Appendix H:
Air Quality

Appendix H: Proposed Air Quality (E) Designations

A. INTRODUCTION

Under the proposed zoning, (E) Designations are proposed to avoid impacts on privately owned parcels on projected or potential development sites with respect to air quality (heating and hot water systems and potential industrial uses). A description of the requirements of those (E) Designations follows. A list of the sites, blocks, and lots affected by the (E) Designations is presented in **Tables H-1 through H-4**.

B. PROPOSED (E) DESIGNATIONS

HEATING AND HOT WATER SYSTEM (E) DESIGNATIONS

Under the Proposed Actions, for each of the projected and potential development sites that failed the initial heating and hot water system screening analysis, additional screening or a refined analysis was performed utilizing the AERMOD dispersion model (see Chapter 15," Air Quality"). The results indicated that all but 10 of the projected development sites and six of the potential development sites failed the initial screening analysis for No. 2 oil.

To preclude the potential for significant adverse air quality impacts on other projected and potential developments from the heating and hot water system emissions, an (E) Designation would be incorporated into the proposed rezoning for each of the affected sites. The descriptions and requirements of the proposed (E) Designations for these sites with respect to heating and hot water systems are presented in **Tables H-1 and H-2**.

Table H-1
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
1	27	2, 3, 4, 5, 15, 17, 23, 25, 37	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 428 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 140 feet away from the lot line facing 46th Avenue to avoid any potential significant air quality impacts.
~~2~~	~~28~~	~~9, 10, 11~~	~~Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems to avoid any potential significant air quality impacts.~~

