretty much every night. There's no attempt to vary  
4 the lighting. If it's not busy, those lights don't  
5 need to be on full blast.

6           The shore side of electricity. The cruise  
7 ships, why do Terminal 91's cruise ships require  
8 shore-sided electricity -- also called cold ironing?  
9 Another strange word there -- yet at Terminal 5, I  
10 haven't heard anything about shore-sided electricity.

11           If you don't have shore-sided electricity with  
12 giant ships loading and unloading burning ship side  
13 engines, diesel all day long -- so why Terminal 91 and  
14 not Terminal 5, when it's a clearly further giant  
15 project than the cruise ships?

16           The terminal equipment noise -- I'm talking  
17 about the area where inboxes go from the ship to the  
18 yard and from the yard to the rail -- and the yard to  
19 the rail has always required terminal landing  
20 equipment. Those machines are mobile. They're big and  
21 make a lot of noise when they back up so people hear  
22 them and don't get run over. Those back-up noises are  
23 loud. There's new technology called ambient sensors  
24 and ambient noise that can do the job but not nearly as  
25 loud.



1 **Comment 83** HENRY LEE: It's when container ships plug  
2 into -- when they're running diesel all night, CO2  
3 emissions -- meaning a loud, obnoxious, low-frequency  
4 vibration that we all can hear in our bones, in our  
5 homes. It's hard to block it.

6 So all the Port's west coast competitors have  
7 shore power from Prince Rupert in British Columbia,  
8 which is way up in northern BC -- they have shore  
9 power. What are they trying to protect? We live right  
10 next to the Port of Seattle, T5, why can't we have  
11 shore power there?

12 The Port of Vancouver, which is a competitor  
13 but also in alliance with Seattle -- they both have  
14 commitments to the Northwest Clean Air Strategy. And  
15 that's July of this year that they will have shore  
16 power by 2017. On their Web site it says that with  
17 shore power we will reduce CO2 emissions by 75 percent  
18 and also reduce generating noise. So two benefits  
19 there.

20 Other ports in the northwest -- Long Beach had  
21 it for a long time. It's mandated by their state, but  
22 they can reach -- reduce pollution up to 80 percent by  
23 2020. And they're going towards that.

24 I want onshore power, but I also want the  
25 possibility of retrofitting our homes as a way to



1 the larger picture which is, What the hell is Seattle  
2 doing in the port business anyway? It's not  
3 well-situated for train traffic. Train routes in the  
4 east, the north of Seattle, south of Seattle -- Tacoma  
5 is much better situated. Everett is much better  
6 situated. Maybe we should let Seattle do what it does  
7 best, which is generate hi-tech jobs. Use the land for  
8 jobs, for office buildings and residential.

9 Tell me, has San Francisco suffered by being  
10 out of the port business? I don't think so. Has New  
11 York suffered for shipping its port business over to  
12 New Jersey? Not really. It's a vibrant, vibrant city.  
13 That's what Seattle should be doing. That old historic  
14 model is just for nostalgia.

15 <<<>>>

16  
17 **Comment 85** THOMAS NOYES: Thank you for allowing me  
18 to speak and comment on the scoping process for this  
19 process. It appears that the ultimate aspirational  
20 goal on Alternative 3 would be to see the potential  
21 throughput of almost -- 1.6 million TEUs for Terminal  
22 T5.

23 So in my mind, that's going to raise a whole  
24 load of transportation issues; therefore, the  
25 transportation analysis in the drafting EIS should be

1 very sensitive. Of course, the two different models  
2 are truck and rail for the land-site connections. And  
3 the rail component alone, it seems like there are a lot  
4 of issues and questions. That consultant, whoever is  
5 working on the traffic, to make sure to consult the  
6 state's future rail plan -- things like overcapacity  
7 issues. There's a lot of roads in Washington state  
8 with rail traffic -- oil trains coming in, coal trains  
9 generating more traffic. If you're running 1.6 million  
10 TEUs, that's going to be a lot of train traffic.

11           There should also be several scenarios within  
12 the transportation analysis to look at what is the  
13 scenario if its 1.6 TEUs, whatever -- if you're  
14 assuming 90 to 95 percent going on a rail, okay, that's  
15 fine. If that does not happen, what happens? And the  
16 local network is congested and cannot handle that.  
17 What are the transportation impacts? You see a  
18 scenario where half is going by rail, half by truck; 75  
19 percent going by rail, 25 percent by truck, and they go  
20 out for local distribution. That's a lot of truck  
21 trips, and that needs to be looked at.

22           The rail operational analysis should also look  
23 at specific numbers based on the assumptions for how  
24 many daily trains does this supply. You know, looking  
25 at raiing constrictions as it currently stands. It

1 barely is able to support the T5 operations on the  
2 previous 650,000 TEUs per year. It's an old rail line  
3 -- hundred years old. The rail transportation analysis  
4 really needs to look at that in great detail. And,  
5 again, for the road network, a lot of it is pulled out  
6 by truck. There's a lot of work and a lot of analysis  
7 that needs to be done because that changes the local  
8 community. That's a huge impact for the regional  
9 network, all of which are already congested and only  
10 going to get worse in the next 20 years.

11 And the transportation analysis, I think, it  
12 should clearly show what the assumptions (inaudible)  
13 different scenarios with respect to the analysis.

14 Thank you.

15 <<<>>>

16  
17 **Comment 86** DEB BARKER: I'm Deb Barker. I am a  
18 board member of the West Seattle Transportation  
19 Coalition, and I'm also the president of the Morgan  
20 Community Association. Excellent comments on  
21 transportation. I may be repeating some of those.

22 I'm going to read off -- oh, my gosh, this is  
23 so small. I'm reading our cochair's comments from my  
24 iPhone.

25 He says, I offer transportation thoughts on

1 traffic coordination and mitigation for them to  
2 consider in the scope. One, looking at additional gray  
3 route separation from noncommercial traffic, especially  
4 during peak commute periods. Be sure to study options  
5 that include adding more ramps and more separated  
6 routes.

7 Two, to make sure that you're estimating what  
8 the peak commercial road usage looks like during the  
9 work week not just the weekend. What do their peak  
10 volumes look like? What do they look like during the  
11 day and night?

12 Three, providing analysis of the train versus  
13 truck traffic, and what routes are expected to be used  
14 by the trucks.

15 Four, with thresholds -- identify the  
16 thresholds to determine required mitigation for the  
17 West Seattle resident commuters.

18 Five, be sure to study any use of -- potential  
19 use of the east terminals. Are there potential offsets  
20 to the T5 West Seattle capacity level by using those  
21 terminals under certain conditions or certain times,  
22 i.e., the morning commute?

