

File No. 110854

Committee Item No. \_\_\_\_\_

Board Item No. 25

## COMMITTEE/BOARD OF SUPERVISORS

### AGENDA PACKET CONTENTS LIST

Committee: Land Use and Economic Development Date September 19, 2011

Board of Supervisors Meeting

Date September 27, 2011

#### Cmte Board

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Completed by: Alisa Miller Date September 16, 2011  
 Completed by: Alisa Miller Date September 21, 2011

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document can be found in the file.

1 [Environment Code - Green Building Requirements for City Buildings]

2  
3 **Ordinance amending the San Francisco Environment Code, Chapter 7, Sections 700**  
4 **through 713, to update the green building requirements for the design, construction,**  
5 **and operation of City buildings.**

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

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

10 Section 1. The San Francisco Environment Code is hereby amended by: 1) amending  
11 Sections 700, 702, 702 and 703; 2) renumbering Sections 709, 707, 705.5, 706, 705.3, 705.4,  
12 710 and 708 as Sections 704, 705, 707, 708, 710, 711, 712 and 713, respectively, and  
13 amending them; 3) adding Sections 706 and 709; and 4) repealing former Sections 704, 705,  
14 705.1 and 705.2, all to read as follows:

15 **SEC. 700. FINDINGS AND PURPOSE.**

16 The Board of Supervisors finds that:

17 1.A. Buildings are one of the distinguishing elements of human civilization. Traditional  
18 building design and construction practices have significant negative environmental impacts, but if they  
19 are not constructed thoughtfully they can waste precious natural and financial resources, as well as  
20 harm the environment and the health of people who use them. Around the globe, building operations,  
21 construction and demolition consume 40 percent of the world's energy, 65 percent of all electricity, and  
22 40 percent of all raw materials. In the United States, buildings consume 48 percent of all energy, 76  
23 percent of all electricity, and generate 38 percent of all carbon (CO<sub>2</sub>) emissions. Each year in the  
24 United States, building related activities are responsible for 30 percent of the nation's carbon dioxide  
25 emissions, 40 percent of ozone pollution, and 35 percent of municipal solid waste. In San Francisco,

1 buildings consume 54 percent of all energy, 80 percent of all electricity, and generate 56 percent of all  
2 carbon emissions. Advanced green buildings can generate their own energy, minimize carbon  
3 emissions, produce and process their own water, emphasize reuse of buildings and materials, and  
4 provide healthy interior environments.

5 2 B. The selection of sustainable design features and building materials is consistent with the  
6 City's Precautionary Principle Policy. This policy requires that the City consider a full range of  
7 alternatives in order to select products and procedures that minimize harm and maximize the  
8 protection of public health and natural resources. The construction and remodeling projects San  
9 Francisco completed as part of a Green Building Pilot Project demonstrate that thoughtful planning  
10 and design decisions can result in a significant cost savings to the City over the life of such facilities,  
11 and can improve the health and productivity of City employees and visitors. "Green Buildings" are  
12 designed to make optimum use of public transportation and will offer substantial long term economic,  
13 health and environmental benefits to the citizens of San Francisco.

14 C. The selection of resource efficient and less toxic building materials and design features is  
15 consistent with the City's Precautionary Principle Policy. This principle requires that the City consider  
16 of a full range of alternatives in order to select products and procedures that minimize harm and  
17 maximize the protection of public health and natural resources.

18 3 D. The United States Green Building Council (USGBC) is a non-profit organization  
19 committed to a prosperous and sustainable future for our nation through cost-efficient and energy-  
20 saving green buildings. , nationally recognized association with membership representing all segments  
21 of the building industry, including architects, manufacturers, government agencies, and  
22 environmentalists. LEED<sup>®</sup> is an internationally-recognized green building certification system,  
23 developed by the USGBC. The USGBC has created the Leadership in Energy and Environmental  
24 Design (LEED<sup>™</sup>) rating system for building design, construction, and operations that provides specific  
25 principles and practices which result in certification of environmental performance.

1 4. Green buildings provide financial benefits while protecting human and environmental  
2 health. Total construction costs for buildings seeking LEED certification fall into the existing range of  
3 costs for buildings not seeking LEED certification. Green buildings, on average, result in savings of 20  
4 percent of total construction costs over the first 20 years of operation.

5  
6 **SEC. 701. DEFINITIONS.**

7 The following terms shall have the meanings set forth below.

8 (a) "Alternative Daily Cover" or "ADC" means materials, other than soil, that have been  
9 approved by the California Department of Resources Recycling and Recovery ("CalRecycle") or a  
10 successor agency for use as a temporary overlay on an exposed landfill face.

11 (b) "Beneficial reuse" means the reuse of material at a landfill that does not include ADC but  
12 shall include, but not be limited to, use of the material for or as the following: alternative intermediate  
13 cover; final cover foundation layer; liner operations layer; leachate and landfill gas collection system;  
14 construction fill; road base; wet weather operations pads and access roads; and, soil amendments for  
15 erosion control and landscaping. "Beneficial reuse" does not include disposal of material at a landfill.

16 (c) "BioMass Energy Generation" means the controlled combustion, when separated from  
17 other solid waste and used for producing electricity or heat, of wood, wood chips, wood waste, and tree  
18 and brush prunings. "Bio-mass Energy Generation" does not include the controlled combustion of  
19 recyclable pulp or recyclable paper materials, or medical or hazardous waste.

20 (d) ~~(a)~~ "Building" means:

21 (1) Any structure used for support or shelter of any use or occupancy.

22 "Structure" means that which is built or constructed, an edifice or building of any kind, or any  
23 piece of work artificially built or composed of parts joined together in some definite manner  
24 and permanently attached to the ground.

1 (2) "Building" includes office buildings, libraries, recreation centers, museums,  
2 airport buildings, public safety buildings, hospitals, clinics, education centers, transportation facilities,  
3 cruise ship terminals, marina buildings, convention facilities, and other structures ~~wherein things~~  
4 ~~may be grown, made or produced, kept, handled, stored or disposed of.~~ "Building" also includes  
5 ~~marinas, outdoor recreation areas, and parking facilities.~~

6 (3) "Building" does not include machinery, equipment, or appliances installed for  
7 manufacture or process purposes only, any construction installation that is not part of a  
8 building, or any tunnel, roadway or bridge, or any vehicle or mobile equipment.

9 (e) "CALGreen" means the California State Green Building Code as adopted by San Francisco  
10 Building Code Chapter 13C.

11 (f) ~~(b)~~ "City department" means any department of the City and County of San  
12 Francisco. City department does not include any other local agency or any federal or State  
13 agency, including but not limited to, the San Francisco Unified School District, the San  
14 Francisco Community College District, the San Francisco Redevelopment Agency and the  
15 San Francisco Housing Authority.

16 (g) ~~(e)~~ "City-owned Facility" means any building owned by the City and County of San  
17 Francisco. "City-owned Facility" includes ~~does not include~~ City-owned facilities or portions  
18 thereof that the City leases to non-City entities, ~~except when the City enters into a new lease or~~  
19 ~~other similar agreement with a new tenant executed after August 31, 1999.~~

20 (h) "City Leasehold" means a building or portion thereof owned by others where the City is a  
21 tenant.

22 (i) "City Representative" means the employee of the City who oversees the construction and/or  
23 demolition process for a City construction and/or demolition project and is responsible for ensuring  
24 that the contractor complies with all aspects of the contract documents.

25 (j) ~~(d)~~ "Commission" means the Commission on the Environment.

1           (k) (e) "Commissioning Process" means an independent process to ensure the  
2 attainment of quality facilities pursuant to this Chapter. The commissioning process verifies and  
3 documents focuses on verifying and documenting that the energy using systems in buildings building  
4 and all of its systems are planned, designed, installed, and tested, and operate are operating and  
5 maintained as designed. The Commissioning Process shall coordinate with, but not include,  
6 routine inspections performed by the code official having jurisdiction Department of Building  
7 Inspection.

8           (l) "Construction and Demolition Debris" or "C & D Debris" means building materials and  
9 solid waste generated from construction and demolition activities, including, but not limited to: fully-  
10 cured asphalt; concrete; brick; rock; soil; lumber; gypsum wallboard; cardboard and other associated  
11 packaging; roofing material; ceramic tile; carpeting; fixtures; plastic pipe; metals; and, tree stumps  
12 and other vegetative matter resulting from land clearing and landscaping for construction,  
13 deconstruction, demolition or land developments. "Construction and Demolition Debris" does not  
14 include refuse regulated under the 1932 Refuse Collection and Disposal Ordinance or sections of the  
15 Municipal Code that implement the provisions of that ordinance, or materials excavated from the  
16 public right-of-way. "Construction and Demolition Debris" does not include "hazardous waste," as  
17 defined in California Health and Safety Code Sections 25100 et seq.

18           (m) (f) "Construction Project" means any building, planning or construction activity,  
19 including demolition, new construction, major alteration, renovation, remodeling, or building  
20 additions by a City department at a City-owned Facility, Existing City Leasehold, or New City  
21 Leasehold.

22           (n) "Contractor" means the company or person to whom the City awards a contract for a  
23 construction and/or demolition project. The contractor is responsible for complying with all aspects of  
24 Section 708 of this Chapter and for ensuring that all subcontractors, lower-tier subcontractors and  
25 suppliers also comply.

1           (o) "Deconstruction" means the process of taking apart a structure with the primary goal of  
2 preserving the value of all useful building materials, so that they may be reused or recycled.

3           (p) "Demolition Project" means the decimating, razing, ruining, tearing down or wrecking of  
4 any facility, structure, pavement, building, wall or fence, whether in whole or in part and whether  
5 interior or exterior.

6           (q) ~~(g)~~ "Department" means the Department of the Environment.

7           (r) "Design Phases" means the generally-accepted stages of architectural design: conceptual  
8 design, schematic design, design development and construction documents.

