

1 [Requiring Lighting Efficiency Measures in Commercial and City Buildings.]

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3 **Ordinance amending the San Francisco Building Code by adding a new Chapter 13D to**
4 **require commercial buildings to increase efficiency of fluorescent lighting by 2011;**
5 **amending Section 705 of the Environment Code to require City–owned facilities to**
6 **increase efficiency of fluorescent lighting; adopting findings required by California**
7 **Health and Safety Code Section 17958.7 and environmental findings; and directing the**
8 **Clerk of the Board of Supervisors to forward this ordinance to the California Building**
9 **Standards Commission upon final passage.**

10 Note: Additions are *single-underline italics Times New Roman*;
11 deletions are *strikethrough italics Times New Roman*.
12 Board amendment additions are double underlined.
13 Board amendment deletions are ~~strikethrough normal~~.

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

15 Section 1. To the extent the requirements of this Ordinance are deemed to constitute
16 changes or modifications to the requirements of the California Building Standards Code and
17 other regulations pursuant to California Health and Safety Code Section 17958.7, the Board of
18 Supervisors expressly declares that the following amendments to the Building Code are
19 reasonably necessary because of local climatic, topological, and geological conditions as
20 listed below.

21 1. San Francisco is the oldest urban areas in California and has a large proportion
22 of older commercial buildings that were constructed and remodeled under building and
23 electrical codes that did not emphasize energy efficiency.

24 2. These older commercial buildings are typically small and do not have on-site
25 professional maintenance staff to routinely retrofit inefficient lighting or to advise building
owners of the value of improving buildings' energy efficiency.

1 3. Many San Francisco buildings have mixed commercial and residential uses.
2 Since residential uses offer fewer lighting efficiency opportunities, owners of mixed use
3 buildings are particularly unlikely to retrofit the building's lighting.

4 4. Commercial uses also consume more electricity for lighting than residential
5 spaces of similar size because commercial uses typically illuminate workspaces, public areas
6 and outside sales areas continuously for 10 to 24 hours per day.

7 5. Lighting in San Francisco's commercial buildings typically accounts for
8 approximately 40% of the buildings' total electricity consumption.

9 6. Lighting is a disproportionate portion of San Francisco's electricity consumption
10 because San Francisco's frequent foggy weather pattern means that many small San
11 Francisco commercial buildings have no air conditioning load.

12 7. San Francisco has a high proportion of commercial, hospitality and
13 entertainment enterprises that operate in the evening hours, contributing to a winter evening
14 peak load that is often greater than the summer afternoon load.

15 8. San Francisco is located at the tip of a peninsula and has a constrained
16 transmission area served by the electricity grid at a single point, the Martin Substation. It
17 therefore is uniquely vulnerable to accident or malfunction, especially during winter evening
18 peak periods, such as the December, 1999 blackout.

19 9. Reliable electricity is critical to local residents, organizations, and the San
20 Francisco economy.

21 10. As a coastal city, San Francisco is vulnerable to sea level rise and is already
22 experiencing the repercussions of excessive CO₂ emissions.

23 11. The Department of the Environment anticipates that it will be able to provide
24 incentive funding to businesses and owners of commercial buildings to retrofit 4' and 8'
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1 fluorescent lighting through utility rate payer funded programs authorized by the California
2 Public Utilities Commission (CPUC).

3 12. Since 2001, at least 5,000 San Francisco businesses located in small
4 commercial buildings have retrofitted their 4' and 8' fluorescent lighting with the assistance of
5 publicly funded incentive programs.

6 13. It is reasonably necessary to require commercial building owners to take steps
7 to reduce the electricity consumed by inefficient building operations in order to reduce the
8 City's demands on the power grid, and the resulting pollution and global warming effects of
9 energy consumption.

10 14. The Department of Environment estimates that upgrades to inefficient
11 fluorescent lighting required by this Ordinance will reduce citywide electricity use by at least
12 44 million kilowatt hours and CO₂ emissions by at least 0.7%.

13 15. Under the Energy Policy Act of 1992, 42 U.S.C. 6201 *et seq*, it will be unlawful
14 to manufacture, sell or incorporate certain inefficient ballasts in fluorescent lighting beginning
15 in 2012.

