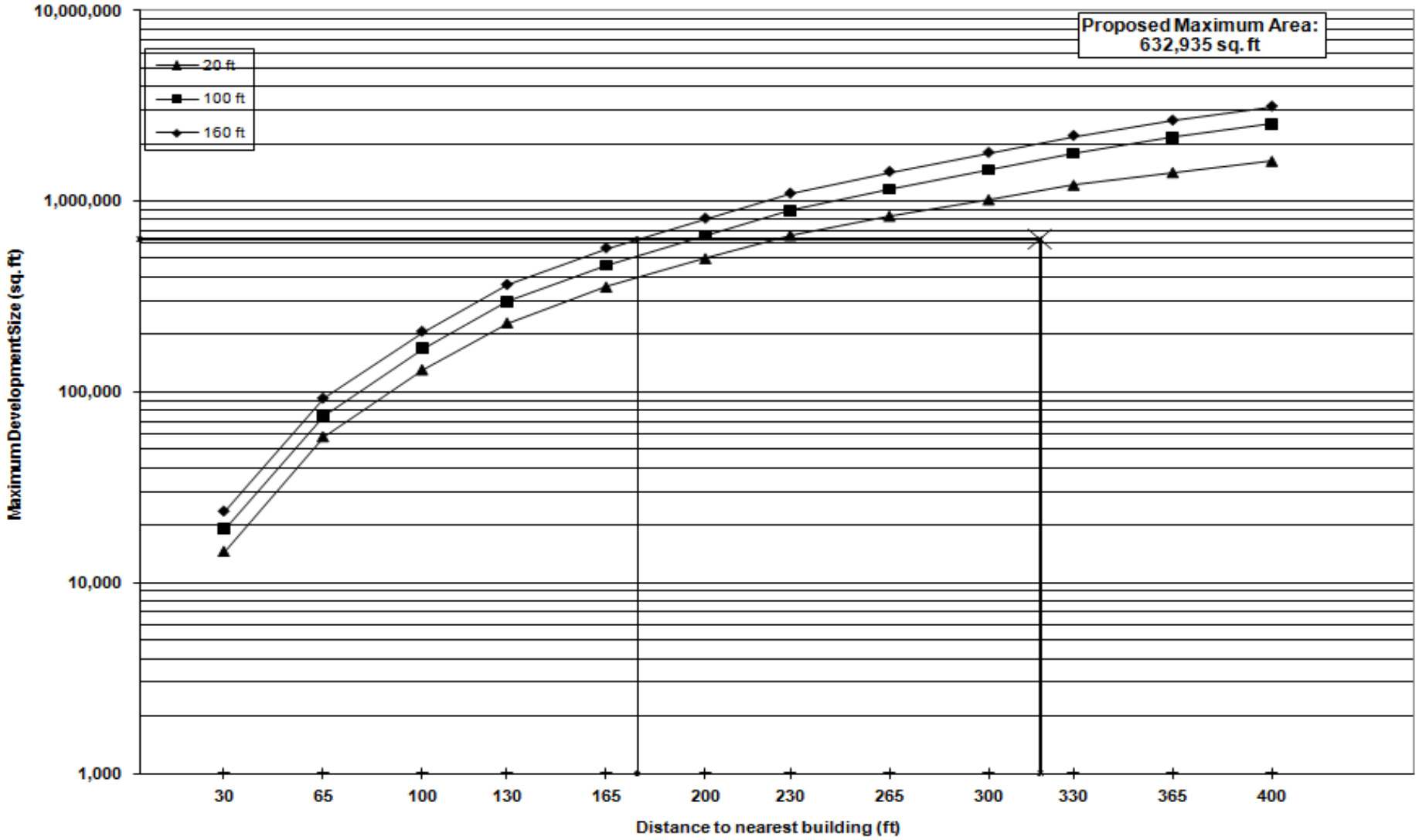
Appendix C
Air Quality

Air Quality Appendix
List of Contents

Figure 1-1

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4

HVAC Screening Analysis
Site: Buliding A
Date: 4/13/2009
Pass



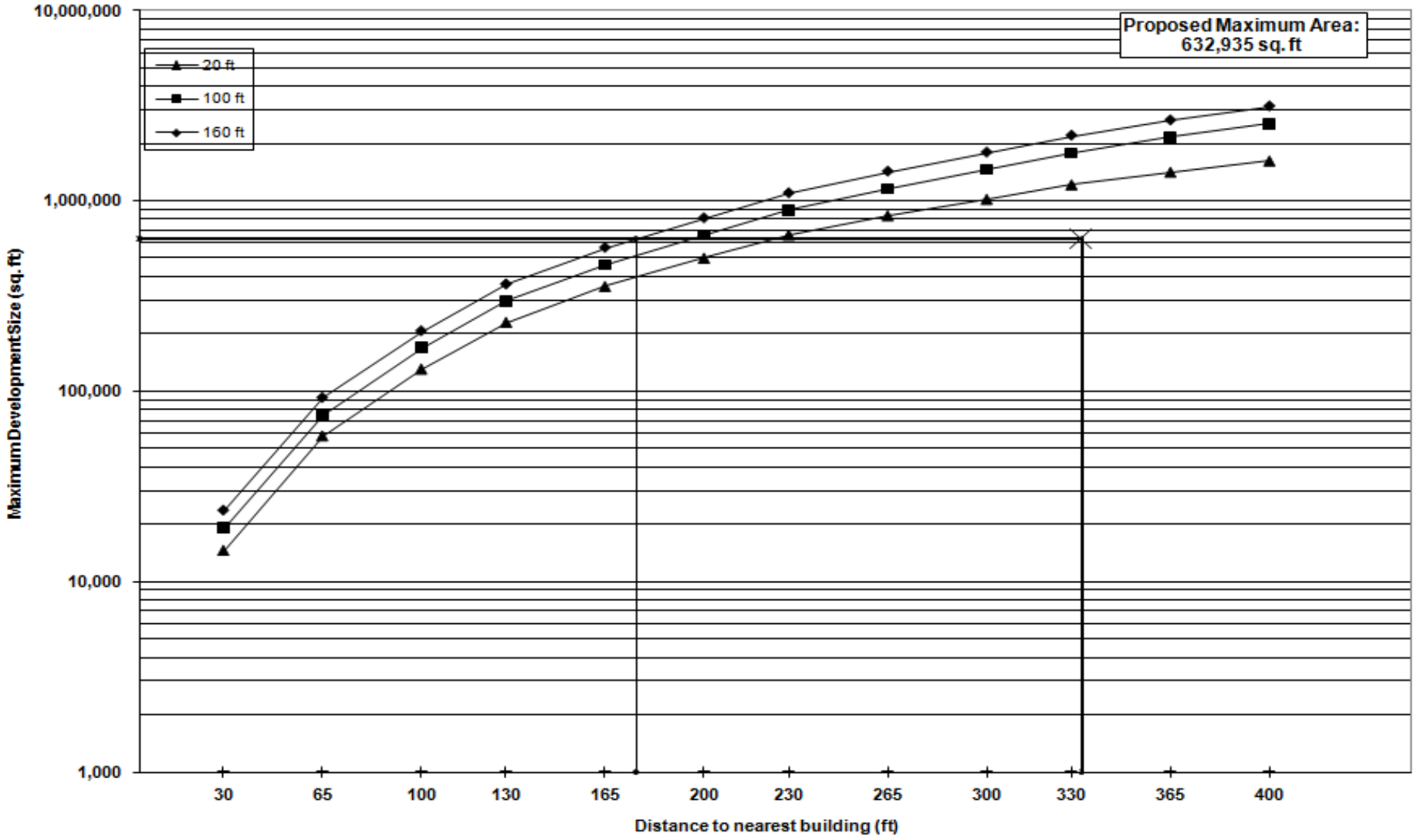
Stack Height: 374 ft
Distance to Nearest Building of Similar or Greater Height: 318 ft
Proposed Maximum SQFA: 632,935 sq. ft
Minimum Allowable Distance to Nearest Building: 176 ft