23 I would also like to -- you mentioned to  
24 coordinate with other city plans and city processes  
25 that are going on. I want to throw another one into

1 the mix. Right now there is the West Seattle Bridge  
2 Corridor Project list that Councilmember Rasmussen has  
3 before city council right now for funding \$700,000 for  
4 initial studies. If you're in support of that, please  
5 go ahead and tell the city council to support that  
6 Green Sheet in the city budget process.

7 But it's a very long list of short-term and  
8 long-term tools that you need to be very, very well  
9 aware of -- or consult with us.

10 Lastly then, I'm going to throw in from the  
11 noise aspect. So I just want to say for relations'  
12 sake, I live on the west side of West Seattle; I can  
13 hear the trains on the west side of the Seattle  
14 Peninsula. Trains are over on the Duwamish River.  
15 Noise travels day and night. Thank you all for being  
16 here. This is a great turnout.

17 <<<>>>

18  
19 **Comment 87** CHRIS WILKE: My name is Chris Wilke. I  
20 am executive director at Puget Soundkeeper. We are a  
21 water quality, lifestyle organization in Seattle with  
22 3,000 members, supporters, and volunteers.

23 The number one issue I wanted to address here  
24 tonight is stormwater pollution. My organization has  
25 been intimately involved with a number of Port-owned

1 facilities and is currently involved with several  
2 Port-owned facilities to bring them into compliance  
3 with the Clean Water Act, including Terminal 46 and  
4 Terminal 18. These were drastically out of the  
5 compliance with the industrial shore water general  
6 permit. And, as we speak right now, both of those  
7 facilities are installing advanced stormwater-treatment  
8 systems. It will trap copper, zinc, PAHs, PCB, fecal  
9 coliform.

10 At this time during the preparation of an  
11 environmental impact statement, why not put the  
12 treatment system in Terminal 5 right now, proactively,  
13 to have it all ready for the next tenant instead of  
14 kicking the can down the road and waiting for a  
15 citizen's group to bring them into compliance.

16 We're part of the working waterfront. We  
17 don't want to see these jobs moved, but you're going to  
18 have to do this to get this site into compliance. And  
19 in particular, the overhanging apron that hangs over  
20 the water has holes in the them to drain that water.  
21 That's part of the industrial stormwater permit. Those  
22 need to be monitored and brought into compliance.  
23 That's the main issue I want to bring up.

24 One more thing on that, number one export  
25 product out of the Port of Seattle -- I don't know if

1 it's number one. A major export out of the Port of  
2 Seattle: Raw, uncured animal hides. I guess we send  
3 out uncured animal hides and then bring them back in on  
4 Adidas and Prada shoes from the Far East. These  
5 uncured animal hides seep and leak and sink, and they  
6 ooze out on the tarmac. And the Port employees don't  
7 want to go near these things. Those probably need to  
8 be contained and treated and not even treated in  
9 stormwater. Terminal 46 is doing that right now.

10 You're going to want to look at the toxicity  
11 of these sites: Any of the disturbed sediments or in  
12 areas that you're dredging to make room for the larger  
13 ships that are coming in.

14 Eight-six percent of herring in central Puget  
15 Sound have health -- adverse health effects because of  
16 PCBs. These herring are consumed by salmon --  
17 magnifies a hundred times -- those are consumed by Orca  
18 whales and people -- magnifies a hundred times over  
19 that. And there's PCBs in these salmon, so we need to  
20 deal with that.

21 We need to look at the air quality issues.  
22 Given Duwamish air quality is the worst in the state --  
23 shore power.

24 The truck traffic -- you're going to want to  
25 find a way to keep those trucks from idling. You got

1 three major terminals. Why not have a truck-staging  
2 area for all three terminals where the trucks can come  
3 in and park and they don't have to idle, move 10 feet  
4 ahead at a time.

5 You're going to want to look at sanitation  
6 facilities in the communities that the truckers are  
7 going to need in order to get their turn around before  
8 they go back out again. Thanks.

9 <<<>>>

10

11 **Comment 88** RAY KRUEGER: I'm Ray Krueger. I'm also  
12 on the board of West Seattle Transportation Coalition.  
13 I want to talk about the emissions that are going to be  
14 building up. Right now it's -- the Port seems to have  
15 500,000 TEUs a year. They're looking to add one  
16 million, so that's triple the current level. I think  
17 we need to have local monitoring equipment monitored by  
18 the regional -- Puget Sound regional consult or whoever  
19 has jurisdiction for emissions. Soon the Air Quality  
20 Control Act could be gone, the Clean Air Act, due to  
21 changes in Congress. We need to get that in place now.

22 We need to measure the gases. And two things  
23 that I could mitigate that would be shore power -- has  
24 been brought up -- also converting the truck fleets to  
25 compressed natural gas for 50 percent of the trucks by

1 2025. That's something that would go on to the haulers  
2 and could be monitored as the trucks pass through into  
3 the Port. That's all I have.

4 <<<>>>

5  
6 **Comment 89** ROXANNE RUSCH: I want to thank everyone  
7 for the comments and all the work that led up to the  
8 success of the Port actually agreeing to do an EIS.

9 The impact categories that I think we've heard  
10 resonate with the entire group are really three  
11 additional categories. As you know, the Port of  
12 Seattle updated its SEPA Resolution in 2011 and that  
13 resolution No. 3650, it included a methodology for  
14 climate-change impact. So we don't see the whole  
15 notion of the effects of climate impact and  
16 climate-change impacts on the methodology, and we would  
17 really like that added to this as soon as possible.

18 The other categories that we don't see  
19 reflected here -- and I think many of the speakers  
20 brought this up kind of directly or indirectly, Jim  
21 more specifically, was really the whole issue of  
22 socioeconomics. That really falls into two areas. The  
23 1994 EIS called the area already, right, and so what's  
24 a little more pollution? What's a little more noise,  
25 trash, and dirt? And that's really unacceptable. So

1 from a socioeconomic perspective, especially in the  
2 light of the mayor's commitment to a clean, walkable  
3 city, this is really not consistent with that green  
4 commitment. Socioeconomics really needs to look at is  
5 the West Seattle and South Park area, south regions  
6 bearing the burden of the profit margin of the Port of  
7 Seattle. That's a point to mention.

8           Finally, we talked a lot about the economics.  
9 The economics -- we talked about -- Paul, I think said  
10 there was a study -- I think, whatever you said. We  
11 really would like -- I'm in health care. We build  
12 health care models that are efficient, and we look at  
13 our throughput. Is the design that is being approved  
14 and modified, is it really the right design? Is it an  
15 efficient design that generates appropriate throughput,  
16 efficiency? You talk about the goal of being  
17 self-sufficient. You talked about slot cost. Where is  
18 the impact or the study of efficiency? Is this the  
19 right model? Is this the right return on investment?  
20 Is this the right area? Is this the right efficiency  
21 for the organization? And does it make economic sense  
22 for us as taxpayers to give you more money as stewards  
23 of our resources and potentially squander it?