16 16. The low mercury fluorescent lamps required under this Ordinance are
17 commercially available at competitive prices.

18 Section 2. The San Francisco Building Code is hereby amended by adding Chapter
19 13D to read as follows:

20 **SEC. 1301D. TITLE.** *This Chapter shall be known as the "Commercial Lighting Efficiency*
21 *Ordinance."*

22 **SEC. 1302D. PURPOSE.** *The purpose of this Chapter is to reduce public demand for*
23 *electricity and the associated detriment to the environment of energy production and delivery by*
24 *requiring commercial buildings to install or adopt more energy efficient lighting measures.*

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1 **SEC. 1303D. SCOPE.** *The provisions of this Chapter shall apply to all privately owned non-*
2 *residential buildings, including school facilities, the non-residential portions of mixed-use commercial*
3 *and residential buildings, tourist hotels, and the common areas of residential hotels and multiple -unit*
4 *residential buildings, all as herein defined.*

5 **EXCEPTIONS:**

6 *The provisions of this Chapter do not apply to:*

7 *1. Residential buildings and residential hotels, except that it shall apply to their common areas.*

8 *2. The residential portions of mixed-use commercial and residential buildings, except that it*
9 *shall apply to their common areas.*

10 **SEC. 1304D. DEFINITIONS.** *For the purpose of this Chapter, certain terms are defined as*
11 *follows:*

12 **Commercial Building** *is any privately owned building that is occupancy group A, B, E, F, H, I,*
13 *L, M or S as defined in this Code and any tourist hotels, as herein defined. When a building is*
14 *designated for more than one type of occupancy, “Commercial Building” shall mean those spaces*
15 *within the mixed use building designated as A, B, E, F, H,I, L, M or S or tourist hotel, as herein*
16 *defined. Except for tourist hotels as herein defined, “Commercial Building” shall include only the*
17 *common areas of any R (“residential”) occupancy buildings or the common areas of any R*
18 *(“residential”) occupancy portions of mixed use buildings.*

19 **Common Area** *is any area, space or room of a building that is made available to the general*
20 *public as either a client or guest.*

21 **Director** *is the Director of the Department of Building Inspection, or his or her designee.*

22 **Exit Signs** *are signs located and illuminated as required by the Building Code.*

23 **Linear Fluorescent Lamp** *is a “tube” or “bulb” formed in a straight shape, as distinguished*
24 *from a circular or u-shape, but not including linear specialty lamps such as black lights.*

1 **Luminaire** is an interior or exterior complete lighting unit, including internally or externally
2 illuminated signs, consisting of the lamp and the parts designed to distribute the light, to protect the
3 lamp, and to connect the lamp to the power supply, but not including illuminated utilization equipment
4 or exit signs as defined herein.

5 **Occupancy Sensor Control Device** is a device that automatically turns off a luminaire or series
6 of luminaires no more than 30 minutes after it senses that the area is vacated.

7 **Tourist Hotel** is any residential building, or portion thereof, which is occupied as a hotel, motel
8 or inn and which has a certificate of use for tourist occupancy, or any portion of a residential building
9 which is converted to tourist hotel use pursuant to the Residential Hotel Conversion Ordinance (S.F.
10 Administrative Code, Article 41) or other City law.

11 **Utilization Equipment** is commercial, retail or industrial equipment, including but not limited
12 to refrigeration equipment, fully enclosed retail display cases, vending machines, printing equipment or
13 conveyors, which uses 4-foot or 8-foot linear fluorescent lamps as an integrated part of such
14 equipment. "Utilization Equipment" shall not include furniture or workstations.

15 **SEC. 1305D. COMPLIANCE REQUIREMENTS.**

16 **1305D.1. Compliance Deadline.** No later than December 31, 2011 ("Compliance Deadline"),
17 the owner of each building subject to this Chapter shall cause an inspection to be made of the entire
18 building by a knowledgeable professional and, if the entire building does not meet the standards
19 specified in this Chapter 13D, shall make such repairs as may be required to conform to this Chapter.

