



SAN FRANCISCO PLANNING DEPARTMENT

Executive Summary Health, Building, Administrative, and Environment Code Text Change

HEARING DATE: SEPTEMBER 18, 2014

Date: September 18, 2014
Project Name: **Amendments Relating to Enhanced Ventilation for Sensitive Use Projects; and Clean Construction Ordinance**
Case Number: 2014.1295U [Board File No. 140806]; and 2014.1296U [Board File No. 140805]
Initiated by: Supervisor Malia Cohen/ Introduced July 17, 2014
Staff Contact: Wade Wietgreffe, Environmental Planner
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Reviewed by: Jessica Range, Senior Environmental Planner
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Recommendation: **Recommend Approval**

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HEALTH, BUILDING, ADMINISTRATIVE, AND ENVIRONMENT CODE AMENDMENT

The two proposed Ordinances would:

- amend the Health Code, Article 38 to require an enhanced ventilation system for sensitive use projects within the Air Pollutant Exposure Zone, and establish document review fees; amend the Building Code to correspond to the Health Code changes; and make environmental findings, and findings under the California Health and Safety Code; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.
- amend the Administrative Code to require a Construction Emissions Minimization Plan and monitoring for public projects within the Air Pollutant Exposure Zone, as mapped pursuant to Health Code, Article 38; amend the Administrative and Environment Codes to reflect these requirements; and make environmental findings.

The Way It Is Now:

Since adoption of the Clean Construction Ordinance and Health Code, Article 38 in 2007 and 2008, respectively, scientific methods for understanding the impact (modeling of emissions and health effects) of known sources of air pollution have improved dramatically. In addition, the California Environmental Quality Act (CEQA) has required a more thorough evaluation and modeling effort of all known sources of air pollution within a proposed development or construction project's radius. The San Francisco Department of Public Health (DPH), the Planning Department, and the Bay Area Air Quality Management District have worked together to utilize third-party-verified modeling to identify locations

in the City that exceed two health-based criteria: 1) an excess cancer risk¹ from all modeled sources (i.e., vehicles on roadways, permitted stationary, port, and maritime sources); and 2) Particulate Matter (PM)_{2.5}² concentrations from all modeled sources (including ambient) that exceed defined health-protective limits for the general public and for vulnerable populations. These locations are referred to as the Air Pollutant Exposure Zone (see Exhibit E). In addition, the City has included parcels within 500 feet of elevated freeways as part of the Air Pollutant Exposure Zone, consistent with guidance from the California Air Resources Board.³

Sensitive Use Projects (Health Code, Article 38):

- DPH maintains a map that identifies *potential* roadways with PM_{2.5} concentrations greater than 0.2 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), referred to as the Potential Roadway Exposure Zone. During the building permit review process, any newly constructed building containing 10 or more residential units within the Potential Roadway Exposure Zone requires that an air quality model be generated to assess the impact of vehicle emissions on local roadways within 150 meters to determine if building users would be exposed to PM_{2.5} concentrations greater than 0.2 $\mu\text{g}/\text{m}^3$. If the project site exceeds this criterion, the project sponsor must install and properly maintain a ventilation system that will achieve the removal of at least 80 percent of ambient PM_{2.5} concentrations.
- Currently, Article 38 does not apply to projects of fewer than 10 residential units; nor does it apply to schools, day care facilities, and other sensitive uses, within the Potential Roadway Exposure Zone, although such projects are required to install the above-mentioned ventilation system through CEQA mitigation measures and conditions of project approval if they are located within the modeled health-based criteria of the Air Pollutant Exposure Zone.

Public Construction Projects (Clean Construction Ordinance):

- Public projects' construction activities at sites throughout the City are required to use off-road (i.e., construction) equipment fueled by biodiesel fuel grade B20 or higher *and* that either meets or exceeds Tier 2 standards⁴ *or* operates with the most effective verified diesel emission control

¹ Excess cancer risk is in addition to any cancer risk borne by a person not exposed to these air toxics. For example, a risk level of 100 in a million implies a likelihood that up to one hundred persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration over 70 years (an assumed lifetime).

² Particulate matter is a class of air pollutants that consists of heterogeneous solid and liquid airborne particles from manmade and natural sources. Coarse PM (PM₁₀) consists of particles that are 10 microns or less in diameter. A subset of PM₁₀, PM_{2.5}, consists of particles 2.5 microns or less in diameter. PM_{2.5} are referred to as "fine" particles and are believed to pose the greatest health risk. Because of their small size (approximately 1/30th the average width of a human hair), fine particles can lodge deeply into lungs.

³ California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005. Available online at: <http://www.arb.ca.gov/ch/landuse.htm>.

⁴ The United States Environmental Protection Agency and California Air Resources Board has established emissions standards to regulate *new* pieces of construction equipment. The standards range between Tier 1 and Tier 4: the higher the tier level, the cleaner the equipment (i.e., more stringent standards). Tier 4 emissions standards for new equipment are required to be phased in by 2015.

strategy⁵ through Administrative Code, Section 6.25. The requirement is enforced by individual City departments pursuing such capital projects.

- Every public project subject to CEQA is required to show that the project would not result in a significant air pollutant impact. Currently, the existing Clean Construction Ordinance does not provide stringent enough standards to protect public health or monitoring for construction equipment if the public project is located within locations of the City already burdened by poor air quality (i.e., the modeled health-based criteria of the Air Pollutant Exposure Zone). Therefore, such projects are required to provide more stringent standards for construction equipment through CEQA mitigation measures and conditions of project approval.

The Way It Would Be:

Sensitive Use Project (i.e., Health and Building Code Changes):

- DPH would replace the Potential Roadway Exposure Zone map with the more comprehensive Air Pollutant Exposure Zone map (see Exhibit E).
- All sensitive use projects *within* the Air Pollutant Exposure Zone must install and properly maintain a ventilation system that will achieve the protection from PM_{2.5} equivalent to that associated with MERV 13⁶ filtration and include a disclosure to buyers or renters that the building is located within the Air Pollutant Exposure Zone. Through CEQA, a ventilation system mitigation measure would not be required as this would be required through adopted legislation.
- No further analysis would be required for projects *outside* of the Air Pollutant Exposure Zone.

Public Construction Projects (i.e., Administrative and Environment Code Changes):

- Public project construction activities at sites *outside* of the Air Pollutant Exposure Zone would continue to be required to meet the existing requirements of Administrative Code, Section 6.25.
- The proposed Ordinance would amend the Administrative Code to require public projects' construction activities at sites *within* the Air Pollutant Exposure Zone to use only off-road equipment that meets or exceeds Tier 2 standards *and* operates with the most effective verified diesel emission control strategy (currently a Level 3 diesel emission control strategy) through a monitoring plan. The requirements would continue to be enforced by individual City departments. Currently, the requirement of a most effective verified diesel emission strategy would reduce particulate matter emissions by an additional 85 percent. Through CEQA, a construction equipment mitigation measure would not be required as this would be required through adopted legislation.

⁵ The California Air Resources Board has verified control strategies, which can be retrofits on *existing* construction equipment, to achieve diesel particulate matter reductions: Level 1 (at least 25 percent), Level 2 (at least 50 percent), and Level 3 (at least 85 percent).

⁶ Minimum Efficiency Reporting Value (MERV), as defined by American Society of Heating, Refrigerating and Air-Conditioning Engineers standard 52.2, establishes ratings based on a filter's ability to remove airborne particles in specific size ranges. MERV 13 filtration removes greater than 90 percent of particles within 1 to 10 micron size range.

- No further analysis would be required for projects *outside* of the Air Pollutant Exposure Zone.⁷

ISSUES AND CONSIDERATIONS

Shortcomings/Problems with Existing Health Code, Article 38

The existing Health Code, Article 38 applies to newly constructed buildings containing 10 or more residential units within the Potential Roadway Exposure Zone where modeled air pollution at the parcel exceeds PM_{2.5} concentrations greater than 0.2 µg/m³. An air quality model, based only on vehicle sources of pollution, is conducted on a project-by-project basis to determine whether a performance measure-based enhanced ventilation system is required. However, other known sources of air pollution exist in San Francisco both within and outside locations of the Potential Roadway Exposure Zone. Therefore, the basic air quality model does not represent a comprehensive assessment of air pollution that could affect sensitive receptors at a proposed project site.

Pursuant to CEQA, the Planning Department reviews all known sources of air pollution and its impact on sensitive use projects by determining whether the site is located within the Air Pollutant Exposure Zone. The Air Pollutant Exposure Zone is a comprehensive assessment of emissions from vehicles along roadways, permitted stationary, port, and maritime sources. As such, sensitive use projects that evaluate only vehicle source emissions under the current Article 38 may receive conflicting determinations as to whether an enhanced ventilation system is required during the CEQA review process.

In addition, other newly constructed buildings which contain sensitive uses (e.g., projects of fewer than 10 residential units, schools, day care facilities) are not subject to the existing Ordinance. During the CEQA review process, all sensitive use projects located within the Air Pollutant Exposure Zone, and not already subject to the ventilation requirements of Article 38, are required to provide an enhanced ventilation system through CEQA mitigation measures and conditions of project approval. This process requires a more costly, cumbersome, time-consuming, and less certain process for projects. Aligning City law with CEQA codifies the mitigation requirements, reducing cost and providing more certainty and consistency to the development review process.

Shortcomings/Problems with Existing Clean Construction Ordinance

The existing Clean Construction Ordinance applies citywide to public projects estimated to require 20 or more cumulative days of construction to complete. The existing Ordinance requires the use of construction equipment fueled by biodiesel fuel grade B20 or higher and that either meets or exceeds Tier 2 standards or operates with the most effective verified diesel emission control strategy. However, some locations of the City are already burdened with poor air quality (Air Pollutant Exposure Zone) and these locations warrant special consideration.

For public projects within the Air Pollutant Exposure Zone, more stringent construction equipment mitigation is required pursuant to CEQA. However, mitigation is only enforceable through CEQA

⁷ Projects that result in a substantial amount of construction for a prolonged period of time (e.g., multiphase construction lasting several years), as determined by the Environmental Review Officer, may be required to conduct additional modeling. Example projects include the HOPE SF Sunnydale and Potrero development projects.

mitigation measures and conditions of project approval, requiring a more costly, cumbersome, time-consuming, and less certain development review process for projects within the Air Pollutant Exposure Zone. Aligning City law with CEQA codifies the mitigation requirements, reducing cost and providing more certainty and consistency to the development review process.

Objectives of Proposed Revisions to Health Code, Article 38

The goal of the proposed Ordinance is to protect public health in locations of the City burdened with poor air quality (Air Pollutant Exposure Zone). The proposed Ordinance requires new construction that would house sensitive receptors to include an enhanced ventilation system that requires the removal of fine particulate matter (PM_{2.5}) equivalent to that associated with MERV 13 filtration.