24           We ask that the socioeconomic and the climate  
25 change be added to the impact areas in the EIS. Thank

1 you.

2 <<<>>>

3

4 **Comment 90** JIM BORROW: Always after the fact, I  
5 think of something -- damn, I was going to say  
6 something about that. This just feeds into what  
7 Roxanne said, socioeconomics. About two years ago, I  
8 was at a little summer party and chatting with the  
9 retired husband of a friend of mine, a fellow that just  
10 so happened to be an executive -- not the big SSA --  
11 smaller player. He's been in the business pretty much  
12 all his life. We were talking about the Port of  
13 Seattle. He said, you know, the Port of Seattle has  
14 been, is, and always will be a discretionary port. The  
15 shippers don't have to come here. I say, Well, why do  
16 they all come? No. No matter how they improved it, it  
17 has always been a discretionary port. Given the  
18 increased competition up and down the West Coast, I  
19 think that is still a big risk.

20 So my question is: Are we, the taxpayers, who  
21 support the Port of Seattle, unfortunately without more  
22 direct control, are we going to gamble \$250 million --  
23 a roll of the dice? If they come up, good.

24 I don't really see building out Terminal 5 as  
25 best use. The city always talks about -- our land-use

1 code talks about best use. I do not think this is best  
2 use. I think my earlier idea about using the land to  
3 do what Seattle is doing best right now, create jobs in  
4 other sectors, diversify the economy, is the best use.  
5 That doesn't have to do with the EIS discussed here,  
6 but I think in the broad picture it is very, very  
7 important.

8 <<<>>>

9  
10 **Comment 91** PATRICIA DAVIS: Maybe we don't have to  
11 eat Terminal 5. When you look at annual reports for  
12 the Port of Seattle, you'll also look at one of the  
13 reasons they're losing money is because of grain. It's  
14 a major issue in that regard.

15 When we were in the West Seattle  
16 Transportation Committee -- spoke out and told us we're  
17 in heavy-duty competition with Vancouver, BC. I forgot  
18 to mention that we have a Northwest Port Clean Air  
19 Implementation that has been put into effect for  
20 Seattle, Tacoma, and Victoria, BC -- excuse me  
21 Vancouver, BC.

22 Port of Seattle hasn't showed up very well  
23 there. They were ceded by some of the other areas in  
24 performance of taking clean air seriously.

25 I think they're kind of bullies, to be honest

1 with you. And I think we need to watch out what's  
2 going on down there. Ms.(inaudible) said one of the  
3 things we need to compete with Vancouver, BC, is that  
4 we need rail. I said, Hmm, there's all that rail over  
5 at East Marginal. I was over there counting the tracks  
6 and I was counting the tracks on Harbor Island, which  
7 are massive. We look at the upland portion of what  
8 they're asking for, which interestingly disappeared  
9 during this period of time. It will probably come  
10 later. We don't want more rail. Why don't you go  
11 where there is rail instead of buying more? Do you  
12 know that many people have asked for permits on your  
13 waterway? They've asked for downzoning. And I've  
14 called some of them and said, How's it going? They  
15 say, We can't get that. I said, Why not? They say,  
16 The Port pushes back on us. They want that.

17           People have asked for master-use permits down  
18 there for restaurants, retail. The Parks Department  
19 could buy it. We have tourists coming over on our  
20 water taxi. Why doesn't our waterfront count? How  
21 come we knocked down the viaduct? It wasn't going to  
22 stand up anymore in 2001. Now all this time -- long  
23 time later -- and it's carrying our traffic. It's a  
24 big gentrification of downtown Seattle and we're  
25 getting dumped with the rest.

1 I don't know if we're going to grow as a port.  
2 I think that's a worthy consideration. We're sick of  
3 China. We're sick of eating their toxic products. It  
4 wouldn't be wise, considering that we basically  
5 subsidize you, for you to wisely use our money and  
6 maybe look into turning that terminal into a Parks  
7 Department, retail, something that's clean and green.

8 And in particular, because so many people  
9 breathe what you do and so many people close their  
10 windows because they can't sleep and they still can't  
11 sleep, I would say come on over and listen to what's  
12 going on down there. You're not the only train noise.  
13 I cannot -- I think really -- and I've lived here 40  
14 years, so before you were here, I might move away with  
15 all honestly. You're a deal breaker for me. I love my  
16 home and invested in my community or I wouldn't be  
17 working my butt off now. But you are bullies. You  
18 pollute the air. You're not good neighbors. We're a  
19 clean, green city and we would like to see you step up.  
20 And when you say, We're never going to be Long Beach,  
21 because you need to be right about it.

22 <<<>>>

23  
24 **Comment 92** DEB BARKER: I'm Deb Barker. I'm  
25 wearing a couple different hats. I do want to have two

1 points of mitigation discussion. EIS, of course, is  
2 all about coming up with different sorts of mitigation.  
3 One potential idea for mitigation on this particular  
4 site of T5 could be land setup for West Seattle transit  
5 center and a Park & Ride so that there is a place for  
6 all those folks to try and get over the West Seattle  
7 Bridge or lower bridge and jump on the bus before ST3  
8 and the light rail get here. Some land for deviating  
9 some commute issues.

10 Number two. And all of us know West Seattle,  
11 we think of it is as our own island. There's the days  
12 when you don't want to go off the island when the  
13 bridge is bad. Because we're an island, when the big  
14 one hits -- this comes up in our emergency  
15 preparedness -- we're going be trapped here and on our  
16 own. Because the city -- as they say, have your water  
17 for three days or two weeks, whichever comes first.

18 One thing with shore power -- I'm making a  
19 push for the Port to include shore power and pay for  
20 shore power. Don't throw it off to a mystery tenant;  
21 put in the shore power and all that is put into  
22 effective use when we are all cut off, and we're here  
23 together with your shore power and all your big  
24 generators, and make that work. So that can also be a  
25 mitigation tool -- that you are helping the emergency

1 preparedness of West Seattle. Thank you.

2 <<<>>>

3

4 **Comment 93** TOM NOYES: We've been complaining a lot  
5 about the impacts, and they are real, but the EIS is  
6 about solution and mitigation. I want to round out  
7 that we've talked about train horns. They really are a  
8 problem. What they call road locomotives -- the  
9 loud-level sound horns or whatever they are -- they  
10 bring you right out of your bed. In the summers, you  
11 can't leave your window open. The federal railroad  
12 administration has procedures for putting in quiet  
13 zones.

14 I know the Port staff -- there's one right  
15 across from their headquarters. They don't have to  
16 blow their horns -- contrary to what we've been told.  
17 If you're going to be a good neighbor, you better treat  
18 us right. There's a way to get it accomplished. So if  
19 they're serious about it, take that action.

