Appendix C - AIR QUALITY TECHNICAL REPORT ADDENDUM



Yesler Terrace Redevelopment Project

Air Quality Technical Report Addendum

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PREFERRED ALTERNATIVE AIR QUALITY DISCUSSION

Affected Environment

Existing air quality conditions on the DEIS Site (West of Boren Sectors and East of Boren Sector) would remain as described in the September 2010 DEIS Air Quality Technical Report (DEIS Appendix E), and in Section 3.2.1 of the DEIS.

Existing air quality conditions in the East of 12th Sector are essentially the same as those described in the DEIS for the DEIS site. That is, air quality generally complies with applicable health standards most of the time, but the area is subject to somewhat elevated levels of some air contaminants due to the numerous transportation sources in the vicinity. For example, refer to Figures 9 and 10 in the air quality technical report which indicate existing and future annual average concentrations of diesel particulate matter are about the same in the East of 12th Sector area as across the DEIS Site, in spite of the increased distance from the freeway. On the other hand, short-term (e.g., 1-hour)concentrations of pollutants from transportation sources such as NO₂ are probably lower in the East of 12th Sector compared with the portions of the main site near the freeway due to the increased distance. See for example Figures 5 and 6 in the air quality technical report.

Impacts

Construction

Construction impacts under the Preferred Alternative on the DEIS Site would remain as described in Section 3.2.3 of the DEIS, and in DEIS Appendix E, Air Quality Technical Report. As noted for the DEIS Alternatives, with implementation of the controls required for the various aspects of construction activities and consistent use of best management practices to minimize on-site emissions, construction of the Preferred Alternative would not be expected to significantly affect air quality.

Construction of the facilities within the East of 12th Sector would have the same limited potential to result in air quality impacts as discussed for DEIS Alternatives 1-4. Demolition of existing buildings, site preparation and grading, and new construction could result in localized increases in some air pollutants including dust and emissions associated with diesel powered equipment. By taking steps such as minimizing on-site diesel engine idling, construction-related diesel emissions would not likely substantially affect air quality on the project site or in the site vicinity. And as discussed for Alternatives 1-4, adherence to requirements and advisories from the Puget Sound Clear Air Agency would likely be sufficient to prevent any significant air quality impacts related to construction sources and activities.

Operation

The potential for air quality impacts associated with off-site traffic related to operation of the proposed project under the Preferred Alternative including within the East of 12th Sector would be the same as discussed for Alternatives 1-4. An expanded traffic analysis of project implications of the Preferred Alternative indicated no changes in operations of the most affected signalized intersections in the study area. Therefore as described in the DEIS, project operation would not be expected to result in any significant air quality impacts.

Site suitability issues with the Preferred Alternative site configuration would remain the same as those discussed for Alternatives1-4. The addition of the East of 12th Sector makes no difference in the previous conclusions regarding long-term average exposure of people in the vicinity of the site to pollutants from vehicle sources.

Mitigation

In additional to the mitigation measures outlined in the DEIS, and the September 2010 Air Quality Technical Report, the following could also be incorporated into the project.

- SHA could incorporate the use of additional filters on building air intake units to partially reduce exterior-to-interior infiltration of particulate matter.
- SHA could incorporate inoperable windows and eliminate balconies on those buildings near I-5 in order to reduce occupant exposure to particulate matter.

Greenhouse Gases

The Preferred Alternative site configuration was assessed for greenhouse gas (GHG) emissions using the same methods described in the DEIS. The tabulation for the DEIS site is summarized in <u>Table 1</u>, and the tabulation for the East of 12th Sector is shown in <u>Table 2</u>. Overall project GHG emissions associated with the Preferred Alternative would be slightly less than the Alternative 3 configuration documented in the DEIS.

Table 1. Project-Related Preferred Alternative GHG Emissions – DEIS Site

	Total Square Footage	Life Span Emissions (MTCO ₂ e)
Building Type	(thousand square feet)	Preferred Alternative
Parking Structure/ Surface Parking	1,720	283,355
Pavement/ROW	387.4	19,830
Office Building High-Rise	899.7	880,237
Residential Mid-Rise	2,246	2,193,708
Residential High-Rise	2,049	2,003,221
Total Emissions		5,380,351

Table 2. Project-Related Preferred Alternative GHG Emissions – East of 12th

	Total Square Footage	Life Span Emissions (MTCO ₂ e)
Building Type	(thousand square feet)	Preferred Alternative
Parking Structure/ Surface Parking	52.7	8,663
Pavement/ROW	13	200
Office Building High-Rise	0	0
Residential Mid-Rise	218	212,946
Residential High-Rise	0	0
Total Emissions		221,809