Objectives of Proposed Revisions to Clean Construction Ordinance

The goal of the proposed Ordinance is to protect public health by reducing exposure to diesel emissions generated from construction activities at public project construction sites within locations of the City already burdened with poor air quality (Air Pollutant Exposure Zone) through a plan that requires, among other items, the use of newer technologies and newer engines that reduce diesel particulate matter.

POTENTIAL COMMISSION ACTIONS

As the proposed Ordinances do not amend the Planning Code, no Planning Commission action is required. However, as this proposal affects Department review of projects, the proposed Ordinances are before the Commission so that it may recommend adoption, rejection, or adoption with modifications to the Board of Supervisors.

RECOMMENDATION

The Department recommends that the Commission recommend *approval* of the proposed Ordinances and adopt the attached Draft Resolutions to that effect.

ENVIRONMENTAL REVIEW

The proposed Ordinances would result in no direct or indirect physical impact on the environment. The proposed amendments are exempt from environmental review under Section 15060(c) and 15378 of the CEQA Guidelines.

PUBLIC COMMENT

The Planning Department has co-hosted with DPH several meetings with various members of the public and government agencies over the last 12 to 18 months regarding the proposed amendments, including community organizations, contractors, developers, mechanical engineers, Department of Building Inspection, Department of Public Works, San Francisco Public Utilities Commission, and the San Francisco Port. The Planning Department and DPH have attempted to incorporate these comments, while still accomplishing the objectives of the proposed Ordinances. Some members of the development community continue to have concerns about the costs of the Enhanced Ventilation pursuant to Health Code, Article 38 compared to their standard construction practices. However, as mentioned above, these developments would still be required to incorporate Enhanced Ventilation through CEQA. Additionally, the DPH has documented feasible examples of developments incorporating Enhanced Ventilation.

Lastly, responsible development demands that government ensure that protections are provided for the public's health, safety, and welfare, which these proposed Ordinances aim to achieve.

Since publication of the public notice for this hearing on August 27, 2014, the Planning Department has not received any comments from the public on the proposed Ordinances. On December 7, 2013, the Health Commission unanimously passed a resolution recommending approval by the Board of Supervisors of the proposed Health Code, Article 38 changes; and on May 27, 2014, the Environment Commission unanimously passed a resolution recommending approval by the Board of Supervisors of the proposed Clean Construction Ordinance changes.

RECOMMENDATION: Recommendation of Approval
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Attachments:

- Exhibit A: Draft Planning Commission Resolution – Health Code, Article 38
- Exhibit B: Board of Supervisors File No. 140806
- Exhibit C: Draft Planning Commission Resolution – Clean Construction Ordinance
- Exhibit D: Board of Supervisors File No. 140805
- Exhibit E: Air Pollutant Exposure Zone map



Exhibit A

SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Draft Resolution

HEARING DATE SEPTEMBER 18, 2014

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Project Name: **Amendments Relating to Enhanced Ventilation for Sensitive Use Projects**

Case Number: 2014.1295U [Board File No. 140806]

Initiated by: Supervisor Malia Cohen/ Introduced July 17, 2014

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Reviewed by: Jessica Range, Senior Environmental Planner
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Recommendation: **Recommend Approval**

RECOMMENDING THAT THE BOARD OF SUPERVISORS ADOPT A PROPOSED ORDINANCE THAT WOULD AMEND THE HEALTH CODE TO REQUIRE AN ENHANCED VENTILATION SYSTEM FOR SENSITIVE USE PROJECTS WITHIN THE AIR POLLUTANT EXPOSURE ZONE AND ESTABLISHING DOCUMENT REVIEW FEES; AMENDING THE BUILDING CODE TO CORRESPOND TO THE HEALTH CODE CHANGES; AND MAKING ENVIRONMENTAL FINDINGS, AND FINDINGS UNDER THE CALIFORNIA HEALTH AND SAFETY CODE; AND DIRECTING THE CLERK OF THE BOARD OF SUPERVISORS TO FORWARD THIS ORDINANCE TO THE CALIFORNIA BUILDING STANDARDS COMMISSION UPON FINAL PASSAGE.

WHEREAS, on July 17, 2014, Supervisor Cohen introduced a proposed Ordinance under Board of Supervisors (hereinafter "Board") File Number 140806, which would amend the Health Code to require an enhanced ventilation system for sensitive use projects within the Air Pollutant Exposure Zone and establish document review fees; and amend the Building Code to correspond to the Health Code changes.

WHEREAS, The Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting to consider the proposed Ordinance on September 18, 2014; and,

WHEREAS, the proposed Ordinance has been determined not to be a project under the California Environmental Quality Act Section 15060(c) and 15378; and

WHEREAS, the Planning Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of Department staff and other interested parties; and

WHEREAS, all pertinent documents may be found in the files of the Department, as the custodian of records, at 1650 Mission Street, Suite 400, San Francisco; and

WHEREAS, the Planning Commission has reviewed the proposed Ordinance.

MOVED, that the Planning Commission hereby recommends that the Board of Supervisors **approve** the proposed ordinance.

FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

1. Scientific studies have found an association between exposure to particulate matter and significant human health problems. Exposure to outdoor air pollutants may be a contributing factor to the leading causes of death recorded for San Francisco's population.
2. The proposed Ordinance would provide equal levels of protection for all new sensitive use projects from major sources of air pollution, including vehicles on roadways, permitted stationary, port, and maritime sources.
3. The proposed Ordinance would provide a greater level of certainty to the development review process, as amending regulation to the City's laws would be preferential to the current practice of conducting modeling and adding mitigations through the development review process.

NOW THEREFORE BE IT RESOLVED that the Commission hereby recommends that the Board ADOPT the proposed Ordinance as described in this Resolution.

I hereby certify that the foregoing Resolution was adopted by the Commission at its meeting on September 18, 2014.

Jonas P. Ionin
Commission Secretary

AYES:

NOES:

ABSENT:

ADOPTED: September 18, 2014

1 [Health, Building Codes - Ventilation Requirement for Urban Infill Development and
2 Establishing Fees]

3 **Ordinance amending the Health Code, Article 38, to require an enhanced ventilation**
4 **system for sensitive use projects within the Air Pollutant Exposure Zone and**
5 **establishing document review fees; amending the Building Code to correspond to the**
6 **Health Code changes; and making environmental findings, and findings under the**
7 **California Health and Safety Code; and directing the Clerk of the Board of Supervisors**
8 **to forward this Ordinance to the California Building Standards Commission upon final**
9 **passage.**

10 NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
11 **Additions to Codes** are in *single-underline italics Times New Roman font*.
12 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.
13 **Board amendment additions** are in double-underlined Arial font.
14 **Board amendment deletions** are in ~~strikethrough Arial font~~.
15 **Asterisks (* * * *)** indicate the omission of unchanged Code
16 subsections or parts of tables.

17 Be it ordained by the People of the City and County of San Francisco:

18 Section 1. General Findings.

19 The Planning Department has determined that the actions contemplated in this
20 ordinance comply with the California Environmental Quality Act (California Public Resources
21 Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of
22 Supervisors in File No. ___ and is incorporated herein by reference.

23 Section 2. Findings Under the California Health and Safety Code.

24 The Board of Supervisors finds that:

25 (1) The topography of San Francisco leads to development of a high density of
buildings on small lots, and often in close proximity to major roadways, necessitating special
provisions for ventilation. (Topography).

1 (2) High building density and crowded occupancy leaves fewer parcels available for
2 residential development than needed to satisfy regional demand, and many of those sites are
3 in close proximity to major roadways, necessitating special provisions for ventilation.
4 (Topography).

5 (3) The configuration of the City as a peninsula restricts the availability of land suitable
6 for residential development, leaving such development to sites that are close to major
7 roadways, necessitating special provisions for ventilation. (Topography).

8 (4) The region is subject to strong winds, which often direct roadway air pollutants to
9 surrounding areas. (Climate).

10 Pursuant to the applicable California Health and Safety Code Sections, the Board of
11 Supervisors finds and determines that these local conditions give rise to the need for
12 modification of the 2013 California Building Code provisions published by the Building
13 Standards Commission. Further, the Board finds and determines that the proposed
14 modifications are reasonably necessary based on these local conditions.

15 Section 3. Article of the 38 the Health Code is hereby amended by deleting existing
16 Section 3806; adding two sections (numbered as Sections 3803 and 3811); revising existing
17 Sections 3801 to 3805 and 3807 to 3813 and renumbering those sections, in light of the
18 deleted and added sections, to produce Sections 3801 to 3814, to read as follows:

19 **SEC. 3801. SHORT TITLE.**

20 This Article shall be entitled "*Air Quality Assessment and Ventilation Requirement Enhanced*
21 *Ventilation Required* for Urban Infill ~~*Residential Sensitive Use*~~ Developments ~~*in the Air Pollutant*~~
22 ~~*Exposure Zone.*~~"

23 **SEC. 3802.FINDINGS.**

24 (a) ~~*Motor vehicles are a major source of air pollution in the United States, particularly in*~~
25 ~~*urban areas;*~~

1 (a) Scientific studies show that exposure to particulate matter from air pollution leads to
2 significant human health problems, including: aggravated asthma; chronic bronchitis; reduced lung
3 function; irregular heartbeat; heart attack; and premature death in people with heart or lung disease.
4 Exposure to air pollutants that are carcinogens can also have significant human health consequences.
5 For example, exposure to diesel exhaust is an established cause of lung cancer.

6 (b) Heart disease and stroke are the first and fourth leading causes of death in the U.S,
7 respectively. Air pollution affects heart health and can trigger or contribute to heart attacks and
8 strokes. One in three Americans has heart or blood vessel disease and is at higher risk from air
9 pollution. Impacts on the lungs may take several forms. Short-term effects include deficits in lung
10 function that can limit breathing, especially during exercise. Irritants from air pollution may cause
11 airway constriction or chest tightening that is uncomfortable or limiting to normal activity. These
12 changes in lung function are sometimes accompanied by underlying lung tissue inflammation which
13 over the long term may lead to chronic lung disease. Exposure to air pollutants may be a contributing
14 factor to leading causes of death recorded for San Francisco’s population (ischemic heart disease;
15 lung, bronchus and tracheal cancers; cerebrovascular disease; chronic obstructive pulmonary disease;
16 hypertensive heart disease and lower respiratory infection). ~~Pollution from motor vehicles imposes~~
17 ~~severe health burdens on children and families living near freeways and busy roadways. Health~~
18 ~~research has consistently shown that~~

19 (c) ~~P~~ Persons living in close proximity to air pollution sources, such as freeways or
20 busy roadways, have poorer lung functions and are more susceptible to developing asthma
21 and other respiratory problems, compared with persons living at a greater distance; ~~from such~~
22 sources. The California Air Resources Board’s 2005 Land Use Guidance document, “Air Quality And
23 Land Use Handbook: A Community Health Perspective,” reviewed traffic-related air pollution studies
24 and found that particulate matter pollution levels decrease by about 70 percent at 500 feet from
25

1 freeways and high-traffic roadways, defined as urban roads with 100,000 vehicles/day or rural roads
2 with 50,000 vehicles/day.