20 You heard about shore power. There's all that  
21 push back why it's too expensive, the ships don't use  
22 it, it's going to cost money. If it isn't installed,  
23 we'll have to breathe that air. The whole valley fills  
24 up with diesel.

25 And the whole back-up alarms -- new technology

1 since the last EIS. That's the way to go. The city  
2 uses it. It's a white-noise alarm. And if those pure  
3 tone alarms are reinstalled, we are going to have  
4 problems again. Invest in the new technology. Thank  
5 you.

6 <<<>>>

7  
8 **Comment 94** ROXEANNE RUSCH: Dredging. I know we  
9 haven't glossed over dredging. But going down to minus  
10 58, the water naturally wants to fill in the hole that  
11 was created with dredging. Natural shoreline is  
12 ultimately affected. Maintenance dredging required --  
13 make no doubt about it maintenance dredging is  
14 required. If you don't do it right and coordinate it  
15 with the others -- and I counted just online in the  
16 last week, at least six other dredgings in that Elliott  
17 Bay-Duwamish waterway -- maybe all of them are going on  
18 simultaneously or at different schedules. So every  
19 time you dredge, you bring up sediment and  
20 contamination, you acidify, you can deplete oxygen from  
21 the area. It's a risky situation. It sounds good in  
22 isolation, but when you do get -- not in a coordinated  
23 schedules -- and some of the dredge material that you  
24 are portraying, Oh, don't worry, it's all offshore  
25 disposal or water disposal. That really wasn't true

1 with the 2013 sampling. So really keep us in the loop  
2 about the sampling and the plan for disposal.

3 And the studies that I read -- the engineer of  
4 reports said you have to have the same contractor doing  
5 the dredging and the disposal. If not, they point  
6 fingers and say, I'm not responsible for disposing.  
7 It's contaminated and we're not going there. If you  
8 don't have the same contractors, that is a huge  
9 mitigation about the dredging.

10 Also, coordinating among the other maintenance  
11 dredging and see what kind of cleanup is critical.  
12 It's the livelihood of the folks around here.

13 And people fish and use that waterway, and  
14 it's contaminated. The sediment that rises and falls  
15 at different points, it will always be in  
16 acidification, oxygen depleted; and what suffers then,  
17 the habitat and wildlife.

18 That's a short summary of too much  
19 information. I want to make note, using the same  
20 contractor for the dredging and disposal is critical in  
21 mitigation strategy. Thank you.

22 <<<>>>

23

24 **Comment 95** MARK JOHNSON: I forgot to mention my  
25 initial documents piggyback on what James said about



1 laying -- I don't know if it's into the Port or out of  
2 the Port. But I think the consultant consolidate that  
3 information with whatever results come out of the  
4 study. And that's it.

5 (Public comment concluded at 7:39 p.m.)

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C E R T I F I C A T E

1  
2  
3 I, Katie McGinnity Roberts, the undersigned  
4 Certified Court Reporter pursuant to RCW 5.28.010,  
5 authorized to administer oaths and affirmations in and  
6 for the State of Washington, do hereby certify that the  
7 sworn testimony and/or proceedings, a transcript of  
8 which is attached, was given before me at the time and  
9 place stated therein; that any and/or all witness(es)  
10 were duly sworn to testify to the truth; that the sworn  
11 testimony and/or proceedings were by me  
12 stenographically recorded and transcribed under my  
13 supervision, to the best of my ability; that the  
14 foregoing transcript contains a full, true, and  
15 accurate record of all the sworn testimony and/or  
16 proceedings given and occurring at the time and place  
17 stated in the transcript; that I am in no way related  
18 to any party to the matter, nor to any counsel, nor do  
19 I have any financial interest in the event of the  
20 cause.

21 WITNESS my hand in Seattle, County of King,  
22 State of Washington, this 19th day of November, 2015.

23 Katie Roberts  
24 Katie McGinnity Roberts, CCR #3309,  
25 Court Reporter in and for the State  
of Washington. Commission expires  
April 21, 2016.

<b>\$</b>	<b>6</b>	<b>analysis</b> 12:12,22 13:3,6,11,13 14:12 29:2,10,15
<b>\$250</b> 21:22	<b>650,000</b> 13:2	<b>animal</b> 17:2,3,5
<b>\$700,000</b> 15:3	<b>7</b>	<b>annual</b> 22:11
<b>1</b>	<b>75</b> 12:18	<b>anymore</b> 23:22
<b>1.6</b> 12:9,13 29:6	<b>7:39</b> 30:5	<b>approved</b> 20:13
<b>1.8</b> 29:6	<b>9</b>	<b>apron</b> 16:19
<b>10</b> 18:3	<b>90</b> 12:14	<b>area</b> 18:2 19:23 20:5,20 27:21
<b>18</b> 16:4	<b>95</b> 12:14	<b>areas</b> 17:12 19:22 20:25 22:23
<b>1994</b> 19:23	<b>A</b>	<b>aspect</b> 15:11
<b>2</b>	<b>access</b> 29:24	<b>Association</b> 13:20
<b>20</b> 13:10	<b>accessed</b> 26:18	<b>assuming</b> 12:14 29:9
<b>2001</b> 23:22	<b>acidification</b> 28:16	<b>assumptions</b> 12:23 13:12
<b>2011</b> 19:12	<b>acidify</b> 27:20	<b>aware</b> 15:9
<b>2013</b> 28:1	<b>Act</b> 16:3 18:20	<b>B</b>
<b>2025</b> 19:1	<b>action</b> 26:19	<b>back</b> 17:3 18:8 23:16 26:21
<b>25</b> 12:19	<b>add</b> 18:15	<b>back-up</b> 26:25
<b>27</b> 29:22	<b>added</b> 19:17 20:25	<b>bad</b> 25:13
<b>3</b>	<b>adding</b> 14:5	<b>barely</b> 13:1
<b>3,000</b> 15:22	<b>additional</b> 14:2 19:11	<b>Barker</b> 13:17 24:24
<b>3650</b> 19:13	<b>address</b> 15:23	<b>based</b> 12:23
<b>4</b>	<b>Adidas</b> 17:4	<b>basically</b> 24:4
<b>40</b> 24:13	<b>administration</b> 26:12	<b>Bay-duwamish</b> 27:17
<b>46</b> 16:3 17:9	<b>advanced</b> 16:7	<b>BC</b> 22:17,20,21 23:3
<b>5</b>	<b>adverse</b> 17:15	<b>Beach</b> 24:20
<b>5</b> 16:12 21:24 22:11	<b>affected</b> 27:12	<b>bearing</b> 20:6
<b>50</b> 18:25	<b>agreeing</b> 19:8	<b>bed</b> 26:10
<b>500,000</b> 18:15	<b>ahead</b> 15:5 18:4	<b>big</b> 21:10,19 23:24 25:13,23
<b>58</b> 27:10	<b>air</b> 17:21,22 18:19,20 22:18,24 24:18 26:23	<b>blow</b> 26:16
	<b>alarm</b> 27:2	<b>board</b> 13:18 18:12
	<b>alarms</b> 26:25 27:3	<b>BORROW</b> 21:4
	<b>amount</b> 29:7	<b>breaker</b> 24:15
		<b>breathe</b> 24:9 26:23
		<b>bridge</b> 15:1 25:7,13 29:23
		<b>bring</b> 16:2,15,23 17:3 26:10 27:19
		<b>broad</b> 22:6

