

# APPENDIX E

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## Reasonably Anticipated Land Use Letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, WA 98101

April 12, 2007

Reply to  
Attn Of: ECL-111

Doug Hotchkiss  
Port of Seattle  
P.O. Box 1209  
Seattle, Washington 98111

**RE: Reasonably Anticipated Future Land Use at T-117 Early Action Area, Lower Duwamish Waterway Superfund Site, Seattle, Washington**

Dear Mr. Hotchkiss:

This letter is to clarify the U.S. Environmental Protection Agency's (EPA) expectations regarding reasonably anticipated future land use as it relates to future removal action decision making at the T-117 Early Action Area (EAA) of the Lower Duwamish Waterway (LDW) Superfund Site. Since EPA's initial determination in this regard, potential future use of this site has been formally addressed first by the Seattle City Council and then by the Port of Seattle Commission in response to concerns raised by the Duwamish River Cleanup Coalition (DRCC). Others in the South Park neighborhood have also expressed their points of view at community meetings and through the Engineering Evaluation/Cost Analysis (EE/CA, July 13, 2005) public comment process.

Pursuant to EPA's proposed Amended Administrative Settlement Agreement and Order on Consent (ASAOC), the Port of Seattle (Port) and City of Seattle (City) (Respondents) will be preparing portions respectively of a revised EE/CA for T-117 sediments, bank, shoreline (by Respondents jointly), upland soils (by Port only) and adjacent streets (by City only). Respondents will also analyze whether the marina and Basin Oil are current potential sources to the Duwamish Waterway. The goals of an EE/CA are to identify the objectives of the removal action (see proposed T-117 Removal Action Objectives (RAOs) below) and to analyze the various alternatives that may be used to satisfy these objectives in terms of effectiveness (protectiveness, compliance with all applicable and relevant and appropriate requirements (ARARs), achievement of RAOs), implementability (technical and administrative feasibility, availability of services and materials, state acceptance, community acceptance), and cost. The draft EE/CA should include a comparative analysis of the cleanup alternatives (e.g., depth of soil/sediment removal to meet the RAOs with and without caps) and identification of a recommended alternative. EPA will review and comment on the draft EE/CA, ensure that any necessary changes are made, and put the final EE/CA out for public comment. EPA will consider and respond to any significant public comments and select the removal action to be performed and the rationale for its selection in an Action Memorandum.

Land use is determined by landowners subject to restrictions or limitations imposed by governments such as zoning boards with land use regulatory authority. EPA does not select land use(s) in its CERCLA decision documents; though it may select limited land use restrictions in the form of Institutional Controls as part of a removal or remedial action. However, as described below, at sites where it is appropriate, EPA considers both current and reasonably anticipated future land use in the remedy selection process.

The Superfund Land Use Directive (“Land Use in the CERCLA Remedy Selection Process,” OSWER Directive No. 9355.7-04, May 1995) provides basic information on developing and using future land use assumptions to support Superfund remedial actions. It says that:

- \* Remedial-action objectives...should reflect the reasonably anticipated future land use or uses.
- \* The Superfund Land Use Directive promotes early discussions with stakeholders regarding potential future land use options for sites and promotes the use of that information to develop realistic assumptions regarding future land use....Integrating realistic assumptions of future land use into Superfund response actions is an important step toward facilitating the reuse of sites following cleanup....Regions should...ensure that reasonable future land use assumptions are incorporated into the development, evaluation and selection of response actions, where appropriate.

The Reuse Assessments Directive (OSWER 9355.7-06P) extends the applicability of the Superfund Land Use Directive to non-time-critical removal actions, where site conditions and the nature of the response action warrant. Future land use assumptions can support site characterization, risk assessment, and the development, evaluation and selection of response actions. The analysis supporting the assumptions of future land use can be scaled back, as appropriate, consistent with the scope of the removal action.

Current T-117-land use and zoning is industrial. The Port indicated during the EE/CA process for the sediment, bank and shoreline that it intended to restrict the property to industrial uses in the future, and Port counsel indicated a willingness to propose a deed restriction to Port management to ensure this limitation. However, subsequent events summarized below have led EPA to determine that it is no longer reasonable to conclude that T-117 land use will be restricted to industrial uses.