3 ~~(e) — To avoid the health problems associated with exposure to roadway pollution, the~~
4 ~~California Air Resources Board recommends avoiding the placement of residential and other sensitive~~
5 ~~uses within 500 feet (approximately 150 meters) of busy freeways and other busy roadways. However,~~
6 ~~significant residential development in the state is occurring in urban infill sites, near freeways or busy~~
7 ~~arterial roadways, potentially increasing these residents' exposure to air pollutants and their~~
8 ~~associated health risks; and~~

9 ~~(d) — This situation is exacerbated in the City of San Francisco, which, by virtue of being~~
10 ~~located on a peninsula, has a limited amount of land available for new residential development.~~

11 (d) Proximity to sources of air pollution increases exposure, and proximity to sources is
12 established to be more common for the poor and for certain ethnic minorities.

13 (e) Consequently, health vulnerability varies among neighborhoods and populations within
14 San Francisco, as measured by population health records of air pollution-associated hospital
15 discharges and emergency room visits, and non-accident mortality. Health vulnerable populations are
16 likely to have more significant health consequences from air pollutant exposure compared to
17 populations that are less vulnerable.

18 (f) Existing regulatory control measures, often focused on new stationary sources of
19 emissions and average regional air pollution concentrations, are not sufficient to address all local
20 sources of exposure or disparities in exposure.

21 (g) “Sensitive Use” buildings have the highest proportion of individuals who are most
22 vulnerable to air pollutant exposures.

23 (h) Available technologies exist to protect sensitive uses from air pollution health effects.
24 Available and accepted air pollution modeling technology allows for the estimation of certain air
25 pollutant concentrations for individual land parcels. Furthermore, available building ventilation and

1 engineering technologies provide mechanisms to protect indoor environments from the infiltration of
2 ambient air pollutants.

3 **SEC. 3803. PURPOSES AND GOALS.**

4 (a) The purpose of this Article 38 is to protect the public health and welfare by establishing
5 an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill
6 sensitive use development within the Air Pollutant Exposure Zone.

7 (b) The goals of this Article 38 are to maintain and increase the stock of infill housing and
8 other sensitive use development in the City while reducing the risk to human health from air pollutants
9 among occupants of, and visitors to, buildings in the Air Pollutant Exposure Zone.

10 **SEC. 38034. DEFINITIONS.**

11 For the purposes of this Article 38, the following words shall have the following
12 meanings:

13 (a) ~~—"Building" means a new structure containing ten or more dwelling units as those terms~~
14 ~~are defined in the San Francisco Building Code.~~

15 (b) ~~—"Department" means the San Francisco Department of Public Health.~~

16 (c) ~~—"Director" means the Director of the San Francisco Department of Public Health or the~~
17 ~~Director's designee.~~

18 (d) ~~—"Local Roadway Traffic Sources" means traffic generated on roadways within 500 feet~~
19 ~~from the site.~~

20 (e) ~~—"PM 2.5" means solid particles and liquid droplets found in the air, that are less than~~
21 ~~2.5 micrometers in diameter.~~

22 (f) ~~—"Potential Roadway Air Pollutant Exposure Zone" means those areas within the~~
23 ~~City and County of San Francisco which, by virtue of their proximity to freeways and major~~
24 ~~roadways, may exhibit high PM 2.5 concentration attributable to Local Roadway Traffic Sources. air~~
25 ~~pollution emissions sources, including Freeways, have substantially greater concentrations of air~~

1 pollutants. The Air Pollutant Exposure Zone shall be modeled according to specific risk factors defined
2 in the Rules and Regulations, and will include at a minimum, criteria for maximum allowed excess
3 cancer risks and maximum PM_{2.5} concentrations; these criteria shall be more stringent in Health
4 Vulnerable Locations, as defined below.

5 ~~(g) —“Potential Roadway Exposure Zone” means a map, prepared and periodically updated~~
6 ~~by the Director and available to the public in the Department's website, depicting the Potential~~
7 ~~Roadway Exposure Zone.~~

8 “Building” means a building that contains a “Sensitive Use” and that is either:

9 (1) a new building; or

10 (2) a building undergoing a “Major Alteration to Existing Building” as defined by
11 the San Francisco Green Building Code; or

12 (3) a building undergoing a Planning Department permitted change of use.

13 “City” means the City and County of San Francisco.

14 “Department” means the San Francisco Department of Public Health.

15 “Director” means the Director of the San Francisco Department of Public Health or the
16 Director's designee.

17 “Enhanced Ventilation” means a ventilation system capable of achieving the protection from
18 particulate matter (PM_{2.5}) equivalent to that associated with a Minimum Efficiency Reporting Value
19 (MERV) 13 filtration (as defined by American Society of Heating, Refrigerating and Air-Conditioning
20 Engineers (ASHRAE) standard 52.2).

21 “Freeway” refers to freeways as defined in the San Francisco General Plan, Transportation
22 Element.

23 “Health Vulnerable Locations” means those San Francisco zip codes, census tracts or other
24 defined locations having the highest percentage of health vulnerable residents, based on criteria such
25 as State discharge data from respiratory and cardiovascular related hospitalizations, non-accident

1 mortality, or other criteria as determined by the Director and specified in the Rules and Regulations
2 enacted under this Article.

3 "PM_{2.5}" means solid particles and liquid droplets found in the air, that are less than or equal to
4 2.5 micrometers (µm) in diameter.

5 "Sensitive Use" means:

6 (1) any building or facility designed for residential use, including but not limited to
7 those defined by City, state or federal law and regulations, excluding Tourist Hotels;

8 (2) any ~~building or~~ facility serving specific populations, including but not limited to
9 California Department of Social Services (CDSS)-licensed Adult Day Care Centers, Adult Support
10 Centers, Child Care Centers, Family Child Care Homes, Infant Care Centers, School-Aged Child Care
11 Centers, and Community Treatment Centers;

12 (3) any California Department of Education (CDE)-licensed schools;

13 (4) any California Department of Public Health (CDPH)-licensed Health Care
14 Facilities with 24-hour care, except for CDPH-licensed hospitals, which are subject to specific
15 regulations;

16 (5) any California Building Code Section 305-defined occupancies of Educational
17 Group E;

18 (6) any California Building Code Section 308-defined occupancies of Institutional
19 Group I; and

20 (7) any California Building Code Section 310-defined occupancies of Residential
21 Group R.

22 ~~(h)~~ "Site" means a parcel of land as defined in the San Francisco Building Code.

23 **SEC. 38045. APPLICABILITY OF ARTICLE.**

24 This Article ~~38~~ shall apply to ~~newly constructed~~ Sensitive Use-buildings ~~containing ten or~~
25 ~~more dwelling units located on a site identified as~~ within the Potential Roadway Exposure Zone, and

1 ~~that have been determined to have a PM 2.5 concentration at the proposed site greater than 0.2 ug/m3~~
2 ~~attributable to Local Roadway Traffic Sources, as defined herein. Air Pollutant Exposure Zone that are~~
3 ~~either:~~

4 (a) Newly constructed; or

5 (b) Undergoing a “Major Alteration to Existing Building” as defined by the San Francisco
6 Green Building Code; or

7 (c) The subject of an application for a Planning Department-permitted Change of Use.

8 **SEC. 38056. POTENTIAL ROADWAY AIR POLLUTANT EXPOSURE ZONE AND**
9 **POTENTIAL ROADWAY AIR POLLUTANT EXPOSURE ZONE MAP.**

10 (a) ~~Pursuant to Section 4.110 of the Charter of the City and County of San Francisco, the~~
11 ~~Director shall create a Potential Roadway an Air Pollutant Exposure Zone Map, depicting the~~
12 ~~Potential Roadway Exposure Zone according to Rules and Regulations as authorized by Section 3809.~~
13 The Air Pollutant Exposure Zone Map shall depict all locations in the City where the estimated
14 cumulative PM_{2.5} concentration is greater than 10 µg/m³ or where the estimated cumulative excess risk
15 of cancer from air pollutants resulting from lifetime (70 year) exposure is greater than 100 in a million.
16 Additionally, the Air Pollutant Exposure Zone Map shall include all locations within 500 feet of any
17 Freeway, if those locations were not otherwise captured by modeling estimates. Within Health
18 Vulnerable Locations, the Air Pollutant Exposure Zone Map shall depict all locations where the
19 estimated cumulative PM_{2.5} concentration is greater than 9 µg/m³ or where the estimated cumulative
20 excess risk of cancer from air pollutants resulting from lifetime (70 year) exposure is greater than 90 in
21 a million. The Director shall update the Air Pollutant Exposure Zone Map to identify new sources,
22 updated pollutant standards, additional pollutants and standards for those pollutants, and updated
23 methodologies in accordance with Section 3809 and the accompanying Rules and Regulations for this
24 Article 38.

1 (b) The Director shall ~~from time to time, at least once every five years,~~ update the
2 ~~Potential Roadway Exposure Zone Map, Rules and Regulations governing creation of the Air Pollutant~~
3 ~~Exposure Zone Map~~ to account for changes in ~~circumstances that lead to changes in the Potential~~
4 ~~Roadway Exposure Zone, information~~ including, but not limited, to:

5 (1) ~~Information available to estimate air pollutants of health concern;~~

6 (2) ~~Information available to determine Health Vulnerable Locations; and~~

7 (3) ~~Information that may affect delineation of the Air Pollutant Exposure Zone, including,~~
8 ~~but not limited to:~~

9 ~~(1)(A) Construction, expansion or modification of new major roadways in residential areas;~~

10 ~~(2)(B) Changes in traffic patterns in the City's roadway system;~~

11 ~~(3) Specific scientific data showing that certain areas should be included in the Potential~~
12 ~~Roadway Exposure Zone Map.~~

13 (C) ~~Changes in area sources or siting of industrial or commercial sources of air pollution; and~~

14 (D) ~~Climatic factors for which there is evidence of changes to air quality.~~

15 (c) The Director shall post the ~~Potential Roadway Air Pollutant~~ Exposure Zone Map ~~in~~
16 ~~on~~ the Department's website, and make paper copies of the map available to the public upon
17 request.