**brought** 16:22 18:24 19:20  
**budget** 15:6  
**build** 20:11  
**building** 18:14 21:24  
**bullies** 22:25 24:17  
**burden** 20:6  
**bus** 25:7  
**business** 21:11  
**butt** 24:17  
**buy** 23:19  
**buying** 23:11

---

**C**

---

**call** 26:8  
**called** 19:23 23:14  
**capacity** 14:20  
**care** 20:11,12  
**carrying** 23:23  
**categories** 19:9,11,18  
**ceded** 22:23  
**center** 25:5  
**central** 17:14  
**change** 20:25  
**chatting** 21:8  
**China** 24:3  
**Chris** 15:19  
**citizen's** 16:15  
**city** 14:24 15:3,5,6 20:3 21:25 24:19  
25:16 27:1  
**clean** 16:3 18:20 20:2 22:18,24 24:7,  
19  
**cleanup** 28:11  
**climate** 19:15 20:24  
**climate-change** 19:14,16  
**close** 24:9  
**coal** 12:8  
**Coalition** 13:19 18:12

**Coast** 21:18  
**cochair's** 13:23  
**code** 22:1  
**coliform** 16:9  
**comment** 30:5  
**comments** 13:20,23 19:7  
**commercial** 14:8  
**commitment** 20:2,4  
**Committee** 22:16  
**communities** 18:6  
**community** 13:8,20 24:16  
**commute** 14:4,22 25:9  
**commuters** 14:17  
**compete** 23:3  
**competition** 21:18 22:17  
**complaining** 26:4  
**compliance** 16:2,5,15,18,22  
**component** 12:3  
**compressed** 18:25  
**concluded** 30:5  
**conditions** 14:21  
**congested** 12:16 13:9  
**Congress** 18:21  
**connections** 12:2  
**consideration** 24:2  
**consistent** 20:3  
**consolidate** 30:2  
**constrictions** 12:25  
**consult** 12:5 15:9 18:18  
**consultant** 12:4 30:2  
**consumed** 17:16,17  
**contained** 17:8  
**contaminated** 28:7,14  
**contamination** 27:20  
**contractor** 28:4,20  
**contractors** 28:8  
**contrary** 26:16

**control** 18:20 21:22  
**converting** 18:24  
**coordinate** 14:24 27:14  
**coordinated** 27:22  
**coordinating** 28:10  
**coordination** 14:1  
**copper** 16:8  
**corridor** 15:2 29:23  
**cost** 20:17 26:22  
**council** 15:3,5  
**Councilman** 29:21  
**Councilmember** 15:2  
**count** 23:20  
**counted** 27:15  
**counting** 23:5,6  
**couple** 24:25  
**create** 22:3  
**created** 27:11  
**critical** 28:11,20  
**current** 18:16  
**cut** 25:22

---

**D**

---

**daily** 12:24  
**damn** 21:5  
**DAVIS** 22:10  
**day** 14:11 15:15  
**days** 25:11,17  
**deal** 17:20 24:15  
**Deb** 13:17 24:24  
**Department** 23:18 24:7  
**deplete** 27:20  
**depleted** 28:16  
**describe** 29:12  
**describing** 29:11  
**design** 20:13,14,15

<b>detail</b> 13:4	<b>eat</b> 22:11	<b>federal</b> 26:11 29:1,11
<b>detailed</b> 29:2,11,15	<b>eating</b> 24:3	<b>feeds</b> 21:6
<b>determine</b> 14:16	<b>economic</b> 20:21	<b>feet</b> 18:3
<b>deviating</b> 25:8	<b>economics</b> 20:8,9	<b>fellow</b> 21:9
<b>dice</b> 21:23	<b>economy</b> 22:4	<b>fill</b> 27:10
<b>diesel</b> 26:24	<b>ed</b> 26:22	<b>fills</b> 26:23
<b>direct</b> 21:22	<b>effect</b> 22:19	<b>Finally</b> 20:8
<b>directly</b> 19:20	<b>effective</b> 25:22	<b>find</b> 17:25
<b>director</b> 15:20	<b>effects</b> 17:15 19:15	<b>fine</b> 12:15
<b>dirt</b> 19:25	<b>efficiency</b> 20:16,18,20	<b>fingers</b> 28:6
<b>disappeared</b> 23:8	<b>efficient</b> 20:12,15	<b>fish</b> 28:13
<b>discretionary</b> 21:14,17	<b>Eight-six</b> 17:14	<b>fleets</b> 18:24
<b>discussed</b> 22:5	<b>EIS</b> 19:8,23 20:25 22:5 25:1 26:5 27:1 29:10	<b>folks</b> 25:6 28:12
<b>discussion</b> 25:1	<b>Elliott</b> 27:16	<b>forgot</b> 22:17 28:24 29:20
<b>disposal</b> 27:25 28:2,5,20	<b>emergency</b> 25:14,25	<b>freight</b> 29:25
<b>disposing</b> 28:6	<b>emissions</b> 18:13,19	<b>friend</b> 21:9
<b>distribution</b> 12:20	<b>employees</b> 17:6	<b>fruition</b> 29:6
<b>disturbed</b> 17:11	<b>encourage</b> 29:2,14	<b>full</b> 29:6
<b>diversify</b> 22:4	<b>engineer</b> 28:3	<b>funding</b> 15:3
<b>documents</b> 28:25	<b>enormous</b> 29:7	<b>future</b> 12:6
<b>doubt</b> 27:13	<b>entire</b> 19:10	<hr/> <b>G</b> <hr/>
<b>downtown</b> 23:24	<b>environmental</b> 16:11	<b>gamble</b> 21:22
<b>downzoning</b> 23:13	<b>equipment</b> 18:17	<b>gas</b> 18:25
<b>draft</b> 29:10	<b>estimating</b> 14:7	<b>gases</b> 18:22
<b>drain</b> 16:20	<b>Excellent</b> 13:20	<b>gates</b> 29:13
<b>drastically</b> 16:4	<b>excuse</b> 22:20	<b>general</b> 16:5
<b>dredge</b> 27:19,23	<b>executive</b> 15:20 21:10	<b>generates</b> 20:15
<b>dredging</b> 17:12 27:8,9,11,12,13 28:5,9,11,20	<b>expected</b> 14:13	<b>generating</b> 12:9
<b>dredgings</b> 27:16	<b>expensive</b> 26:21	<b>generators</b> 25:24
<b>due</b> 18:20	<b>export</b> 16:24 17:1	<b>gentrification</b> 23:24
<b>dumped</b> 23:25	<hr/> <b>F</b> <hr/>	<b>give</b> 20:22
<b>Duwamish</b> 15:14 17:22 29:23	<b>facilities</b> 16:1,2,7 18:6	<b>glossed</b> 27:9
<hr/> <b>E</b> <hr/>	<b>fact</b> 21:4	<b>goal</b> 20:16
<b>earlier</b> 22:2	<b>falls</b> 19:22 28:14	<b>good</b> 21:23 24:18 26:17 27:21
<b>east</b> 14:19 17:4 23:5	<b>fecal</b> 16:8	<b>gosh</b> 13:22