20 **1305D.2. Stay of Compliance Deadline.** The Compliance Deadline stated in Section 1305D.1
21 shall be stayed for up to two years from the date of an application for a demolition permit for any
22 building subject to this Chapter. If the building is demolished and a Certificate of Completion issued
23 by the Department before the end of the two-year postponement, the requirements of this Chapter shall
24 not apply. If the building is not demolished after the expiration of two years, the provisions of this
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1 Chapter shall apply even though the demolition permit is still in effect or a new demolition permit has
2 been issued.

3 **SEC. 1306D. LIGHTING EFFICIENCY MEASURES.**

4 **1306D.1. Mercury Content.** The mercury content of each 4-foot linear fluorescent lamp
5 installed after the Compliance Deadline in a luminaire in a building subject to this Chapter shall not
6 exceed 5 mg. The mercury content of each 8-foot linear fluorescent lamp installed after the
7 Compliance Deadline in a luminaire in a building subject to this Chapter shall not exceed 10 mg.

8 **1306D.2. Energy Efficiency.** The lamp and ballast system in each luminaire that utilizes one or
9 more 4-foot or 8-foot linear fluorescent lamps to provide illumination in a building subject to this
10 Chapter must meet at least one of the following requirements:

- 11 1. The lamp and ballast system emits 81 or more lumens per watt of electricity consumed.
- 12 2. The luminaire is controlled by an occupancy sensor control device that does not control
13 an area in the building of more than 250 square feet.
- 14 3. The luminaire is fitted with a lighting efficiency measure approved by the Director as
15 equivalent to the measures in subsection (1) or (2).
- 16 4. The Director finds, based on the facts of the particular building and luminaire, that the
17 energy savings from installing lighting efficiency measures meeting the requirements of this Section
18 will be so insignificant over the life of the luminaire that the measure is not cost efficient.
- 19 5. If the owner of a Commercial Building elects to meet the requirements of this Section
20 1306D.2 with measures that require permits, such permits shall comply with all other applicable
21 requirements of this Code and all other applicable state and local laws.

1 **SEC. 1307D. ENFORCEMENT.**

2 *Any building maintained in violation of this Chapter shall constitute a public nuisance under*
3 *the terms of Section 102A of this Code and such nuisance may be abated pursuant to the procedures set*
4 *forth in Section 102A of this Code for unsafe buildings.*

5 **SEC. 1308D. RULES.**

6 *The Director, after consulting with the Department of the Environment, and in accordance with*
7 *Section 104A.2.1 of this Code, shall adopt, and may amend, reasonable rules, guidelines and forms for*
8 *implementing the provisions and intent of this Chapter.*

9 **SEC. 1309D. UNDERTAKING FOR THE GENERAL WELFARE.**

10 *In undertaking the enforcement of this Chapter, the City and County of San Francisco is*
11 *assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on*
12 *its officers and employees, an obligation for breach of which it is liable in money damages to any*
13 *person who claims that such breach proximately caused injury.*

14 **SEC. 1310D. PREEMPTION.**

15 *Nothing in this Chapter shall be interpreted or applied so as to create any power or duty in*
16 *conflict with any federal or state law or regulation.*

17 **SEC. 1311D. SEVERABILITY.**

18 *If any provision or clause of this Chapter or the application thereof to any person or*
19 *circumstance is held to be unconstitutional or to be otherwise invalid by any court of competent*
20 *jurisdiction, such invalidity shall not affect other provisions, and clauses of this Chapter are declared*
21 *to be severable.*

22 Section 3. The San Francisco Environment Code is hereby amended by amending
23 Section 705 to read as follows:

1 **SEC. 705. RESOURCE EFFICIENCY REQUIREMENTS FOR CITY BUILDINGS.**

2 (a) Within 90 days of the effective date of this Chapter, the Commission shall issue
3 guidelines to all City departments to assist them in determining which of the following
4 provisions in this Chapter apply to them. Pursuant to Section 703(b), the Director may revise
5 these guidelines from time to time.

6 (b) Water Conservation Requirements for Toilets.

