

BOARD of SUPERVISORS



City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco 94102-4689  
Tel. No. 554-5184  
Fax No. 554-5163  
TDD/TTY No. 554-5227

## MEMORANDUM

TO: Ed Reiskin, Executive Director, Municipal Transportation Agency  
Phil Ginsburg, General Manager, Recreation and Parks Department  
Anne Kronenberg, Executive Director, Department of Emergency Management  
Luis Herrera, City Librarian, Public Library  
Joanne Hayes-White, Chief, Fire Department  
Barbara A. Garcia, Director, Department of Public Health  
John Updike, Director, Real Estate Division  
Ivar C. Satero, Airport Director, Airport Department  
Deborah Raphael, Director, Department of the Environment  
Mohammed Nuru, Director, Public Works  
Harlan Kelly, Jr., General Manager, Public Utilities Commission  
Naomi Kelly, City Administrator, Office of the City Administrator  
Tom Hui, Director, Department of Building Inspection  
John Rahaim, Director, Planning Department  
Elaine Forbes, Executive Director, San Francisco Port Department

FROM:  Alisa Somera, Legislative Deputy Director  
Land Use and Transportation Committee

DATE: December 12, 2016

SUBJECT: LEGISLATION INTRODUCED

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The Board of Supervisors' Land Use and Transportation Committee has received the following proposed legislation, introduced by Mayor Lee on November 29, 2016:

**File No. 161287**

**Ordinance amending the Environment Code to update the green building requirements for the design, construction, and operation of City buildings; and affirming the Planning Department's determination under the California Environmental Quality Act.**

If you have comments or reports to be included with the file, please forward them to me at the Board of Supervisors, City Hall, Room 244, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102 or by email at: [alisa.somera@sfgov.org](mailto:alisa.somera@sfgov.org).

c: Janet Martinsen, Municipal Transportation Agency  
Kate Breen, Municipal Transportation Agency  
Dillon Auyoung, Municipal Transportation Agency  
Viktoriya Wise, Municipal Transportation Agency  
Sarah Madland, Recreation and Parks Department  
Kelly Alves, Fire Department  
Greg Wagner, Department of Public Health  
Colleen Chawla, Department of Public Health  
Cathy Widener, Airport Department  
Guillermo Rodriguez, Department of the Environment  
Anthony Valdez, Department of the Environment  
Mei Ling Hui, Department of the Environment  
Frank Lee, Public Works  
John Thomas, Public Works  
Lena Liu, Public Works  
Juliet Ellis, Public Utilities Commission  
Donna Hood, Public Utilities Commission  
William Strawn, Department of Building Inspection  
Carolyn Jayin, Department of Building Inspection  
Scott Sanchez, Planning Department  
Lisa Gibson, Planning Department  
AnMarie Rodgers, Planning Department  
Aaron Starr, Planning Department  
Joy Navarrete, Planning Department  
Jeanie Poling, Planning Department  
Daley Dunham, San Francisco Port Department

[Environment Code - Green Building Requirements for City Buildings]

**Ordinance amending the Environment Code to update the green building requirements for the design, construction, and operation of City buildings; and affirming the Planning Department's determination under the California Environmental Quality Act.**

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

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

Section 1. CEQA Findings. The Planning Department has determined that the actions contemplated in this ordinance comply with the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.). Said determination is on file with the Clerk of the Board of Supervisors in File No. \_\_\_\_ and is incorporated herein by reference. The Board affirms this determination.

Section 2. The Environment Code is hereby amended by revising Sections 701 through 709 and 712 through 713, and deleting Section 710, to read as follows:

**SEC. 701. DEFINITIONS.**

The following terms shall have the meanings set forth below.

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

1 used as Alternative Daily Cover, including Green Material, does not qualify as material diverted from  
2 landfill.

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

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

14 (d) "Building" means:

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

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

19 (2) "Building" includes office buildings, libraries, recreation centers, museums,  
20 airport buildings, public safety buildings, hospitals, clinics, education centers, transportation  
21 facilities, cruise ship terminals, marina buildings, convention facilities, and other structures.

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



1        ~~(e)~~ "CALGreen" means the California ~~State~~ Green Building Standards Code ~~(Cal. Code of~~  
2        Regs. Title 24, Part 11) as adopted by San Francisco Green Building Code ~~Chapter 13C~~.

3        ~~(f)~~ "City department" means any department of the City and County of San Francisco.  
4        City department does not include any other local agency or any federal or State agency,  
5        including but not limited to, the San Francisco Unified School District, the San Francisco  
6        Community College District, the Successor Agency to the San Francisco Redevelopment Agency  
7        or and the San Francisco Housing Authority.

8        ~~(g)~~ "City-owned Facility" means any building owned by the City and County of San  
9        Francisco. "City-owned Facility" includes City-owned facilities or portions thereof that the City  
10       leases to non-City entities.