9           (s) ~~(h)~~ "Director" means the Director of the Department of the Environment or his or her  
10 designee.

11           (t) "Disposal" means final deposition of material at a legally operating permitted landfill that  
12 does not include beneficial reuse or at a permitted transformation facility. A legally operating  
13 permitted landfill includes Class III landfills and inert fills. Disposal of inert materials at inert fills or  
14 inert backfill sites does not constitute recycling.

15           (u) "Diversion" means use of material for any purpose other than disposal in a landfill or  
16 transformation facility, such as source reduction, reuse, recycling, and composting activities that do  
17 not result in material being disposed at permitted landfills and transformation facilities.

18           (v) "Diversion Rate" means the percentage of total material that is diverted from disposal at  
19 permitted landfills and transformation facilities through processes such as source reduction, reuse,  
20 recycling, and composting.

21           (w) "Green Building Certification Institute" or "GBCI" is the body providing independent  
22 third-party LEED certification and professional credentials recognizing excellence in green building  
23 performance and practice.

24           (x) "Hazardous Material" means any material defined as hazardous in California Health and  
25 Safety Code Sections 25100 et seq., as amended.

1           (y) "Indoor Air Quality" means the quality of indoor air, including the concentration of  
2 particulates, fumes, odors, carbon dioxide, etc.

3           (z) "Indoor Environmental Quality" means the quality of the indoor environment, including air  
4 quality, thermal quality, acoustical quality, daylight, views and controllability of systems.

5           (aa) "Landfill" means a facility that (i) accepts for disposal in or on land non-hazardous waste  
6 such as household, commercial, and industrial waste, and waste generated during construction,  
7 remodeling, repair and demolition operations, and (ii) has a valid current solid waste facilities permit  
8 from the California Department of Resources Recycling and Recover (CalRecycle).

9           (i) "Existing City Leasehold" means that portion or portions of any building that is leased or  
10 otherwise occupied, but not owned, by the City and County of San Francisco or any City Department  
11 for a term of one year or more pursuant to a written agreement that was executed before August 31,  
12 1999.

13           (bb) (j) "Leadership in Energy and Environmental Design" or "LEED<sup>®</sup>" is an internationally  
14 recognized green building certification system developed by the USGBC, providing third-party  
15 verification that a building or community was designed and built using strategies aimed at improving  
16 performance across all the following metrics: energy savings; water efficiency; CO2 emissions  
17 reduction; improved indoor environmental quality; and ,stewardship of resources and sensitivity to  
18 their impacts. LEED provides building owners and operators with a concise framework for identifying  
19 and implementing practical and measurable green building design, construction, operations, and  
20 maintenance solutions. "LEED<sup>™</sup> rating system" or "LEED<sup>™</sup>; Leadership in Energy and  
21 Environmental Design rating system" means the rating system developed by the United States Green  
22 Building Council (USGBC) for evaluating the environmental performance of a building. LEED  
23 certified buildings Buildings are rated on a scale from lowest to highest: LEED LEED<sup>™</sup> Certified,  
24 LEED LEED<sup>™</sup> Silver, LEED LEED<sup>™</sup> Gold and LEED LEED<sup>™</sup> Platinum. Wherever specific LEED  
25 prerequisites or credits are cited, such references are to LEED Building Design and Construction



1 (BD+C) 2009. More recent LEED versions may be used, provided the credits and points achieved are  
2 at least as stringent as LEED BD+C 2009.

3 (cc) ~~(c)~~ "LEED Accredited Professional" or "LEED AP" "LEED<sup>TM</sup> accredited professional"  
4 means an employee of a City department or a consultant retained by the City through a design or  
5 construction contract or other agreement another individual who has fulfilled all requirements and  
6 passed the LEED LEED<sup>TM</sup> accreditation exam issued by GBCI the USGBC in applying LEED  
7 LEED<sup>TM</sup> principles to technical fields of practice in building design, construction and operations.

8 (l) "New City Leasehold" means that portion or portions of any building that is leased or  
9 otherwise occupied, but not owned, by the City and County of San Francisco or any City department  
10 for a term of one year or more pursuant to a written agreement that was executed or renewed after  
11 August 31, 1999. "New City Leasehold" does not include common area portions of a building that are  
12 not exclusively leased or otherwise occupied by a City department.

13 (m) "Recycling area" means space allocated for collecting, storing, and loading recyclable  
14 materials. Such areas shall be able to accommodate receptacles for recyclable materials.

15 (dd) "LEED Project Administrator" means the individual member of the design team who  
16 registers a project with GBCI, and subsequently administers the LEED documentation process. For  
17 San Francisco municipal construction projects, the LEED Project Administrator shall be a LEED AP.

18 (ee) "LEED Scorecard" means a summary chart indicating all LEED prerequisites and credits  
19 being pursued and reasonably expected to be achieved for a construction project.

20 (ff) "Major Alteration" means construction work that is extensive enough such that normal  
21 building operations cannot be performed while the work is in progress, and/or a new certificate of  
22 occupancy, or similar official indication that it is fit and ready for use, is required.

23 (gg) "Minimum Project Requirements" or "MPR" means the minimum requirements for  
24 projects to become LEED certified, as issued by the USGBC.

1            (hh) "Mixed Construction & Demolition debris" or "Mixed C & D Debris" means  
2 "Construction and Demolition Debris" or "C&D Debris", but excluding materials source-separated for  
3 reuse or recycling.

4            (ii) "New Construction" means construction from the ground up, including a new building  
5 envelope, and new structural, mechanical, electrical and plumbing systems.

6            (jj) "Person" means a natural person, a firm, joint stock company, business concern,  
7 association, partnership or corporation or, to the extent permitted by law, governmental entity,  
8 including the City and County of San Francisco and its departments, boards and commissions for  
9 projects within the nine counties surrounding the San Francisco Bay, and its or their successors or  
10 assigns.

11           (kk) "Recover" or "Recovery" means any activity, including source reduction, deconstruction  
12 and salvaging, reuse, recycling and composting, which causes materials to be recovered for use as a  
13 resource and diverted from disposal.

14           (ll) "Recycle" or "Recycling" means the process of collecting, sorting, cleansing, treating, and  
15 reconstituting materials that would otherwise become solid waste, and returning them to the economic  
16 mainstream in the form of raw material for new, reused, or reconstituted products which meet the  
17 quality standards necessary to be used in the marketplace. "Recycling" does not include  
18 "transformation," as defined in Section 40201 of California Public Resources Code.

19           (mm) "Recycling Facility" means an operation or person that collects and processes materials  
20 for recycling.

21           (nn) "Registered Facility" means a facility that accepts mixed construction and demolition  
22 debris for processing and recycling and holds a valid registration issued by the City and County of San  
23 Francisco pursuant to Chapter 14 of the Environment Code.

24           (oo) "Registered Transporter" means a person who removes mixed construction and/or  
25 demolition (C&D) debris from a construction and/or demolition site, using a vehicle with more than

1 two axles or two tires per axle (such as a large pickup truck with four tires on the rear axle or three-  
2 axle dump trucks), and hauling at least one (1) cubic yard of mixed construction and demolition debris.  
3 A "Registered Transporter" must hold a valid registration from the City and County of San Francisco  
4 and is obligated to take all mixed C&D material only to a Registered Facility.

5 (pp) "Reuse" means using an object or material again, either for its original purpose or for a  
6 similar purpose, without significantly altering the physical form of the object or material.

7 (qq) "Source Reduction" means any action which causes a net reduction in the generation of  
8 solid waste. Source reduction includes, but is not limited to, reducing the use of non-recyclable  
9 materials, replacing disposable materials and products with reusable materials and products, reducing  
10 packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with  
11 incentives to reduce waste tonnage generated, and increasing the efficiency of the use of paper,  
12 cardboard, glass, metal, plastic, and other materials.

13 (rr) "Source-Separated Materials" means materials that have been separated or kept separate  
14 from the solid waste stream, at the point of generation, for the purpose of reuse, recycling or  
15 composting in order to return them to the economic mainstream in the form of raw material for new,  
16 reused, or reconstituted products which meet the quality standards necessary to be used in the  
17 marketplace.

18 (ss) The "United States Green Building Council" or "USGBC" is a non-profit organization  
19 committed to a prosperous and sustainable future for our nation through cost-efficient and energy-  
20 saving green buildings.

21  
22 **SEC. 702. MUNICIPAL GREEN RESOURCE EFFICIENT BUILDING TASK FORCE.**

23 (a) **Establishment and Purpose.** The Board of Supervisors establishes the Municipal  
24 Green Resource Efficient Building Task Force (the "Task Force") to oversee and assist in making  
25 City buildings resource-efficient enhancing the environmental performance of City construction

1 projects pursuant to this Chapter. The Task Force shall review municipal construction projects subject  
2 to this Chapter during their design and construction to ensure that the responsible City departments  
3 are complying with the requirements of the Chapter, and may advise the Department of the  
4 Environment on matters of policy related to this Chapter. The Task Force shall facilitate  
5 communication about green building issues throughout the City, and act as an educational forum to  
6 increase knowledge and share project-related successes and lessons learned.

7 (b) The Task Force will consist of one member of the public appointed by the Mayor,  
8 and a representative with building design, construction and/or finance experience from each of the  
9 following City departments:

10 (1) The Department of the Environment;

11 (2) The Division of Building Design and Construction Bureau of Architecture within  
12 the Department of Public Works;

13 (3) The Division of Infrastructure Design and Construction within the Department of  
14 Public Works;

15 (4) ~~(3)~~ The San Francisco Public Utilities Commission;

16 (5) ~~(4)~~ The Department of Recreation and Park Department;

17 (5) ~~The Bureau of Construction Management within the Department of Public Works;~~

18 (6) The San Francisco Municipal Transportation Agency Railway;

19 (7) The Department of Building Inspection;

20 (8) The Port of San Francisco;

21 (9) The San Francisco International Airport; ~~and~~

22 (10) The San Francisco Public Library; -

23 (11) The Department of Public Health; and,

24 (12) The Real Estate Division within the Department of Administrative Services.