7 (1) This requirement applies to the following City departments: City departments
8 undertaking or authorizing others to undertake Construction Projects with a total projected
9 cost of \$90,000 or more at City-owned Facilities; City departments undertaking or authorizing
10 others to undertake Construction Projects with a total projected cost of \$90,000 or more in
11 Existing City Leaseholds (but only if restrooms are included in the leasehold space and the
12 City department has a separate metering account with the San Francisco Public Utilities
13 Commission); City departments undertaking or authorizing others to undertake Construction
14 Projects with a total projected cost of \$90,000 or more in New City Leaseholds (but only if
15 restrooms are included in the leasehold space and the City department has a separate
16 metering account with the San Francisco Public Utilities Commission Water Department); City
17 departments executing agreements for New City Leaseholds or occupying New City
18 Leaseholds (but only if restrooms are included in the leasehold space and the City department
19 has a separate metering account with the San Francisco Public Utilities Commission); City
20 departments occupying City-owned Facilities (but only if the City department has separate
21 metering account with the San Francisco Public Utilities Commission); and all City
22 departments purchasing toilets beginning 90 days after the effective date of this ordinance.

1 (2) All City departments listed above shall ensure that all toilets are replaced with
2 toilets that use no more than 1.6 gallons of water per flush. Replacement shall occur at the
3 earlier of:

4 (A) The time of major remodeling, defined as when a water drainage system is
5 substantially altered, modified or renovated (as those terms are defined in *San Francisco 2001*
6 *California* Plumbing Code Section ~~101(4)~~ 101.4.4 or when two or more toilets and/or urinals are
7 replaced in a single bathroom; or

8 (B) By June 30, 2005.

9 (3) Each City department subject subsection (b)(1) of this Section shall be
10 responsible for the costs of compliance and for ensuring that all applicable contract
11 documents for the replacement of toilets contain the above requirement.

12 (4) To facilitate the installation of these toilets, the San Francisco Public Utilities
13 Commission shall:

14 (A) Negotiate and secure, within 90 days of the effective date of this Chapter,
15 contracts with one or more vendors that all City departments may use for the purchase and
16 installation of 1.6-gallon-per-flush valves and tank toilets. The contract will include a list of
17 toilets approved by the International Association of Plumbing and Mechanical Officials. The
18 toilets on this list shall be the only toilets purchased. This list shall be updated annually by the
19 San Francisco Public Utilities Commission and shall be provided to all heads of City
20 departments responsible for purchases and/or installations at City-owned Facilities or
21 leaseholds and to the Purchasing Department.

22 (B) Establish a procedure (including a fixed price) by which City departments may
23 contract with the Department of Public Works' Bureau of Building Repair for the installation of
24 such toilets. This procedure shall be distributed to all City departments responsible for
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1 purchases and/or installations at City-owned Facilities or leaseholds within 90 days of the
2 effective date of this Chapter. It shall be updated by the San Francisco Public Utilities
3 Commission annually and sent to all heads of City departments responsible for purchases
4 and/or installations at City-owned Facilities or leaseholds and to the Purchasing Department.

5 (5) Between July 1, 2005, and June 23, 2007, the San Francisco Public Utilities
6 Commission shall inspect all buildings subject to this requirement to ensure that all toilets
7 have been installed as required by this subsection.

8 (6) Should the Director determine that toilets that are more water-efficient than
9 those specified in the foregoing sections exist, the Director may, in consultation with the San
10 Francisco Public Utilities Commission, establish a list of other water-efficient toilets that City
11 departments may use pursuant to Section 703(b).

12 (c) Water Conservation Requirements for Shower Heads.

13 (1) This requirement applies to the following City departments: City departments
14 undertaking or authorizing others to undertake Construction Projects with a total projected
15 cost of \$90,000 or more in City-owned Facilities; City departments undertaking or authorizing
16 others to undertake Construction Projects with a total projected cost of \$90,000 or more in
17 Existing City Leaseholds (but only if restrooms are included in the leasehold space and the
18 City department has a separate metering account with the San Francisco Public Utilities
19 Commission); City departments undertaking or authorizing others to undertake Construction
20 Projects with a total projected cost of \$90,000 or more in New City Leaseholds (but only if
21 restrooms are included in the leasehold space and the City department has a separate
22 metering account with the San Francisco Public Utilities Commission); City departments
23 executing agreements for New City Leaseholds or occupying New City Leaseholds (but only if
24 restrooms are included in the leasehold space and the City department has a separate
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1 metering account with the San Francisco Public Utilities Commission); City departments
2 occupying City-owned Facilities (but only if the City department has a separate metering
3 account with the San Francisco Public Utilities Commission); and all City departments
4 purchasing shower heads beginning 90 days after the effective date of this Ordinance.