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

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

17       ~~(j)~~ "Commission" means the Commission on the Environment.

18       ~~(k)~~ "Commissioning Process" means an independent process to ensure the attainment  
19       of quality facilities pursuant to this Chapter. The commissioning process verifies and  
20       documents that the energy using systems in buildings are installed, tested, and operate as  
21       designed. ~~The Commissioning Process shall coordinate with, but not include, routine inspections~~  
22       ~~performed by the code official having jurisdiction.~~

23       ~~(l)~~ "Construction and Demolition Debris" or "C & D Debris" means building materials  
24       and solid waste generated from construction and demolition activities, including, but not  
25       limited to: fully-cured asphalt; concrete; brick; ~~rock; soil;~~ lumber; gypsum wallboard;

1 cardboard and other associated packaging; roofing material; ceramic tile; carpeting; fixtures;  
2 plastic pipe; and metals; ~~and, tree stumps and other vegetative matter resulting from land clearing~~  
3 ~~and landscaping for construction, deconstruction, demolition or land developments.~~ Construction  
4 and Demolition Debris does not include refuse regulated under the 1932 Refuse Collection  
5 and Disposal Ordinance or sections of the Municipal Code that implement the provisions of  
6 that ordinance, or materials excavated from the public right-of-way. Construction and  
7 Demolition Debris does not include "hazardous waste," as defined in California Health and  
8 Safety Code Sections 25100 et seq.

9 ~~(m)~~ "Construction Project" means any ~~building~~, planning, ~~design~~, ~~building~~, or  
10 construction activity, including demolition, new construction, major alteration, or building  
11 additions by a City department at a City-owned Facility, or City Leasehold, including planning,  
12 design, building, or construction activities performed by tenants at a City-owned Facility.

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

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

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

23 ~~(q)~~ "Department" means the Department of the Environment.

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



1        ~~(s)~~ "Director" means the Director of the Department of the Environment or his or her  
2        designee.

3        ~~(t)~~ "Disposal" means final deposition of material at a legally operating permitted landfill  
4        that does not include beneficial reuse or at a permitted transformation facility. A legally  
5        operating, permitted landfill includes Class III landfills and inert fills. Disposal of inert materials  
6        at inert fills or inert backfill sites does not constitute recycling.

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

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

13       ~~(w)~~ "Green Business Building Certification Inc. Institute" or "GBCI" is the body providing  
14       independent third-party LEED certification and professional credentials recognizing excellence  
15       in green building performance and practice.

16       "Green Material" means any plant material that is either separated at the point of generation  
17       or separated at a centralized facility that employs methods to minimize contamination of waste streams.  
18       Green Material includes, but is not limited to, yard trimmings, untreated wood wastes, paper products,  
19       and natural fiber products. Green Material does not include treated wood waste, mixed demolition or  
20       mixed construction debris, manure, or plant waste from food processing facilities, alone or blended  
21       with soil.

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

24       ~~(y)~~ "Indoor Air Quality" or "IAQ" means the air quality within and  
25       around buildings and structures, especially as it relates to the health and comfort of building

1 occupants. IAQ can be affected by gases (including carbon dioxide, carbon monoxide, radon,  
2 formaldehyde, volatile organic compounds), particulates, and microbial contaminants (mold, bacteria)  
3 that can induce adverse health conditions. ~~the quality of indoor air, including the concentration of~~  
4 ~~particulates, fumes, odors, carbon dioxide, etc.~~

5 (z) "Indoor Environmental Quality" means the conditions inside a building, such as air  
6 quality, lighting, acoustics, thermal conditions, daylight, views, ergonomics, and controllability of  
7 systems, and their effects on occupants. ~~the quality of the indoor environment, including air quality,~~  
8 ~~thermal quality, acoustical quality, daylight, views and controllability of systems.~~

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

14 (bb) "Leadership in Energy and Environmental Design" or "LEED®" is an internationally  
15 recognized green building certification system developed by the USGBC, providing third-party  
16 verification that a building or community was designed and built using strategies aimed at  
17 improving performance across all the following metrics: energy savings; water efficiency; CO<sub>2</sub>  
18 emissions reduction; improved indoor environmental quality; and, stewardship of resources  
19 and sensitivity to their impacts. LEED provides building owners and operators with a concise  
20 framework for identifying an implementing practical and measurable green building design,  
21 construction, operations, and maintenance solutions. LEED certified buildings are rated on a  
22 scale from lowest to highest: LEED Certified, LEED Silver, LEED Gold and LEED Platinum.  
23 Wherever specific LEED prerequisites or credits are cited, such references are to LEED  
24 version 4 ("v4") building Design and Construction (BD+C) 2009. More recent LEED versions may  
25



1 be used, provided the credits and points achieved are at least as stringent as LEED ~~v4 BD+C~~  
2 ~~2009~~.