1           (c) The Task Force shall adopt bylaws to govern its operations. At least one member of the  
2 Task Force shall be a LEED Accredited Professional ~~LEED<sup>TM</sup>-accredited professional.~~

3           (d) ~~(b)~~ The Department of the Environment shall provide staff for the Task Force.  
4

5           **SEC. 703. DUTIES OF THE DEPARTMENT OF THE ENVIRONMENT.**

6           (a) General Duties under this Chapter Establishment and Purpose. ~~The Department of the~~  
7 ~~Environment shall: There is hereby created with the Department of the Environment a Resource~~  
8 ~~Efficient Building Program. The purpose of the Resource Efficient Building Program is to:~~

9                   (1) Develop goals, criteria, and strategies for optimizing municipal green  
10 ~~maximizing resource efficient~~ building design, construction and operations and ~~to~~ make policy  
11 recommendations regarding requirements for municipal construction projects ~~city and private~~  
12 ~~resource efficient buildings~~ to the Board of Supervisors;

13                   (2) Develop and oversee a training program in green resource efficient building  
14 practices, including design, construction, alteration, renovation, operation and reuse of  
15 buildings ~~in a resource efficient and energy efficient manner~~ for department heads and city  
16 architects, engineers, construction managers, ~~and~~ building managers, department managers and  
17 finance officers employed by the City in order to implement the policies adopted by the Board  
18 of Supervisors;

19                   (3) Coordinate with the Task Force and other City departments having expertise  
20 with, or with responsibility for, compliance with the requirements of this Chapter, and on  
21 achieving municipal green resource efficient building goals including, but not limited to, the  
22 Department of Public Works, the San Francisco Public Utilities Commission and the  
23 Department of Building Inspection. These departments shall also assist the Director in  
24 providing advice, assistance, outreach, and education to other City departments concerning  
25 green resource efficient building practices;

1                   (4) Provide technical project oversight and assistance directly to City project teams or  
2 through green building technical assistance contracts; Assess the efficacy of the Pilot Program and the  
3 Resource Efficient Building Program on both environmental and economic grounds; and

4                   (5) Develop forms and materials necessary for compliance with this Chapter. Provide  
5 information to the general public to encourage the adoption of resource efficient building guidelines by  
6 the public and private sector.

7                   (b) **Guidance, Rules and Regulations.** After a public hearing, the Director may  
8 promulgate such guidance, forms, performance procedures, rules and regulations as may be  
9 necessary or appropriate from time to time to carry out the provisions of this Chapter,  
10 including the adoption of forms necessary to implement this Chapter. The Director is  
11 authorized to call upon the Task Force and other City departments as necessary and  
12 appropriate to assist in developing such guidance, forms, performance procedures, rules and  
13 regulations. Such guidance, forms, performance procedures, rules and regulations may include  
14 adopting appropriate versions of LEED and adopting or modifying San Francisco-specific LEED  
15 requirements for municipal construction projects, as provided in Section 706.

16                   (c) ~~Green Building Compliance Guide.~~ *In accordance with Section 703(b) and in consultation*  
17 *with other City departments, no later than 120 days from the effective date of this ordinance, the*  
18 *Director shall adopt and regularly update a Green Building Compliance Guide for San Francisco*  
19 *Municipal Buildings. The Compliance Guide shall contain all necessary forms and guidelines for*  
20 *compliance with this Chapter. At a minimum, the Compliance Guide shall contain:*

- 21                   (1) ~~a list of City requirements pursuant to this Chapter;~~  
22                   (2) ~~all applicable LEED<sup>TM</sup> methods and standards;~~  
23                   (3) ~~all local and state environmental regulations regarding building design and~~  
24 ~~construction related to LEED<sup>TM</sup>;~~  
25

1                   ~~(4) directions on how to prepare a conceptual design assessment and a construction~~  
2 ~~documents assessment;~~

3                   ~~(5) a method for administering a LEED<sup>TM</sup>-rated project;~~

4                   ~~(6) a LEED<sup>TM</sup> project checklist;~~

5                   ~~(7) commissioning guidelines, including how to identify a commissioning authority and~~  
6 ~~how to obtain the LEED<sup>TM</sup> additional commissioning credit;~~

7                   ~~(8) guidelines for projects less than 5,000 square feet;~~

8                   ~~(9) a waiver request form; and~~

9                   ~~(10) an annual reporting form.~~

10               ~~(c) (d)~~ The Director shall determine the costs of implementing this Chapter and shall  
11 request that relevant City departments provide work orders to the Department to cover the  
12 costs of implementing and maintaining the programs required by this Chapter. ~~Such work~~  
13 ~~orders may cover the costs of departments on the Task Force.~~

14  
15 **SEC. ~~704 709~~. DUTIES OF CITY DEPARTMENTS.**

16               ~~(a)~~ Each City department, board and commission subject to this Chapter shall administer its  
17 construction projects in accordance with the Chapter.

18               ~~(b) (a)~~ Each City department, board and commission subject to this Chapter shall  
19 cooperate with, and provide in writing to the Department all information necessary for the  
20 Department to carry out its duties under this Chapter.

21               ~~(c) (b)~~ Each City department shall designate an employee a contact person for  
22 construction projects ~~Construction Projects~~ and green building communications.

23               ~~(d)~~ Each City department shall assist the Director in providing advice, assistance, outreach  
24 and education to other City departments concerning municipal green building practices.

1           ~~(e)~~ (e) Appropriate City department personnel ~~shall~~ will attend green building Green  
2 Building related training offered by the Department.

3           ~~(f) The San Francisco Public Utilities Commission may provide energy- or water-related~~  
4 ~~technical project design review assistance directly to City project teams or through technical assistance~~  
5 ~~contracts.~~

6  
7 **~~SEC. 704. RESOURCE EFFICIENT PILOT PROJECTS.~~**

8           ~~(a) Pilot Projects. Under the original enactment of this Chapter, an interdepartmental task~~  
9 ~~force selected the following as Pilot Projects:~~

10           ~~(1) EcoCenter and San Francisco Department of the Environment Offices;~~

11           ~~(2) Moscone West Convention Center;~~

12           ~~(3) West End Pavilion;~~

13           ~~(4) Visitation Valley Clubhouse;~~

14           ~~(5) 23rd and Treat Streets New Mission Park and Clubhouse;~~

15           ~~(6) Laguna Honda Hospital Replacement Project;~~

16           ~~(7) New California Academy of Sciences;~~

17           ~~(8) Golden Gate Music Concourse Underground Parking Facility; and~~

18           ~~(9) Islais Creek, MUNI Maintenance and Operations Facility.~~

19           ~~(b) Commissioning Process. Pilot projects are encouraged to follow the Commissioning~~  
20 ~~Process established by the Department pursuant to Section 703~~

21           ~~(c) Pilot Project Funding.~~

22           ~~(1) Each revenue generating City department shall, to the extent possible, fund its Pilot~~  
23 ~~Projects from its own revenue. The total costs of a pilot project shall be determined by the Bureau of~~  
24 ~~Architecture, in conjunction with the Department, based upon the design documents submitted by the~~  
25 ~~City department to the Bureau of Architecture.~~



1                   ~~(2) The Department of the Environment shall assist departments in identifying~~  
2 ~~additional public and private sector funding sources for Pilot Projects not yet completed.~~

3  
4 **SEC. ~~705 707. LEED CERTIFICATION GREEN BUILDING DESIGN~~ REQUIREMENTS FOR**  
5 **MUNICIPAL CONSTRUCTION PROJECTS.**

6           Except as otherwise provided by the City's Charter,

7           ~~(a) In addition to complying with this Chapter, municipal construction projects shall comply~~  
8 ~~with the requirements of Chapter 13C of the San Francisco Building Code, "The San Francisco Green~~  
9 ~~Building Code."~~

10           ~~(b) (a)~~ As described in this Chapter, the LEED Leadership in Energy and Environmental  
11 Design (LEED<sup>TM</sup>) rating system shall be used to certify measure the environmental design  
12 performance of the City's municipal construction projects buildings. The minimum requirement for  
13 municipal construction projects of 5,000 square feet or more shall be LEED Gold certification by  
14 GBCI. If there are substantive changes to the LEED<sup>TM</sup> rating system after the adoption of this  
15 ordinance, the Director shall recommend appropriate amendments to the Board of Supervisors.

16           ~~(c)~~ In order to achieve LEED Gold certification, municipal construction projects must meet  
17 selected San Francisco-specific LEED credit requirements as further specified by Section 706 and this  
18 Chapter.

19           ~~(d) (b)~~ **Operative Effective Date.** This section shall apply to any construction project  
20 otherwise subject to the provisions of this Chapter 7 where the initial appropriation request, either  
21 whole or partial, is submitted to the Board of Supervisors after September 1, 2011. Construction  
22 Projects for which an initial budget has been prepared on or after 120 days after the effective date of  
23 this ordinance.