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
3	28	12, 15, 17, 18, 121	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 153 feet above grade to avoid any potential significant air quality impacts.
4	48	5, 8, 37, 40, 43	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade to avoid any potential significant air quality impacts.
5	48	12	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade to avoid any potential significant air quality impacts.
7	49	1, 5 ,44	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 63 feet away from the lot line facing 45th Road to avoid any potential significant air quality impacts.
9	49	35, 37	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 39 feet away from the lot line facing 46th Avenue to avoid any potential significant air quality impacts.
10	50	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 148 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 47 feet away from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
12	51	1	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 138 feet above grade, and ensure that the heating system stack(s) is located at least 54 feet away from the lot line facing 44th Drive to avoid any potential significant air quality impacts.
13	51	6, 11, 28, 33, 36, 38, 42	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 238 feet above grade to avoid any potential significant air quality impacts.
14	51	13	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
15	51	15, 16	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade to avoid any potential significant air quality impacts.
17A	411	12, 31	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 608 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 66 feet away from the lot line facing 22nd Street to avoid any potential significant air quality impacts.
17B	411	12, 31	Any new residential and/or commercial development must use electric heating and hot water systems to avoid any potential significant air quality impacts.
18	411	18	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located no more than 76 feet from the lot line facing 21st Street to avoid any potential significant air quality impacts.
20	424	1	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 348 feet above grade, and ensure that the heating system stack(s) is located at least 53 feet away from the lot line facing 42nd Street and 40 feet away from the lot line facing 24th Street to avoid any potential significant air quality impacts.
21	428	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 688 feet above grade to avoid any potential significant air quality impacts.
25	447	5, 40	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 158 feet above grade to avoid any potential significant air quality impacts.
26	448	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 118 feet above grade, and ensure that the heating and hot water system stack(s) is located no more than 52 feet from the lot line facing 11th Street to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
27	448	6	Any new residential and/or commercial development must ensure that the heating and hot water system stack(s) is located at least 31 and 10 feet away from the lot line facing 44th Road when using fuel oil or natural gas as the type of fuel, respectively, to avoid any potential significant air quality impacts.
28	448	24	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located no more than 74 feet away from the lot line facing 44th Road ~~at least 26 feet away from the lot line facing 44th Drive~~ to avoid any potential significant air quality impacts.
29	392	1, 5, 43	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located no more than 85 feet away from the lot line facing 21st Street ~~at least 91 feet away from the lot line facing 22nd Street~~ to avoid any potential significant air quality impacts.
30	392	38, ~~29~~39, 40, 41	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 123 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 174 feet away from the lot line facing 40th Avenue to avoid any potential significant air quality impacts.
31	393	1, 27	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 76 feet away from the lot line facing 40th Avenue to avoid any potential significant air quality impacts.
32	393	34	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 153 feet above grade to avoid any potential significant air quality impacts.
38	444	12, 14	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade to avoid any potential significant air quality impacts.
39	445	1, 12	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 10 feet away from the lot line facing 11th Street to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
40	453	1	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 108 feet above grade to avoid any potential significant air quality impacts.
42	457	143, 144, 149	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade to avoid any potential significant air quality impacts.
43	457	169	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 168 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 75 feet away from the lot line facing 21st Street to avoid any potential significant air quality impacts.
46	458	94, 98, 101	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 105 feet away from the lot line facing 12th Street to avoid any potential significant air quality impacts.
49	459	23, 64	Any new commercial and/or manufacturing development must ensure that the heating and hot water system stack(s) is located no more than 74 feet away from the lot line facing 12th Street ~~at least 122 feet away from the lot line facing 11th Street~~ to avoid any potential significant air quality impacts.
50	459	65	Any new commercial and/or manufacturing development must ensure that the heating and hot water system stack(s) is located at least ~~10~~ 55 feet away from the lot line facing 12th Street to avoid any potential significant air quality impacts.
51	460	10, 16, 30, 40	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 198 feet above grade to avoid any potential significant air quality impacts.
52	461	12, 13, 47	Any new commercial and/or manufacturing development must be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 198 feet above grade to avoid any potential significant air quality impacts.
54	429	3	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 278 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 53 feet away from the lot line facing 43rd Avenue and at least 56 feet away from the lot line facing 24th Street to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
57	439	8	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 75 feet away from the lot line facing 23rd Street to avoid any potential significant air quality impacts.
59	454	21, 22, 25, 26, 39	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 123 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 136 feet away from the lot line facing 44th Avenue and at least 107 feet from the lot line facing 10th Street to avoid any potential significant air quality impacts.
61	486	1, 5, 13	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 148 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 99 feet away from the lot line facing Vernon Boulevard and 175 feet away from the lot line facing 43rd Road to avoid any potential significant air quality impacts.
~~62~~	~~486~~	~~24~~	~~Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 10 feet away from the lot line facing 44th Avenue to avoid any potential significant air quality impacts.~~
63A	25	15	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 738 feet above grade, and ensure that the heating system stack(s) is located no more than 48 feet from the lot line facing 44th Drive and at least 189 feet from the lot line facing 5th Street to avoid any potential significant air quality impacts.
63C	25	15	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 658 feet above grade, and ensure that the heating system stack(s) is located at least 305 feet away from the lot line facing Vernon Boulevard and no more than 382 feet from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
63D	25	15	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 698 feet above grade to avoid any potential significant air quality impacts.
64A	26	17, 21	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 498 feet above grade to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
64B	26	17, 21	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 598 feet above grade to avoid any potential significant air quality impacts.
65	25	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 573 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 121 feet away from the lot line facing 45th Avenue to avoid any potential significant air quality impacts.
	26	10	
66	24	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 138 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 74 feet away from the lot line facing 5th Street to avoid any potential significant air quality impacts.
67B	488	11, 15	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade, and ensure that the heating and hot water system stack(s) is located no more than 126 feet from the lot line facing 44th Drive and no more than 112 feet from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
	489	23, 1	
67C	488	11, 15	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 628 feet above grade, and ensure that the heating system stack(s) is located at least 444 feet away from the lot line facing Vernon Boulevard and no more than 81 feet from the lot line facing 44th Drive to avoid any potential significant air quality impacts.
	489	23, 1	
68	24	7	Any new residential and/or commercial development must use electric domestic hot water systems, and exclusively use natural gas as the type of fuel for heating systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating systems, and ensure that the heating system stack(s) is located at least 338 feet above grade, and ensure that the heating system stack(s) is located at least 72 feet away from the lot line facing 45th Avenue to avoid any potential significant air quality impacts.

Table H-1 (cont'd)
(E) Designations for Projected Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
69A	488	1, 3	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 338 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 406 feet away from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
69B	488	1, 2, 3	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 998 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 145 feet away from the lot line facing 44th Road to avoid any potential significant air quality impacts.
69C	488	1, 2, 3	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 538 feet above grade, and ensure that the heating and hot water system stack(s) is located no more than 125 feet from the lot line facing Vernon Boulevard and at least 51 feet away from the lot line facing 44th Avenue to avoid any potential significant air quality impacts.
69D	488	1, 2, 3	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 288 feet above grade, and ensure that the heating and hot water system stack(s) is located ~~at least~~no more than 58 feet away from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
70	48~~0~~	1, 45, 46, 47, 48	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 98 feet above grade to avoid any potential significant air quality impacts.
71	26	4	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 418 feet above grade, and ensure that the heating and hot water system stack(s) is located at least 81 feet away from the lot line facing 5th Street to avoid any potential significant air quality impacts.