<b>grain</b> 22:13	<b>hows</b> 29:16	<b>island</b> 23:6 25:11,12,13
<b>gray</b> 14:2	<b>huge</b> 13:8 28:8 29:4	<b>isolation</b> 27:22
<b>great</b> 13:4 15:16	<b>hundred</b> 13:3 17:17,18	<b>issue</b> 15:23 16:23 19:21 22:14 29:5
<b>green</b> 15:6 20:3 24:7,19	<b>husband</b> 21:9	<b>issues</b> 12:4,7 17:21 25:9 29:14
<b>group</b> 16:15 19:10		
<b>grow</b> 24:1	<hr/> <b>I</b> <hr/>	<hr/> <b>J</b> <hr/>
<b>guess</b> 17:2	<b>i.e.</b> 14:22	<b>James</b> 28:25
<hr/> <b>H</b> <hr/>	<b>idea</b> 22:2 25:3	<b>Jim</b> 19:20 21:4
<b>habitat</b> 28:17	<b>identify</b> 14:15	<b>jobs</b> 16:17 22:3
<b>half</b> 12:18	<b>idle</b> 18:3	<b>JOHNSON</b> 28:24
<b>handle</b> 12:16	<b>idling</b> 17:25	<b>jump</b> 25:7
<b>hangs</b> 16:19	<b>impact</b> 13:8 16:11 19:9,14,15 20:18, 25 29:24	<b>jurisdiction</b> 18:19
<b>happen</b> 12:15	<b>impacts</b> 12:17 19:16 26:5	<hr/> <b>K</b> <hr/>
<b>happened</b> 21:10	<b>implement</b> 29:12	<b>kicking</b> 16:14
<b>Harbor</b> 23:6	<b>Implementation</b> 22:19	<b>kind</b> 19:20 22:25 28:11
<b>hats</b> 24:25	<b>implemented</b> 29:3	<b>knocked</b> 23:21
<b>haulers</b> 19:1	<b>important</b> 22:7	<b>Krueger</b> 18:11 29:20
<b>headquarters</b> 26:15	<b>improved</b> 21:16	<hr/> <b>L</b> <hr/>
<b>health</b> 17:15 20:11,12	<b>inaudible</b> 13:12	<b>land</b> 22:2 25:4,8
<b>hear</b> 15:13	<b>include</b> 14:5 25:19	<b>land-site</b> 12:2
<b>heard</b> 19:9 26:20	<b>included</b> 19:13	<b>land-use</b> 21:25
<b>heavy-duty</b> 22:17	<b>including</b> 16:3 29:25	<b>larger</b> 17:12
<b>helping</b> 25:25	<b>increased</b> 21:18	<b>Lastly</b> 15:10
<b>herring</b> 17:14,16	<b>indirectly</b> 19:20	<b>laying</b> 29:25 30:1
<b>hides</b> 17:2,3,5	<b>industrial</b> 16:5,21	<b>leak</b> 17:5
<b>hits</b> 25:14	<b>information</b> 28:19 30:3	<b>leave</b> 26:11
<b>Hmm</b> 23:4	<b>initial</b> 15:4 28:25	<b>led</b> 19:7
<b>hole</b> 27:10	<b>install</b> 26:22	<b>level</b> 14:20 18:16
<b>holes</b> 16:20	<b>installing</b> 16:7	<b>life</b> 21:12
<b>home</b> 24:16	<b>interestingly</b> 23:8	<b>lifestyle</b> 15:21
<b>honest</b> 22:25	<b>intimately</b> 15:25	<b>light</b> 20:2 25:8
<b>honestly</b> 24:15	<b>Invest</b> 27:4	<b>list</b> 15:2,7
<b>horns</b> 26:7,9,16 29:5	<b>invested</b> 24:16	<b>listen</b> 24:11
<b>host</b> 29:13	<b>investment</b> 20:19	<b>live</b> 15:12
<b>How's</b> 23:14	<b>involved</b> 15:25 16:1	
	<b>iphone</b> 13:24	

**lived** 24:13  
**livelihood** 28:12  
**local** 12:16,20 13:7 18:17  
**locomotives** 26:8  
**long** 15:7 23:22 24:20  
**long-term** 15:8  
**looked** 12:21  
**loop** 28:1  
**losing** 22:13  
**lot** 12:3,7,10,20 13:5,6 20:8 26:4  
**loud-level** 26:9  
**love** 24:15  
**lower** 25:7

---

**M**

---

**magnifies** 17:17,18  
**main** 16:23  
**maintenance** 27:12,13 28:10  
**major** 17:1 18:1 22:14 29:4  
**make** 12:5 14:7 17:12 20:21 25:24  
27:13 28:19  
**making** 25:18  
**margin** 20:6  
**Marginal** 23:5  
**MARK** 28:24  
**massive** 23:7  
**master-use** 23:17  
**material** 27:23  
**matter** 21:16  
**mayor's** 20:2  
**meant** 29:1  
**measure** 18:22  
**member** 13:18  
**members** 15:22  
**mention** 20:7 22:18 28:24 29:1,20  
**mentioned** 14:23  
**methodology** 19:13,16

**million** 12:9 18:16 21:22 29:6  
**mine** 21:9  
**minus** 27:9  
**mitigate** 18:23  
**mitigation** 14:1,16 25:1,2,3,25 26:6  
28:9,21 29:4,16  
**mix** 15:1  
**model** 20:19  
**models** 12:1 20:12  
**modified** 20:14  
**money** 20:22 22:13 24:5 26:22  
**monitored** 16:22 18:17 19:2  
**monitoring** 18:17  
**Morgan** 13:19  
**morning** 14:22  
**move** 18:3 24:14  
**moved** 16:17  
**Ms.(inaudible)** 23:2  
**mystery** 25:20