24           ~~(e)~~ **Conceptual Design Assessment.** In accordance with the Compliance Guide and this  
25 Section, a City department proposing a Construction Project shall prepare a conceptual design

1 *assessment. The assessment will classify the proposed Construction Project as less than 5,000 square*  
2 *feet or 5,000 square feet or more.*

3 *(e) (d) **Projects less than 5,000 square feet.** For construction projects less than 5,000*  
4 *square feet and for construction projects of any size not meeting the Minimum Project Requirements to*  
5 *be eligible for LEED certification, the sponsoring City department, in consultation with a LEED AP,*  
6 *shall prepare and submit a conceptual design phase LEED Scorecard to the Department for*  
7 *informational and reporting purposes. The conceptual design phase LEED Scorecard shall*  
8 *demonstrate the maximum LEED credits that are practicable for the project. The sponsoring City*  
9 *department shall pursue these LEED credits throughout the design and construction process. The*  
10 *department, in consultation with a LEED AP, shall prepare and submit a final as-built LEED*  
11 *Scorecard to the Department indicating all LEED credits that would be achieved if the project had*  
12 *been certified. Documentation of LEED credits is not required for these projects. For Construction*  
13 *Projects with square footage less than 5,000 square feet, the conceptual design assessment shall*  
14 *provide for the maximum LEED<sup>TM</sup> points practicable. The proposing City department shall submit the*  
15 *assessment to the Task Force for informational and reporting purposes.*

16 *(f) (e) **Projects of 5,000 square feet or more.** For Construction Projects with square*  
17 *footage of 5,000 square feet or more the following applies:*

18 *(1) **Conceptual Design Phase.** During the conceptual design phase, the*  
19 *sponsoring proposing City department shall assemble a design team, which shall must include a*  
20 *LEED AP assigned to be the LEED Project Administrator LEED<sup>TM</sup>-accredited professional. The*  
21 *LEED Project Administrator shall LEED<sup>TM</sup>-accredited professional member of the design team must*  
22 *prepare and submit to the Task Force for approval a conceptual phase LEED Scorecard design*  
23 *assessment to the Department for review by the Task Force. The conceptual phase LEED Scorecard*  
24 *design assessment shall demonstrate must propose a LEED Gold LEED<sup>TM</sup>-Silver rating or higher,*  
25 *including all San Francisco-specific LEED credit requirements. The Task Force shall review and*

1 make recommendations on the conceptual LEED Scorecard design assessment within 35 days of  
2 submittal.

3 (2) Schematic Design, Design Development and Construction Document Phases

4 Design Phase. During the Schematic Design design phase, the LEED Project Administrator  
5 proposing City department must retain an independent commissioning authority and provide the name  
6 of the commissioning authority to the Task Force. The proposing City department shall register the  
7 construction project Construction Project with the GBCI USGBC as a LEED registered LEED™  
8 project. At the conclusion of each design phase (Schematic Design, Design Development, and  
9 Construction Documents), the LEED Project Administrator shall submit an updated LEED Scorecard  
10 to the Department; the Scorecard shall demonstrate a LEED Gold rating or higher for the project,  
11 including all San Francisco-specific LEED credit requirements. These interim LEED Scorecards shall  
12 be available for review by the Task Force.

13 ~~(3) Construction Documents Phase. During the final construction documents phase,~~  
14 ~~the LEED™-accredited professional member of the design team shall prepare and submit to the Task~~  
15 ~~Force for approval a construction documents assessment that maintains a LEED™ Silver rating or~~  
16 ~~higher. The Task Force shall review construction documents assessment within 35 calendar days of~~  
17 ~~submittal, except for large complex projects for which a schedule will be determined upon submission.~~

18 ~~(4) Commissioning Process. The City department and the independent commissioning~~  
19 ~~authority for the project shall perform the Commissioning Process as described in the Compliance~~  
20 ~~Guide.~~

21 (3) (5) Project Construction. At the completion of construction, the LEED  
22 Project Administrator City department shall submit the final LEED LEED™ documentation to the  
23 GBCI USGBC for certification. Upon receiving the LEED rating from the GBCI USGBC, the  
24 LEED Project Administrator City department shall submit the LEED ratings # and the final LEED  
25 Scorecard LEED™ project checklist to the Department for review by the Task Force.

1           ~~(f) **Annual Report.** No later than August 1 of each year, each City department with a~~  
2 ~~Construction Project subject to this Chapter shall submit a report to the Task Force in accordance with~~  
3 ~~the Compliance Guide.~~

4           (g) The USGBC updates the LEED rating system on a three-year cycle. The Director shall as  
5 necessary adopt by the regulation the current applicable versions of LEED pursuant to Section 703(b).

6  
7 **SEC. 705. RESOURCE EFFICIENCY REQUIREMENTS FOR CITY BUILDINGS;**  
8 **GUIDELINES.**

9           *The Commission on the Environment shall issue guidelines to all City departments to assist*  
10 *them in determining which of the provisions of Section 705.1 et seq. apply to them. Pursuant to Section*  
11 *703(b), the Director may revise these guidelines from time to time.*

12  
13 **SEC. 706. SAN FRANCISCO-SPECIFIC LEED CREDIT REQUIREMENTS FOR MUNICIPAL**  
14 **CONSTRUCTION PROJECTS.**

15           (a) As part of the LEED Gold certification requirement for municipal construction projects, the  
16 projects must achieve the following LEED credits:

17           (1) **Stormwater Management.** The LEED Project Administrator shall submit  
18 documentation verifying that a construction project that is located outside the City and County of San  
19 Francisco achieves the LEED SS6.2 credit. Construction projects located within the City and County of  
20 San Francisco shall implement the applicable stormwater management controls adopted by the San  
21 Francisco Public Utilities Commission (the "SFPUC"). All construction projects shall develop and  
22 implement construction activity pollution prevention and stormwater management controls adopted by  
23 the SFPUC, and achieve LEED prerequisite SSp1 or similar criteria adopted by the SFPUC, as  
24 applicable.

1                   (2) Indoor Water Use Reduction. The LEED Project Administrator shall submit  
2 documentation verifying a minimum 30 percent reduction in the use of indoor potable water, as  
3 calculated to meet and achieve LEED credit WE3.2.

4                   (3) Energy Performance. Using an Alternative Calculation Method (ACM) approved by  
5 the California Energy Commission, the LEED Project Administrator shall calculate the project's  
6 energy use, and compare it to the standard or "budget" building to achieve LEED credit EA1 by  
7 either:

8                               (A) A 15 percent compliance margin over Title 24, Part 6, 2008 California  
9 Energy Standards; or,

10                              (B) Document compliance with Title 24, Part 6, 2008 California Energy  
11 Standards, including submittal of all standard documentation, and additionally demonstrate that the  
12 project achieves a 15 percent or greater compliance margin over the ASHRAE 90.1 2007 energy cost  
13 baseline using the published LEED 2009 rules. Such analysis shall include all on-site building energy  
14 use, including exterior and security lighting, elevators, all process loads, and receptacle loads.

15                   (4) Renewable Energy. The LEED Project Administrator shall confer with SFPUC on  
16 renewable energy opportunities for municipal construction projects, including photovoltaics, solar hot  
17 water and wind power. Space allocation and infrastructure for future renewable energy installations  
18 shall be included in municipal construction projects, as advised by SFPUC, including but not limited to  
19 structural capacity, wiring conduits, supply and return piping, and control wiring. The LEED Project  
20 Administrator shall submit documentation verifying that either:

21                               (A) At least 1 percent of the building's energy costs are offset by on-site  
22 renewable energy generation, achieving LEED credit EA 2, including any combination of:  
23 photovoltaic, solar thermal, wind, biofuel-based electrical systems, geothermal heating, geothermal  
24 electric, wave, tidal, or low impact hydroelectric systems, or as specified in Section 25741 of the  
25 California Public Resources Code; or,

1 (B) In addition to meeting LEED prerequisite EA 1 Energy Performance  
2 requirement, achieve an additional 10 percent compliance margin over Title 24, Part 6, 2008  
3 California Energy Standards, for a total compliance margin of at least 25 percent.

4 (5) Commissioning. The LEED Project Administrator shall submit documentation  
5 verifying that the facility has been or will meet the criteria necessary to achieve LEED credit EA 3.0  
6 (Enhanced Commissioning), in addition to LEED prerequisite EA p1 (Fundamental Commissioning of  
7 Building Energy Systems.)

8 (6) Enhanced Refrigerant Management. The LEED Project Administrator shall submit  
9 documentation verifying that the project will reduce ozone depletion, while minimizing direct  
10 contribution to climate change, achieving LEED credit EA 4.

11 (7) Construction Debris Management. The LEED Project Administrator shall submit  
12 documentation verifying the diversion of a minimum of 75 percent of the project's construction and  
13 demolition debris, as calculated to achieve LEED credit MR2.2. The project must also satisfy the  
14 requirements of Section 708.

15 (8) IAQ Management: During Construction. The LEED Project Administrator shall  
16 submit documentation verifying that the sponsoring City department has prepared and implemented an  
17 Indoor Air Quality Management Plan that achieves LEED credit EQ 3.1. This requirement includes  
18 meeting or exceeding the recommended Control Measures of the Sheet Metal and Air Conditioning  
19 National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under  
20 Construction, 2nd Edition 2007, ANSI-SMACNA 008-2008 (Chapter 3).

21 (9) IAQ Management: Before Occupancy. The LEED Project Administrator shall  
22 submit documentation verifying that the sponsoring City department has prepared and implemented an  
23 Indoor Air Quality Management Plan that achieves LEED credit EQ 3.2.

1                   (10) Low Emitting Materials. The LEED Project Administrator shall submit  
2 documentation verifying that the project is using low-emitting materials, subject to onsite verification,  
3 achieving LEED credits EO 4.1, EO 4.2, EO 4.3, and EO 4.4 wherever applicable:

4                   (A) Adhesives, sealants and sealant primers shall achieve LEED credit EO 4.1,  
5 including compliance with South Coast Air Quality Management District (SCAQMD) Rule #1168,  
6 amended January 7, 2005.

7                   (B) Interior paints and coatings applied on-site shall achieve LEED credit EO  
8 4.2, including:

9                                 (i) Architectural paints and coatings shall meet the VOC content limits of  
10 Green Seal Standard GS-11 (1st Edition, 1993).

11                                (ii) Anti-corrosive and anti-rust paints applied to interior ferrous metal  
12 substrates shall not exceed the VOC content limit of Green Seal Standard GC-03 (2nd Edition, 1997)of  
13 250 g/L.

14                                (iii) Clear wood finishes, floor coatings, stains, primers, and shellacs  
15 applied to interior elements shall not exceed SCAQMD Rule 1113 (2004) VOC content limits.