3 ~~(ee)~~ "LEED Accredited Professional with specialty" or "LEED AP with specialty" means  
4 an employee of a City department or a consultant retained by the City through a design or  
5 construction contract or other agreement who has ~~fulfilled all requirements and~~ passed the  
6 LEED AP with specialty accreditation exam issued by GBCI and maintained this credential  
7 through continuing education in applying LEED principles to technical fields of practice in building  
8 design, construction and operations.

9 ~~(dd)~~ "LEED Project Administrator" means the individual member of the design team  
10 who registers a project with GBCI, and subsequently administers the LEED documentation  
11 and certification process for the project. For San Francisco municipal construction projects, the  
12 LEED Project Administrator shall be a LEED AP with specialty.

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

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

18 ~~(gg)~~ "Minimum Program Project Requirements" or "MPR" means the minimum  
19 requirements necessary for projects to become LEED certified, as determined issued by the  
20 USGBC.

21 ~~(hh)~~ "Mixed Construction & Demolition debris" or "Mixed C & D Debris" means  
22 "Construction and Demolition Debris" or "C&D Debris," but excluding materials source-  
23 separated for reuse or recycling.

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

1       ~~(ii)~~ "Person" means a natural person, a firm, joint stock company, business concern,  
2       association, partnership or corporation or, to the extent permitted by law, governmental entity,  
3       including the City and County of San Francisco and its departments, boards and commissions  
4       for projects within the nine counties surrounding the San Francisco Bay, and its or their  
5       successors or assigns.

6       ~~(iii)~~ "Recover" or "Recovery" means any activity, including source reduction,  
7       deconstruction and salvaging, reuse, recycling and com posting, which, causes materials to  
8       be recovered for use as a resource and diverted from disposal.

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

15       ~~(v)~~ "Recycling Facility" means an operation or person that collects and processes  
16       materials for recycling.

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

20       ~~(vii)~~ "Registered Transporter" means a person who removes mixed construction and/or  
21       demolition (C&D) debris from a construction and/or demolition site, using a vehicle with more  
22       than two axles or two tires per axle (such as a large pickup truck with four tires on the rear  
23       axle or three-axle dump trucks), and hauling at least one (1) cubic yard of mixed construction  
24       and demolition debris. A "Registered Transporter" must hold a valid registration from the City  
25



1 and County of San Francisco and is obligated to take all mixed C&D material only to a  
2 Registered Facility.

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

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

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

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

## 20 21 **SEC. 702. MUNICIPAL GREEN BUILDING TASK FORCE.**

22 (a) Establishment and Purpose. The Board of Supervisors establishes the Municipal  
23 Green Building Task Force (the "Task Force") to oversee and assist in enhancing the  
24 environmental performance of City construction projects pursuant to this Chapter. The Task  
25 Force shall review municipal construction projects subject to this Chapter during their design



1 and construction to ensure that the responsible City departments are complying with the  
2 requirements of the Chapter, and may advise the Department of the Environment on matters  
3 of policy related to this Chapter. The Task Force shall facilitate interdepartmental  
4 communication and cooperation about green building issues throughout the City, and act as an  
5 educational forum to increase green building knowledge and share project-related successes  
6 and lessons learned. The Task Force shall hear waiver requests from City departments and make  
7 recommendations to the Director with respect to such requests.

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

11 (1) ~~The~~ Department of the Environment;

12 (2) ~~The Division of~~ Building Design and Construction Division within the  
13 Department of Public Works;

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

16 (4) Landscape Architecture Division within the Department of Public Works;

17 (5) Public Works Buildings – Project Management;

18 (6) ~~(4)~~ Power Enterprise within The San Francisco Public Utilities Commission;

19 (7) Water Enterprise within San Francisco Public Utilities Commission;

20 (8) Wastewater Enterprise within San Francisco Public Utilities Commission;

21 (9) Infrastructure within San Francisco Public Utilities Commission;

22 (10) ~~(5)~~ Project Management Division within The Recreation and Parks Park  
23 Department;

24 (11) ~~(6)~~ Capital Programs and Construction Division within The San Francisco  
25 Municipal Transportation Agency;

1                    (12) Capital Planning Program within Office of City Administrator;  
2                    (13) ~~(7)~~ The Department of Building Inspection;  
3                    (14) Citywide Planning Division within Planning Department;  
4                    (15) ~~(8)~~ The Port of San Francisco;  
5                    (16) ~~(9)~~ Design and Construction Division within The San Francisco International  
6 Airport;  
7                    (17) ~~(10)~~ Facilities Division within The San Francisco Public Library;  
8                    (18) Fire Department;  
9                    (19) ~~(11)~~ Environmental Health Section of The Department of Public Health; and,  
10                   (20) ~~(12)~~ The Real Estate Division within the Department of Administrative  
11 Services.

12                (c) The Task Force shall adopt bylaws to govern its operations. At least half the Task  
13 Force members and the public member ~~one member of the Task Force~~ shall hold the credential of be a  
14 LEED Accredited Professional with specialty.