Notes:

Figure 1-2

HVAC Screening Analysis
Site: Buliding A
Date: 4/13/2009
Pass

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4



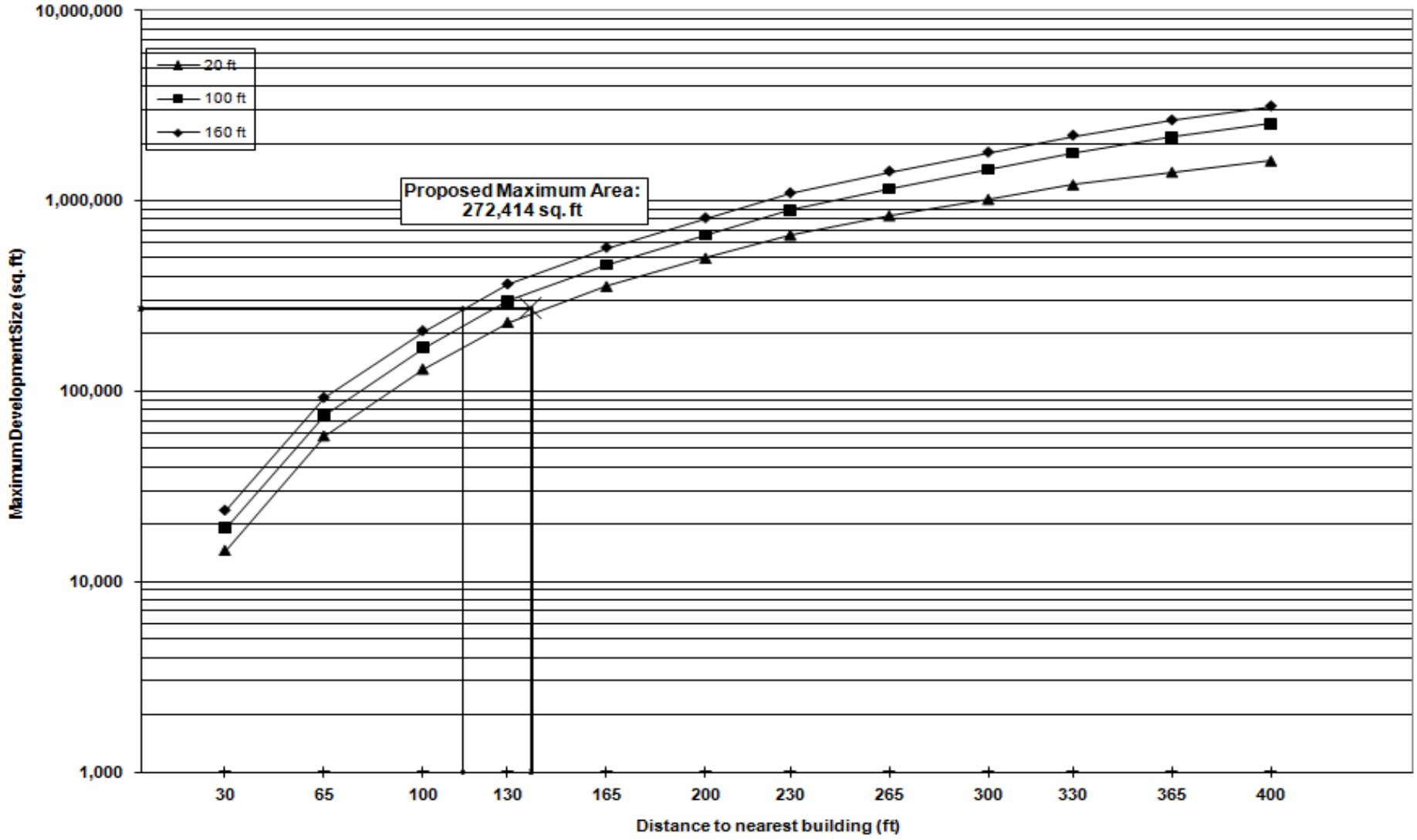
Stack Height: 374 ft
Distance to Nearest Building of Similar or Greater Height: 334 ft
Proposed Maximum SQFA: 632,935 sq. ft
Minimum Allowable Distance to Nearest Building: 176 ft

Notes:

Figure 1-3

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4

HVAC Screening Analysis
Site: Building B
Date: 4/13/2009
Pass



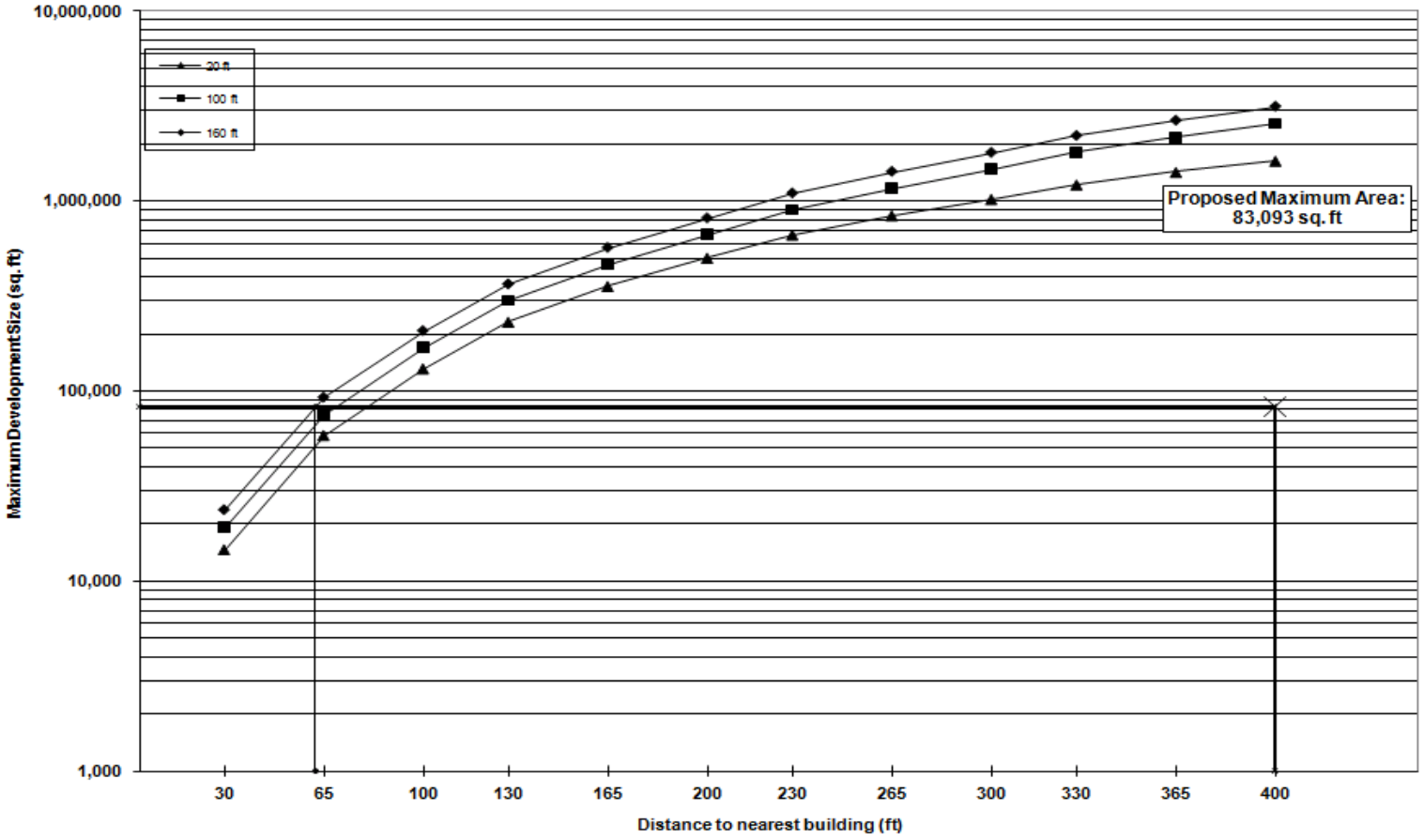
Stack Height: 197 ft
Distance to Nearest Building of Similar or Greater Height: 138 ft
Proposed Maximum SQFA: 272,414 sq. ft
Minimum Allowable Distance to Nearest Building: 114 ft

Notes:

Figure 1-4

HVAC Screening Analysis
Site: Building C North
Date: 7/17/2009
Pass

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4



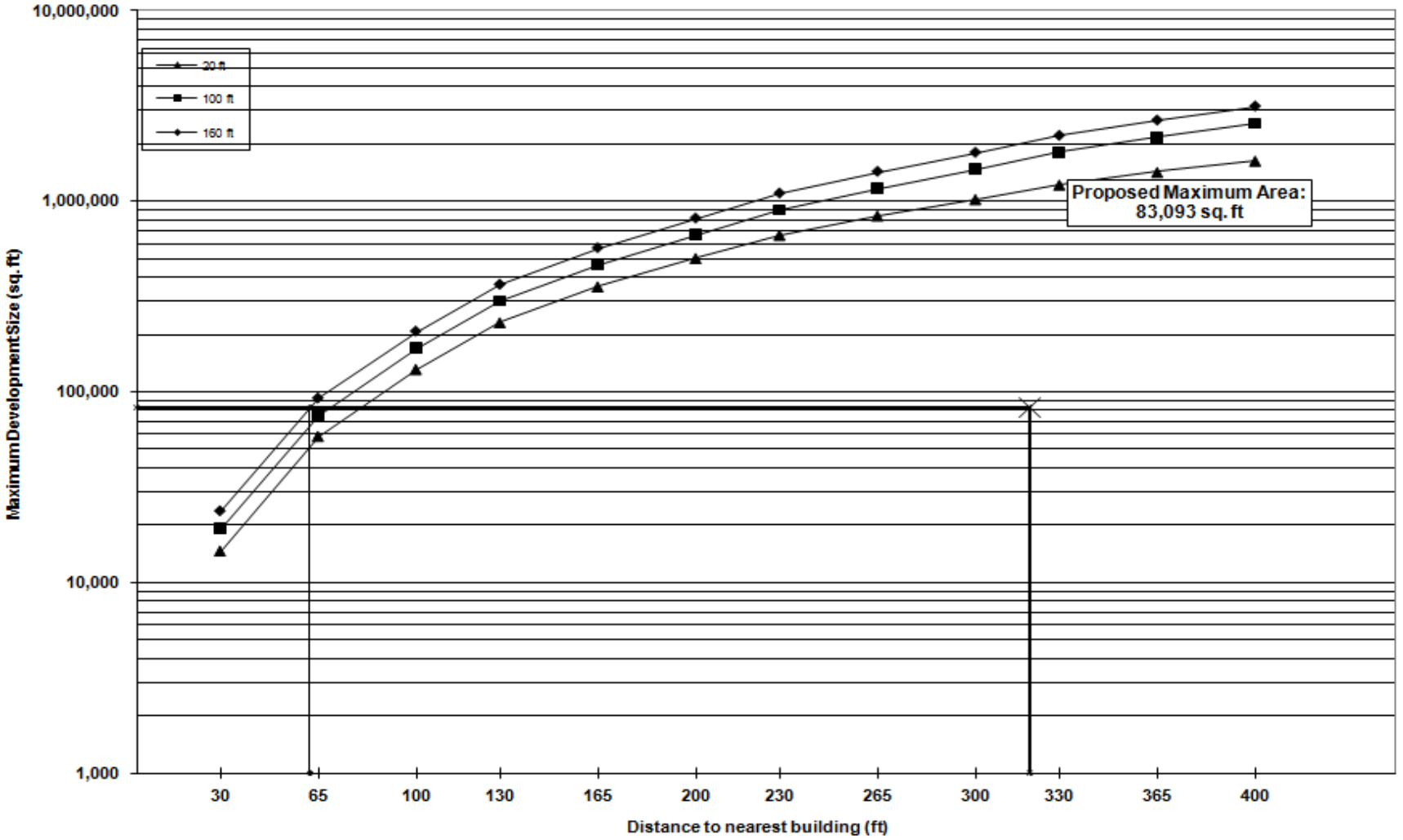
Stack Height: 199 ft
Distance to Nearest Building of Similar or Greater Height: 400 ft
Proposed Maximum SQFA: 83,093 sq. ft
Minimum Allowable Distance to Nearest Building: 62 ft