16                   (C) Flooring systems shall achieve LEED credit EO 4.3 Option 1, including:

17                                (i) Interior carpet shall meet the testing and product requirements of the  
18 Carpet and Rug Institute Green Label Plus program.

19                                (ii) Interior carpet cushioning shall meet the requirements of the Carpet  
20 and Rug Institute Green Label program.

21                                (iii) Hard surface flooring, including linoleum, laminate flooring, wood  
22 flooring, ceramic flooring, rubber flooring, and wall base shall be certified as compliant with the  
23 FloorScore standard, provided, however, that 100 percent reused or 100 percent post-consumer  
24 recycled hard surface flooring may be exempted from this LEED credit EO 4.3 requirement. Projects  
25 exercising this exemption for hard surface flooring shall otherwise be eligible for LEED credit EO 4.3.

1                    (D) Interior composite wood and agrifiber products shall achieve LEED credit  
2 EO 4.4 by containing no added urea formaldehyde resins. Interior and exterior hardwood plywood,  
3 particleboard, and medium density fiberboard composite wood products shall additionally meet  
4 California Air Resources Board Air Toxics Control Measure for Composite Wood (17 CCR  
5 93120 et seq.), by or before the dates specified in those sections.

6                    (E) Project sponsors are encouraged to achieve LEED Pilot Credit 2: Persistent  
7 Bioaccumulative Toxic Chemicals Source Reduction: Dioxins and Halogenated Organic Compounds.  
8 This standard is consistent with Environment Code Chapter 5: Non-PVC Plastics.

9                    (11) Indoor Chemical and Pollutant Source Control. The LEED Project Administrator  
10 shall submit documentation verifying that the project will minimize and control the entry of pollutants  
11 into buildings and later cross contamination of regularly occupied areas, achieving LEED credit EO 5.

12  
13 **SEC. 707 705.5. CITY BUILDINGS; COLLECTION, STORAGE AND LOADING OF**  
14 **RECYCLABLE AND COMPOSTABLE MATERIALS RECYCLABLES.**

15                    (a) All City departments shall ensure that adequate, accessible, and convenient recycling,  
16 composting and waste areas are provided within City-owned facilities and leaseholds, and that all  
17 contract documents for construction activities contain this requirement. In accordance with the City  
18 and County of San Francisco's solid-waste diversion goals, and the Mandatory Recycling and  
19 Composting Ordinance (Chapter 19 of the Environment Code), the departments shall provide sufficient  
20 space to allow the collection, storage and loading of 100 percent of the facility's recyclable,  
21 compostable and waste materials. That space must be sufficient to accommodate containers consistent  
22 with both current methods and goals of refuse collection, storage and loading, and with projected  
23 needs when full zero waste goals are met.

24                    (1) The departments shall integrate all areas designated for the collection, storage and  
25 loading of recyclable, compostable and waste materials into the design and construction of the project.



1 The departments shall ensure that areas for collection, storage and loading of recyclable and  
2 compostable materials are at least as convenient and usable as spaces provided for non-recyclable  
3 waste disposal, and located in the same areas whenever possible. When separate locations must be  
4 provided due to space constraints, the locations for collection, storage and loading of recyclable and  
5 compostable materials shall be at least as convenient as non-recyclable waste disposal locations.

6 (2) All areas designated for the collection, storage and loading of recyclable,  
7 compostable and waste materials shall allow for easy access to the containers by collection vehicles.

8 (3) Each interior space shall include adequate area designed and designated for  
9 collection and storage of recyclable, compostable and waste materials.

10 (4) Any chute system for solid-waste disposal shall be designed for equal convenience to  
11 all users to separate the three waste streams of trash, recycling and compostable materials.

12 (b) **Surplus Furniture, Equipment, Computers and Supplies.** The Virtual Warehouse Program  
13 facilitates the reuse, recycling, and disposal of surplus City materials. To the extent permitted by law,  
14 all surplus furniture, equipment, computers and supplies purchased with San Francisco City and  
15 County funds shall be turned in to the Virtual Warehouse. Before buying any new furniture, equipment  
16 or supplies, City employees shall check the Virtual Warehouse for available products that meet their  
17 needs.

18 (c) All City departments are required to recycle used fluorescent and other mercury containing  
19 lamps, batteries, and universal waste as defined by California Code of Regulations Section 66261.9.

20 (a) The requirements of this Section apply to the following City departments: City departments  
21 undertaking or authorizing others to undertake Construction Projects at City-owned Facilities; City  
22 departments undertaking or authorizing others to undertake Construction Projects in Existing City  
23 Leaseholds; City departments undertaking or authorizing others to undertake Construction Projects in  
24 New City Leaseholds; City departments executing agreements for New City Leaseholds or occupying  
25

1 ~~New City Leaseholds; and City departments occupying City-owned Facilities (but only if the City-~~  
2 ~~owned Facility was acquired at least 90 days after the effective date of the Ordinance.)~~

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

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

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

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

14 ~~(d) Any cost associated with recycling areas pursuant to this subsection shall be the~~  
15 ~~responsibility of the party or parties who are responsible for the cost of any alterations to~~  
16 ~~accommodate their occupancy.~~

17  
18 **SEC. ~~708 706~~. CONSTRUCTION AND DEMOLITION DEBRIS MANAGEMENT.**

19 ~~(a) This requirement applies to all Construction and/or Demolition Projects at City-owned~~  
20 ~~Facilities and City leaseholds, regardless of size of the project, located within the nine counties~~  
21 ~~surrounding the San Francisco Bay with a total projected cost of \$90,000 or more at City-owned~~  
22 ~~Facilities and new and existing city leaseholds. All City departments shall ensure that each~~  
23 ~~Construction and/or Demolition Project subject to this Section Chapter shall meet minimize~~  
24 ~~construction and demolition debris disposal in accordance with the following requirements:~~

1                   (1) The Contractor shall employ the following hierarchy of highest and best use for  
2 handling Construction & Demolition ("C&D") debris as follows:

3                   (A) Implement reduced material usage or reuse of materials before any  
4 recycling;

5                   (B) Implement recycling of source-separated material before any recycling of  
6 mixed C&D debris material;

7                   (C) Implement recycling of mixed C&D debris before all other forms of disposal.

8                   (2) The contractor shall manage all project C&D debris materials to meet a minimum  
9 diversion rate of 75 percent. The Director may increase the minimum diversion rate by regulation  
10 under Section 703(b) based on the Director's assessment of infrastructure, markets and materials  
11 available to support the new rate.

12                   (3) The contractor is prohibited from sending any C&D debris material directly to a  
13 landfill without submitting a request to and receiving approval from the Department. The request must  
14 demonstrate that all reuse and recycling options for the material have been evaluated and determined  
15 to be not possible. A request to send C&D material directly to landfill must demonstrate that beneficial  
16 reuse of the material is employed, if possible, before any material is used as alternative daily cover  
17 (ADC), and that material is used as landfill disposal only as a last resort if necessary, and shall include  
18 documentation such as a written statement by the landfill operator that the material will be used as  
19 designated.

20                   The contractor should submit any initial request for approval to send C&D debris  
21 material directly to a landfill to the Department at the same time the contractor submits the  
22 Construction and Demolition and Debris Management Plan (CDDMP) to the City Representative, as  
23 provided in subsection (b)(2)(A)(ii), below. But if unforeseen circumstances affect the material during  
24 the project, the contractor may at that time submit an additional or amended request to the Department  
25 for its review and possible approval.

1                   (4) The contractor is prohibited from sending any C&D debris materials directly to any  
2 facility that would incinerate such debris or otherwise process such debris using high temperature  
3 conversion technology, unless the debris is used as boiler fuel in BioMass Energy Generation, which  
4 will only be allowed after the contractor has submitted a request to and received approval from the  
5 Department. The contractor shall demonstrate in the request that all reuse and recycling options for  
6 the material have been evaluated and determined to be not possible.

7                   (5) No solid waste or C&D debris material shall be buried or otherwise disposed of on  
8 the project site, unless engineered and processed on site for on-site reuse such as engineered backfill or  
9 landscaping; any such use shall be documented on all C&D debris material management plans and  
10 reports.

11                   (6) In order for C&D debris to be considered hazardous, such as containing asbestos or  
12 lead, it shall be tested and determined to be hazardous by an independent professional, such as a  
13 Cal/OSHA Certified Asbestos Consultant. The waste determination and other verification shall be  
14 included with the C&D Debris Management Plan, together with a list of hazardous materials found at  
15 the project site and plans for proper disposal.

16                   **(b) (a) Construction and Demolition Debris Management Plan.** The contract  
17 between the City department and the contractor shall require the contractor responsible for  
18 construction and/or demolition debris material management to:

19                   (1) Conduct a site assessment to estimate the types of materials that will be  
20 generated during the by construction and/or demolition project, including packaging or shipping  
21 materials. at the site that are anticipated to be feasible and practical for reuse and recycling, and

22                   (2) Complete a plan as set forth below in subparagraph (b) describing the  
23 procedures for disposal, reuse, or recycling and material management.

24                   **(A) (b) Plan Requirements.** The contract between the City department  
25 and the contractor shall require that:

1 (i) ~~(1)~~ After award of the contract and prior to commencement of  
2 the demolition or construction project, the City Representative ~~project engineer~~ shall ensure that  
3 ~~meet with~~ the contractor develops to develop a plan for managing C&D construction and demolition  
4 debris material from the project to meet the requirements of this Section to enable the City and the  
5 contractor to develop a mutual understanding regarding recycling and reuse.

6 (ii) ~~(2)~~ The contractor shall prepare, sign and submit ~~to the City~~  
7 ~~project engineer~~ a Construction and Demolition Debris Management Plan ("CDDMP") to the City  
8 Representative ~~written construction and demolition debris management plan.~~ The City Representative  
9 shall review the plan to ensure the contractor and the City are maximizing highest and best use of all  
10 C&D debris material and are meeting the requirements of this Section. The City Representative shall,  
11 if appropriate, approve and sign the CDDMP to ensure that the contractor abides by all requirements  
12 of this Section.