The surrounding community is currently zoned and used for residential and commercial uses. On numerous occasions, including a public meeting last Spring (date) for a proposed time critical removal action for upland soils, DRCC and other members of the community clearly articulated a strong preference for the imposition of unrestricted use cleanup standards for the property to allow them to continue to advocate for future residential and/or recreational uses of the property. At the same public meeting, Seattle City Council representatives, including a sitting Councilman, supported DRCC and the other advocates for other-than industrial uses. This City Council support was memorialized in a letter dated May 25, 2006, signed by the full Council, referencing a

potential future annexation of T-117 by the City to facilitate broader future land uses. Thereafter, at a Port Commission public meeting (June 27, 2006) to consider a proposed EPA Settlement Agreement for the upland soils that had been the subject of the above-referenced public meeting, Port Commissioners were confronted with the City Council letter by DRCC and other community advocates, and expressed their intention as stewards of the environment and responsive to community concerns to very seriously consider non-industrial land uses for T-117. Shortly thereafter, the Port presented various land use scenarios to the South Park community which voiced a very strong preference for habitat/recreational use.

Based on the reuse assessment guidance, EPA's process should include soliciting community input on future land use considerations for sites. Community input can be particularly useful for sites where the future land use is uncertain and should be directed toward understanding the types of categories of future land use that the community believes would be appropriate for the site, and categories of land use that the community believes inappropriate. This information can be used as an indicator of the potential reliability and reasonableness of the future land use assumptions and their potential relevance for consideration in the remedy selection process.

Accordingly EPA has concluded that future land use should no longer be reasonably anticipated to be limited to industrial uses, and that cleanup standards for T-117 soils should be based on requirements for unrestricted uses.

## **REMOVAL ACTION GOALS AND OBJECTIVES**

EPA recommends using the following Removal Action Goals and Objectives in the new draft EE/CA – *the bold text highlights proposed changes to the July 13, 2005, EE/CA, Section 3.2 on RAOs to serve as new draft RAOs.*

The goal of the NTCRA at T-117 is to significantly reduce exposure of ecological and human receptors to sediment **and soil** contamination and thereby reduce or eliminate adverse effects on biological resources in the removal area. The removal action will reduce potential risks to human health by removing or isolating bioaccumulative chemicals that are found in sediment **and soils** or are sources to the sediment. Risks for the entire LDW will ultimately be addressed in one or more Records of Decision (ROD), which will establish site-wide cleanup levels. It is EPA's intention to sufficiently cleanup this EAA so as not to have to conduct future T-117 cleanup actions under the LDW ROD.

More specifically, the following removal action objectives (RAOs) are recommended by EPA for the T-117 removal areas as a means of meeting the stated goal:

- \* Reduce the concentration of contaminants in surface sediment (biological active zone, 0-10 cm) within the removal area boundary below the Sediment Quality Standards (SQS) for PCBs (12 mg/kg OC);

\* Ensure that any remaining bank and upland soil contamination at T-117 will not be released into the waterway and result in exposure to human and ecological receptors above protective levels (DELETE—"by removal and capping of PCB contaminated soils");

\*Ensure that any concentrations of contaminants in upland soils in the T-117 removal area, adjacent streets or at the upland marina property, are protective of human health and the environment for current and reasonable anticipated future land use."

Cleanup level considerations to achieve the RAOs include protectiveness, ARARs and reasonably anticipated future land use. ARARs for T-117 NTCRA site include the relevant sections of the Model Toxics Control Act (MTCA) and the Toxic Substances Control Act (TSCA) PCB regulations. The EE/CA should be expanded to discuss applicable cleanup levels for unrestricted and restricted uses in more detail. For protection of sediments, the 12 ppm OC level is applicable in the sediments and in soils that could migrate to or impact the sediments.

EPA will require that as the EE/CA is developed the Port will provide alternatives consistent with the RAOs, ARARs, and reasonably anticipated future land uses based on the foregoing, as well as the Port's intentions for its property.

If you have any additional questions, please call me at (206) 553-4951 or send me an e-mail at [peterston-lee.piper@epa.gov](mailto:peterston-lee.piper@epa.gov).

Sincerely,

Piper L. Peterson Lee  
Remedial Project Manager

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