Notes:

Figure 1-5

HVAC Screening Analysis
Site: Building C South
Date: 4/27/2009
Pass

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4



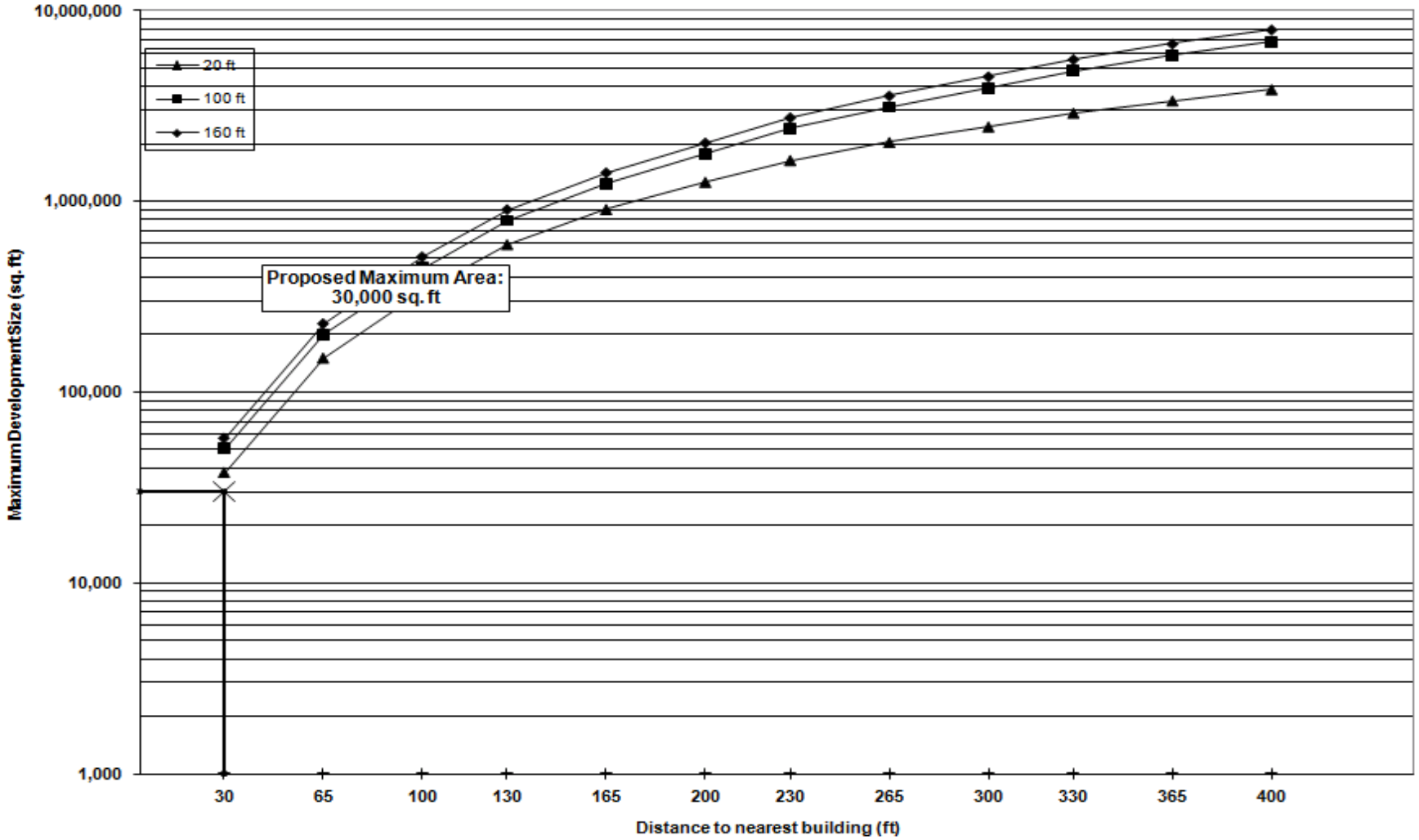
Stack Height: 199 ft
Distance to Nearest Building of Similar or Greater Height: 320 ft
Proposed Maximum SQFA: 83,093 sq. ft
Minimum Allowable Distance to Nearest Building: 62 ft

Notes:

Figure 1-6

CEQR Figure 3Q-9
NO_2 Boiler Screen
Residential - Natural Gas

HVAC Screening Analysis
Site: EX PS 51/Future Residential
Date: 3/30/2009
Pass



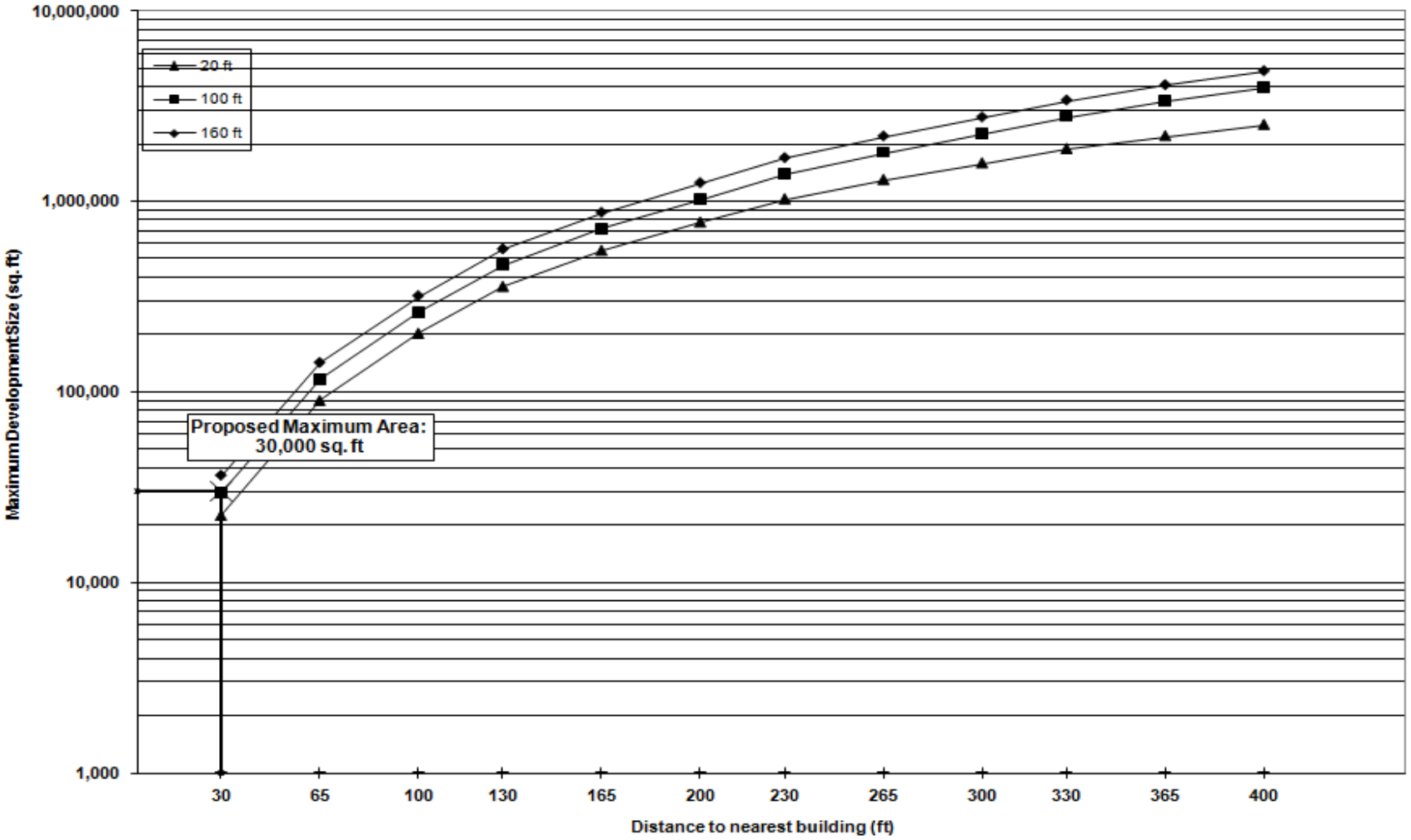
Stack Height: 110 ft
Distance to Nearest Building of Similar or Greater Height: 30 ft
Proposed Maximum SQFA: 30,000 sq. ft
Minimum Allowable Distance to Nearest Building: 30 ft

Notes: In order to avoid impacts, the HVAC exhaust stack should be placed at least 30 ft away from any operable window or air intakes on the proposed neighboring residential buildings.

Figure 1-7

CEQR Figure 3Q-7
SO_2 Boiler Screen
Residential - Fuel Oil #2

HVAC Screening Analysis
Site: EX PS 51/Future Residential
Date: 3/30/2009
Pass



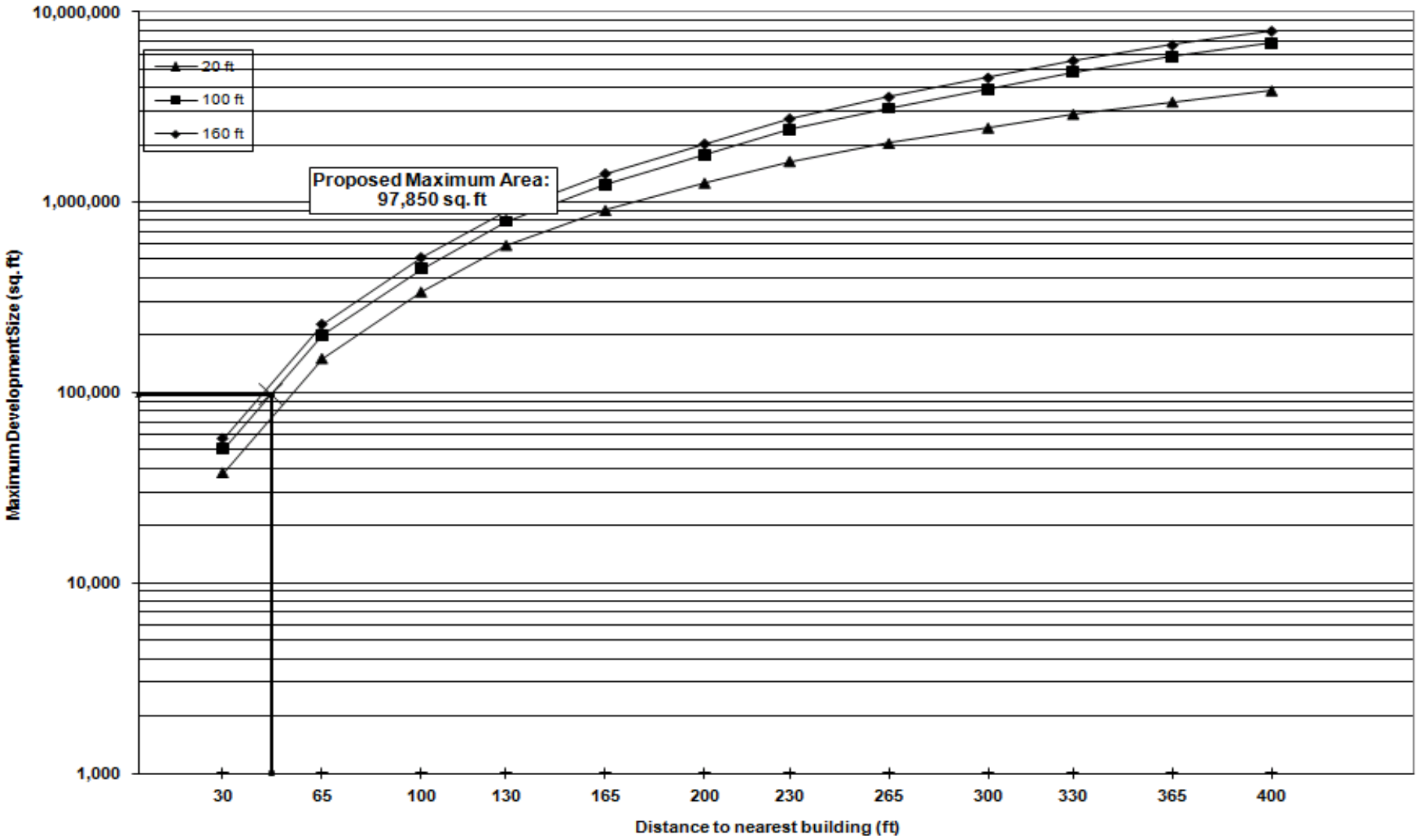
Stack Height: 110 ft
Distance to Nearest Building of Similar or Greater Height: 30 ft
Proposed Maximum SQFA: 30,000 sq. ft
Minimum Allowable Distance to Nearest Building: 30 ft

Notes: In order to avoid impacts, the HVAC exhaust stack should be placed at least 30 ft away from any operable window or air intakes on the proposed neighboring residential buildings.