18 (d) In creating and updating the ~~Potential Roadway Air Pollutant~~ Exposure Zone Map,
19 the Director shall follow the procedures ~~of Section 3809, and shall make specific findings explaining~~
20 ~~how the boundaries of the Potential Roadway Exposure Zone Map meet the definition of Section~~
21 ~~3803(f) specified in Section 3809.~~

22 (e) The ~~current Potential Roadway Air Pollutant~~ Exposure Zone Map that is operative as
23 ~~of the effective date of Ordinance No. _____ amending this Article 38, is attached to this Ordinance as~~
24 ~~Attachment A on file with the Clerk of the Board of Supervisors in File No. _____.~~
25

1 **~~SEC. 3806. AIR QUALITY ASSESSMENT AND AIR QUALITY REPORT.~~**

2 ~~(a) — Projects meeting the conditions of Section 3804 shall have performed an Air Quality~~
3 ~~Assessment, to evaluate the concentration of PM 2.5 from Local Roadway Traffic Sources at the site.~~
4 ~~All locations at the site where residential buildings or construction may occur shall be evaluated. The~~
5 ~~Department shall develop guidance, pursuant to Section 3809, setting forth what types of analyses shall~~
6 ~~be conducted. The project sponsor shall follow the Department's guidance, unless an alternative~~
7 ~~proposal is approved in writing by the Director.~~

8 ~~(b) At the completion of the Air Quality Assessment required by Section 3806(a), an Air Quality~~
9 ~~Report shall be submitted to the Director. The Air Quality Report shall contain the following~~
10 ~~information:~~

11 ~~(1) The names, addresses and professional expertise of the persons who conducted the Air~~
12 ~~Quality Assessment;~~

13 ~~(2) An explanation of the methodology used in the Air Quality Assessment; and~~

14 ~~(3) The results of the Air Quality Assessment.~~

15 ~~(c) Review by the Director. The Director shall determine whether the Air Quality Report~~
16 ~~required by this Article was conducted as required by this Article, and whether the Air Quality Report~~
17 ~~is complete. If the Air Quality Report was not conducted as required by this Article or does not comply~~
18 ~~with the requirements of this Section, the Director shall notify the project sponsor in writing within 30~~
19 ~~days of receipt of the Air Quality Report, indicating the reasons the report is unacceptable. A copy of~~
20 ~~the notification shall be sent to the Director of building Inspection.~~

21 ~~(d) Finding of No Dangerous PM 2.5 Concentration. If the Air Quality Report indicates that the~~
22 ~~concentration level of PM 2.5 from Local Roadway Traffic Sources at the site is less than 0.2 ug/m3,~~
23 ~~the Director shall provide the project sponsor with written notification that the project has complied~~
24 ~~with the requirements of this Article.~~

1 **SEC. 3807. ENHANCED VENTILATION REQUIREMENT.**

2 (a) ~~If the Air Quality Report indicates that the concentration level of PM 2.5 from Local~~
3 ~~Roadway Traffic Sources at the site is greater than 0.2 ug/m3 the project shall:~~

4 ~~(1) be designed, or relocated on the site in a way that would avoid residential exposure to PM~~
5 ~~2.5 concentration from Local Roadway Traffic Sources greater than 0.2 ug/m3, as demonstrated by the~~
6 ~~Air Quality Report, or~~

7 ~~(2) Any person or entity to whom this Article 38 applies, as defined in Section 3805, shall~~
8 submit to the Director an Enhanced Ventilation Proposal, prepared by, or under the supervision
9 of a licensed mechanical engineer or other individual authorized by the California Business and
10 Professions Code Sections 6700-6799 (Professional Engineers Act) to design professional, to install in
11 ~~the project a mechanical~~ ventilation systems ~~to that~~ meet the requirements of this Article 38 and
12 San Francisco Building Code Section 1203.5. An Enhanced Ventilation Proposal shall include the
13 name, title and license number of the person submitting such proposal. Building permit documents
14 ~~submitted to the Department of Building Inspection shall incorporate designs and details necessary for~~
15 ~~the construction of such ventilation system.~~

16 (b) The Enhanced Ventilation Proposal shall explain ~~in detail~~ how the project will
17 achieve the standards mandated by this Article 38 and accompanying the Rules and Regulations
18 as described and updated according to Section 3809, San Francisco Building Code Section
19 1203.5. ~~The, and any relevant amendments or revisions thereto.~~ The Enhanced Ventilation Proposal
20 shall include a statement signed by the ~~licensed design professional~~ person who prepared it, in
21 accordance with the requirements of Section 3807(a), certifying that in his or her judgment the
22 ventilation system proposed will be capable of ~~removing~~ >80% of ambient PM 2.5 achieving the
23 protection from habitable areas of dwelling units. particulate matter (PM_{2.5}) equivalent to that
24 associated with MERV 13 filtration (as defined by ASHRAE standard 52.2). In updates to the Rules and
25

1 Regulations, the Director may specify additional or alternative protective equivalents as technology
2 and research dictate.

3 (c) The Director shall review the Enhanced Ventilation Proposal and may require
4 additional modification or justification prior to the Director's approval. The Director shall issue a
5 letter to the Department of Building Inspection Permit Services Energy/Mechanical Plan Review
6 Section identifying and attaching the letter describing the approved Enhanced Ventilation Proposal.

7 (d) Building permit documents submitted to the Department of Building Inspection shall
8 incorporate all designs and details necessary for the construction of the approved Enhanced
9 Ventilation system. The Department of Building Inspection shall review submitted plans to assure
10 compliance with the Director-approved Enhanced Ventilation proposal and shall not issue permits for
11 the construction, installation, or modification of the Enhanced Ventilation systems unless it is in
12 compliance with the approved proposal.

13 **SEC. 3808. MAINTENANCE OF DOCUMENTS BY ~~DIRECTOR~~DEPARTMENT.**

14 The ~~Air Quality Report, Enhanced~~ Ventilation Proposal, Certification and related
15 documents shall become part of the file maintained by the Department. Such file shall be
16 available to the public upon request.

17 **SEC. 3809. RULES AND REGULATIONS.**

18 (a) ~~Adoption of Rules. The Director may adopt, and may thereafter amend, rules,~~
19 ~~regulations and guidelines that the Director deems necessary to implement the provisions of this~~
20 ~~Article. For the purposes of this Article, a public hearing before the Health Commission shall be held~~
21 ~~prior to the adoption or any amendment of the rules, regulations and guidelines recommended for~~
22 ~~implementation, including creation and amendments to update the Potential Roadway Exposure Zone~~
23 ~~Map. In addition to notices required by law, the Director shall send written notice, at least 15 days~~
24 ~~prior to the hearing, to any interested party who sends a written request to the Director for notice of~~
25 ~~hearings related to the adoption of rules, regulations and guidelines pursuant to this Section.~~

1 ~~In developing such regulations, the Director shall consider, inter alia, State and federal~~
2 ~~statutes, regulations and guidelines pertaining to the health effects of roadway air pollutants. The~~
3 ~~Director shall also~~ Within 90 days after the effective date of revised Ordinance No. _____, amending
4 Article 38, the Director shall issue Rules and Regulations necessary to effectuate the purposes of this
5 Article and to protect public health and safety. Any person or entity as defined in Section 3805 shall
6 comply with this Article, the Rules and Regulations, and all applicable local, state, and federal laws.

7 (b) _____ The Director shall consult with the Planning Department's Environmental Review
8 Officer at least 30 days prior to initiating any amendments or modifications to ~~these rules or~~
9 ~~regulations, including changes to the Potential Roadway Exposure Zone Map, and shall seek such~~
10 ~~officer's concurrence on any proposed change~~ the Rules and Regulations.

11 (c) _____ The Director shall also, from time to time, consult with the Municipal Green
12 Building Task Force, as established in Environment Code Sec.702, or any successor body, to
13 coordinate and resolve any potential conflicts that may arise between the San Francisco Green
14 Building Ordinance Code and this Ordinance Article 38.

15 ~~(b)(d) Guidelines for Rules and Regulations. Rules, regulations and guidelines may shall, at a~~
16 ~~minimum, meet address among others,~~ the following, subjects standards and criteria:

17 (1) _____ Minimum standards for acceptable Air Quality Assessment tests. The minimum
18 standards shall be designed to assist interested persons including, but not limited to, the Director of the
19 Department of Building Inspection, other state and local public agencies and licensed design
20 professionals, to evaluate whether analyses, other than those required by Section 3806(a) must be
21 conducted to detect the presence of harmful roadway air pollutants; The criteria used for the definition
22 of "Health Vulnerable Locations" shall be at least as health-protective as that of the Bay Area Air
23 Quality Management District (BAAQMD) methodology. BAAQMD methodology defines those zip codes
24 in San Francisco in the worst quintile of Bay Area health vulnerability scores based on two years of
25 statewide hospitalization and emergency room visit records, and estimated costs, for the following air

1 pollution related conditions per zip code: Chronic Obstructive Pulmonary Disease (COPD) Hospital
2 Admissions, Pneumonia Hospital Admissions, Myocardial Infarction (MI, Heart Attack) Hospital
3 Admissions and Emergency Room Visits, Cardiovascular Hospital Admissions (less MI), Asthma
4 Emergency Hospital Admissions and Emergency Room Visits, Asthma Hospital Admissions, Hospital
5 Admissions for Respiratory Diseases, combined with the non-accident mortality rate per zip code. For
6 San Francisco, based on 2009-2011 health records, the zip codes in the worst quintile of Bay Area
7 health vulnerability scores are 94102, 94103, 94105, 94124, and 94130. In updates to the Rules and
8 Regulations, the Director may modify the methodology to identify Health Vulnerable Locations as
9 required to ensure the Air Pollutant Exposure Zone Map is consistent with current scientific evidence.

10 (2) The criteria for creating and updating the Air Pollutant Exposure Zone Map and the
11 models underlying this map shall include, but not be limited to:

12 (A) Identification of parcels with lifetime excess cancer risk due to air pollution
13 greater than 100 cases per million population.

14 (B) Identification of parcels in Health Vulnerable Locations with lifetime excess
15 cancer risk due to air pollution greater than 90 cases per million population.

16 (C) Identification of parcels where $PM_{2.5}$ concentrations are greater than $10 \mu\text{g}/\text{m}^3$
17 (including ambient levels).

18 (D) Identification of parcels in Health Vulnerable Locations where $PM_{2.5}$
19 concentrations are greater than $9 \mu\text{g}/\text{m}^3$ (including ambient levels).

20 (E) Identification of parcels within 500 feet of any Freeway, if those locations were
21 not otherwise captured by modeling estimates.

22 (F) New research findings, particularly quantification of risk, that change the
23 Director's knowledge of how particulate matter and any other air pollutants affect public health.

24 (3) Required performance standards for Enhanced Ventilation Proposals must include the
25 following minimum criteria:

1 (A) Location of air intake for HVAC (Heating, Ventilation and Air Conditioning
2 systems) away from air pollution sources;

3 (B) Specification of filtration certified by the ASHRAE capable of achieving
4 protection from particulate matter (PM_{2.5}) equivalent to that associated with a MERV 13 filtration (as
5 defined by ASHRAE standard 52.2).

6 (4) Additional criteria for Enhanced Ventilation Proposals may include the following
7 project design information:

8 (A) Number of air exchanges per hour of outside filtered air;

9 (B) Building materials and/or design that limit unfiltered infiltration of outside air,
10 such as air sealing or maintenance of positive pressure within the building interior;

11 (C) Location of operable windows oriented away from air pollutant sources, to the
12 extent feasible;

13 (D) Other building design criteria that may reduce air pollution exposure to
14 residents;

15 (E) Other combinations of technologies and designs to achieve the goals of this
16 Article.

