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

Ordinance amending the San Francisco Building Code by adding a new Chapter 13D, Sections 1301D through 1311D, to require commercial buildings to increase efficiency of fluorescent lighting by the year 2011; amending the San Francisco Environment Code by dividing Section 705 into Sections 705 through 705.5 and amending them to require City-owned facilities to increase efficiency of fluorescent lighting; adopting findings required by California Health and Safety Code Section 17958.7 and environmental findings; and directing the Clerk of the Board of Supervisors to forward this ordinance to the California Building Standards Commission upon final passage.

NOTE: Additions are single-underline italics Times New Roman; deletions are strike through italics Times New Roman. Board amendment additions are double-underlined; Board amendment deletions are strikethrough normal.

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

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

1. San Francisco is one of the oldest urban areas in California and has a large proportion of older commercial buildings that were constructed and remodeled under building and electrical codes that did not emphasize energy efficiency.
2. These older commercial buildings are typically small and do not have on-site professional maintenance staff to routinely retrofit inefficient lighting or to advise building owners of the value of improving buildings' energy efficiency.

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

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

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

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

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

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

9. Reliable electricity is critical to local residents, organizations, and the San Francisco economy.
10. As a coastal city, San Francisco is vulnerable to sea level rise and is already experiencing the repercussions of excessive CO₂ emissions.

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

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

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

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


16. The low mercury fluorescent lamps required under this Ordinance are commercially available at competitive prices.
Section 2. The San Francisco Building Code is hereby amended by adding Chapter 13D, Sections 1301D through 1311D, to read as follows:

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

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

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

EXCEPTIONS:
The provisions of this Chapter do not apply to:
1. Residential buildings and residential hotels, except that it shall apply to their common areas.
2. The residential portions of mixed-use commercial and residential buildings, except that it shall apply to their common areas.

SEC. 1304D. DEFINITIONS.
For the purpose of this Chapter, certain terms are defined as follows:
**Commercial Building** is any privately owned building that is occupancy group A, B, E, F, H, I, L, M or S as defined in this Code and any tourist hotels, as herein defined. When a building is designated for more than one type of occupancy, “Commercial Building” shall mean those spaces within the mixed use building designated as A, B, E, F, H, I, L, M or S or tourist hotel, as herein defined. Except for tourist hotels as herein defined, “Commercial Building” shall include only the common areas of any R ("residential") occupancy buildings or the common areas of any R ("residential") occupancy portions of mixed use buildings.

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

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

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

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

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

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

**Tourist Hotel** is any residential building, or portion thereof, which is occupied as a hotel, motel or inn and which has a certificate of use for tourist occupancy, or any portion of a residential building which is converted to tourist hotel use pursuant to the Residential Hotel Conversion Ordinance (S.F. Administrative Code, Article 41) or other City law.
**Utilization Equipment** is commercial, retail or industrial equipment, including but not limited to refrigeration equipment, fully enclosed retail display cases, vending machines, printing equipment or conveyors, which uses 4-foot or 8-foot linear fluorescent lamps as an integrated part of such equipment. “Utilization Equipment” shall not include furniture or workstations.

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

**1305D.1. Compliance Deadline.** No later than December 31, 2011 (“Compliance Deadline”), the owner of each building subject to this Chapter shall self-certify that the entire building meets the standards specified in this Chapter 13D, and if the building is not certified, the building owner shall make such repairs as may be required to conform to this Chapter.

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

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

**1306D.1. Mercury Content.** The mercury content of each 4-foot linear fluorescent lamp installed after the Compliance Deadline in a luminaire in a building subject to this Chapter shall not exceed 5 mg. The mercury content of each 8-foot linear fluorescent lamp installed after the Compliance Deadline in a luminaire in a building subject to this Chapter shall not exceed 10 mg.
1306D.2. Energy Efficiency. The lamp and ballast system in each luminaire that utilizes one or more 4-foot or 8-foot linear fluorescent lamps to provide illumination in a building subject to this Chapter must meet at least one of the following requirements:

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

SEC. 1307D. ENFORCEMENT.

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

SEC. 1308D. RULES.