15                (d) The Municipal Green Building Coordinator from Department of the Environment shall  
16 be a permanent member and act as chair of ~~provide staff for~~ the Task Force.

17                (e) Beginning on the effective date of the ordinance adding this subsection (e) to Section 702,  
18 the public member of the Task Force appointed by the Mayor shall serve for a three-year term. No  
19 person may serve as the public member of the Task Force for more than two consecutive terms.  
20

### 21 **SEC. 703. DUTIES OF THE DEPARTMENT OF THE ENVIRONMENT.**

22                (a) General Duties Under this Chapter. The Department of the Environment shall:

23                    (1) Develop goals, criteria, and strategies for optimizing municipal green  
24 building design, construction and operations and make policy recommendations regarding  
25 requirements for municipal construction projects to the Board of Supervisors;



1 (2) Develop and oversee a training program in green building practices,  
2 including design, construction, alteration, renovation, operation and reuse of buildings for  
3 department heads and city architects, engineers, construction managers, building managers,  
4 department managers and finance officers employed by the City in order to implement the  
5 policies adopted by the Board of Supervisors;

6 (3) ~~Chair~~ ~~Coordinate with~~ the Task Force and ~~coordinate other~~ City departments  
7 having ~~expertise with, or with~~ responsibility for, compliance with the requirements of this  
8 Chapter, ~~and on achieving municipal green building goals including, but not limited to, the~~  
9 ~~Department of Public Works, the San Francisco Public Utilities Commission and the Department of~~  
10 ~~Building Inspection.~~ The Task Force ~~These departments~~ shall ~~also~~ assist the Director in providing  
11 green building advice, assistance, outreach, and education to ~~other~~ City departments  
12 ~~concerning green building practices;~~

13 (4) Provide technical project oversight and assistance directly to City project  
14 teams or through green building technical assistance contracts; and

15 (5) Develop forms and materials necessary for compliance with this Chapter.

16 (b) Guidance, Rules and Regulations. After a public hearing, the Director may  
17 promulgate such guidance, forms, performance procedures, rules and regulations as may be  
18 necessary or appropriate from time to time to carry out the provisions of this Chapter,  
19 including the adoption of forms necessary to implement this Chapter. The Director is  
20 authorized to call upon the Task Force and other City departments as necessary and  
21 appropriate to assist in developing such guidance, forms, performance procedures, rules and  
22 regulations. Such guidance, forms, performance procedures, rules and regulations may  
23 include adopting appropriate versions of LEED and adopting or modifying locally-required  
24 measures ~~San Francisco-specific LEED requirements~~ for municipal construction projects, as  
25 provided in Section 706.



1 (c) The Director shall determine the costs of implementing this Chapter and shall  
2 request that relevant City departments provide work orders to the Department to cover the  
3 costs of implementing and maintaining the programs required by this Chapter.  
4

#### 5 **SEC. 704. DUTIES OF CITY DEPARTMENTS.**

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

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

11 (c) Upon LEED project registration, each City department subject to this Chapter shall provide  
12 LEED Online project access to the Department.

13 (d) Upon request, each City department subject to this Chapter shall provide project reports  
14 and presentations to the Municipal Green Building Task Force.

15 (e) ~~(e)~~ Each City department shall designate an employee contact person for  
16 construction projects and green building communications.

17 (f) ~~(f)~~ Each City department shall assist the Director in providing advice, assistance,  
18 outreach and education to other City departments concerning municipal green building  
19 practices.

20 (g) ~~(g)~~ Appropriate City department personnel shall attend green building related  
21 training offered by the Department.

22 (h) ~~(h)~~ The San Francisco Public Utilities Commission may provide energy- or water-  
23 related technical project design review assistance directly to City project teams or through  
24 technical assistance contracts.  
25

1   **SEC. 705. LEED CERTIFICATION REQUIREMENTS FOR MUNICIPAL CONSTRUCTION**  
2   **PROJECTS.**

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

4       (a) In addition to complying with this Chapter, municipal construction projects are  
5       subject to the applicable building codes in effect at the time of permit application. Municipal  
6       construction projects located within the City and County of San Francisco shall comply with the  
7       requirements ~~of Chapter 13C~~ of the San Francisco Green Building Code, ~~"The San Francisco~~  
8       ~~Green Building Code."~~ except for municipal construction projects located on property managed by the  
9       Port of San Francisco, which projects shall comply with this Chapter and the Port of San Francisco  
10       Building Code, and municipal construction projects located at the San Francisco International Airport,  
11       which shall comply with this Chapter and the California Building Standards Code (CCR Title 24). All  
12       other municipal construction projects located outside the City and County of San Francisco shall  
13       comply with this Chapter and the local building code promulgated by the authority having jurisdiction.