5 (2) All City departments listed above shall ensure that all shower heads are
6 replaced with shower heads using no more than 1.5 gallons per minute by June 30, 2005.

7 (3) Each City department subject to subsection (c)(1) shall be responsible for the
8 costs of compliance and for ensuring that all applicable contract documents for the
9 replacement of shower heads contain the above requirement.

10 (4) To facilitate the installation of these shower heads, the San Francisco Public
11 Utilities Commission shall:

12 (A) Provide a list of the approved shower head brands and models to all heads of
13 City departments responsible for purchases and/or installations at City-owned Facilities or City
14 Leaseholds and to the Purchasing Department;

15 (B) Negotiate and secure, within 90 days of the effective date of this Chapter, a
16 contract with one or more vendors for the purchase and installation by City departments of 1.5
17 gallon per minute shower heads; and

18 (C) Negotiate a set price for the installation of the shower heads with the
19 Department of Public Works'

20 (D) Distribute information on the price for installation, and lists of approved shower
21 heads and contract vendors to all heads of City departments responsible for purchases and/or
22 installations at City-owned Facilities or City Leaseholds and to the Purchasing Department.

23 (5) Should the Director determine that shower heads that are more water efficient
24 than those specified in the foregoing section exist, the Director may, in consultation with the
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1 San Francisco Public Utilities Commission, establish a list of other water-efficient shower
2 heads that City departments may use pursuant to Section 703(b).

3 (d) Energy Conservation.

4 (1) These requirements (or California Code of Regulations Title 24, Part 6, or
5 subsequent State standards, whichever are more stringent) shall apply in all cases except
6 those in which a City department is not responsible for maintenance of light fixtures or exist
7 signs.

8 (2) City departments shall be responsible for the cost of compliance and for
9 ensuring that all applicable contract documents for the replacement and installation of light
10 fixtures and exit signs contain the following requirements:

11 (A) Exit Signs. At the time of installation or replacement of broken or non-functional
12 exit signs, all exit signs shall be replaced with light-emitting diode (L.E.D.)-type signs. Edge-lit
13 compact fluorescent signs may be used as replacements for existing edge-lit incandescent
14 exit signs.

15 (B) Fluorescent Fixtures.

16 (i) For the purposes of this Section 705(d)(2)(B), the following definitions shall apply:

17 (a) "Luminaire" is an interior or exterior complete lighting unit, including
18 internally or externally illuminated signs, consisting of the lamp and the parts designed to distribute the
19 light, to protect the lamp, and to connect the lamp to the power supply, but not including illuminated
20 utilization equipment or exit signs.

21 (b) "Occupancy Sensor Control Device" is a device that automatically turns off a
22 luminaire or series of luminaires no more than 30 minutes after it senses that the area is vacated.

23 (c) "Utilization Equipment" is commercial, retail or industrial equipment,
24 including but not limited to refrigeration equipment, fully enclosed retail display cases, vending
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1 machines, printing equipment or conveyors, which uses 4-foot or 8-foot fluorescent lamps (“tubes” or
2 “bulbs”) as an integrated part of such equipment. “Utilization Equipment” shall not include furniture
3 or workstations.

4 (ii) By December 31, 2011, the mercury content of each 4-foot or 8-foot fluorescent
5 lamp (“tube” or “bulb”) utilized in a luminaire shall not exceed 5 mg for each 4-foot fluorescent
6 lamp, or 10 mg for each 8-foot fluorescent lamp.

7 (iii) Each luminaire that utilizes one or more 4-foot or 8-foot fluorescent lamps to
8 provide illumination in a building subject to this Chapter must emit 81 or more lumens per watt of
9 electricity consumed or be fitted with an occupancy sensor control device or other lighting efficiency
10 measure approved by the Director.

11 (iv) The requirements of this Section 705 (d)(2)(B) shall not apply where the resulting
12 luminaire will provide lighting levels at the work surface that are below the standards established by
13 the Illuminating Engineering Society.

