

Appendix B

Air Quality

Appendix B
Re-Tenanted Heat and Hot Water Systems Air Quality Screening Analysis
Detailed Model Parameters and Results

Building ID Number	Estimated Stack Height (ft.)	Distance to Nearest Receptor (ft.)	Building Sq. Ft.	Estimated Natural Gas Peak NOx Emissions (g/s, worst case)	NO ₂ 1-Hour Screening Results		
					Maximum Estimated Increment (µg/m ³)	Maximum Estimated Total Concentrations (µg/m ³)	Refinements Used
1	36	27	930,020	4.88E-03	1.89	127.85	Maximum receptor network height of 33 ft used in all directions
2	36	75	435,344	2.29E-03	30.45	156.41	No refinements used
3	36	65	524,160	2.75E-03	48.29	174.25	No refinements used
4	36	40	587,059	3.08E-03	5.34	131.30	Maximum receptor network height of 33 ft used in all directions
5	36	40	723,341	3.80E-03	6.58	132.54	Maximum receptor network height of 33 ft used in all directions
6	36	50	751,296	3.94E-03	6.63	132.59	Maximum receptor network height of 33 ft used in all directions
7	36	50	786,240	4.13E-03	6.94	132.90	Maximum receptor network height of 33 ft used in all directions
8	36	50	684,902	3.60E-03	6.04	132.00	Maximum receptor network height of 33 ft used in all directions
9	36	35	621,712	3.26E-03	4.6	130.6	Maximum receptor network height of 33 ft used in all directions
10	36	40	635,981	3.34E-03	5.79	131.75	Maximum receptor network height of 33 ft used in all directions
11	18	42	87,360	4.59E-04	13.67	139.63	No refinements used
14	25	55	477,568	2.51E-03	55.22	181.18	No refinements used
15	25	55	500,864	2.63E-03	57.91	183.87	No refinements used
16	25	55	489,216	2.57E-03	56.56	182.52	No refinements used
17	25	55	495,040	2.60E-03	57.24	183.20	No refinements used
18	25	55	500,864	2.63E-03	57.91	183.87	No refinements used
19	25	68	864,864	4.54E-03	50.63	176.59	Maximum receptor network height of 33 ft used within the directional range of 60 - 120 degrees.
20	25	68	753,480	3.96E-03	17.9	143.9	Maximum receptor network height of 22 ft used in all directions
25	36	45	985,421	5.17E-03	9.0	134.9	Maximum receptor network height of 33 ft used in all directions
105	18	70	501,010	2.63E-03	29.39	155.35	No refinements used
109	18	55	224,185	1.18E-03	23.56	149.52	No refinements used
114	25	80	301,909	1.58E-03	15.31	141.27	No refinements used
301	18	120	679,056	3.56E-03	16.26	142.22	No refinements used
324	30	90	650,918	3.42E-03	27.05	153.01	No refinements used
330	15	50	537,240	2.82E-03	56.46	182.42	No refinements used
333	36	140	1,644,826	8.64E-03	35.0	161.0	No refinements used
403	36	60	202,633	1.06E-03	18.7	144.6	No refinements used
404	36	60	380,584	2.00E-03	35.1	161.0	No refinements used
405	36	60	375,046	1.97E-03	34.6	160.5	No refinements used
406	36	60	375,046	1.97E-03	34.6	160.5	No refinements used
407	36	60	362,374	1.90E-03	33.4	159.3	No refinements used
408	36	60	331,822	1.74E-03	30.6	156.5	No refinements used
409	36	60	470,252	2.47E-03	43.3	169.3	No refinements used
410	25	45	166,092	8.72E-04	28.79	154.75	No refinements used
515A	47	60	805,042	4.23E-03	6.9	132.9	Maximum receptor network height of 44 ft used in all directions
515B	47	50	805,042	4.23E-03	7.4	133.4	Maximum receptor network height of 44 ft used in all directions
555	36	68	1,188,693	6.24E-03	10.1	136.0	Maximum receptor network height of 33 ft used in all directions
12 total (1)	47	85	5,250,111	2.76E-02	6.7	132.6	Maximum receptor network height of 22 ft used in all directions
104&125 (2)	36	65	3,556,062	1.87E-02	30.2	156.1	Maximum receptor network height of 33 ft used in all directions
111&112 (3)	47	95	2,952,494	1.55E-02	7.1	133.0	Maximum receptor network height of 33 ft used in all directions
135 total (4)	36	50	1,082,172	5.68E-03	9.55	135.51	Maximum receptor network height of 33 ft used in all directions
298 total (5)	36	60	1,679,350	8.82E-03	5.50	131.46	Maximum receptor network height of 22 ft used in all directions
315 total (6)	47	65	1,139,135	5.98E-03	2.5	128.5	Maximum receptor network height of 33 ft used in all directions
400 total (7)	58	170	10,801,235	5.67E-02	11.1	137.0	Maximum receptor network height of 33 ft used in all directions
New Construction (8)	25	25	1,075,200	5.64E-03	47.9	173.8	Maximum receptor network height of 33 ft used within the directional range of 160 - 250 degrees.

- (1) Total includes buildings 12C through 12R as one system
- (2) Total includes buildings 104 & 125 as one system
- (3) Total includes buildings 111 & 112 as one system
- (4) Total includes buildings 135A, 135B, & 135C as one system
- (5) Total includes buildings 298A & 298B as one system
- (6) Total includes buildings 315A, 315B, & 315C as one system
- (7) Total includes buildings 400A through 400O as one system
- (8) Newly constructed building located to the North of Building 110