14       (b) As described in this Chapter, the LEED rating system shall be used to certify the  
15       environmental design of the City's municipal construction projects. The minimum requirement  
16       for municipal construction projects of 10,000 ~~5,000~~ square feet or more shall be LEED Gold  
17       certification by GBCI.

18       (c) Municipal construction projects shall demonstrate compliance with locally-required  
19       measures as provided in ~~In order to achieve LEED Gold certification, municipal construction projects~~  
20       ~~must meet selected San Francisco-specific LEED credit requirements as further specified by~~  
21       Section 706 and this Chapter.

22       (d) Operative Date. This section shall apply to any construction project otherwise  
23       subject to the provisions of this Chapter 7 where LEED project registration takes place on or after  
24       November 1, 2016 the initial appropriation request, either whole or partial, is submitted to the board of  
25       supervisors after November 1, 2011.



1 (e) Projects Less Than 10,000 5,000 Gross Square Feet. For construction projects less  
2 than 10,000 5,000 gross square feet and for construction projects of any size not meeting the  
3 Minimum Project Requirements to be eligible for LEED certification, the sponsoring City  
4 department, in consultation with a LEED AP with specialty, shall prepare and submit a  
5 conceptual design phase LEED Scorecard to the Department for informational and reporting  
6 purposes. The conceptual design phase LEED Scorecard shall demonstrate the maximum  
7 LEED credits that are practicable for the project. The sponsoring City department shall pursue  
8 these LEED credits throughout the design and construction process. The department, in  
9 consultation with a LEED AP with specialty, shall prepare and submit a final as-built LEED  
10 Scorecard to the Department indicating all LEED credits that would be achieved if the project  
11 had been certified. Documentation of LEED credits is not required for these projects. Projects  
12 less than 10,000 gross square feet are subject to all applicable local ordinances and requirements,  
13 including but not limited to, Construction and Demolition Debris Management, Recycling by  
14 Occupants, Construction Site Runoff Pollution Prevention, Stormwater Control, and Water Efficient  
15 Irrigation, as well as the requirements of the California Green Building Standards Code (CCR Title 24,  
16 Part 11).

17 (f) Projects of 10,000 5,000 Gross Square Feet or More. For Construction Projects with  
18 square footage of 10,000 5,000 gross square feet or more the following applies:

19 (1) Conceptual Design Phase. During the conceptual design phase, the  
20 sponsoring City department shall assemble a design team, which shall include a LEED AP  
21 with specialty assigned to be the LEED Project Administrator. The LEED Project Administrator  
22 shall prepare and submit a conceptual phase LEED Scorecard to the Department for review  
23 by the Task Force. The conceptual phase LEED Scorecard shall demonstrate a LEED v4 Gold  
24 rating or higher, including all locally-required measures ~~San Francisco-specific LEED credit~~  
25



1 ~~requirements~~. The Task Force shall review and make recommendations on the conceptual  
2 LEED Scorecard within 35 days of submittal.

3 (2) Schematic Design, Design Development and Construction Document  
4 Phases. During the Schematic Design phase, the LEED Project Administrator shall register  
5 the construction project with ~~the~~ GBCI as a LEED registered project. At the conclusion of each  
6 design phase (Schematic Design, Design Development, and Construction Documents), the  
7 LEED Project Administrator shall submit an updated LEED Scorecard to the Department; the  
8 Scorecard shall demonstrate a LEED ~~v4~~ Gold rating or higher for the project, including locally-  
9 required measures ~~all San Francisco-specific LEED credit requirements~~. These interim LEED  
10 Scorecards shall be available for review by the Task Force.

11 (3) Project Closeout Consultation. At the completion of construction, the LEED  
12 Project Administrator shall submit the final LEED documentation to ~~the~~ GBCI for certification.  
13 Upon receiving the LEED certification rating from ~~the~~ GBCI, the LEED Project Administrator  
14 shall submit a copy of the LEED certificate ratings and the final LEED Scorecard to the  
15 Department for review by the Task Force.

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

19  
20 **SEC. 706. LOCALLY-REQUIRED MEASURES ~~SAN FRANCISCO-SPECIFIC LEED CREDIT~~**  
21 **~~REQUIREMENTS~~ FOR MUNICIPAL CONSTRUCTION PROJECTS.**

22 All municipal construction projects shall comply with the following locally-required measures:  
23 ~~(a) As part of the LEED Gold certification requirement for municipal construction projects, the~~  
24 ~~projects must achieve the following LEED credits:~~

