

APPENDIX H:
PROPOSED AIR QUALITY (E) DESIGNATIONS

Under the proposed zoning, (E) Designations are proposed to avoid adverse Air Quality impacts on projected or potential development sites with respect to air quality (heating systems and industrial sources). 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, H-2, for the Projected and Potential Sites, respectively, under the Proposed Actions. Table H-3 presents the list of the sites, blocks and lots affected by the (E) Designations that would be modified by the A-Text Alternative.

To preclude the potential for significant adverse air quality impacts on other projected and potential developments from either the HVAC emissions, or from existing/proposed industrial source 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 HVAC systems and existing/proposed industrial sources are presented in Tables H-1 and H-2 for the Proposed Actions, and Table H-3 for the sites that would be modified by the A-Text Alternative.

Table H-1: (E) Designations for Projected Development Sites (HVAC and Industrial Source Restrictions) for the Proposed Actions

Development Site	Block	Lots	Proposed (E) Designation
1	488	71	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 <u>at the highest tier and</u> at least 20 feet from the lot line facing Murray Hulbert Avenue, to avoid any potential significant air quality impacts.
2	487	60,64,80	Any new commercial <u>and/or community facility</u> development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 65 feet from the lot line facing Minthorne Street, to avoid any potential significant air quality impacts.
3	488	9	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 systems stack(s) is located at least 135 feet above grade, to avoid any potential significant air quality impacts.
4	488	18, 26, 175, 201, 206	Any new residential and/or commercial <u>and/or community facility</u> 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 systems stack(s) is located at least 135 feet above grade, to avoid any potential significant air quality impacts.
5	488	53,65	Any new residential and/or commercial <u>and/or community facility</u> development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 283 feet from the lot line facing Baltic Street, at least 100 feet from the lot line facing Front Street, and at least 95 feet above grade, to avoid any potential significant air quality impacts.
7	497	1, 7, 9	Any new brewery operating on this site must ensure that the process exhaust stack(s) is located at least 10 feet from the nearest adjacent building, and discharge at a height of at least 3

			feet above the proposed development height of 145 feet for this projected site (total of 148 feet above grade).
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Development Site	Block	Lots	Proposed (E) Designation
9	500	16, 18, 20, 22, 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 <u>at the highest tier and</u> at least 80 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
11	505	4,51	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 60 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
12	505	11,12,14	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 35 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
13 ¹	505	22,24,25	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, <u>and ensure that the heating and hot water system stack(s) is located at the highest tier</u> to avoid any potential significant air quality impacts.
14 ²	505	18	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, <u>and ensure that the heating and hot water system stack(s) is located at the highest tier</u> to avoid any potential significant air quality impacts.
15	507	12,17	Any new 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 <u>at the highest tier and at least 38 feet above grade and</u> at least 30 feet from the lot line facing Clinton Street, to avoid any potential significant air quality impacts.
17	509	1,4,8	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 80 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
<u>18</u>	<u>526</u>	<u>11</u>	<u>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 systems stack(s) is located at least 65 feet above grade, to avoid any potential significant air quality impacts.</u>
<u>19</u>	<u>526</u>	<u>19, 21, 25</u>	<u>Any new residential and/or commercial and/or community facility development must be fitted with low NO_x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at the highest tier to avoid any potential significant air quality impacts.</u>
<u>22</u>	<u>527</u>	<u>49</u>	<u>Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot</u>

¹ The (E) Designation for Site 13 was applied based on the modeling done for the HVAC Cluster Analysis.

² The (E) Designation for Site 14 was applied based on the modeling done for the HVAC Cluster Analysis.