Table H-2
(E) Designations for Potential Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
A	48	30, 31, 35	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 75 feet away from the lot line facing Vernon Boulevard to avoid any potential significant air quality impacts.
B	49	15	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located no more than 71 feet away from the lot line facing 46th Avenue to avoid any potential significant air quality impacts.
C	50	17	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 15 feet away from the lot line facing 45th Road to avoid any potential significant air quality impacts.
D	438	7502	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 113 feet away from the lot line facing 21st Street to avoid any potential significant air quality impacts.
E	447	13	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 156 feet away from the lot line facing 21st Street to avoid any potential significant air quality impacts.
F	409	21	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 51 feet away from the lot line facing 40th Avenue to avoid any potential significant air quality impacts.
H	442	5	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and be fitted with low NOx (30 ppm) burners firing only natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 193 feet above grade to avoid any potential significant air quality impacts.
I	442	18	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 193 feet above grade to avoid any potential significant air quality impacts.

Table H-2 (cont'd)
(E) Designations for Potential Development Sites
(Heating and Hot Water System Restrictions)

Development Site	Block	Lots	Proposed (E) Designation
L	438	45	Any new commercial and/or manufacturing development must ensure that the heating and hot water system stack(s) is located at least 64 feet away from the lot line facing 23rd Street to avoid any potential significant air quality impacts.
~~N~~	~~446~~	~~9, 10~~	~~Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems to avoid any potential significant air quality impacts.~~
O	454	1, 17	Any new commercial and/or manufacturing development must exclusively use natural gas as the type of fuel for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 127 feet away from the lot line facing 9th Street to avoid any potential significant air quality impacts.

CITY-OWNED PARCELS

For the City-owned parcels located within Projected Development Site 67 (Block 488, Lots, 11 and 15, Block 489, Lots 1 and 23) and Projected Development Site 68 (Block 24, Lot 7), the implementation of the restrictions would be required through the Land Disposition Agreement between the New York City Department of Housing Preservation and Development (HPD) and future developer with oversight provided through HPD.

INDUSTRIAL (E) DESIGNATIONS

EXISTING SOURCES

As discussed in Chapter 15, "Air Quality" analyses were undertaken to identify manufacturing and industrial uses within 400 feet of the projected and potential development sites. In order to avoid impacts on these sites due to local industrial source emissions an (E) designation for air quality could be incorporated into the rezoning proposal on these affected sites. The (E) designations for those sites affected by industrial sources is presented in **Table H-3**.

As currently proposed, the (E) designations would require that new residential and/or commercial development, enlargement, or change of use would meet specified conditions designed to preclude adverse air quality effects. Specifically, fee owners of properties on which the (E) designations would be mapped would need to demonstrate to DEP that any new development, enlargement, or change of use has inoperable windows and does not include air intakes, unless such intakes incorporate alternative design features and/or technologies recognized as effective under industry standards. New York law requires operable windows in habitable portions of residential buildings and residential development, enlargement, or change of use on the referenced property is therefore restricted under current conditions.

These conditions would apply only if the emissions and/or contaminants identified in the air quality analyses were to continue to be present at the time that the fee owner of the property subject to the (E) designation seeks to satisfy the (E) requirements. If the fee owner could demonstrate to

DEP that the emissions, contaminants, or exposure pathways no longer existed or have been reduced below impact levels, the conditions would not apply.

Table H-3
(E) Designations for Projected and Potential Development Sites – Existing Industrial Uses