The Director, after consulting with the Department of the Environment, and in accordance with Section 104A.2.1 of this Code, shall adopt, and may amend, reasonable rules, guidelines and forms for implementing the provisions and intent of this Chapter.
SEC. 1309D. UNDERTAKING FOR THE GENERAL WELFARE.

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

SEC. 1310D. PREEMPTION.

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

SEC. 1311D. SEVERABILITY.

If any provision or clause of this Chapter or the application thereof to any person or circumstance is held to be unconstitutional or to be otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other provisions, and clauses of this Chapter are declared to be severable.
Section 3. The San Francisco Environment Code is hereby amended by dividing
Section 705 into Sections 705 through 705.5, and amending those Sections to read as
follows:

SEC. 705. RESOURCE EFFICIENCY REQUIREMENTS FOR CITY BUILDINGS;

GUIDELINES.

(a) Within 90 days of the effective date of this Chapter, the The Commission on the
Environment shall issue guidelines to all City departments to assist them in determining which
of the following provisions of Section 705.1 et seq. in this Chapter apply to them. Pursuant to
Section 703(b), the Director may revise these guidelines from time to time.

SEC. 705.1. CITY BUILDINGS; WATER CONSERVATION REQUIREMENTS—TOILETS.

(b) Water Conservation Requirements for Toilets.

(a) The requirements of this Section apply This requirement applies to the following City
departments: City departments undertaking or authorizing others to undertake Construction
Projects with a total projected cost of $90,000 or more at City-owned Facilities; City
departments undertaking or authorizing others to undertake Construction Projects with a total
projected cost of $90,000 or more in Existing City Leaseholds (but only if restrooms are
included in the leasehold space and the City department has a separate metering account
with the San Francisco Public Utilities Commission); City departments undertaking or
authorizing others to undertake Construction Projects with a total projected cost of $90,000 or
more in New City Leaseholds (but only if restrooms are included in the leasehold space and
the City department has a separate metering account with the San Francisco Public Utilities
Commission Water Department); City departments executing agreements for New City
Leaseholds or occupying New City Leaseholds (but only if restrooms are included in the leasehold space and the City department has a separate metering account with the San Francisco Public Utilities Commission); City departments occupying City-owned Facilities (but only if the City department has separate metering account with the San Francisco Public Utilities Commission); and all City departments purchasing toilets beginning 90 days after the effective date of this ordinance.

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

1. The time of major remodeling, defined as when a water drainage system is substantially altered, modified or renovated (as those terms are defined in San Francisco 2001 California Plumbing Code Section 401.014.4 or when two or more toilets and/or urinals are replaced in a single bathroom; or


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

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

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

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

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

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

SEC. 705.2. CITY BUILDINGS; WATER CONSERVATION REQUIREMENTS—SHOWER
HEADS.

(e) Water Conservation Requirements for Shower-Heads:

(a) (1) The requirements of this Section apply This requirement applies to the following City
departments: City departments undertaking or authorizing others to undertake Construction
Projects with a total projected cost of $90,000 or more in City-owned Facilities; City
departments undertaking or authorizing others to undertake Construction Projects with a total
projected cost of $90,000 or more in Existing City Leaseholds (but only if restrooms are
included in the leasehold space and the City department has a separate metering account
with the San Francisco Public Utilities Commission); City departments undertaking or
authorizing others to undertake Construction Projects with a total projected cost of $90,000 or
more in New City Leaseholds (but only if restrooms are included in the leasehold space and
the City department has a separate metering account with the San Francisco Public Utilities
Commission); City departments executing agreements for New City Leaseholds or occupying
New City Leaseholds (but only if restrooms are included in the leasehold space and the City
department has a separate metering account with the San Francisco Public Utilities
Commission); City departments occupying City-owned Facilities (but only if the City
department has a separate metering account with the San Francisco Public Utilities
Commission); and all City departments purchasing shower heads beginning 90 days after the
effective date of this Ordinance.

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

c) (3) Each City department subject to subsection (a) (c)(4) shall be responsible for
the costs of compliance and for ensuring that all applicable contract documents for the
replacement of shower heads contain the above requirement.

d) (4) To facilitate the installation of these shower heads, the San Francisco Public
Utilities Commission shall:
(1) Provide a list of the approved shower head brands and models to all heads of City departments responsible for purchases and/or installations at City-owned Facilities or City Leaseholds and to the Purchasing Department;

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

(3) Negotiate a set price for the installation of the shower heads with the Department of Public Works.