17 ~~(2)(5) Minimum education and experience~~ Certification and/or licensing requirements for the
18 persons who prepare Air Quality Assessments pursuant to Section 3806(a) and the Enhanced
19 Ventilation Proposals pursuant to Section 3807. ~~and~~ The Enhanced Ventilation Proposal must be
20 prepared by, or under the responsible charge of a person who is authorized by California Business and
21 Professions Code Sections 6700-6799 (Professional Engineers Act), or any successor provisions, to
22 design mechanical ventilation systems that meet the requirements of this Article 38 and San Francisco
23 Building Code Section 1203.5 and either:

24 (A) a licensed mechanical engineer, or
25

1 (B) an individual authorized by California Business and Professions Code Sections
2 6700-6799 to design mechanical ventilation systems that meet the requirements of this Article 38 and
3 San Francisco Building Code Section 1203.5.

4 ~~(3) — Creation and Periodic Updates of the Potential Roadway Exposure Zone Map.~~

5 (6) Minimum criteria for maintenance and disclosure, including but not limited to:

6 (A) Minimum standards for proper maintenance, and

7 (B) Disclosure to buyers, lessees and renters that the building is located in an area
8 with substantial concentrations of air pollutants, and that the building includes an enhanced ventilation
9 system information about the proper use of the installed enhanced ventilation system.

10 (e) The Director may specify additional or alternative equivalents as justified by accepted
11 research including:

12 (1) addition or substitution of risk factor criteria;

13 (2) inclusion of other pollutants such as Nitrogen Dioxide.

14 (f) Within Health Vulnerable Locations, the Director shall specify more protective
15 requirements in the Air Pollutant Exposure Zones.

16 (g) The Director may grant variances to this Article 38, on a case-by-case basis.

17 **SEC. 3810. MAINTENANCE AND DISCLOSURE REQUIREMENTS.**

18 (a) The ventilation systems installed pursuant to Section 3807 shall be properly
19 maintained, following standard practices, and as specified by the manufacturer.

20 (b) ~~Project sponsors shall preserve a~~Documentation of ~~their actions installing the~~
21 installation and/or ~~maintaining maintenance of the~~ enhanced ventilation systems shall be preserved
22 for five years after installation.

23 (c) Failure to properly maintain the enhanced ventilation systems is subject to enforcement
24 and possible penalties under the Health Code Article 11, Nuisances, or other applicable sections.

1 (d) Disclosure to buyers, lessees and renters shall be made in accordance with Rules and
2 Regulations as specified in Section 3809(d)(6).

3 **SEC. 3811. FEES.**

4 (a) Review and approval of an Enhanced Ventilation Proposal..... \$984.00

5 (b) Additional consultation, document review or inspection.....\$225.00 per hour

6 **SEC. 381~~1~~². NO CONFLICT WITH FEDERAL OR STATE LAW.**

7 Nothing in this Article shall be interpreted or applied so as to create any requirement,
8 power, or duty in conflict with any federal or state law.

9 **SEC. 381~~2~~³. SEVERABILITY.**

10 If any section, subsection, sentence, clause, or phrase of this Article 38 is for any
11 reason held to be invalid or unconstitutional by a decision of any court of competent
12 jurisdiction, such decision shall not affect the validity of the remaining portions of the Article.

13 The Board of Supervisors hereby declares that it would have passed this Article and each and
14 every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional
15 without regard to whether any portion of this Article would be subsequently declared invalid or
16 unconstitutional.

17 **SEC. 381~~3~~⁴. UNDERTAKING FOR THE GENERAL WELFARE.**

18 In adopting and implementing this Article 38, the City ~~and County of San Francisco~~ is
19 assuming an undertaking only to promote the general welfare. It is not assuming, nor is it
20 imposing in its officers and employees, an obligation for breach of which it is liable in money
21 damages to any person who claims that such breach proximately caused injury.

22 Section 4. The Building Code is hereby amended by amending Section 1203.5, to read
23 as follows:

24 **SEC. 1203 – VENTILATION**

25 * * * *

1 **SEC. 1203.5. Amending second paragraph as follows:**

2 ~~Newly constructed~~ For all buildings containing ~~ten or more dwelling units~~ any sensitive land
3 use located within the ~~Potential Roadway Air Pollutant Exposure Zone and having a PM 2.5~~
4 ~~concentration at the proposed building site greater than 0.2 ug/m3 attributable to Local Roadway~~
5 ~~Traffic Sources, as determined by the Director of Public Health~~ pursuant to Article 38 of the San
6 Francisco Health Code, that are:

7 (a) Newly constructed;

8 (b) Undergoing a “Major Alteration to Existing Building” as defined by the San Francisco
9 Green Building Code; or

10 (c) Applying for a San Francisco Planning Department-permitted Change of Use,
11 such buildings shall incorporate an ~~have~~ enhanced ventilation systems designed and constructed
12 to ~~remove >80% of ambient PM 2.5 from habitable areas of dwelling units~~ be in compliance with San
13 Francisco Health Code Article 38.

14 Section 5. Effective Date. This ordinance shall become effective 30 days after
15 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the
16 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board
17 of Supervisors overrides the Mayor’s veto of the ordinance.

1 Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors
2 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,
3 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal
4 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment
5 additions, and Board amendment deletions in accordance with the "Note" that appears under
6 the official title of the ordinance.

7 Section 7. Directions to the Clerk. The Clerk of the Board of Supervisors is hereby
8 directed to forward a copy of this ordinance to the California Building Standards Commission
9 upon final passage.

10
11 APPROVED AS TO FORM:
12 DENNIS J. HERRERA, City Attorney

13 By: _____
14 VIRGINIA DARIO ELIZONDO
15 Deputy City Attorney

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Exhibit C

SAN FRANCISCO PLANNING DEPARTMENT

Planning Commission Draft Resolution

HEARING DATE SEPTEMBER 18, 2014

Project Name: **Amendments Relating to Clean Construction Ordinance**
Case Number: 2014.1296U [Board File No. 140805]
Initiated by: Supervisor Malia Cohen/ Introduced July 17, 2014
Staff Contact: Wade Wietgreffe, Environmental Planner
wade.wietgreffe@sfgov.org, 415-575-9050
Reviewed by: Jessica Range, Senior Environmental Planner
jessica.range@sfgov.org, 415-575-9018
Recommendation: **Recommend Approval**

1650 Mission St.
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RECOMMENDING THAT THE BOARD OF SUPERVISORS ADOPT A PROPOSED ORDINANCE THAT WOULD AMEND THE ADMINISTRATIVE CODE TO REQUIRE A CONSTRUCTION EMISSIONS MINIMIZATION PLAN AND MONITORING FOR PUBLIC PROJECTS WITHIN THE AIR POLLUTANT EXPOSURE ZONE, AS MAPPED BY HEALTH CODE, ARTICLE 38; AMENDING THE ADMINISTRATIVE AND ENVIRONMENT CODES TO REFLECT THESE REQUIREMENTS; AND MAKING ENVIRONMENTAL FINDINGS.

WHEREAS, on July 17, 2014, Supervisor Cohen introduced a proposed Ordinance under Board of Supervisors (hereinafter "Board") File Number 140805, which would amend the Administrative Code to require a construction emissions minimization plan and monitoring within the Air Pollutant Exposure Zone, as mapped by Health Code, Article 38, and amend the Administrative and Environment Codes to reflect these requirements.

WHEREAS, The Planning Commission (hereinafter "Commission") conducted a duly noticed public hearing at a regularly scheduled meeting to consider the proposed Ordinance on September 18, 2014; and,

WHEREAS, the proposed Ordinance has been determined not to be a project under the California Environmental Quality Act Section 15060(c) and 15378; and

WHEREAS, the Planning Commission has heard and considered the testimony presented to it at the public hearing and has further considered written materials and oral testimony presented on behalf of Department staff and other interested parties; and

WHEREAS, all pertinent documents may be found in the files of the Department, as the custodian of records, at 1650 Mission Street, Suite 400, San Francisco; and

WHEREAS, the Planning Commission has reviewed the proposed Ordinance.

MOVED, that the Planning Commission hereby recommends that the Board of Supervisors **approve** the proposed ordinance.

FINDINGS

Having reviewed the materials identified in the preamble above, and having heard all testimony and arguments, this Commission finds, concludes, and determines as follows:

1. Scientific studies have found an association between exposure to particulate matter and significant human health problems. Exposure to outdoor air pollutants may be a contributing factor to the leading causes of death recorded for San Francisco's population.
2. Construction activities, which are variable, can result in temporary diesel exhaust emissions and are a nuisance and public health risk.
3. The proposed Ordinance would provide higher levels of protection from construction exhaust at public project sites within areas of the City burdened from major sources of air pollution, including emissions from vehicles on roadways, permitted stationary, port, and maritime sources.
4. The proposed Ordinance would provide a greater level of certainty to the development review process for public projects, as amending regulation to the City's laws would be preferential to the current practice of conducting modeling and adding mitigations through the development review process.

NOW THEREFORE BE IT RESOLVED that the Commission hereby recommends that the Board ADOPT the proposed Ordinance as described in this Resolution.

I hereby certify that the foregoing Resolution was adopted by the Commission at its meeting on September 18, 2014.

Jonas P. Ionin
Commission Secretary

AYES:

NOES:

ABSENT:

ADOPTED: September 18, 2014

1 [Administrative, Environment Codes - Clean Construction Ordinance Updates]

2

3 **Ordinance amending the Administrative Code to require a Construction Emissions**
4 **Minimization Plan and monitoring for public projects within the Air Pollutant Exposure**
5 **Zone, as mapped pursuant to Health Code, Article 38; amending the Administrative and**
6 **Environment Codes to reflect these requirements; and making environmental findings.**

7 NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
8 **Additions to Codes** are in *single-underline italics Times New Roman font*.
9 **Deletions to Codes** are in ~~*strikethrough italics Times New Roman font*~~.
10 **Board amendment additions** are in double-underlined Arial font.
11 **Board amendment deletions** are in ~~strikethrough Arial font~~.
12 **Asterisks (* * * *)** indicate the omission of unchanged Code
13 subsections or parts of tables.

11

12 Be it ordained by the People of the City and County of San Francisco:

13

14 Section 1. Findings.

15 (a) The Planning Department has determined that the actions contemplated in this
16 ordinance comply with the California Environmental Quality Act (California Public Resources
17 Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of
18 Supervisors in File No. ____ and is incorporated herein by reference.

19

20 Section 2. The Administrative Code is hereby amended by revising Section 6.25, to
21 read as follows:

22 **SEC. 6.25. CLEAN CONSTRUCTION.**

23 **(a) Findings.**

24 **(1) Scientific studies have found an association between exposure to particulate matter and**
25 **significant human health problems, including: aggravated asthma; chronic bronchitis; reduced lung**

1 function; irregular heartbeat; heart attack; and premature death in people with heart or lung disease.
2 Exposure to air pollutants that are carcinogens have significant human health consequences. For
3 example, exposure to diesel exhaust is an established cause of lung cancer.