Figure 1-8

CEQR Figure 3Q-9
NO_2 Boiler Screen
Residential - Natural Gas

HVAC Screening Analysis
Site: New PS 51
Date: 3/30/2009
Pass



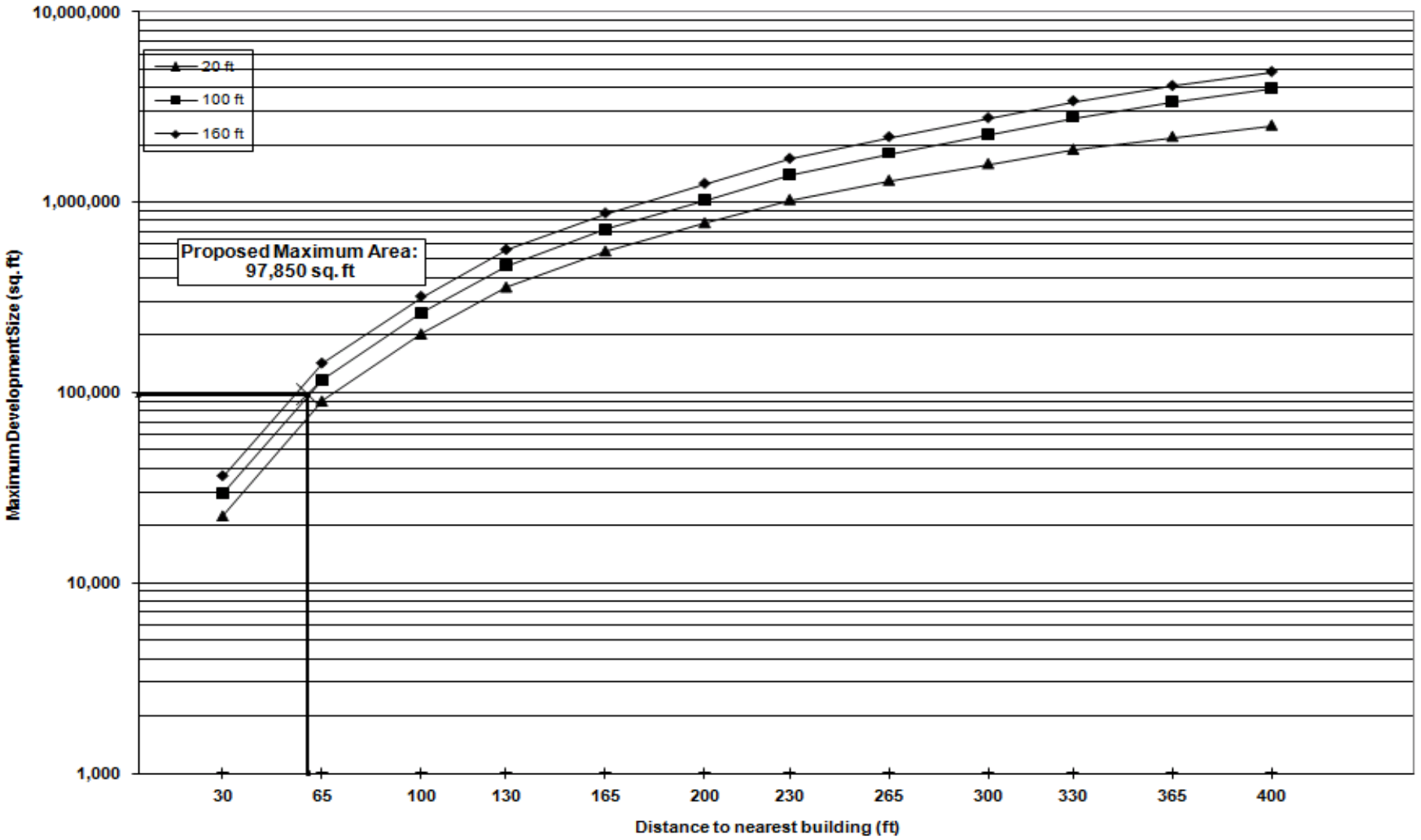
Stack Height: 110 ft
Distance to Nearest Building of Similar or Greater Height: 47 ft
Proposed Maximum SQFA: 97,850 sq. ft
Minimum Allowable Distance to Nearest Building: 47 ft

Notes: In order to avoid impacts, the HVAC exhaust stack should be placed at least 47 ft away from any operable window or air intakes on the proposed neighboring residential buildings.