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

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

SEC. 705.3. CITY BUILDINGS; ENERGY CONSERVATION REQUIREMENTS—LIGHT FIXTURES AND EXIT SIGNS.

(d) Energy Conservation:

(a) The requirements of this Section (or of California Code of Regulations Title 24, Part 6, or subsequent State standards, whichever are more stringent) shall apply in all cases except those in which a City department is not responsible for maintenance of light fixtures or exit signs.
(b) (2) City departments shall be responsible for the cost of compliance and for ensuring that all applicable contract documents for the replacement and installation of light fixtures and exit signs contain the following requirements:

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

(2) (B) Fluorescent Fixtures.

(A) Definitions. For the purposes of this Section 705.3(b), the following definitions shall apply:

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

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

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

(iv) "Compliance Deadline" is the final date by which all fixtures using 4-foot or 8-foot linear fluorescent lamps to provide illumination are to be in compliance.
(B) Compliance Deadline. The Compliance Deadline is December 31, 2011.

(C) Mercury Content. The mercury content of each 4-foot or 8-foot fluorescent lamp ("tube" or "bulb") installed in a luminaire after the Compliance Deadline shall not exceed 5 mg for each 4-foot fluorescent lamp, or 10 mg for each 8-foot fluorescent lamp.

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

(i) The lamp and ballast system emits 81 or more lumens per watt of electricity consumed;

(ii) The luminaire is controlled by an occupancy sensor control device that does not control an area in the building of more than 250 square feet;

(iii) The luminaire is fitted with a lighting efficiency measure approved by the Director as equivalent to the measures in subsections (i) or (ii) above;

(iv) The Director finds, based on the facts of the particular building and luminaire, that the energy savings from installing lighting efficiency measures meeting the requirements of this Section will be so insignificant over the life of the luminaire that the measure is not cost-effective; or,

(v) If the City department elects to meet the requirements of this Section 705.3(b)(2) with measures that require permits, such permits shall comply with all other applicable requirements of this Code and all other applicable state and local laws.

(E) Low Light Levels. The requirements of this Section 705.3(b)(2) shall not apply where the resulting luminaire will provide lighting levels at the work surface that are below the standards established by the Illuminating Engineering Society.
(F) Waivers. By September 30, 2011, the Director shall act on all pending requests for City Departments for a temporary waiver of the requirements of this Section 705.3(b). The criteria for waivers of this Section 705.3(b) shall be described in rules issued by the Director. The Director shall submit to the Board of Supervisors a list of all departments receiving waivers, and shall identify budgetary or other barriers to compliance cited in those departments' waiver requests. Thereafter, the Director shall report on the effects of this Ordinance as part of the tri-annual report required by Section 710.

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

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

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

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

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

**SEC. 705.4. CITY BUILDINGS; INDOOR AIR QUALITY.**

(f) **Indoor Air Quality.**

(a) (ii) **The requirements of this Section apply** This requirement applies to the following City departments: City departments undertaking or authorizing others to undertake Construction Projects with a total projected cost of $90,000 or more in City-owned Facilities; City departments undertaking or authorizing others to undertake Construction Projects with a total projected cost of $90,000 or more in Existing City Leaseholds; City departments undertaking or authorizing others to undertake Construction Projects with a total projected cost of $90,000 or more in New City Leaseholds; City departments occupying an Existing City Leasehold (if the City is responsible for managing the Existing City Leasehold); City departments executing agreements for New City Leaseholds or occupying New City Leaseholds (if the City is responsible for managing the New City Leasehold); and City departments occupying City-owned Facilities (if the City department is responsible for managing the City-owned Facility.)

(b) (2) **Maintenance.** Within 90 days of the effective date of this Chapter, the Department shall provide informational guidelines for the development of indoor air quality maintenance plans to all City departments identified above. The guidelines shall include, at a minimum, guidance and recommendations on the following:
(l) (A) A schedule and procedures for thorough cleaning of finishes, furniture and fixtures in order to remove and reduce the growth of organisms hazardous to human health at the time of delivery and regularly after installation.