1           ~~(a) (1)~~ Stormwater Management. Projects that connect to the City's combined or separate  
2 sewer systems shall implement construction site run-off best management practices in compliance with  
3 the Construction Site Runoff Ordinance (Public Works Code §§146-146.11) and post-construction  
4 stormwater controls in compliance with the Stormwater Management Ordinance (Public Works Code  
5 §§147-147.6). ~~The LEED Project Administrator shall submit documentation verifying that a~~  
6 ~~construction project that is located outside the City and County of San Francisco achieves the LEED~~  
7 ~~SS6.2 credit. Construction projects located within the City and County of San Francisco shall~~  
8 ~~implement the applicable stormwater management controls adopted by the San Francisco Public~~  
9 ~~Utilities Commission (the "SFPUC"). All construction projects shall develop and implement~~  
10 ~~construction activity pollution prevention and stormwater management controls adopted by the~~  
11 ~~SFPUC, and achieve LEED prerequisite SSp1 or similar criteria adopted by the SFPUC, as applicable.~~

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

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

18                       ~~(A) A 15 percent compliance margin over Title 24, Part 6, 2008 California~~  
19 ~~Energy Standards; or,~~

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

25           ~~(c) (4)~~ Renewable Energy Efficiency, Better Roofs, and Energy Resilience.



1                   (1) As provided in Administrative Code Section 99.3, the project shall receive electric  
2 service from the SFPUC unless the SFPUC determines that such service is not feasible or that the  
3 City's lease or contract, if any, does not permit such service. The project design team shall work with  
4 the SFPUC to arrange for electric service and LEED Project Administrator shall confer with SFPUC  
5 on renewable energy opportunities and interconnection requirements for municipal construction  
6 projects, including photovoltaics; and solar hot water, and wind power. ~~Space allocation and~~  
7 ~~infrastructure for future renewable energy installations shall be included in municipal construction~~  
8 ~~projects, as advised by SFPUC, including but not limited to structural capacity, wiring conduits, supply~~  
9 ~~and return piping, and control wiring. The LEED Project Administrator shall submit documentation~~  
10 ~~verifying that either:~~

11                   (2) (A) The project design team shall submit documentation to the Department of  
12 Building Inspection verifying that the project meets LEED prerequisite Minimum Energy Performance  
13 and demonstrates compliance with CCR Title 24, Part 6, in effect at the time of the permit application.  
14 ~~At least 1 percent of the building's energy costs are offset by on-site renewable energy generation,~~  
15 ~~achieving LEED credit EA 2, including any combination of: photovoltaic, solar thermal, wind, biofuel-~~  
16 ~~based electrical systems, geothermal heating, geothermal electric, wave, tidal, or low impact~~  
17 ~~hydroelectric systems, or as specified in Section 25741 of the California Public Resources Code; or,~~

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

21                   (3) The project design team shall set a target for annual net energy consumption, and  
22 report this target to the Municipal Green Building Task Force. The Department in collaboration with  
23 the Task Force shall provide guidance as to the tools and methods to be used for setting annual net  
24 energy consumption targets.



1                   (4) For each project with an estimated height of no more than three stories above  
2 grade, project design teams shall determine the feasibility of designing and constructing such project to  
3 have zero net annual site energy consumption, including all building end uses. The Department in  
4 collaboration with the Task Force shall provide guidance as to the tools and methods to be used for  
5 determining feasibility. The design team shall submit determinations of feasibility to the Municipal  
6 Green Building Task Force.

7                   (5) The project shall include a combination of photovoltaic, solar thermal, and/or living  
8 roof area meeting the requirements of Planning Code Section 149 and San Francisco Green Building  
9 Code Chapter 5, Division 5.2, or demonstrate the applicability of any exceptions to those requirements.  
10 Compliance with the Living Roofs Alternative approved by the Planning Department in accordance  
11 with Planning Code Section 149 shall be acceptable in lieu of compliance with San Francisco Green  
12 Building Code Sections 5.201.2 and 5.201.1.3. In such cases, the applicable requirements of CCR  
13 Title 24, Part 6, Section 110.10 for the solar zone shall continue to apply.

14                   (6) Project design teams shall confer with the Department of Emergency Management  
15 and the Office of Resilience and Recovery to determine whether there are opportunities for the project  
16 site to deliver essential services to the community during disaster recovery. If the opportunity exists,  
17 project design teams shall analyze the costs and benefits of incorporating onsite battery electricity  
18 storage systems which store electricity from onsite solar photovoltaic systems and can be temporarily  
19 separated from the electricity grid for the purpose of supplying electricity that can be used to support  
20 the community in the event of disaster, and for other benefits identified by the project design team.  
21 Cost and benefit analyses shall be submitted to the Municipal Green Building Task Force, Department  
22 of Emergency Management, and Office of Resilience and Recovery.

23                   (d) (5) Commissioning. The LEED Project Administrator shall submit documentation  
24 verifying that the project achieves Option 1 of facility has been or will meet the criteria necessary to  
25 achieve LEED credit EA 3.0 (Enhanced and Monitoring-Based Commissioning), in addition to

1 LEED prerequisite ~~EAp1~~-(Fundamental Commissioning and Verification. ~~of Building Energy~~  
2 ~~Systems.~~)

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

6 ~~(e)~~ (7) Construction Debris Management. The LEED Project Administrator shall submit  
7 documentation verifying the diversion from landfill of a minimum of 75% ~~percent~~ of the project's  
8 construction and demolition debris, as calculated to achieve LEED credit Construction and  
9 Demolition Waste Management MR2.2. The project must also satisfy; the requirements of  
10 Section 708.