---

**N**

---

**natural** 18:25 27:11  
**naturally** 27:10  
**neighbor** 26:17  
**neighbors** 24:18  
**network** 12:16 13:5,9  
**night** 14:11 15:15  
**noise** 15:11,15 19:24 24:12 29:4,5  
**noncommercial** 14:3  
**Northwest** 22:18  
**note** 28:19  
**notion** 19:15  
**NOYES** 26:4  
**number** 15:23,25 16:24 17:1 25:10  
**numbers** 12:23

---

**O**

---

**offer** 13:25  
**offsets** 14:19  
**offshore** 27:24  
**oil** 12:8  
**online** 27:15  
**ooze** 17:6  
**open** 26:11  
**operational** 12:22  
**operations** 13:1  
**option** 29:9  
**options** 14:4  
**Orca** 17:17  
**order** 18:7  
**organization** 15:21,24 20:21  
**outline** 29:22  
**overcapacity** 12:6  
**overhanging** 16:19  
**oxygen** 27:20 28:16

---

**P**

---

**p.m.** 30:5  
**PAHS** 16:8  
**pans** 29:9  
**park** 18:3 20:5 25:5  
**Parks** 23:18 24:6  
**part** 16:16,21  
**party** 21:8  
**pass** 19:2  
**PATRICIA** 22:10  
**Paul** 20:9  
**pay** 25:19  
**PCB** 16:8  
**PCBS** 17:16,19  
**peak** 14:4,8,9

<b>Peninsula</b> 15:14	<b>procedures</b> 26:12	<b>read</b> 13:22 28:3
<b>people</b> 17:18 23:12,17 24:8,9 28:13	<b>process</b> 15:6	<b>reading</b> 13:23
<b>percent</b> 12:14,19 17:14 18:25	<b>processes</b> 14:24	<b>ready</b> 16:13
<b>performance</b> 22:24	<b>produced</b> 29:21	<b>real</b> 26:5
<b>period</b> 23:9	<b>product</b> 16:25	<b>reasons</b> 22:13
<b>periods</b> 14:4	<b>products</b> 24:3	<b>reflected</b> 19:19
<b>permit</b> 16:6,21	<b>profit</b> 20:6	<b>regard</b> 22:14
<b>permits</b> 23:12,17	<b>project</b> 15:2 29:6	<b>regional</b> 13:8 18:18
<b>perspective</b> 20:1	<b>projects</b> 29:22	<b>regions</b> 20:5
<b>picture</b> 22:6	<b>proposed</b> 29:25	<b>reinstalled</b> 27:3
<b>piggyback</b> 28:25	<b>provide</b> 29:2	<b>relations'</b> 15:11
<b>place</b> 18:21 25:5	<b>providing</b> 14:12	<b>repeating</b> 13:21
<b>plan</b> 12:6 28:2	<b>public</b> 30:5	<b>reports</b> 22:11 28:4
<b>plans</b> 14:24	<b>Puget</b> 15:20 17:14 18:18	<b>required</b> 14:16 27:12,14 29:13
<b>player</b> 21:11	<b>pulled</b> 13:5	<b>resident</b> 14:17
<b>point</b> 20:7 28:5	<b>pure</b> 27:2	<b>resolution</b> 19:12,13
<b>points</b> 25:1 28:15	<b>push</b> 25:19 26:21	<b>resonate</b> 19:10
<b>pollute</b> 24:18	<b>pushes</b> 23:16	<b>resources</b> 20:23
<b>pollution</b> 15:24 19:24	<b>put</b> 16:11 22:19 25:21	<b>respect</b> 13:13
<b>port</b> 16:25 17:1,6 18:14 19:3,8,11 20:6 21:12,13,14,17,21 22:12,18,22 23:16 24:1 25:19 26:14 29:24 30:1,2	<b>putting</b> 26:12	<b>responsible</b> 28:6
<b>Port-owned</b> 15:25 16:2	<hr/> <b>Q</b> <hr/>	<b>rest</b> 23:25
<b>portion</b> 23:7	<b>quality</b> 15:21 17:21,22 18:19	<b>restaurants</b> 23:18
<b>portraying</b> 27:24	<b>question</b> 21:20	<b>restrictions</b> 29:12
<b>potential</b> 14:18,19 25:3	<b>questions</b> 12:4	<b>results</b> 30:3
<b>potentially</b> 20:23	<b>quiet</b> 26:12 29:1,3,12	<b>retail</b> 23:18 24:7
<b>power</b> 17:23 18:23 25:18,19,20,21, 23 26:20	<hr/> <b>R</b> <hr/>	<b>retired</b> 21:9
<b>Prada</b> 17:4	<b>rail</b> 12:2,3,6,8,14,18,19,22 13:2,3 23:4,10,11 25:8 29:9,11	<b>return</b> 20:19
<b>preparation</b> 16:10	<b>railing</b> 12:25	<b>Ride</b> 25:5
<b>preparedness</b> 25:15 26:1	<b>railroad</b> 26:11	<b>rises</b> 28:14
<b>president</b> 13:19	<b>ramps</b> 14:5	<b>risk</b> 21:19
<b>pretty</b> 21:11	<b>Rasmussen</b> 15:2 29:21	<b>risky</b> 27:21
<b>previous</b> 13:2	<b>Raw</b> 17:2	<b>River</b> 15:14
<b>proactively</b> 16:12	<b>Ray</b> 18:11 29:20	<b>road</b> 13:5 14:8 16:14 26:8
<b>problem</b> 26:8	<b>reaches</b> 29:6	<b>roads</b> 12:7
<b>problems</b> 27:4		<b>roll</b> 21:23
		<b>room</b> 17:12
		<b>round</b> 26:6

**route** 14:3  
**routes** 14:6,13  
**Roxanne** 19:6 21:7  
**ROXEANNE** 27:8  
**running** 12:9  
**RUSCH** 19:6 27:8

---

**S**

---

**sake** 15:12  
**salmon** 17:16,19  
**sampling** 28:1,2  
**sanitation** 18:5  
**scenario** 12:13,18  
**scenarios** 12:11 13:13  
**schedules** 27:18,23  
**scope** 14:2  
**SDOT** 29:22  
**Seattle** 13:18 14:17,20 15:1,12,13,  
21 16:25 17:2 18:12 19:12 20:5,7  
21:13,21 22:3,12,15,20,22 23:24  
25:4,6,10 26:1 29:23  
**section** 29:11  
**sectors** 22:4  
**sediment** 27:19 28:14  
**sediments** 17:11  
**seep** 17:5  
**self-sufficient** 20:17  
**send** 17:2  
**sense** 20:21  
**sensitive** 12:1  
**SEPA** 19:12  
**separated** 14:5  
**separation** 14:3  
**setup** 25:4  
**Sheet** 15:6  
**shippers** 21:15  
**ships** 17:13 26:21  
**shoes** 17:4