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

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

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

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

(d) (4) Pollutant Source Control.

Reduction of Health Hazards from Microbial Contaminants.

Commencing 90 days after the effective date of this Chapter, all City departments undertaking or authorizing others to undertake Construction Projects with a total projected cost of $90,000 or more in City-owned Facilities, New City Leaseholds, and Existing City Leaseholds shall include in their contracts for Construction Projects provisions requiring:

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

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

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

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

SEC. 705.5. CITY BUILDINGS; STORAGE OF RECYCLABLES.

(g) - Storage of Recyclables.

(a) (1) The requirements of this Section apply to the following City departments: City departments undertaking or authorizing others to undertake Construction Projects at City-owned Facilities; City departments undertaking or authorizing others to undertake Construction Projects in Existing City Leaseholds; City departments undertaking or authorizing others to undertake Construction Projects in New City Leaseholds; City departments executing agreements for New City Leaseholds or occupying New City Leaseholds; and City departments occupying City-owned Facilities (but only if the City-owned Facility was acquired at least 90 days after the effective date of the Ordinance.)

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

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

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

(2) (ii) Multiple alterations which are conducted within a twelve-month period which collectively add to or modify 20 percent or more of the existing floor area of the project.
Any cost associated with recycling areas pursuant to this subsection shall be the responsibility of the party or parties who are responsible for the cost of any alterations to accommodate their occupancy.

Section 4. The Planning Department has determined that the actions contemplated in this Ordinance are in compliance with the California Environmental Quality Act (California Public Resources Code sections 21000 et seq.). Said determination is on file with the Clerk of the Board of Supervisors in File No. 090584 and is incorporated herein by reference.

Section 5. Upon final passage of this Ordinance, the Clerk of the Board of Supervisors is hereby directed to transmit this Ordinance to the California Building Standards Commission pursuant to applicable provisions of California law.
Section 6. The lighting retrofits required by this ordinance may expose the people replacing the lamp and/or ballast to dangerous levels of electricity. The Board of Supervisors strongly urges building owners and managers to take appropriate precautions to protect both the people doing the electrical work and the people in the buildings from the associated risks of fire, serious injury, and/or death, by having the work performed only by qualified persons. Such persons should be trained in both the technical requirements of the work involved, and the decision-making process necessary to determine the nature and extent of the hazard and the personal protective equipment and job planning necessary to perform the task safely.

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

By:  
THOMAS J. OWEN  
Deputy City Attorney
Ordinance amending the San Francisco Building Code by adding a new Chapter 13D, Sections 1301D through 1311D, to require commercial buildings to increase efficiency of fluorescent lighting by the year 2011; amending the San Francisco Environment Code by dividing Section 705 into Sections 705 through 705.5 and amending them to require City-owned facilities to increase efficiency of fluorescent lighting; adopting findings required by California Health and Safety Code Section 17958.7 and environmental findings; and directing the Clerk of the Board of Supervisors to forward this ordinance to the California Building Standards Commission upon final passage.

April 27, 2010 Board of Supervisors - PASSED ON FIRST READING
Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Daly, Dufty, Eisbernd, Mar and Mirkarimi
Excused: 1 - Maxwell

May 04, 2010 Board of Supervisors - AMENDED
Ayes: 11 - Alioto-Pier, Avalos, Campos, Chiu, Daly, Dufty, Eisbernd, Mar, Maxwell and Mirkarimi

May 04, 2010 Board of Supervisors - PASSED ON FIRST READING AS AMENDED
Ayes: 11 - Alioto-Pier, Avalos, Campos, Chiu, Daly, Dufty, Eisbernd, Mar, Maxwell and Mirkarimi

May 11, 2010 Board of Supervisors - FINALLY PASSED
Ayes: 11 - Alioto-Pier, Avalos, Campos, Chiu, Daly, Dufty, Eisbernd, Mar, Maxwell and Mirkarimi
I hereby certify that the foregoing Ordinance was FINALLY PASSED on 5/11/2010 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

5/21/2010
Date Approved