11 ~~(f) Indoor Air Quality. The LEED Project Administrator shall submit documentation verifying~~  
12 ~~that the project achieves LEED credit Enhanced Indoor Air Quality Strategies (1 point), LEED credit~~  
13 ~~Construction Indoor Air Quality Management Plan (1 point), and LEED credit Indoor Air Quality~~  
14 ~~Assessment Option 2: Air Testing (2 points).~~

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.~~

24 (g) (10) Low Emitting Materials. The LEED Project Administrator shall submit  
25 documentation verifying that the project achieves LEED Low Emitting Materials (3 points). ~~is~~



1 ~~using low-emitting materials, subject to onsite verification, achieving LEED credits EQ 4.1, EQ 4.2,~~  
2 ~~EQ 4.3, and EQ 4.4 wherever applicable:~~

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

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

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

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

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

15 ~~(C) Flooring systems shall achieve LEED credit EQ 4.3 Option 1, including:~~

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

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

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



1 ~~(D) Interior composite wood and agrifiber products shall achieve LEED credit~~  
2 ~~EQ 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 93120 et~~  
5 ~~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 EQ 5.~~

12 (h) Toxics Reduction and Pollution Prevention.

13 (1) For all new construction or major renovation projects that include furniture within  
14 the project scope, or for purchases made by or on behalf of City departments for these projects, the  
15 furniture shall comply with regulations promulgated under this Chapter pertaining to the following  
16 environmental attributes, subject to verification by the Department of the Environment:

17 (A) Added flame retardant chemicals;

18 (B) Emissions of volatile organic compounds (VOCs);

19 (C) Use of certified wood;

20 (D) Polyvinyl chloride (PVC) content;

21 (E) Antimicrobial chemicals;

22 (F) Fluorinated chemicals;

23 (G) Required ecolabels; and

24 (H) Other environmental attributes, consistent with this Chapter.

1                   (2) For all new construction or major renovation projects, and for purchases made by  
2 or on behalf of City departments for such projects, interior surfaces, including but not limited to,  
3 countertops, doorknobs, handles, wall paints, and carpet, where these features are included within the  
4 project scope, shall comply with regulations promulgated under this Chapter pertaining to the  
5 following attributes, subject to verification by the Department of the Environment:

6                   (A) Emissions of volatile organic compounds (VOCs);

7                   (B) Fluorinated chemicals;

8                   (C) Recycled content and recyclability;

9                   (D) Antimicrobial chemicals;

10                  (E) Required ecolabels; and

11                  (F) Other environmental attributes, consistent with this Chapter.

12  
13 **SEC. 707. COLLECTION, STORAGE AND LOADING OF RECYCLABLE AND**  
14 **COMPOSTABLE MATERIALS.**

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



1           (1) ~~The departments shall integrate all~~ All areas designated for the collection,  
2 storage and loading of recyclable, compostable and trash waste materials shall be integrated  
3 into the design and construction of the project. The departments shall ensure that areas for  
4 collection. storage and loading of recyclable and compostable materials are at least as  
5 convenient and usable as spaces provided for non-recyclable waste disposal, and located in  
6 the same areas whenever possible. When separate locations must be provided due to space  
7 constraints, the locations for collection, storage and loading of recyclable and compostable  
8 materials shall be at least as convenient as non-recyclable trash waste disposal locations.

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

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

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

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

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



1  
2 **SEC. 708. CONSTRUCTION AND DEMOLITION DEBRIS MANAGEMENT.**

3 \* \* \* \*

4 (c) Summary of Diversion; Disposal. The contract between the City department and  
5 the contractor shall require that:

6 (1) With each application for progress payment, the contractor shall submit a  
7 signed Summary of Diversion to the City Representative showing C&D debris material  
8 diversion and disposal coinciding with the time period of the progress payment. This summary  
9 shall quantify all materials generated by the construction and/or demolition project, and how  
10 they were diverted from disposal through reuse or recycling, plus supporting documentation in  
11 the form of weight slips or other similar proof. The means used to reuse or recycle debris  
12 material must be consistent with the CDDMP for the project. No material may be taken to any  
13 landfill without prior approval pursuant to Section 708(a)(3), and landfill documentation  
14 provided with the Summary of Diversion must show that material was used as specified in the  
15 CDDMP. Failure to submit the Summary of Diversion and supporting documentation to the  
16 City Representative shall render the application for progress payment incomplete and delay  
17 progress payment. The Summary of Diversion must be submitted on a form specified by  
18 regulation of the Director under Section 703(b).