4 (2) Heart disease and stroke are the first and fourth leading causes of death in the U.S.
5 respectively; air pollution affects heart health and can trigger heart attacks and strokes that cause
6 disability and death; one in three Americans has heart or blood vessel disease and is at higher risk
7 from air pollution. Impacts on the lungs may take several forms. Short-term effects include deficits in
8 lung function that can limit breathing, especially during exercise. Irritants may cause airway
9 constriction or chest tightening that is uncomfortable or limiting to normal activity. These changes in
10 lung function sometimes have underlying lung tissue inflammation which over the long term may lead
11 to chronic lung disease. Exposure to air pollutants is among one of many contributing factors to most
12 of the leading causes of death recorded for San Francisco's population (ischemic heart disease; lung,
13 bronchus and tracheal cancers; cerebrovascular disease; chronic obstructive pulmonary disease;
14 hypertensive heart disease and lower respiratory infection).

15 (3) Persons living in close proximity to air pollution sources, such as freeways or busy
16 roadways, have poorer lung functions and are more susceptible to develop asthma and other
17 respiratory problems, compared with persons living at a greater distance from sources. The California
18 Air Resources Board's 2005 Land Use Guidance document, Air Quality And Land Use Handbook: A
19 Community Health Perspective, reviewed traffic-related air pollution studies and found that particulate
20 matter pollution levels decrease by about 70 percent at 500 feet from freeways and high-traffic
21 roadways, defined as urban roads with 100,000 vehicles/day or rural roads with 50,000 vehicles/day.

22 (4) Proximity to sources of air pollution increases exposure and proximity to sources is
23 established to be more common for the poor and for certain ethnic minorities.

24 (5) Consequently, health vulnerability varies among neighborhoods and populations within
25 San Francisco, as measured by population health records of air pollution-associated hospital

1 discharges and emergency room visits, and non-accident mortality. Health vulnerable populations are
2 likely to have more significant health consequences from air pollutant exposure compared to
3 populations that are less vulnerable.

4 (6) Construction activities can result in temporary diesel exhaust emissions from
5 construction equipment, creating a public health risk.

6 (7) According to the California Air Resources Board, off-road equipment, which includes
7 construction equipment, is the sixth largest source of diesel particulate matter emissions in California.

8 (8) The City and County of San Francisco (“the City”) has an interest in the protection of
9 public health and the reduction of exposure to diesel emissions generated at publicly funded
10 construction sites.

11 (9) The City can reduce the exposure to diesel exhaust emissions from off-road diesel
12 equipment by requiring City contractors undertaking public works projects within the Air Pollutants
13 Exposure Zone, as defined, to utilize off road diesel equipment with lower emissions and to reduce
14 exhaust emissions through a construction emissions minimization plan.

15 (10) Newer technologies, such as verified diesel emission control strategies, combined with
16 newer engines (Tier 2 or later) can reduce particulate matter emissions from construction equipment
17 between 89 and 94 percent compared to older, dirtier equipment.

18 (11) Requiring newer technologies and newer engines in limited areas within San Francisco
19 is feasible given the wide availability of newer technologies and, based on California Air Resources
20 Board inventories, the estimated availability of newer engines across all sizes of fleets, equipment
21 types, and sizes of engines. Furthermore, as the useful life of older engines becomes obsolete, both
22 state and federal regulations will require newer, cleaner equipment, such as the California Air
23 Resources Board adopted In-Use Off-Road Diesel Vehicle Regulation.

1 (12) The City can further reduce the exposure to diesel emissions from off-road diesel
2 equipment by creating and implementing a bidding incentive for City contractors to utilize the cleanest
3 possible off-road diesel equipment on public works projects.

4 (13) The City can reduce the exposure to diesel emissions from off-road diesel vehicle fleets
5 by seeking funding to retro-fit City owned equipment and other off-road diesel equipment operated in
6 the City from existing incentive programs such as the Carl Moyer Air Quality Standards Attainment
7 Program.

8 (14) Under this Section, the City wishes to exercise its power to make economic decisions
9 involving its own funds as a participant in the marketplace and to conduct its own business as a
10 municipal corporation to ensure that purchases and expenditures of public monies are made in a
11 manner consistent with clean construction practices.

12 (15) Nothing in this Section shall be interpreted or applied so as to create any power or duty
13 in conflict with any federal or state law.

14
15 **(ab) Definitions:**

16 “Air Pollutant Exposure Zone,” as defined in Article 38 of the Health Code.

17 “Alternative Fuels” includes natural gas or biodiesel.

18 “Alternative Sources of Power” means utility-based electric power or other power sources
19 other than diesel engines.

20 “ARB” means the California Air Resources Board.

21 ~~(1) “Biodiesel” means a fuel comprised of mono-alkyl esters of long chain fatty acids derived~~
22 ~~from vegetable oils or animal fats, designated B100 or “neat biodiesel”, and meeting the requirements~~
23 ~~of ASTM D 6751. B20 is a mixture of 20% biodiesel and 80% petroleum.~~

24 (2) “City” means the City and County of San Francisco.

1 (3) “Clean Construction” means performing all work required to be performed under
2 a public works contract meeting the requirements in Section 6.25(c)(1) and (2). ~~(1) utilizing only off-~~
3 ~~road equipment and off-road engines fueled by biodiesel fuel grade B20 or higher and (2) utilizing only~~
4 ~~high use equipment that either (a) meets or exceed Tier 2 standards for off-road engines or (b) operates~~
5 ~~with the most effective verified diesel emission control strategy.~~

6 “Construction Activities” means performing all work involved in or required for Construction.

7 “Construction” means building, demolition, excavation, grading, or foundation work, whether
8 or not it requires a City permit, but does not include a site permit.

9 “Construction Phase” means a particular construction activity over a certain period of time.
10 Construction phases may include, but are not limited to, demolition, site preparation, grading, building
11 construction, architectural coatings, and paving. Construction phases may occur at the same time.

12 “Contractor” means, as defined in Section 6.1(G) of this Code, a party who contracts directly
13 with the City and County of San Francisco to perform construction services relevant to a public work
14 or improvement.

15 “Director” means the Director or Department Head of a City Department with jurisdiction
16 over the construction activities, or his or her designee.

17 ~~(4) “Director” means the Director of the Department of the Environment, or his or her~~
18 ~~designee.~~

19 “Equipment” means off-road and on-road equipment.

20 “Equipment Type” means a description of the off-road equipment. This off-road equipment
21 includes bore/drill rigs, cranes, crawler tractors, excavators, graders, off-highway tractors, off-
22 highway trucks, other construction equipment, pavers, paving equipment, rollers, rough terrain
23 forklifts, rubber tired dozers, rubber tired loaders, scrapers, skid steer loaders, surfacing equipment,
24 tractors/loaders/backhoes, and trenchers.

1 ~~(5) “High Use Vehicles” means off-road vehicles or off-road engines used an aggregate of 20~~
2 ~~or more hours during any portion of the project.~~

3 (6) “Major construction project” means a public work to be performed within the
4 geographic limits of the City that utilizes off-road equipment and that is estimated to require
5 twenty (20) or more cumulative non-consecutive days of work to complete.

6 ~~(7) “Most effective verified diesel emission control strategy” means a device, system~~
7 ~~or strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code~~
8 ~~of Regulations to achieve the highest level of pollution control from an off-road vehicle.~~

9 (8) “Off-road engine” means a non-road engine as defined in Title 40 of the Code of
10 Federal Regulations, Section 89.2 ~~a diesel internal combustion engine (including the fuel system)~~
11 ~~including without limitation, internal combustion engines used to power excavators, backhoes,~~
12 ~~bulldozers or similar equipment used in any project subject to this Chapter. “Off road engine” does~~
13 ~~not include portable engines or stationary engines (engines that remain at one location for more than~~
14 ~~12 months).~~

15 (9) “Off-road equipment vehicle” means equipment with off-road engines greater than
16 twenty-five (25) horsepower and operating for more than twenty (20) total hours over the entire
17 duration of construction activities. ~~a vehicle that is propelled by an off-road engine of twenty-five~~
18 ~~horsepower or greater, including, without limitation, excavators, backhoes, bulldozers and similar~~
19 ~~equipment used in any project subject to this Chapter. “Off road vehicle” does not include a~~
20 ~~horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road engine~~
21 ~~of sixty-five horsepower or less and that is not used in any construction program or project. “Off road~~
22 ~~vehicle” does not include portable equipment.~~

23 “On-Road Equipment” means heavy-duty vehicles as defined in Title 40 of the Code of Federal
24 Regulations, Section 86.1803-01.

1 “Portable Diesel Engines” means portable as defined in 71 California Code of Regulations,
2 Section 93116.2.

3 “Posted at the Perimeter of the Construction Site” means one sign on each portion of the
4 construction site facing a public right-of-way.

5 ~~(10)~~ “Public work” means a contract for the erection, construction, renovation,
6 alteration, improvement, demolition, excavation, installation, or repair of any public building,
7 structure, infrastructure, bridge, road, street, park, dam, tunnel, utility or similar public facility
8 that is performed by or for the City, and the cost of which is to be paid wholly or partially out of
9 moneys deposited in the City Treasury or out of trust monies under the control of or collected
10 by the City.

11 ~~(11)~~ “Sensitive Use Site” means as defined in Article 38 of the Health Code.
12 ~~a hospital or other medical institution with facilities for inpatient care, a residential care~~
13 ~~facility providing lodging board and care for a period of 24 hours or more to seven or more persons, a~~
14 ~~child care facility providing less than 24 hour care for 13 or more children, or an elementary or~~
15 ~~secondary school, either public or private, or residences.~~

16 ~~(12)~~ “Tier 2 Off-Road Emission Standards” are those means the Tier 2 new engine emission
17 standards for an off road engine as described in Division 3 Chapter 9, Article 4, Section
18 2423(b)(1)(A) of in Title 13 of the California Code of Regulations, Section 2423(b)(1)(A) and/or
19 Title 40, Code of Federal Regulations, Part 89.112(a), as amended.

20 “VDECS” means a verified diesel emission control strategy, designed primarily for the
21 reduction of diesel particulate matter emissions, which has been verified by ARB pursuant to
22 “Verification Procedures, Warranty and In-Use Strategies to Control Emissions from Diesel Engines,”
23 Title 13, California Code of Regulations, sections 2700-2710. VDECS can be verified to achieve Level
24 1 diesel particulate matter reductions (at least 25 percent), Level 2 diesel particulate matter reductions
25 (at least 50 percent), or Level 3 diesel particulate matter reductions (at least 85 percent).

1 “USEPA” means the United States Environmental Protection Agency.