**shore** 16:5 17:23 18:23 25:18,19,20,  
21,23 26:20  
**shoreline** 27:11  
**short** 28:18  
**short-term** 15:7  
**show** 13:12  
**showed** 22:22  
**sick** 24:2,3  
**side** 15:12,13  
**signage** 29:13  
**simultaneously** 27:18  
**sink** 17:5  
**site** 16:18 25:4  
**sites** 17:11  
**situation** 27:21  
**sleep** 24:10,11  
**slot** 20:17  
**small** 13:23  
**smaller** 21:11  
**socioeconomic** 20:1,24  
**socioeconomics** 19:22 20:4 21:7  
**solution** 26:6  
**sorts** 25:2  
**sound** 17:15 18:18 26:9  
**Soundkeeper** 15:20  
**sounds** 27:21  
**south** 20:5  
**speak** 16:6  
**speakers** 19:19  
**specific** 12:23  
**specifically** 19:21  
**spoke** 22:16  
**squander** 20:23  
**SSA** 21:10  
**ST3** 25:7  
**staff** 26:14  
**stand** 23:22

**stands** 12:25  
**state** 12:7 17:22  
**state's** 12:6  
**statement** 16:11  
**step** 24:19  
**stewards** 20:22  
**stormwater** 15:24 16:21 17:9  
**stormwater-treatment** 16:7  
**strategy** 28:21 29:4,16  
**studies** 15:4 28:3  
**study** 14:4,18 20:10,18 29:21 30:4  
**subsidize** 24:5  
**success** 19:8  
**suffers** 28:16  
**summary** 28:18 29:3,15  
**summer** 21:8  
**summers** 26:10  
**supply** 12:24  
**support** 13:1 15:4,5 21:21  
**supporters** 15:22  
**system** 16:12  
**systems** 16:8

---

**T**

---

**T5** 13:1 14:20 25:4  
**Tacoma** 22:20  
**taking** 22:24  
**talk** 18:13 20:16 29:22  
**talked** 20:8,9,17 26:7  
**talking** 21:12  
**talks** 21:25 22:1  
**tarmac** 17:6  
**taxi** 23:20  
**taxpayers** 20:22 21:20  
**technology** 26:25 27:4  
**tenant** 16:13 25:20

<b>terminal</b> 16:3,4,12 17:9 21:24 22:11 24:6	<b>truck</b> 12:2,18,19,20 13:6 14:13 17:24 18:24	<b>wearing</b> 24:25
<b>terminals</b> 14:19,21 18:1,2	<b>truck-staging</b> 18:1	<b>week</b> 14:9 27:16
<b>TEUS</b> 12:10,13 13:2 18:15 29:7	<b>truckers</b> 18:6	<b>weekend</b> 14:9
<b>thing</b> 16:24 25:18	<b>trucks</b> 14:14 17:25 18:2,25 19:2	<b>weeks</b> 25:17 29:21
<b>things</b> 12:6 17:7 18:22 23:3	<b>true</b> 27:25	<b>west</b> 13:18 14:17,20 15:1,12,13 18:12 20:5 21:18 22:15 25:4,6,10 26:1 29:23
<b>thoughts</b> 13:25	<b>turn</b> 18:7	<b>whales</b> 17:18
<b>thresholds</b> 14:15,16	<b>turning</b> 24:6	<b>whats</b> 29:17
<b>throughput</b> 20:13,15	<b>turnout</b> 15:16	<b>whichever</b> 25:17
<b>throw</b> 14:25 15:10 25:20		<b>white-noise</b> 27:2
<b>time</b> 16:10 18:4 23:9,22,23 27:19	<hr/> <b>U</b> <hr/>	<b>whys</b> 29:17
<b>times</b> 14:21 17:17,18	<b>ultimately</b> 27:12	<b>wildlife</b> 28:17
<b>told</b> 22:16 26:16	<b>unacceptable</b> 19:25	<b>Wilke</b> 15:19
<b>TOM</b> 26:4	<b>uncured</b> 17:2,3,5	<b>window</b> 26:11
<b>tone</b> 27:3	<b>updated</b> 19:12	<b>windows</b> 24:10
<b>tonight</b> 15:24	<b>upland</b> 23:7	<b>wise</b> 24:4
<b>tool</b> 25:25	<b>usage</b> 14:8	<b>wisely</b> 24:5
<b>tools</b> 15:8	<hr/> <b>V</b> <hr/>	<b>work</b> 13:6 14:9 19:7 25:24 29:16
<b>tourists</b> 23:19	<b>valley</b> 26:23	<b>working</b> 12:5 16:16 24:17
<b>toxic</b> 24:3	<b>Vancouver</b> 22:17,21 23:3	<b>worry</b> 27:24
<b>toxicity</b> 17:10	<b>versus</b> 14:12	<b>worse</b> 13:10
<b>tracks</b> 23:5,6	<b>viaduct</b> 23:21	<b>worst</b> 17:22
<b>traffic</b> 12:5,8,9,10 14:1,3,13 17:24 23:23 29:8	<b>Victoria</b> 22:20	<b>worthy</b> 24:2
<b>train</b> 12:10 14:12 24:12 26:7 29:4,7	<b>volumes</b> 14:10	<hr/> <b>Y</b> <hr/>
<b>trains</b> 12:8,24 15:13,14	<b>volunteers</b> 15:22	<b>year</b> 13:2 18:15 29:7
<b>transit</b> 25:4	<hr/> <b>W</b> <hr/>	<b>years</b> 13:3,10 21:7 24:14
<b>transportation</b> 12:12,17 13:3,11, 18,21,25 18:12 22:16 29:2,10,15	<b>waiting</b> 16:14	<hr/> <b>Z</b> <hr/>
<b>trap</b> 16:8	<b>walkable</b> 20:2	<b>zinc</b> 16:8
<b>trapped</b> 25:15	<b>wanted</b> 15:23	<b>zone</b> 29:3,13
<b>trash</b> 19:25	<b>Washington</b> 12:7	<b>zones</b> 26:13 29:1
<b>travels</b> 15:15	<b>watch</b> 23:1	
<b>treat</b> 26:17	<b>water</b> 15:21 16:3,5,20 23:20 25:16 27:10,25	
<b>treated</b> 17:8	<b>waterfront</b> 16:16 23:20	
<b>treatment</b> 16:12	<b>waterway</b> 23:13 27:17 28:13	
<b>triple</b> 18:16		
<b>trips</b> 12:21		