13 (B) The Director shall specify the form of the CDDMP by regulation pursuant to  
14 Section 703(b). The form shall include, but not be limited to: The construction and demolition debris  
15 management plan shall include, but not be limited to the following information:

16 (i) ~~(A)~~ Contractor and project identification information;

17 (ii) ~~(B)~~ Procedures to be used for C&D debris management;

18 (iii) ~~(C)~~ A list listing of the materials generated from the project, their  
19 estimated weight by tons, and how they will ~~to~~ be reused, recycled, or otherwise handled landfilled;  
20 and,

21 ~~(D)~~ An estimate of the quantities to be reused, recycled, or landfilled;  
22 and

23 (iv) ~~(E)~~ The names and locations of reuse and recycling facilities or  
24 sites, and companies that will transport the material.

1                   (3) If the project involves a Full Demolition Permit from the code official having  
2 jurisdiction, or if the projected cost of the project exceeds \$100,000, or as may be required by the  
3 Department, the City Representative shall send the approved CDDMP to the Department for optional  
4 review and approval. The construction and demolition debris management plan is subject to the  
5 approval of the City project engineer.

6                   ~~(e) Recycling of Construction and Demolition Debris. The contract between the City~~  
7 ~~department and the contractor shall require that:~~

8                   ~~(1) The contractor shall develop and implement procedures to reuse and recycle~~  
9 ~~materials to the greatest extent feasible based upon the contract, the construction and demolition debris~~  
10 ~~management plan, the estimated quantities of materials, and the availability of recycling facilities.~~

11                   ~~(2) The contractor shall develop and implement programs for on-site or off-site~~  
12 ~~recycling of source-separated materials, including asphalt, concrete, concrete block, and rocks; dirt~~  
13 ~~and sand metals (ferrous and non-ferrous); wood; green materials (e.g., tree trimmings) and other~~  
14 ~~materials as appropriate, such as red clay brick, corrugated cardboard, and wall board; mixed debris;~~  
15 ~~and salvageable items. Prior to delivering materials, the contractor shall familiarize itself with the~~  
16 ~~specifications for acceptance of construction and demolition materials at recycling facilities.~~

17                   ~~(3) Approval of the contractor's construction and demolition debris management plan~~  
18 ~~by the City project engineer shall not relieve the contractor of the duty to comply with any other~~  
19 ~~applicable laws regulating control or disposal of solid waste or other pollutants.~~

20                   (c) ~~(d)~~ **Summary of Diversion; Disposal.** The contract between the City department  
21 and the contractor shall require that:

22                   (1) With each application for progress payment, the contractor shall submit a  
23 signed Summary of Diversion to the City Representative showing C&D debris material diversion and  
24 disposal coinciding with the time period of the progress payment. summary of construction and  
25 demolition debris diversion and disposal, This summary shall quantify ~~quantifying~~ all materials

1 generated by the construction and/or demolition project, at the work site and disposed of in Class III  
2 Landfills, as defined in Title 27 CCR 20260, or and how they were diverted from disposal through  
3 reuse or recycling, plus supporting documentation in the form of weight slips or other similar proof.  
4 The means used to reuse or recycle debris material must be consistent with the CDDMP for the project.  
5 No material may be taken to any landfill without prior approval pursuant to section 708(a)(3), and  
6 landfill documentation provided with the Summary of Diversion must show that material was used as  
7 specified in the CDDMP. Failure to submit the Summary of Diversion and supporting  
8 documentation to the City Representative in the form of weight slips or other similar proof shall  
9 render the application for progress payment incomplete and delay progress payment. The  
10 Summary of Diversion must be submitted on a form specified by regulation of the Director under  
11 Section 703(b).

12 (2) The City Representative shall review and, if appropriate, sign as approved, the  
13 Summary of Diversion and supporting documentation to ensure that the contractor is adhering to the  
14 approved CDDMP, and that the reported diversion rate is correct. The City Representative shall send  
15 the Department a copy of the approved Summary of Diversion for any projects subject to  
16 subsection (b)(3). The contractor shall be responsible for transporting and disposing of materials that  
17 cannot be delivered to a source-separated or mixed materials recycling facility to a transfer station or  
18 disposal facility that can accept the materials in accordance with state law. No solid waste shall be  
19 burned, buried or otherwise disposed of on the project site.

20 (d) Final Diversion Report. The contract between the City department and the contractor shall  
21 require that:

22 (1) A Final Diversion Report signed by the contractor showing the weight of C&D  
23 debris material diverted for the entire construction and/or demolition project and the overall diversion  
24 rate achieved shall be prepared and submitted to the City Representative for approval prior to final  
25

1 payment. The Final Diversion Report will be submitted on a form established by regulation, pursuant  
2 to Section 703(b).

3 (2) The City Representative will send an approved copy of the Final Diversion Report to  
4 the Department. The City Representative shall retain all supporting documentation and make it  
5 available to the Department upon request.

6 (e) Retention of Records. The City Representative shall retain all C&D Debris Management  
7 Plans, Summaries of Diversion, Final Diversion Reports and all supporting documentation after  
8 completion of the project for a period of time determined by the Department by regulation.

9 (f) Revenue. Revenues or other savings obtained from recycled or reused  
10 materials shall accrue to the City department or the contractor as negotiated between them  
11 and embodied in the contract.

12 (g) All factual representations required by this Section shall be signed under penalty of perjury.

13 (h) All forms and documentation required by this Section will be submitted electronically, if  
14 possible.

15 (i) Enforcement. The Director and his or her designee may administer all provisions of this  
16 section and enforce those provisions by any lawful means available for such purpose except as  
17 otherwise provided in this Chapter.

18  
19 **SEC. 709. WATER CONSERVATION RETROFIT REQUIREMENTS.**

20 (a) On or before January 1, 2017, the department responsible for any City-owned facility's  
21 operation and maintenance shall take all steps necessary to bring the facility into compliance with this  
22 Section.

23 (b) The department shall use San Francisco Public Utilities Commission ("SFPUC") guidelines  
24 to determine which of the following provisions applies.

25 (c) Water Conservation Requirements for Water Closets (Toilets) and Urinals.



1 (1) This subsection applies to all City-owned facilities.

2 (2) City leaseholds are subject to the all the requirements of the Commercial Water  
3 Conservation Ordinance of Chapter 13A of the San Francisco Building Code, including provisions  
4 requiring the replacement of non-compliant water closets and urinals on or before January 1, 2017.

5 (3) The responsible department shall ensure that all water closets in City-owned  
6 facilities with a rated flush volume exceeding 1.6 gallons per flush and all urinals with a rated flush  
7 volume exceeding 1.0 gallon per flush are replaced with high-efficiency water closets that use no more  
8 than 1.28 gallons per flush and high-efficiency urinals that use no more than 0.5 gallons per flush,  
9 respectively.

10 (4) The responsible department shall replace the bowl and flushometer valve together in  
11 all City-owned facilities to meet high-efficiency standards for flushometer type water closets and  
12 urinals. The department shall replace the bowl and tank together to meet high-efficiency standards for  
13 tank type water closets.

14 (5) The department shall be responsible for the costs of compliance and for ensuring  
15 that all applicable contract documents for the replacement of water closets and urinals contain the  
16 above requirement.

17 (6) Installation of water closets and urinals:

18 (A) City departments purchasing water closets and urinals may only purchase  
19 high-efficiency water closets and urinals listed by the General Manager of the SFPUC.

20 (B) City departments shall confer with the General Manger and incorporate  
21 technical assistance and water conservation audit findings in project plans.

22 (7) City departments shall comply with inspection findings determined to be necessary  
23 by the General Manager of the SFPUC to ensure that all fixtures have been properly installed for  
24 buildings subject to the requirements in subsection (c)(3) where four or more high-efficiency water  
25 closets or urinals are replaced.

1                   (8) Should the General Manager of the SFPUC determine that water closets and urinals  
2 that are more water-efficient than those specified in the foregoing sections exist, City departments shall  
3 install fixtures identified on a SFPUC list of other water-efficient water closets and urinals that City  
4 departments may use pursuant to Section 703(b).

5                   **(d) Water Conservation Requirements for Shower Heads.**

6                   (1) This subsection applies to all City-owned facilities.

7                   (2) City leaseholds are subject to the Commercial Water Conservation Ordinance of  
8 Chapter 13A of the San Francisco Building Code, including provisions requiring the replacement of  
9 non-compliant showerheads on or before January 1, 2017.

10                  (3) The department responsible for any City-owned facility's operation and maintenance  
11 shall take all necessary steps to ensure that all showerheads in the facility having a maximum flow rate  
12 exceeding 2.5 gallons per minute are replaced with showerheads having a maximum flow rate not to  
13 exceed 1.5 gallons per minute.

14                  (4) The department shall be responsible for the costs of compliance and for ensuring  
15 that all applicable contract documents for the replacement of showerheads contain the above  
16 requirement.

17                  (5) Should the General Manager of the SFPUC determine that shower heads that are  
18 more water efficient than those specified in the foregoing section exist, City departments shall install  
19 fixtures identified on a San Francisco Public Utilities Commission list of other water-efficient shower  
20 heads that City departments may use pursuant to Section 703(b).

21                  **(e) Water Conservation Requirements for Faucets and Faucet Aerators.**

22                  (1) This subsection applies to all City-owned facilities.

23                  (2) City leaseholds are subject to requirements of the Commercial Water Conservation  
24 Ordinance of Chapter 13A of the San Francisco Building Code, including provisions requiring the  
25 replacement of non-compliant faucets and faucet aerators on or before January 1, 2017.

1           (3) The department responsible for any City-owned facility's operation and maintenance  
2 shall take all necessary steps to ensure that all faucets and faucet aerators in the facility with a  
3 maximum flow rate exceeding 2.2 gallons per minute are replaced with fixtures having a maximum flow  
4 rate not to exceed 0.5 gallons per minute per appropriate site conditions.