Development Site	Block	Lots	Proposed (E) Designation
61	486	1, 5, 13	Under current conditions, formaldehyde emissions from ~~a nearby~~an industrial source located at 9-03 44th Road require that development~~,~~ or enlargement of commercial or community facility uses, or change of use on the referenced property have inoperable windows and may not include air intakes. Development, enlargement, or change of use on the referenced property is restricted under current conditions as a result of these requirements; in particular, New York law requires operable windows in habitable portions of residential buildings and residential development. The City may determine that these requirements are no longer in effect if the emission source is no longer operating, emission levels affecting the referenced property have changed, or new design approaches and/or technologies are developed in the future that are recognized as effective under industry standards.
H	442	5	Under current conditions, ethyl-3-ethoxypropionate emissions from a nearby industrial source located at 43-44 21st Street require that development~~,~~ or enlargement of commercial or community facility uses, or change of use on the referenced property have inoperable windows and may not include air intakes. Development, enlargement, or change of use on the referenced property is restricted under current conditions as a result of these requirements; in particular, New York law requires operable windows in habitable portions of residential buildings and residential development. The City may determine that these requirements are no longer in effect if the emission source is no longer operating, emission levels affecting the referenced property have changed, or new design approaches and/or technologies are developed in the future that are recognized as effective under industry standards.
O	454	1, 17	Under current conditions, formaldehyde emissions from ~~a nearby~~ an industrial source located at 9-03 44th Road require that development~~,~~ or enlargement of commercial or community facility uses, or change of use on the referenced property have inoperable windows and may not include air intakes. Development, enlargement, or change of use on the referenced property is restricted under current conditions as a result of these requirements; in particular, New York law requires operable windows in habitable portions of residential buildings and residential development. The City may determine that these requirements are no longer in effect if the emission source is no longer operating, emission levels affecting the referenced property have changed, or new design approaches and/or technologies are developed in the future that are recognized as effective under industry standards.

Under the proposed zoning, (E) Designations are proposed to avoid impacts on privately owned parcels on development sites with respect to industrial uses. A description of the requirements of those (E) Designations are found in **Table H-4**.

Table H-4
Proposed Industrial Use (E) Designations for Projected and Potential Development Sites

Development Site	Block	Lots	Proposed (E) Designation
Projected Development Sites			
31	393	1, 27	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning equipment) required to obtain a New York City Department of Environmental Protection (DEP) Work Permit in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24 Chapter 1, Subchapter 4) must provide air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: 1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, 2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
38	444	~~1,~~ 12, 14	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection ~~DEP determination on whether a~~ (DEP) Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~.~~ ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
40	453	1	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning ~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection ~~DEP determination on whether a~~ (DEP) Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~.~~ ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.

Table H-4
Proposed Industrial Use (E) Designations for Projected and Potential Development Sites

Development Site	Block	Lots	Proposed (E) Designation
42	457	143, 144, 149	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
45	458	87, 129	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning ~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
52	461	12, 13, 47	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.

Table H-4
Proposed Industrial Use (E) Designations for Projected and Potential Development Sites

Development Site	Block	Lots	Proposed (E) Designation
59	454	21, 22, 25, 26, 39	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
61	486	1, 5, 13	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: 1~~a~~. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
62	486	24	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
~~Projected~~ Potential Development Sites			

Table H-4
Proposed Industrial Use (E) Designations for Projected and Potential Development Sites

Development Site	Block	Lots	Proposed (E) Designation
A	48	30, 31, 35	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work ~~Permit is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~.~~ ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
H	442	5	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~.~~ ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
J	453	29	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to ~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~.~~ ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: 1~~a~~. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, 2~~b~~. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.

Table H-4
Proposed Industrial Use (E) Designations for Projected and Potential Development Sites

Development Site	Block	Lots	Proposed (E) Designation
N	446	9, 10	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning ~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP) Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4)~~. DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, ~~b~~2. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.
O	454	1, 17	To preclude any potential significant adverse air quality impacts from light industrial uses, applicants that propose any process (not including fuel burning~~combustion~~ equipment) required to~~must~~ obtain a New York City Department of Environmental Protection (~~DEP determination on whether a~~ DEP) Work Permit ~~is required prior to the installation or alteration of the process~~ in accordance with New York City Air Pollution Control Code (The New York City Administrative Code, Title 24~~)~~ Chapter 1, Subchapter 4). ~~DEP provides Industrial Process Questionnaire (https://www.nyc.gov/assets/dep/downloads/pdf/air/cats/cats-industrial-process-questionnaire.pdf) to facilitate work permit requirement determination.~~ ~~For any process (not including fuel burning equipment) that is required to obtain a DEP work permit based on DEP determination, an air quality impact analysis~~ must ~~be~~ provide~~d~~ air quality impact analysis to the New York City Mayor's Office of Environmental Review (OER) for below uses within 400 feet radius of the proposed process: ~~a~~1. existing residential, commercial, and community facility uses or known future developments of commercial or community facility uses in M districts, 2b. existing residential, commercial, and community facility uses or potential developments of residential, commercial and community facility uses in R or C districts.

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