

APPENDIX 18:

AIR QUALITY

A. HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) ANALYSIS

Chapter 18 presented the results of the heating, ventilation and air conditioning (HVAC) screening analysis for the proposed actions. Table A18-1 provides a summary of the assumptions regarding the floor area and source to receptor distance used in the screening analysis.

**Table A18-1
Parameters Used in the HVAC Screening Analysis**

Site	Source	Floor Area Assumed [ft ²]	Receptor	Distance to Receptor [ft]	Restriction
Site A	Parcel A Tower	326,500	None	> 400	None
	Parcel B Tower	290,000	Parcel C Tower	129	None
	Taller Parcel C Tower	471,200	None	> 400	None
	Shorter Parcel C Tower	380,200	Parcel D Tower	204	None
	Tower on Parcel D	465,100	Parcel F Tower	398	None
	Shorter Parcel E Tower	296,800	Taller Parcel E Tower	48	Yes (1)
	Taller Parcel E Tower	272,500	Parcel F Tower	127	None
	Parcel F Tower	416,600	None	> 400	None
	Parcel G Tower	354,200	Site B South Parcel Tower	217	None
	School	180,800	Taller Portion of Same Lot	Adjacent	Yes (2)
	Midrise on Site A Lot A	259,800	Parcel A Tower	Adjacent	Yes (3)
	Midrise on Site A Lot A	259,800	Riverview	100	Yes (3)
	Generic Midrise	387,000	Generic	Adjacent	Yes (3)

Table A18-1 (cont'd)
Parameters Used in the HVAC Screening Analysis

Site	Source	Floor Area Assumed [ft ²]	Receptor	Distance to Receptor [ft]	Restriction
Site B	Shorter South Parcel Tower	322,000	Taller South Parcel Tower	135	None
	Taller South Parcel Tower	372,900	Taller North Parcel Tower	158	None
	Taller North Parcel Tower	395,400	None	> 400	None
	Shorter North Parcel Tower	305,000	Taller North Parcel Tower	202	None
<p>(1) To avoid the potential impacts from Site A, Parcel E, the proposed Tower buildings above a total height of 125 feet on Site A, Parcel E must ensure that the HVAC stack(s) is located at least 100 feet from any taller building windows, open spaces, or air intakes when firing No. 2 oil, and at least 80 feet from any taller building windows, open spaces, or air intakes when firing natural gas. No. 4 oil and No. 6 oil would be prohibited.</p> <p>(2) To avoid the potential for impact on the proposed Tower which would be on Site A, Parcel B, the proposed school on Site A, Parcel B must use natural gas as the fuel for the HVAC system and locate the HVAC exhaust stack at least 70 feet from any taller building windows, open spaces, or air intakes. No. 2 oil, No. 4 oil, and No. 6 oil would be prohibited.</p> <p>(3) To account for the range of possible mid-rise development sizes (85 feet to 125 feet) and stack locations, very conservative assumptions were made regarding the gross square foot area and stack heights analyzed. The mid-rise building with the greatest gross floor area and the shortest building height was assumed in the analysis. The results of the analysis determined that to avoid the potential for adverse significant impacts on air quality, proposed mid-rise buildings must locate the HVAC exhaust stack at least 120 feet from any taller building windows, open spaces, or air intakes if using No. 2 oil or at least 100 if using natural gas. No. 4 oil and No. 6 oil would be prohibited.</p>					

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