5           (4) The department shall be responsible for the costs of compliance and for ensuring  
6 that all applicable contract documents for the replacement of faucet or faucet aerators containing the  
7 above requirement.

8           (5) Should the General Manager of the SFPUC determine that faucet aerators that are  
9 more water efficient than those specified in the foregoing section exist, City departments shall install  
10 fixtures identified on a SFPUC list of other water-efficient faucets or faucet aerators that City  
11 departments may use pursuant to Section 703(b).

12  
13 **SEC. 705.1. CITY BUILDINGS; WATER CONSERVATION REQUIREMENTS — TOILETS.**

14           ~~(a) The requirements of this Section apply to the following City departments: City departments~~  
15 ~~undertaking or authorizing others to undertake Construction Projects with a total projected cost of~~  
16 ~~\$90,000 or more at City owned Facilities; City departments undertaking or authorizing others to~~  
17 ~~undertake Construction Projects with a total projected cost of \$90,000 or more in Existing City~~  
18 ~~Leaseholds (but only if restrooms are included in the leasehold space and the City department has a~~  
19 ~~separate metering account with the San Francisco Public Utilities Commission); City departments~~  
20 ~~undertaking or authorizing others to undertake Construction Projects with a total projected cost of~~  
21 ~~\$90,000 or more in New City Leaseholds (but only if restrooms are included in the leasehold space and~~  
22 ~~the City department has a separate metering account with the San Francisco Public Utilities~~  
23 ~~Commission Water Department); City departments executing agreements for New City Leaseholds or~~  
24 ~~occupying New City Leaseholds (but only if restrooms are included in the leasehold space and the City~~  
25 ~~department has a separate metering account with the San Francisco Public Utilities Commission); City~~

1 ~~departments occupying City owned Facilities (but only if the City department has separate metering~~  
2 ~~account with the San Francisco Public Utilities Commission); and all City departments purchasing~~  
3 ~~toilets beginning 90 days after the effective date of this ordinance.~~

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

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

9 ~~(2) By June 30, 2005.~~

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

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

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

22 ~~(2) 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 such~~  
24 ~~toilets. This procedure shall be distributed to all City departments responsible for purchases and/or~~  
25 ~~installations at City owned Facilities or leaseholds within 90 days of the effective date of this Chapter.~~

1 ~~It shall be updated by the San Francisco Public Utilities Commission annually and sent to all heads of~~  
2 ~~City departments responsible for purchases and/or installations at City-owned Facilities or leaseholds~~  
3 ~~and to the Purchasing Department.~~

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

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

11  
12 **~~SEC. 705.2. CITY BUILDINGS; WATER CONSERVATION REQUIREMENTS—SHOWER~~**  
13 **~~HEADS.~~**

14 ~~(a) The requirements of this Section apply to the following City departments: City departments~~  
15 ~~undertaking or authorizing others to undertake Construction Projects with a total projected cost of~~  
16 ~~\$90,000 or more in City-owned Facilities; City departments undertaking or authorizing others to~~  
17 ~~undertake Construction Projects with a total projected cost of \$90,000 or more in Existing City~~  
18 ~~Leaseholds (but only if restrooms are included in the leasehold space and the City department has a~~  
19 ~~separate metering account with the San Francisco Public Utilities Commission); City departments~~  
20 ~~undertaking or authorizing others to undertake Construction Projects with a total projected cost of~~  
21 ~~\$90,000 or more in New City Leaseholds (but only if restrooms are included in the leasehold space and~~  
22 ~~the City department has a separate metering account with the San Francisco Public Utilities~~  
23 ~~Commission); City departments executing agreements for New City Leaseholds or occupying New City~~  
24 ~~Leaseholds (but only if restrooms are included in the leasehold space and the City department has a~~  
25 ~~separate metering account with the San Francisco Public Utilities Commission); City departments~~

1 ~~occupying City-owned Facilities (but only if the City department has a separate metering account with~~  
2 ~~the San Francisco Public Utilities Commission); and all City departments purchasing shower heads~~  
3 ~~beginning 90 days after the effective date of this Ordinance.~~

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

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

9 ~~(d) To facilitate the installation of these shower heads, the San Francisco Public Utilities~~  
10 ~~Commission shall:~~

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

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

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

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

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

1  
2 **SEC. ~~710~~ 705.3. ENERGY EFFICIENT LIGHTING RETROFIT REQUIREMENTS CITY**  
3 **BUILDINGS; ENERGY CONSERVATION REQUIREMENTS — LIGHT FIXTURES AND EXIT**  
4 **SIGNS.**

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

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

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

16 (2) **Fluorescent Fixtures.**

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

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

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

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

6 (iv) "Compliance Deadline" is the final date by which all fixtures  
7 using 4-foot or 8-foot linear fluorescent lamps to provide illumination are to be in compliance.

8 (B) **Compliance Deadline.** The Compliance Deadline is December 31,  
9 2011.

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

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

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

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

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



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

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

8 (E) **Low Light Levels.** The requirements of this Section *705.3(b)(2)* shall  
9 not apply where the resulting *luminaire luminaire* will provide lighting levels at the work surface  
10 that are below the standards established by the Illuminating Engineering Society.

11 (F) **Waivers.** By September 30, 2011, the Director shall act on all  
12 pending requests for City Departments for a temporary waiver of the requirements of this  
13 Section *705.3(b)*. The criteria for waivers for this Section *705.3(b)* shall be described in rules  
14 issued by the Director. The Director shall submit to the Board of Supervisors a list of all  
15 departments receiving waivers, and shall identify budgetary or other barriers to compliance  
16 cited in those departments' waiver requests. Thereafter, the Director shall report on the effects  
17 of this Ordinance as part of the *tri-annual* report required by Section *712.710*

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

23 (c) **Other Technologies.** Should the Director determine that light fixtures or exit signs  
24 that are more energy than those specified in the foregoing sections exist, the Director may, in  
25 consultation with the San Francisco Public Utilities Commission, establish a list of other

1 energy-efficient light fixtures and exit signs that City departments may use pursuant to  
2 Section 703(b).

3  
4 **SEC. 711 705.4. CITY BUILDINGS; INDOOR ENVIRONMENTAL AIR QUALITY.**

5 (a) The requirements of this Section apply to all City-Owned Facilities and City  
6 leaseholds. the following City departments: City departments undertaking or authorizing others to  
7 undertake Construction Projects with a total projected cost of \$90,000 or more in City owned  
8 Facilities; City departments undertaking or authorizing others to undertake Construction Projects with  
9 a total projected cost of \$90,000 or more in Existing City Leaseholds; City departments undertaking or  
10 authorizing others to undertake Construction Projects with a total projected cost of \$90,000 or more in  
11 New City Leaseholds; City departments occupying an Existing City Leasehold (if the City is responsible  
12 for managing the Existing City Leasehold); City departments executing agreements for New City  
13 Leaseholds or occupying New City Leaseholds (if the City is responsible for managing the New City  
14 Leasehold); and City departments occupying City owned Facilities (if the City department is  
15 responsible for managing the City owned Facility.)

16 (b) The San Francisco Department of Public Health ("DPH"), in consultation with the  
17 Department, shall track Indoor Environmental Quality (IEQ) problems, including indoor air pollution,  
18 fumes, odors, humidity problems, and thermal and acoustical comfort issues, in City-owned buildings  
19 and City leaseholds through the Department of Public Works and the Real Estate Division's  
20 Computerized Maintenance Management System (CMMS).

21 (c) City Departments not using the CMMS may complete a voluntary annual survey of IEQ  
22 information.

23 (d) DPH shall compile tracking information from the CMMS and survey results into an annual  
24 analysis including commonalities among complaints and preventative techniques. The annual survey  
25

1 results and analysis will provide information with which to provide better solutions to IEQ problems  
2 and improve IEQ policy-making.

3 (e) DPH will coordinate research and interventions relating to the causes, effects, extent,  
4 prevention, and control of indoor pollution, and will disseminate outcomes to City departments.

5 (f) Pursuant to Section 703(a)(2), the Department, in consultation with DPH, will provide  
6 outreach and education programs for City Departments and design professionals on the importance of  
7 IAQ management in the design, construction, operation and maintenance of municipal buildings.

8 (g) Construction specifications and facility maintenance protocols for City-owned Facilities  
9 and City Leaseholds shall include the following:

10 (1) Implementation of moisture and mold management practices during the design,  
11 construction and maintenance of a building. City-owned Facilities and City Leaseholds shall have a  
12 system in place that provides prompt response and remediation for moisture infiltration, water damage  
13 and/or mold.

14 (2) For new construction, elimination of building materials manufactured with lead.  
15 Eliminated materials are established by regulation, pursuant to Section 703(b).

16 (h) Additional IEQ construction specifications and facility maintenance protocols for City-  
17 owned Facilities and City Leaseholds may be adopted by regulation pursuant to Section 703(b).

18 (b) ~~Maintenance.~~ Within 90 days of the effective date of this Chapter, the Department shall  
19 provide informational guidelines for the development of indoor air quality maintenance plans to all  
20 City departments identified above. The guidelines shall include, at a minimum, guidance and  
21 recommendations on the following:

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

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

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

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

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

12           ~~(d) Pollutant Source Control.~~

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

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

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

1 ~~materials to ensure that they remain dry and to remove and dispose of such materials if they become~~  
2 ~~wet.~~

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

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

18  
19 **SEC. ~~712~~ 710. REPORT TO THE BOARD OF SUPERVISORS.**

20 ~~No later than July 1, 2014, Within three years of the effective date of this ordinance and every~~  
21 ~~three years thereafter,~~ the Director, in consultation with the Task Force and affected City  
22 departments and with input from members of the public who have asked to be informed by the  
23 Task Force or the Department, shall submit to the Board of Supervisors a report on the effects  
24 of this Chapter, including but not limited to the following:  
25

1 (1) A report of the compliance description of the environmental performance of  
2 construction projects ~~Construction Projects~~ under the LEED LEED™ rating system, including a  
3 report on waivers and of the pilot projects;

4 (2) A report of City departments' compliance with this Chapter, ~~including a report~~  
5 ~~on waivers~~;

6 (3) An assessment of whether this Chapter has achieved its stated goals; and

7 (4) Recommended changes, if any, to this Chapter.