2 **(bc) Clean Construction on Major Construction Projects.**

3 (1) Requirement. Clean Construction shall be required for all public works contracts
4 for major construction projects ~~solicited on or after a date two years from the effective date of this~~
5 ~~Ordinance~~. For all such contracts, the department head or officer calling for bids shall specify
6 in the Advertisement for Bids that Clean Construction is required for the performance of all
7 work unless a waiver of all or part of the requirements of this Chapter has been granted under
8 Section 6.25(bc)(3).

9 (A) For public works projects located outside Air Pollutant Exposure Zone, the
10 Contractor or City Department carrying out the Construction Activities shall utilize only off-road
11 equipment and off-road engines fueled by biodiesel fuel grade B20 or higher and utilize only off-road
12 equipment that either:

13 (i) meet or exceed Tier 2 standards for off-road engines; or

14 (ii) operate with the most effective VDECS.

15 (B) For public works projects located within the Air Pollutant Exposure Zone that
16 require a City permit, prior to issuance of a such permit the Contractor or City Department carrying
17 out Construction Activities shall submit a Construction Emissions Minimization Plan to the Director
18 for review and approval. If the project does not require a City permit, the Contractor or City
19 Department carrying out Construction Activities shall submit the Construction Emissions Minimization
20 Plan to the Director prior to commencing work. The Construction Emissions Minimization Plan shall
21 detail project compliance with the following requirements:

22 (i) All off-road equipment shall meet the following requirements:

23 a. Where access to alternative sources of power is available,
24 portable diesel engines shall be prohibited;

25 b. All off-road equipment shall have:

1 1. Engines that meet or exceed either USEPA or ARB Tier 2
2 off-road emission standards, and

3 2. Engines that are retrofitted with an ARB Level 3 VDECS.
4 Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards
5 automatically meet this requirement, therefore a VDECS would not be required.

6 c. Exceptions:

7 1. Exceptions to the alternative source of power requirement
8 may be granted by the Director if the Contractor or City Department carrying out the Construction
9 Activities has submitted information providing evidence to the satisfaction of the Director that an
10 alternative source of power is limited or infeasible at the project site. Under this circumstance, the
11 Contractor or City Department shall submit documentation of compliance with Section
12 6.25(c)(1)(B)(i)b. for onsite power generation.

13 2. Exceptions to the equipment requirements may be granted
14 by the Director if the Contractor or City Department has submitted information providing evidence to
15 the satisfaction to the Director that a particular piece of off-road equipment with an ARB Level 3
16 VDECS is: technically not feasible, would not produce desired emissions reduction due to expected
17 operating modes, installing the VDECS would create a safety hazard or impaired visibility for the
18 operator, or there is a compelling emergency need to use off-road equipment that are not retrofitted
19 with an ARB Level 3 VDECS and the Contractor or City Department Contractor or City Department
20 has submitted documentation to the Director that the requirements of this exception provision apply.

21 3. If an exception from the type of equipment requirement as
22 allowed above, is granted the Contractor or City Department shall provide the next cleanest piece of
23 off-road equipment as provided in the schedule in Table 6.25.1 below.

Table 6.25.1
Off-Road Equipment Compliance Step down schedule*

<u>Compliance Alternative</u>	<u>Engine Emission Standard</u>	<u>Emissions Control</u>
<u>1</u>	<u>Tier 2</u>	<u>ARB Level 2 VDECS</u>
<u>2</u>	<u>Tier 2</u>	<u>ARB Level 1 VDECS</u>
<u>3</u>	<u>Tier 2</u>	<u>Alternative Fuel**</u>

**How to use the table. If the equipment requirements cannot be met as determined by the Director, then the Contractor or the Department would need to meet Compliance Alternative 1. Should the Contractor or City Department not be able to supply off-road equipment meeting Compliance Alternative 1, then Compliance Alternative 2 would need to be met. Should the Contractor or City Department not be able to supply off-road equipment meeting Compliance Alternative 2, then Compliance Alternative 3 would need to be met.*

***Alternative fuels are not a VDECS*

(ii) Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes at any location, except as allowed for in applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). Legible and visible signs shall be posted in multiple languages (e.g., English, Spanish, Chinese) in designated queuing areas and at the construction site to remind operators of the two minute idling limit.

(iii) Contractors or City Departments carrying out Construction Activities shall train construction workers and operators on the maintenance and tuning of construction

1 equipment, and require that such workers and operators properly maintain and tune equipment in
2 accordance with manufacturer specifications.

3 (iv) The Construction Emissions Minimization Plan shall include estimates of
4 the construction timeline by phase, with a description of each piece of off-road equipment required for
5 every construction phase. Off-road equipment descriptions and information may include, but is not
6 limited to: equipment type, equipment manufacturer, equipment identification number, engine model
7 year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and
8 hours of operation. For the VDECS installed: technology type, serial number, make, model,
9 manufacturer, ARB verification number level, and installation date and hour meter reading on
10 installation date. For off-road equipment using alternative fuels, reporting shall indicate the type of
11 alternative fuel being used.

12 (v) The Construction Emissions Minimization Plan shall be available to the
13 public for review on-site during working hours. A legible and visible sign shall be posted at the
14 perimeter of the construction site indicating to the public the equipment requirements of the
15 Construction Emissions Minimization Plan; the fact that the public may request it at any time within
16 working hours; and how to request inspection of the Construction Emissions Minimization Plan.

17 (vi) The Construction Emissions Minimization Plan shall include a statement
18 that the Contractor or City Department carrying out Construction Activities certifies compliance with
19 the Plan, and that the contract specifications reflect all applicable requirements of the Construction
20 Emissions Minimization Plan.

21 (vii) Monitoring. After commencement of construction activities, the
22 Contractor or City Department carrying out Construction Activities shall maintain quarterly reports at
23 the construction site indicating compliance with all the requirements of the Construction Emissions
24 Minimization Plan. After completion of Construction Activities and prior to receiving a final certificate
25 of acceptance, or within six month of cessation of of Construction Activities if a certificate of

1 acceptance is not required, the Contractor or City Department carrying out Construction Activities
2 shall submit to the Director a final report summarizing construction activities, including the start and
3 end dates and duration of each construction phase and the actual detailed information required in the
4 Construction Emissions Minimization Plan.

5 (2) Contract Provisions and liquidated damages. Every contract for which Clean
6 Construction is required under Section 6.25(~~b~~c)(1)(A) or Section 6.25(~~b~~)(1)(B) shall contain
7 provisions, in a form to be approved by the City Attorney: (A) requiring Clean Construction, (B)
8 authorizing waivers as set forth in Section 6.25(~~c~~b)(3), and (C) specifying liquidated damages
9 in the amount of \$100.00 per day per each piece of off-road equipment and each off-road
10 engine utilized to complete work on the project in violation of the Clean Construction
11 requirements.

12 (3) Waivers. Waivers from the requirements of this Chapter are available under the
13 following circumstances:

14 (A) Emergency. A contract awarding department may grant itself a waiver from
15 this Chapter when the contract awarding authority certifies in writing to the Director, prior to
16 the Controller's contract certification, that the contract is being awarded under the emergency
17 provisions of Administrative Code Section 6.60 and that there is no immediately available
18 contractor capable of performing the work as Clean Construction. In such case, the contract
19 awarding authority shall within two business days notify the Director in writing of the
20 emergency that prevented compliance with this Chapter and describe steps being taken to
21 safeguard public and City employee health during the noncomplying work, and shall explain
22 steps to reduce the likelihood that a similar emergency waiver would be required in the future.

23 (B) Performance Standards. The Director may grant a waiver in whole or part
24 from this Chapter prior to the solicitation of bids upon a showing by the contract awarding
25 authority that there are no complying off-road vehicles or off-road engines for some or all of

1 the required work, provided that the contract awarding authority provides a written
2 memorandum explaining the need for the waiver and the steps that will be taken to safeguard
3 public and City employee health during the noncomplying work.

4 (C) Cost Prohibitive. The Director may grant a waiver in whole or part from this
5 Chapter prior to the solicitation of bids upon a showing by the contract awarding authority that
6 compliance would be cost prohibitive under the circumstances, provided that the contract
7 awarding authority provides a written memorandum explaining the need for the waiver and the
8 steps that will be taken to safeguard public and City employee health during the noncomplying
9 work.

10 (D) Other. The Director may grant a waiver in whole or part from this Chapter
11 prior to the solicitation of bids or may waive the biodiesel and/or emissions standards for
12 Clean Construction in advance of any violation of the Clean Construction requirements as to
13 specific off-road equipment or off-road engines essential to complete the work provided that
14 the contract awarding authority provides a written memorandum demonstrating a reasonable
15 basis for the waiver including a reasonable plan to minimize the use of noncomplying
16 equipment or engines, and the steps that will be taken to safeguard public and City employee
17 health during the noncomplying work, and further provided that such post-award waivers for
18 specific equipment may not exceed 25% of the total operating hours of all off-road vehicles or
19 off-road engines used on the project.

20 (E) Rules and Regulations. After a public hearing, the Director, in consultation
21 with the contract awarding authorities, may promulgate rules, regulations or guidelines as
22 necessary or appropriate to carry out the purposes and requirements of this Chapter and may
23 adopt forms necessary to implement this Chapter.

1 (F) Publication of Waivers Granted. The Department of the Environment and the
2 contract awarding authorities shall maintain and post a list of all waivers granted on their
3 Departmental Websites in a manner that can easily be accessed by the public.

4 (G) If no Sensitive Uses are determined to be within 1,000 feet of the construction
5 site and/or the project requires a limited amount of Off-Road Equipment for a limited duration, such
6 as projects exempt from the requirements of Department of Building Inspection's Green Building Code,
7 then the Director may issue a waiver to the Contractor or City Department carrying out Construction
8 Activities that specifies that the project is not required to comply with the Clean Construction
9 requirements of this Section. If the project is changed during the course of construction and results in
10 the use of Off-Road Equipment for an extended duration (i.e., twenty (20) or more days in total), then
11 the Contractor or City Department will be required to immediately comply with this Section.

12 (4) Clean Construction Projects encouraged for other City Contracts. In recognition of
13 the health and other environmental benefits of Clean Construction, contract-awarding
14 authorities are encouraged to require contractors to meet the standards for Clean
15 Construction, as appropriate, in contracts not otherwise covered by this Chapter.

16 (5) Penalty.

17 (A) Whenever any City department finds, after an investigation by the contract
18 awarding authority and the City Attorney, that a person or entity being considered for a
19 contract, or under contract, with the City has, in connection with the bidding, execution or
20 performance of any City contract, falsely represented to the City the nature or character of the
21 off-road vehicles and/or off-road engines to be utilized, or utilized, on the contract, the City
22 department shall have the authority to impose such sanctions or take such other actions as
23 are designed to ensure compliance with the provisions of this Chapter.