14 (v) Within 90 days of the effective date of this Ordinance, the Director, in consultation
15 with the San Francisco Public Utilities Commission and other affected City departments, shall submit
16 to the Board of Supervisors a report on City departments' compliance with this Ordinance which shall
17 include a report on waivers granted and shall identify budgetary or other barriers to compliance.
18 Thereafter, the Director shall report on the effects of this Ordinance as part of the tri-annual report
19 required by Section 710 .

20 ll four foot and eight foot fluorescent fixtures shall be equipped with electronic ballasts and T8
21 or more efficient lamps unless this replacement will create lighting levels at the work surface that are
22 below the standards established by the Illuminating Engineering Society.

23 (C) Exterior Light Fixtures. At the time of installation or replacement of broken or
24 non-functional exterior light fixtures, a photocell or automatic timer shall be installed to prevent
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1 lights from operating during daylight hours. The existing switching capability shall be
2 maintained. Upon written request by a City department the Director may grant an exemption
3 from the requirement of this subsection where lighting is necessary during daylight hours.

4 (D) ~~*[reserved] Fluorescent Fixture Ballasts. At the time of installation or replacement of the*~~
5 ~~*ballasts in fluorescent fixtures equipped with T10 or T12 lamps, all replacement ballasts shall be*~~
6 ~~*electronic and compatible with only No later than December 31, 2010, all four foot and eight foot*~~
7 ~~*fluorescent fixtures shall be equipped with electronic ballasts and T8 or more efficient lamps unless*~~
8 ~~*such replacement will create light levels at the work surface that are below the standards established*~~
9 ~~*by the Illuminating Engineering Society.*~~

10 (E) Other Technologies. Should the Director determine that light fixtures or exit
11 signs that are more energy-efficient than those specified in the foregoing sections exist, the
12 Director may, in consultation with the San Francisco Public Utilities Commission, establish a
13 list of other energy-efficient light fixtures and exit signs that City departments may use
14 pursuant to Section 703(b).

15 (e) Fluorescent Lamp Recycling. Commencing 90 days after the effective date of
16 this Chapter, all fluorescent lamps discarded by City departments shall be recycled. The
17 Director shall establish a program for collecting and recycling discarded fluorescent lamps.

18 (f) Indoor Air Quality.

19 (1) This requirement applies to the following City departments: City departments
20 undertaking or authorizing others to undertake Construction Projects with a total projected
21 cost of \$90,000 or more in City-owned Facilities; City departments undertaking or authorizing
22 others to undertake Construction Projects with a total projected cost of \$90,000 or more in
23 Existing City Leaseholds; City departments undertaking or authorizing others to undertake
24 Construction Projects with a total projected cost of \$90,000 or more in New City Leaseholds;

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1 City departments occupying an Existing City Leasehold (if the City is responsible for
2 managing the Existing City Leasehold); City departments executing agreements for New City
3 Leaseholds or occupying New City Leaseholds (if the City is responsible for managing the
4 New City Leasehold); and City departments occupying City-owned Facilities (if the City
5 department is responsible for managing the City-owned Facility.)

6 (2) Maintenance. Within 90 days of the effective date of this Chapter, the
7 Department shall provide informational guidelines for the development of indoor air quality
8 maintenance plans to all City departments identified above. The guidelines shall include, at a
9 minimum, guidance and recommendations on the following:

10 (A) A schedule and procedures for thorough cleaning of finishes, furniture and
11 fixtures in order to remove and reduce the growth of organisms hazardous to human health at
12 the time of delivery and regularly after installation.

13 (B) A schedule and procedures for inspecting and maintaining mechanical systems,
14 including heating, ventilation and air conditioning systems (hereinafter "HVAC" systems).

15 (C) A schedule and procedures for inspecting for mold and/or mildew contamination
16 in porous building materials, fixtures and furnishing, including provisions for the complete
17 removal and replacement of such materials where it is determined by inspection that the
18 materials have become contaminated by mold and/or mildew.

19 (D) A commitment to using cleaners and polishes with minimal effects on indoor air
20 quality.

21 (3) Within 90 days of the development of guidelines pursuant to Subsection (f)(2),
22 all City departments identified in Subsection (f)(1) shall develop and implement indoor air
23 quality maintenance plans.

24 (4) Pollutant Source Control.