Figure 1-9

CEQR Figure 3Q-7
SO_2 Boiler Screen
Residential - Fuel Oil #2

HVAC Screening Analysis
Site: New PS 51
Date: 3/30/2009
Pass



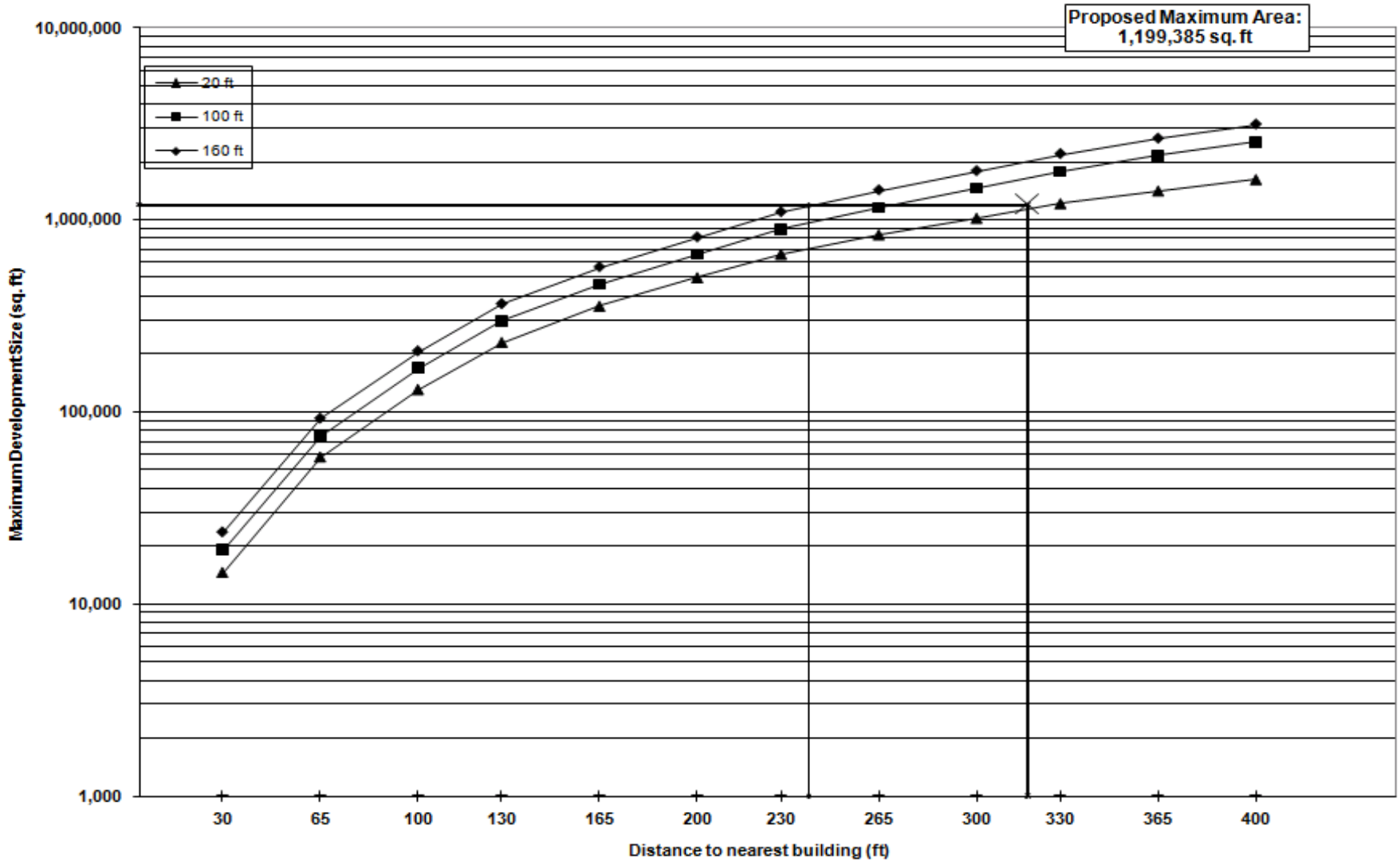
Stack Height: 110 ft
Distance to Nearest Building of Similar or Greater Height: 60 ft
Proposed Maximum SQFA: 97,850 sq. ft
Minimum Allowable Distance to Nearest Building: 60 ft

Notes: In order to avoid impacts, the HVAC exhaust stack should be placed at least 60 ft away from any operable window or air intakes on the proposed neighboring residential buildings.

Figure 1-10

CEQR Figure 3Q-5
SO_2 Boiler Screen
Residential - Fuel Oil #4

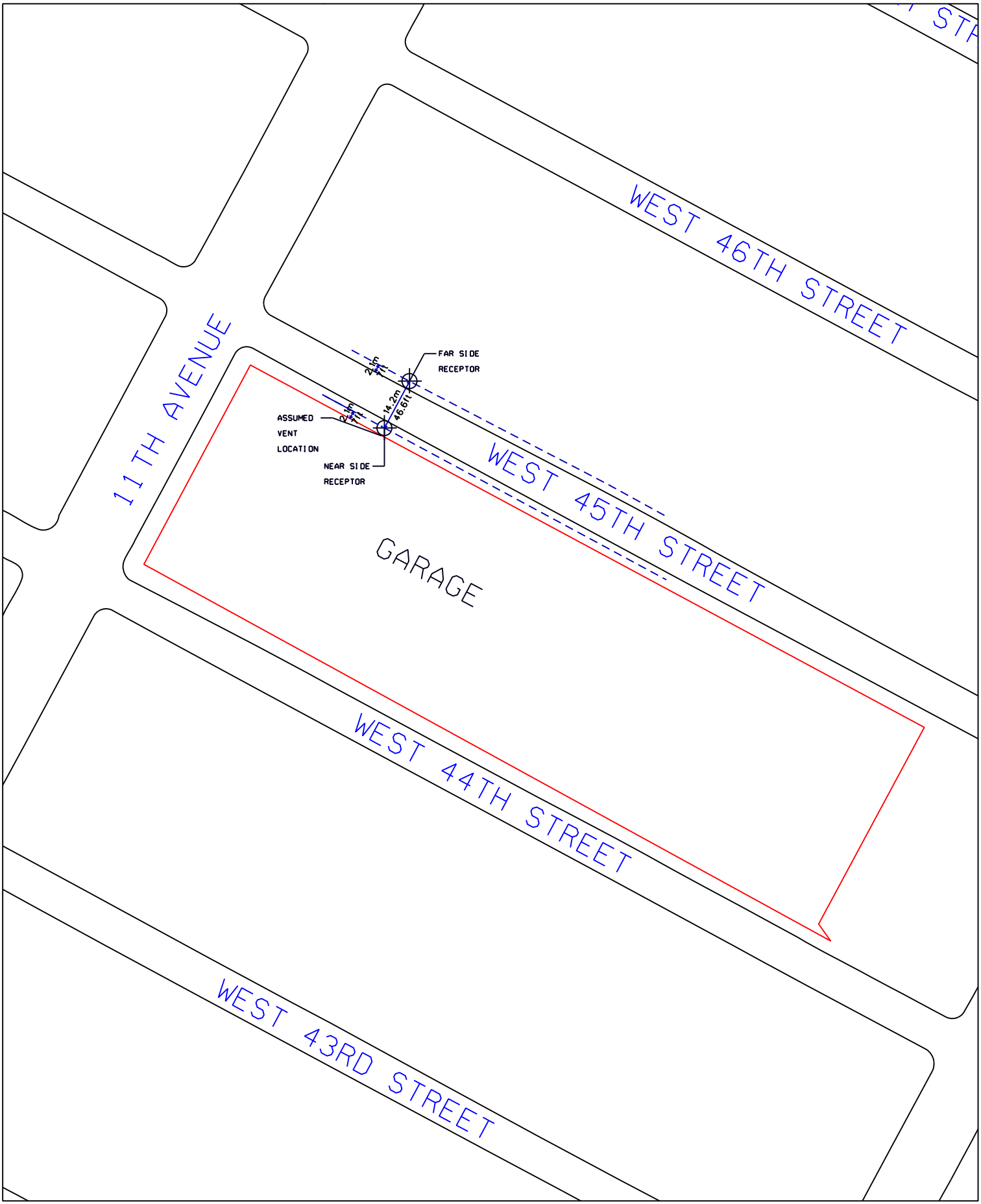
HVAC Screening Analysis
Site: All Buildings (combined)
Date: 4/27/2009
Pass