1 (B) Measures which are available to the City to enforce this Chapter upon
2 finding a violation pursuant to Section 6.25(~~c~~)(~~b~~)(5)(A) include, but are not limited to the
3 following:

4 (i) Refusal to certify the award of a contract;

5 (ii) Suspension of a contract;

6 (iii) Ordering the withholding of City funds due the contractor under any City
7 contract;

8 (iv) Ordering the recession of a contract based upon a material breach of
9 contract provisions or pertaining to representations made in bidding, execution or
10 performance of the contract;

11 (v) Debarment of a bidder, proposer or contractor from eligibility for providing
12 commodities or services to the City for a period not to exceed five years, with a right to review
13 and reconsideration by the City upon a showing of corrective action indicating violations are
14 not likely to reoccur.

15 (C) Nothing in this Chapter shall be construed to relieve a contractor of
16 responsibility to perform the contract.

17
18 Section 3. The Administrative Code is hereby amended by revising Section 6.67 to
19 read as follows:

20 **SEC. 6.67. COMPARISON OF BIDS ON THE BASIS OF CLEAN CONSTRUCTION.**

21 To minimize the adverse impact to the surrounding environment, Department heads
22 authorized to execute contracts for public works are authorized to compare bids on the basis
23 that the work will be performed utilizing off-road equipment and off-road engines that meet or
24 exceed the standards for Clean Construction set forth in Section 6.25 (“Clean Construction
25 Comparative Bidding”). Department heads are particularly encouraged to utilize Clean

1 Construction Comparative Bidding wherever the construction site project is located within 500
2 feet of a Sensitive Use Site or located within an Air Pollutant Exposure Zone, as those terms are
3 defined in Article 38 of the Health Code, and the construction activity will occur for more than 20
4 days. The Department head or officer calling for bids shall specify in the Advertisement for
5 Bids the monetary value that the Department will attribute to Clean Construction and shall
6 evaluate responsive bids accordingly. Any contract awarded in consideration, in whole or in
7 part, on the basis of Clean Construction ~~Comparative Bidding~~ shall include provisions (1)
8 requiring the contractor to certify that all work has been undertaken in compliance with the
9 requirements for Clean Construction set forth in Section 6.25, (2) providing procedures to
10 request a waiver of the ~~biodiesel fuel and/or emissions~~ standards as to specific, necessary
11 equipment ~~as set forth in Section 6.2(b)(3)(D),~~ and (3) providing for liquidated damages in the
12 amount of \$100.00 per day per vehicle operated at the project site in violation of Clean
13 Construction standards. Except as provided herein, contracts awarded on the basis of Clean
14 Construction ~~Comparative Bidding~~ shall be subject to all provisions of Chapter 6 of the
15 Administrative Code.

16
17 Section 4. The Environment Code is hereby amended by revising Section 426 to read
18 as follows:

19 **SEC. 426. CLEAN CONSTRUCTION ASSISTANCE AND REPORTING.**

20 (a) Definitions:

21 (1) —“Most effective VDECS, verified diesel emission control strategy” means a device,
22 ~~system or strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code~~
23 ~~of Regulations to achieve the highest level of pollution control from an off-road vehicle. as defined in~~
24 Administrative Code Section 6.25(b).

1 (2) —“Off-road engine₂” ~~means a diesel internal combustion engine (including the fuel~~
2 ~~system) including without limitation, internal combustion engines used to power excavators, backhoes,~~
3 ~~bulldozers or similar equipment used in any City construction projects. “Off road engine” does not~~
4 ~~include portable engines or stationary engines (engines that remain at one location for more than 12~~
5 ~~months).~~ as defined in Administrative Code Section 6.25(b).

6 (3) —“Off-road equipment vehicle₂” ~~means a vehicle that is propelled by an off-road engine of~~
7 ~~twenty-five (25) horsepower or greater, including, without limitation, excavators, backhoes, bulldozers~~
8 ~~and similar equipment used in any project subject to this Chapter. “Off road vehicle” does not include~~
9 ~~a horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road~~
10 ~~engine of sixty-five (65) horsepower or less and that is not used in any construction program or project.~~
11 ~~“Off-road vehicle” does not include portable equipment.~~ as defined in Administrative Code Section
12 6.25(b).

13 (4) —“Tier 2 Off-Road Emission Standards₂” ~~are those standards for an off-road engine as~~
14 ~~described in Division 3, Chapter 9, Article 4, Section 2423(b)(1)(A) of Title 13 of the California Code~~
15 ~~of Regulations, as amended.~~ as defined in Administrative Code Section 6.25(b).

16 (b) Technical Assistance to Local Businesses. The Department of the Environment
17 shall provide technical assistance to businesses certified as Local Businesses Enterprises
18 (LBEs) by the Human Rights Commission and other local businesses in securing available
19 local, State and Federal public incentive funding to retro-fit, repower or replace off-road
20 equipment vehicles or off-road engines operated by such businesses within the City.

21 (c) Annual Reporting Requirement. The Department of the Environment annually shall
22 prepare and distribute to City departments with off-road equipment vehicles or off-road engines
23 summary information, including application procedures and deadlines, about available local,
24 State and Federal public incentive programs to retrofit, re-power, or replace older, more
25 polluting diesel off-road equipment. The Department of the Environment, in consultation with the

1 Office of the City Administrator, shall include in the Annual Report to the Mayor and the Board
2 of Supervisors, required in Section 414-412, the following:

3 (1) information supplied to the Department of the Environment by City Departments
4 about the extent to which each City Department's off-road equipment ~~vehicle~~ and off-road
5 engine fleet meets or exceeds either Tier 2 off-road emission standards for off-road engines or
6 utilizes the most effective VDECS ~~verified diesel emission control strategy~~,

7 (2) a summary of the results of grant applications made and awarded for the prior
8 year to retro-fit, repower or replace off-road equipment ~~vehicles~~ and engines in the City's fleet,
9 including fleet upgrades funded and completed,

10 (3) a summary of technical assistance provided to LBEs and other local businesses,
11 and results, if known, and

12 (4) recommendations to the Board of Supervisors, Mayor, and City Departments for
13 procedural, policy, or legislative changes to reduce air pollution emanating from off-road
14 equipment ~~vehicles~~ and off-road engines.

15
16 Section 5. Effective Date. This ordinance shall become effective 30 days after
17 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the
18 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board
19 of Supervisors overrides the Mayor's veto of the ordinance.

20
21 Section 6. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors
22 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,
23 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the
24 Administrative and Environment Codes that are explicitly shown in this ordinance as additions,
25

1 deletions, Board amendment additions, and Board amendment deletions in accordance with
2 the “Note” that appears under the official title of the ordinance.

3

4 APPROVED AS TO FORM:
5 DENNIS J. HERRERA, City Attorney

6 By: _____
7 ANDREA RUIZ-ESQUIDE
8 Deputy City Attorney

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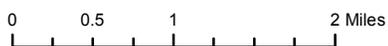
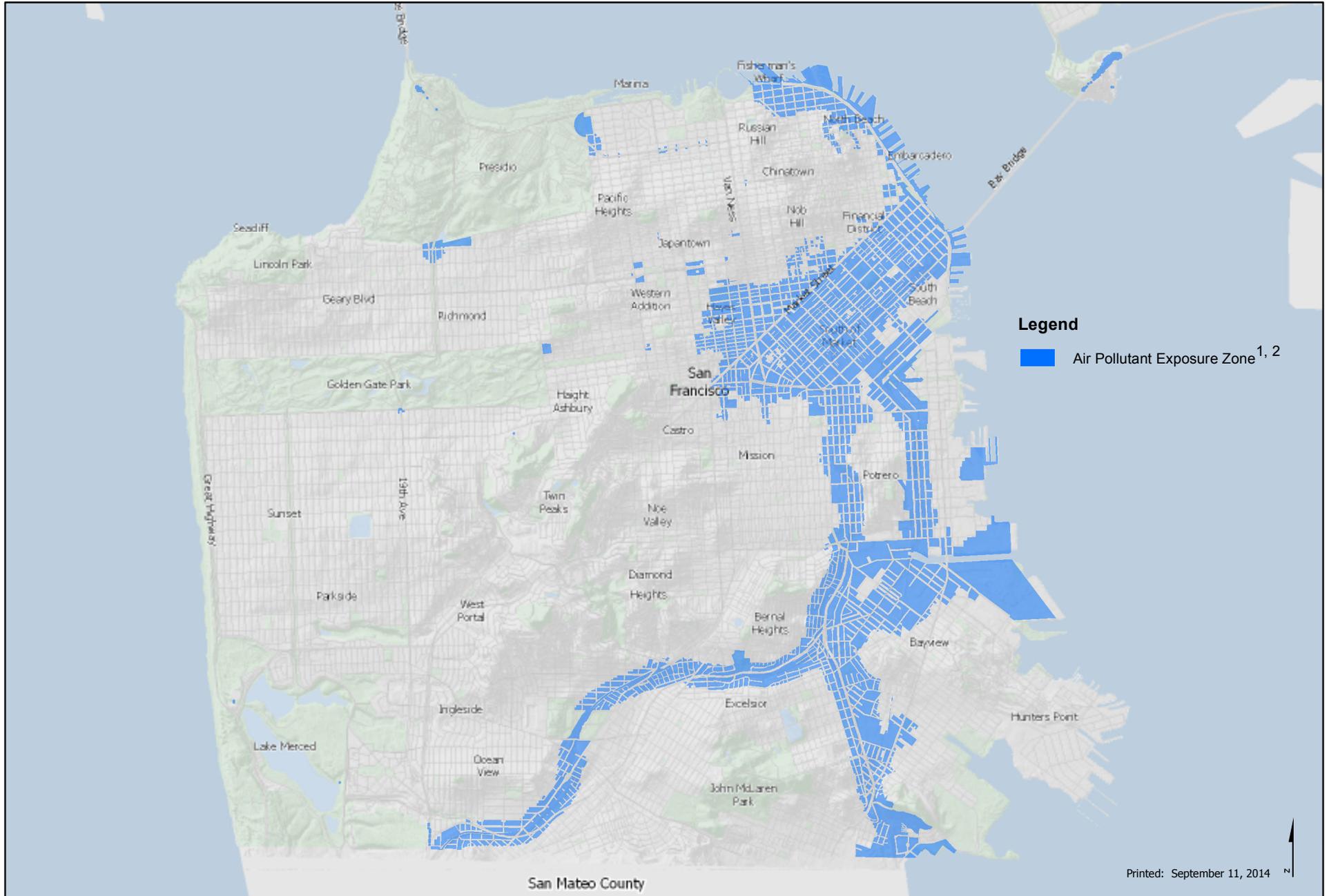
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Air Pollutant Exposure Zone

Exhibit E



1. Map identifies city lots exceeding health-based criteria as proposed in amendments to Health Code, Article 38. Map is based on citywide modeling of air pollution and exposure from mobile, stationary, and area sources.

2. Map does not identify all city lots that overlap with the criteria identified in Air Pollutant Exposure Zone because certain lots are substantially large (e.g., Golden Gate Park, Lake Merced, Presidio, Balboa Park, City College of San Francisco, Yerba Buena Island) and identifying the entire lot, although only one or a few receptor points within the large parcel exceed the criteria, could be misleading. In these instances, only the receptor point(s) is shown.