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1 (A) Reduction of Health Hazards from Microbial Contaminants. Commencing 90
2 days after the effective date of this Chapter, all City departments undertaking or authorizing
3 others to undertake Construction Projects with a total projected cost of \$90,000 or more in
4 City-owned Facilities, New City Leaseholds, and Existing City Leaseholds shall include in their
5 contracts for Construction Projects provisions requiring:

6 (i) Prevention of Moisture Contamination. Building materials that are intended to
7 be kept dry before, during and following installation (e.g., fabrics, carpeting, drywall, ceiling
8 tiles, and insulation) shall be protected from moisture prior to, during, and after installation.

9 (ii) Removal of Building Materials Contaminated by Moisture. If, in the judgment of
10 the City project engineer, project architect or project manager, any building material that is
11 intended to be kept dry before, during and after installation has become wet, such material
12 shall be removed immediately from the job site, disposed of in accordance with this Chapter,
13 and replaced. It shall be the responsibility of the relevant contractor or subcontractor to
14 monitor the storage of such materials to ensure that they remain dry and to remove and
15 dispose of such materials if they become wet.

16 (iii) Determination by Independent Industrial Hygienist. On Construction Projects
17 with a total construction cost exceeding \$1,000,000, if any building material that is intended to
18 be kept dry becomes, in the judgment of the subcontractor or the City project engineer,
19 contaminated by moisture, the City's project manager shall obtain an assessment by an
20 independent industrial hygienist to assess the extent of contamination and supervise the
21 containment and removal of moisture-contaminated materials. Where the hygienist
22 determines that moisture contamination has occurred, the contractor responsible for causing
23 or allowing the contamination to occur shall be responsible for the costs of the hygienist's
24 services and the costs for removal and replacement of the contaminated materials. Should no
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1 moisture contamination be found, the City shall be responsible for the costs of the hygienist's
2 services.

3 (B) Elimination or Encapsulation of Fibrous Insulation Materials. The use of
4 exposed fibrous duct insulation material in Construction Projects shall be prohibited. If the
5 design of a Construction Projection requires the use of fibrous insulation material, such
6 material shall be encapsulated to minimize mold and/or mildew growth and emissions of
7 volatile organic compounds into the habitable space.

8 (g) Storage of Recyclables.

9 (1) This requirement applies to the following City departments: City departments
10 undertaking or authorizing others to undertake Construction Projects at City-owned Facilities;
11 City departments undertaking or authorizing others to undertake Construction Projects in
12 Existing City Leaseholds; City departments undertaking or authorizing others to undertake
13 Construction Projects in New City Leaseholds; City departments executing agreements for
14 New City Leaseholds or occupying New City Leaseholds; and City departments occupying
15 City-owned Facilities (but only if the City-owned Facility was acquired at least 90 days after
16 the effective date of the Ordinance.)

17 (2) All City departments identified above shall ensure that adequate, accessible,
18 and convenient recycling areas are provided within the City-owned Facility or leasehold, and
19 that all applicable contract documents contain this requirement. The minimum allowable
20 recycling area shall be not less than the space allocated for the storage of refuse.

21 (3) The requirement set forth in Subsection (g)(2) of this Section to provide
22 adequate recycling areas shall apply to Construction Project(s) for which funds have been
23 appropriated on or after the effective date of this Chapter for:

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1 (i) A single alteration which is subsequently performed that adds to or modifies 20
2 percent or more of the existing floor area of the project; or

3 (ii) Multiple alterations which are conducted within a twelve-month period which
4 collectively add to or modify 20 percent or more of the existing floor area of the project.

5 (4) Any cost associated with recycling areas pursuant to this subsection shall be the
6 responsibility of the party or parties who are responsible for the cost of any alterations to
7 accommodate their occupancy.

8 Section 4. The Planning Department has determined that the actions contemplated in
9 this Ordinance are in compliance with the California Environmental Quality Act (California
10 Public Resources Code sections 21000 et seq.). Said determination is on file with the Clerk of
11 the Board of Supervisors in File No. _____ and is incorporated herein by reference.

12 Section 5. Upon final passage of this Ordinance, the Clerk of the Board of Supervisors
13 is hereby directed to transmit this Ordinance to the California Building Standards Commission
14 pursuant to applicable provisions of California law.

15
16 APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

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18 By: _____
CATHARINE S. BARNES
19 Deputy City Attorney

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