Stack Height: 374 ft
Distance to Nearest Building of Similar or Greater Height: 318 ft
Proposed Maximum SQFA: 1,199,385 sq. ft
Minimum Allowable Distance to Nearest Building: 240 ft

Notes:

Figure 2-1



West 44th Street and 11th Avenue Rezoning
Parking Garage Analysis - Assumed Vent and Receptor Locations

Table 3-1
Industrial Source Screening Analysis

Source ID	Actual Distance between Source and Project (ft)	ISC Screen Distance (As shown in CEQR Table 3Q-3) (ft)	1-Hour Averaging Period ISC Screen Value (As shown in CEQR Table 3Q-3) (mg/m^3)/(g/sec)	Annual Averaging Period ISC Screen Value (As shown in CEQR Table 3Q-3) (mg/m^3)/(g/sec)	Short-term Screen Impact Value [ISC screen value x (ISC Screen Distance)^2 / (Actual Distance)^2]	Annual Screen Impact Value [ISC screen value x (ISC Screen Distance)^2 / (Actual Distance)^2]	Permit	CAS No.	Pollutant	Hourly Emissions (lb/hr)	Annual Emissions (lb/yr)	Estimated Emissions (Hourly Averaging Period) (g/s)	Estimated Emissions (Annually Averaging Period) (g/s)	Estimated Short-term Impact[a] (ug/m^3)	Short-term Guideline Concentrations[a] (ug/m^3)	Estimated Long-teqm Imqact (ug/m^3)	Annual Guideline Concentrations (ug/m^3)
1)	308	300	2028	34	1930.3	32.4	PA051393	07647-01-0	Hydrogen Chloride	0.003	6.00	3.78E-04	8.63E-05	0.73	2,100	0.00279	20
							PA051393	07697-37-2	Nitric Acid Mist	0.001	2.00	1.26E-04	2.88E-05	0.24	86	0.00093	12
							PA051493	NY075-00-0	Particulates	0.011	12.00	1.39E-03	1.73E-04	2.68	380	0.00559	45
							PA051493	NY210-00-0	Oxides Of Nitrogen	0.002	1.50	2.52E-04	2.16E-05	0.49	--	0.00070	74
							PA051493	NY990-00-0	Miscellaneous Org	0.015	11.00	1.89E-03	1.58E-04	3.65	98,000	0.00512	7,000
							PA051593	NY075-00-0	Particulates	0.001	1.00	1.26E-04	1.44E-05	0.24	380	0.00047	45
							PA052193	07647-01-0	Hydrogen Chloride	0.001	2.00	1.26E-04	2.88E-05	0.24	2,100	0.00093	20
							PA052193	07697-37-2	Nitric Acid Mist	0.001	2.00	1.26E-04	2.88E-05	0.24	86	0.00093	12
							PA052193	10102-44-0	Nitrogen Dioxide	0.001	2.00	1.26E-04	2.88E-05	0.24	--	0.00093	100
2)	160	130	9708	140	6392.8	92.2	PA036997	NY079-00-0	Total Solid Part	0.033	3.38	4.10E-03	4.86E-05	26.18	380	0.00448	45
							PA036997	NY998-00-0	Total Organic Solvent	0.000	0.00	0.00E+00	0.00E+00	0.00	98,000	0.00000	7,000
3)	321	300	2028	34	1772.4	29.7	PA087387	00064-19-7	Acetic Acid	0.001	2.00	1.26E-04	2.88E-05	0.22	3,700	0.00085	60
							PA087387	NY075-00-0	Triethylene Glycol	0.001	2.00	1.26E-04	2.88E-05	0.22	620	0.00085	330
							PA087487	00067-63-0	Isopropyl Alcohol	0.94	3290.00	1.18E-01	4.73E-02	209.93	98,000	1.40619	7,000
							PA087487	NY990-00-0	Miscellaneous Org	1.33	4655.00	1.68E-01	6.70E-02	297.03	98,000	1.98961	7,000
4)	199	165	6269	91	4318.5	62.7	PA026995	00127-18-4	Tetrachloroethylene	0.85	1275.00	1.07E-01	1.83E-02	462.51	1,000	1.14962	1
5)	102	100	17103	246	16568.6	238.3	PA021087	NY990-00-0	Miscellaneous Org	0.000	0.00	0.00E+00	0.00E+00	0.00	98,000	0.00000	7,000
6)	60	30	151114	2196	37778.5	549.0	PB050803	NY075-00-0	Particulates	0.077	154.0	9.70E-03	2.22E-03	366.53	380	1.21607	45
							PB050803	00108-88-3	Toluene	3.520	7040.0	4.44E-01	1.01E-01	16755.52	37,000	55.59189	5,000
							PB050803	00078-93-3	Methyl Ethyl Ketone	1.140	2280.0	1.44E-01	3.28E-02	5426.50	59,000	18.00419	1,000
							PB050803	00110-19-0	Isobutyl Acetate	0.620	1240.0	7.81E-02	1.78E-02	2951.26	--	9.79175	17,000
							PB050803	NY990-00-0	Miscellaneous Org	0.104	208.0	1.31E-02	2.99E-03	495.05	98,000	1.64249	7,000
							PB012205	NY075-00-0	Particulates	0.001	0.16	1.26E-04	2.30E-06	4.76	380	0.00126	45
7)	60	30	151114	2196	37778.5	549.0	PB012305	NY075-00-0	Particulates	0.001	0.16	1.26E-04	2.30E-06	4.76	380	0.00126	45
									Total Acetic Acid					0.22	3,700	0.00085	60
									Total Hydrogen Chloride					0.97	2,100	0.0037	20
									Total Isobutyl Acetate					2,951	--	9.79	17,000
									Total Isopropyl Alcohol					1,005	98,000	5.04	7,000
									Total Methyl Ethyl Ketone					5,427	59,000	18.00	1,000
									Total Nitric Acid Mist					0.49	86	0.0019	12
									Total Oxides Of Nitrogen					0.73	--	0.0016	100
									Total Particulates					405.14[b]	380	4.86	45
									Total Tetrachloroethylene					462.51	1,000	1.15	1
									Total Toluene					16,755	37,000	55.59	5,000
									Total Triethylene Glycol					0.22	620	0.00085	330

Notes:

a) NYSDEC DAR-1(Air Guide-1) AGC/SGC Tables, September 2007.
b) Refined analysis conducted. See 24-hour impact based on the refined analysis.