			<u>water systems, and ensure that the heating and hot water systems stack(s) is located at least 65 feet above grade, to avoid any potential significant air quality impacts.</u>
Stapleton Waterfront Phase III Site A	487	100	Any new residential and/or commercial <u>and/or community facility</u> 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 systems stack(s) is located at least 135 feet above grade, to avoid any potential significant air quality impacts.
Stapleton Waterfront Phase III Site B1	487	100	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 systems stack(s) is located at least 135 feet above grade, to avoid any potential significant air quality impacts.
<p>Notes: For the City-owned parcels located at Stapleton Waterfront Phase III Sites A and B1 (Block 487, Lot 100), the implementation of the restrictions would be required through a disposition agreement between EDC and the future developer. This agreement would require that any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, with stack height restrictions as noted, to avoid any potential significant air quality impacts.</p>			

Table H-2: (E) Designations for Potential Development Sites (HVAC Restrictions) for the Proposed Actions

Development Site	Block	Lots	Proposed (E) Designation
B ³	488	1	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 120 feet from the lot line facing Baltic Street to the north, to avoid any potential significant air quality impacts.
C	488	157,162,164	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 60 feet from the lot line facing Baltic street to the north, and at least 85 feet above grade, to avoid any potential significant air quality impacts.
G	498	5	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, <u>and ensure that the heating and hot water system stack(s) is located at the highest tier</u> to avoid any potential significant air quality impacts.
K	503	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 ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 140 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
L	503	32	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, <u>and ensure that the heating and hot water system stack(s) is located at the highest tier</u> to avoid any potential significant air quality impacts.

³ The (E) Designation for low NO_x burners (30 ppm) for Site B was applied based on the modeling done for the HVAC Cluster Analysis.

M	505	1	Any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems, <u>and ensure that the heating and hot water system stack(s) is located at the highest tier</u> to avoid any potential significant air quality impacts.
N	507	1,5,6	Any new residential and/or commercial <u>and/or community facility</u> development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 30 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
P	508	1	Any new residential and/or commercial development must be fitted with low NO _x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located <u>at the highest tier and</u> at least 30 feet from the lot line facing Bay Street, to avoid any potential significant air quality impacts.
<u>W</u>	<u>527</u>	<u>59</u>	<u>Any new residential and/or commercial and/or community facility 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 the highest tier to avoid any potential significant air quality impacts</u>

Table H-3: Proposed Modified (E) Designations for Development Sites (HVAC and Industrial Source Restrictions) for the A-Text Alternative

<u>Development Site</u>	<u>Block</u>	<u>Lots</u>	<u>Proposed (E) Designation</u>
<u>5</u>	<u>488</u>	<u>53,65</u>	<u>Any new residential and/or commercial and/or community facility development must be fitted with low NO_x (30 ppm) burners firing exclusively natural gas for heating and hot water systems, and ensure that the heating and hot water system stack(s) is located at least 283 feet from the lot line facing Baltic Street, at least 100 feet from the lot line facing Front Street, and at least 95 feet above grade, to avoid any potential significant air quality impacts.</u> <u>Any new brewery operating on this site must ensure that the process exhaust stack(s) is located at the highest tier and discharge at a height of at least 3 feet above the proposed development height of 85 feet for this projected site (total of 88 feet above grade).</u>
<u>Stapleton Waterfront Phase III Site A</u>	<u>487</u>	<u>100</u>	<u>Any new residential and/or commercial and/or community facility 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 systems stack(s) is located at least 140 feet above grade, to avoid any potential significant air quality impacts.</u>
<u>City Disposition Site 2</u>	<u>34</u>	<u>1</u>	<u>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 the highest tier to avoid any potential significant air quality impacts.</u>
<u>City Disposition Site</u>	<u>6</u>	<u>20</u>	<u>Any new residential and/or commercial development must</u>

<p><u>3</u></p>			<p><u>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 the highest tier to avoid any potential significant air quality impacts.</u></p>
<p>Notes: <u>For the City-owned parcel located at Stapleton Waterfront Phase III Sites A (Block 487, Lot 100), the implementation of the restrictions would be required through a disposition agreement between EDC and the future developer. This agreement would require that any new residential and/or commercial and/or community facility development must exclusively use natural gas as the type of fuel for heating and hot water systems, with stack height restrictions as noted, to avoid any potential significant air quality impacts.</u></p> <p><u>Similarly, for the City Disposition Sites 2 and 3, the implementation of the restrictions would be required through a disposition agreement between the City and the future developer. This agreement would require that any new residential and/or commercial development must exclusively use natural gas as the type of fuel for heating and hot water systems.</u></p>			