8  
9 **SEC. ~~713 708~~. WAIVERS.**

10 (a) Waivers from the requirements of this Chapter are available under the following  
11 circumstances:

12 (1) ~~(a)~~ **Emergency.** A City department may grant itself a waiver from any  
13 requirement of this Chapter, except the requirements of Section 706(a)(4), when it is necessary to  
14 respond to an emergency which endangers public health or safety. In such case, the City  
15 department shall report to the Director on a form provided by the Director regarding the  
16 emergency that prevented compliance with this Chapter within five business days. City  
17 departments desiring an emergency waiver from the requirements of Section 706(a)(4) shall confer  
18 with the General Manager of the San Francisco Public Utilities Commission.

19 (2) ~~(b)~~ **Cost Prohibitive.** A City department may request a waiver from the  
20 Director on a form provided by the Director if compliance with this Chapter is cost prohibitive.  
21 The Task Force shall provide the Director with a recommendation with respect to the waiver  
22 request. The Director may grant a waiver upon a finding that the requesting department has:

23 (A) ~~(1)~~ Demonstrated which specific requirements are cost prohibitive as  
24 weighed against the potential economic, environmental and health benefits posed by a  
25 particular requirement; and

1                    ~~(B) (2)~~ If applicable for Section ~~705 707~~, developed a reasonable plan to  
2 maximize the number of ~~LEED LEED<sup>TM</sup>~~ points attainable.

3                    ~~(3) (e)~~ **Other.** If, due to specific circumstances, compliance would defeat the  
4 intent of this Chapter or create an unreasonable burden on the ~~construction project Construction~~  
5 ~~Project~~ or City department, the City department may request a waiver from that requirement  
6 from the Director on a form provided by the Director. The Task Force shall provide the  
7 Director with a recommendation with respect to the waiver request. The Director may grant a  
8 waiver upon a finding that the requesting Department has:

9                    ~~(A) (1)~~ Documented the circumstances and burdens at issue; and

10                    ~~(B) (2)~~ If applicable for Section ~~705 707~~, developed a reasonable plan to  
11 maximize the number of ~~LEED LEED<sup>TM</sup>~~ points attainable.

12                    ~~(b)~~ The Director shall respond to a request for a waiver within 35 days.

13                    ~~(c)~~ The Director may not waive the requirements of Sections 706(a)(4), 707, and 708, except in  
14 the case of emergencies as provided in subsection (a)(1). Departments seeking waivers of the  
15 requirements of Section 710(b) must follow the procedures provided for in Section 710(b)(2)(F).  
16 Granting of a waiver for any requirement of this Chapter does not waive any requirement of San  
17 Francisco Building Code Chapter 13C.

18                    ~~(d)~~ The Director shall report to the Commission on the Environment regularly on  
19 waivers requested, granted and denied.

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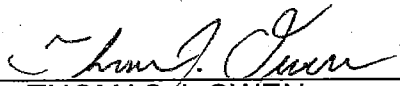
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1           Section 2. **Effective Date.** This ordinance shall become effective 30 days from the  
2 date of passage.  
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5 APPROVED AS TO FORM:  
6 DENNIS J. HERRERA, City Attorney

7  
8 By:   
9       THOMAS J. OWEN  
      Deputy City Attorney

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## LEGISLATIVE DIGEST

[Environment Code - Green Building Requirements for City Buildings]

**Ordinance amending the San Francisco Environment Code, Chapter 7, Sections 700 through 713, to update the green building requirements for the design, construction and operation of City buildings.**

### Municipal Green Building Task Force

Existing law establishes a "Resource Efficient Building Task Force," comprised of representatives from ten City departments, to "oversee and assist in making City buildings resource efficient."

The proposal would re-name this group the "Municipal Green Building Task Force," and would add representatives from the Bureaus of Engineering and Project Management within the Department of Public Works, the Department of Public Health, and the Real Estate Division within the Department of Administrative Services. The Task Force would coordinate implementation of the Chapter among City departments and advise the Department of Environment on green building policy. The Task Force would advise departments regarding compliance with the Chapter during the design and construction of City buildings. The Task Force would also provide a forum for sharing green building best practices and lessons learned among City Departments and project teams.

### LEED Requirements

Existing law requires all City building projects over 5,000 square feet to achieve LEED ("Leadership in Energy and Environmental Design") Silver certification.

The proposal would raise the requirement to LEED Gold certification for City building projects over 5,000 square feet, where the initial appropriation request was submitted to the Board of Supervisors after September 1, 2011. The proposal would require City building projects under 5,000 square feet to identify and implement the maximum practicable number of LEED strategies. (For purposes of comparison, San Francisco Building Code Chapter 13C requires all San Francisco private-sector construction projects over 25,000 square feet to earn a LEED Silver rating in 2011 and a LEED Gold rating in 2012 and after.)

LEED certification may be broken down and scored according to several subcategories. Existing law does not specify in which of those subcategories a City building project must obtain a satisfactory score as part of its certification.

The proposal would require City building projects to earn LEED points in several specified areas as part of achieving an overall LEED Gold certification, including stormwater management, indoor water use reduction, energy use reduction, construction waste management, low-emitting materials, and others.

### Water Conservation Retrofits

Existing law requires that toilets in City-owned facilities and City leaseholds that use more than 1.6 gallons per flush be replaced with toilets using a maximum of 1.6 gallons per flush, and all showerheads be replaced with showerheads using a maximum of 1.5 gallons per minute. The deadline for compliance was June 30, 2005.

The proposal would require all City-owned facilities to replace toilets using more than 1.6 gallons per flush and urinals using more than 1.0 gallons per flush with high-efficiency units using no more than 1.28 and 0.5 gallons per flush, respectively; and to replace all showerheads using more than 2.5 gallons per minute and faucets using over 2.2 gallons per minute with high-efficiency units using no more than 1.5 and 0.5 gallons per minute, respectively. The deadline for compliance would be January 1, 2017.

### Indoor Environmental Quality

Existing law requires the Department of the Environment to provide City departments engaged in specified City building projects with informational guidelines for development of indoor air quality maintenance plans. Existing law also requires City departments engaged in specified City building projects to include provisions in their construction contracts requiring: prevention of moisture contamination; removal of building materials contaminated by moisture; and, elimination of encapsulation of fibrous insulation materials.

The proposal would replace those provisions with a requirement that the Department of Public Health track Indoor Environmental Quality (IEQ) problems, including indoor air pollution, fumes, odors, humidity problems, and thermal and acoustical comfort issues in all City-owned buildings and City leaseholds through the Department of Public Works and the Real Estate Division's Computerized Maintenance Management System (CMMS). City Departments not using the CMMS would be allowed to complete a voluntary annual survey of IEQ information. The proposal would further require DPH to compile annual analyses of complaints, and coordinate interventions and further research.

### Waiver Provisions

Existing law allows the Director of the Department of the Environment to issue waivers from the requirements of the Chapter if compliance would be cost-prohibitive, or otherwise impose an unreasonable burden on a department.

The proposal would bar the Director from waiving the new requirements for recycling and composting, and for construction and demolition debris management, except in cases of emergency. The proposal would also allow the General Manager of the SFPUC to issue waivers for stormwater management requirements.

### Other Changes

The proposal would clarify and expand upon the requirements for providing space in City buildings for the collection and storage of recyclable and compostable refuse, and for the management of construction and demolition debris. The proposal would also make additional technical, organizational and editorial changes in remaining provisions of Chapter 7.



**Re: Referral: BOS File No. 110854**   
**John Updike to: Alisa Somera**

08/17/2011 10:50 AM

Alisa:

It has been a pleasure working with the Resource Efficient Building Task Force and Dept. of Environment staff, particularly Mark Palmer, in updating our Green Building Requirements, culminating in the introduction of this legislation. Real Estate supports this legislation as submitted.

john

John Updike  
 Acting Director of Real Estate  
 LEED AP O+M  
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 e-mail: John.Updike@sfgov.org

Alisa Somera	Attached please find a referral for BOS File No....	08/17/2011 09:24:21 AM
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From: Alisa Somera/BOS/SFGOV  
 To: Melanie Nutter/ENV/SFGOV@SFGOV, Vivian Day/DBI/SFGOV@SFGOV, Mohammed.Nuru@sfdpw.org, Ed Harrington <Ed.Harrington@sfgov.org>, Phil Ginsburg/RPD/SFGOV@SFGOV, "Johnson, Debra" <Debra.Johnson@sfmta.com>, Monique Moyer/SFPORT/SFGOV@SFGOV, John.Martin@flysfo.com, Luis Herrera <lherrera@sfpl.org>, Barbara Garcia/DPH/SFGOV@SFGOV, John Updike/ADMSVC/SFGOV@SFGOV  
 Cc: Mark.Palmer@sfgov.microsoftonline.com, Sonya Harris/DBI/SFGOV@SFGOV, Janet.Martinsen@sfmta.com, Kate.Breen@sfmta.com  
 Date: 08/17/2011 09:24 AM  
 Subject: Referral: BOS File No. 110854

Attached please find a referral for BOS File No. 110854 (Green Building Requirements for City Buildings), which is being referred to your department for informational purposes only. If you do have any reports or comments or would like included in the legislative file, please forward those to me.

Thank you.

[attachment "110854 FYI.pdf" deleted by John Updike/ADMSVC/SFGOV]

**Alisa Somera**  
**Assistant Clerk**  
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Complete a Board of Supervisors Customer Satisfaction form by clicking the link below.  
<http://www.sfbos.org/index.aspx?page=104>