19 (2) The City Representative shall review and, if appropriate, sign as approved,  
20 the Summary of Diversion and supporting documentation to ensure that the contractor is  
21 adhering to the approved CDDMP, and that the reported diversion rate is correct. The City  
22 Representative shall send the Department a copy of the approved Summary of Diversion for  
23 any projects subject to subsection (b)(3).

24 \* \* \* \*

1   **SEC. 709. WATER CONSERVATION RETROFIT REQUIREMENTS.**

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

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

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

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

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

13                   (3) The responsible department shall ensure that all water closets in City-owned  
14 facilities with a rated flush volume exceeding 1.6 gallons per flush ~~and all urinals with a rated~~  
15 ~~flush volume exceeding 1.0 gallon per flush~~ are replaced with high-efficiency water closets that  
16 use no more than 1.28 gallons per flush. All wall-mounted urinals with a rated flush volume  
17 exceeding 1.0 gallon per flush shall be replaced with ~~and~~ high-efficiency urinals that use no more  
18 than 0.125 to 0.5 gallons per flush, ~~respectively~~. All non-wall mounted urinals with a rated flush  
19 volume exceeding 1.0 gallon per flush shall be replaced with ~~and~~ high-efficiency urinals that use no  
20 more than 0.5 gallons per flush, ~~respectively~~.

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



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

4 (6) Installation of water closets and urinals:

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

8 (B) City departments shall confer with the General Manger *of the SFPUC*  
9 and incorporate technical assistance and water conservation audit findings in project plans.

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

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

18 (d) Water Conservation Requirements for Shower Heads.

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

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

23 (3) The department responsible for any City-owned facility's operation and  
24 maintenance shall take all necessary steps to ensure that all showerheads in the facility  
25



1 having a maximum flow rate exceeding 2.5 gallons per minute are replaced with shower  
2 heads having a maximum flow rate, not to exceed 1.5 gallons per minute.

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

6 (5) Should the General Manager of the SFPUC determine that shower heads  
7 that are more water efficient than those specified in the foregoing section exist, City  
8 departments shall install fixtures identified on a San Francisco Public Utilities Commission list  
9 of other water-efficient shower heads that City departments may use pursuant to Section  
10 703(b).

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

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

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

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

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

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

5  
6 **~~SEC. 710. ENERGY EFFICIENT LIGHTING RETROFIT REQUIREMENTS.~~**

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

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

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

16 ~~(2) Fluorescent Fixtures.~~

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

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

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

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

6                               (iv) ~~"Compliance Deadline" is the final date by which all fixtures using~~  
7 ~~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, 2011.~~

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

12                               (D) ~~Energy Efficiency. The lamp and ballast system in each luminaire that~~  
13 ~~utilizes one or more 4-foot or 8-foot linear fluorescent lamps to provide illumination in a City-Owned~~  
14 ~~Facility must meet at least one of the following requirements:~~

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

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

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

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



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

4 ~~(E) Low Light Levels. The requirements of this Section shall not apply where the~~  
5 ~~resulting luminaire will provide lighting levels at the work surface that are below the standards~~  
6 ~~established by the Illuminating Engineering Society.~~

7 ~~(F) Waivers. By September 30, 2011, the Director shall act on all pending~~  
8 ~~requests for City Departments for a temporary waiver of the requirements of this Section. The criteria~~  
9 ~~for waivers for this Section shall be described in rules issued by the Director. The Director shall submit~~  
10 ~~to the Board of Supervisors a list of all departments receiving waivers, and shall identify budgetary or~~  
11 ~~other barriers to compliance cited in those departments' waiver requests. Thereafter, the Director shall~~  
12 ~~report on the effects of this Ordinance as part of the report required by Section 712.~~

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

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

## 22 23 **SEC. 712. REPORT TO THE BOARD OF SUPERVISORS.**

24 No later than July 1, 2018 ~~2014~~, the Director, in consultation with the Task Force and  
25 affected City departments and with input from members of the public who have asked to be

1 informed by the Task Force or the Department, shall submit to the Board of Supervisors a  
2 report on the effects of this Chapter, including but not limited to the following:

3 (1) A report of the compliance of construction projects under the LEED rating system,  
4 including a report on waivers;

5 (2) A report of City departments' compliance with this Chapter;

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. WAIVERS.**

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

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

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

23 (A) 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) If applicable for Section 705, developed a reasonable plan to  
2 maximize the number of LEED points attainable.

3 (3) Alternate Compliance. A City department may request a waiver from LEED Gold  
4 certification if utilizing an independently verified green building rating system or standard that is at  
5 least as stringent as LEED. Such waiver requests shall provide justification and details for exceeding  
6 LEED requirements.

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

13 (A) Documented the circumstances and burdens at issue; and

14 (B) If applicable for Section 705, developed a reasonable plan to  
15 maximize the number of LEED points attainable.

16 (b) After the end of the 50% Design Development Phase, the Director will only accept waiver  
17 requests for consideration if the project design team can demonstrate extenuating circumstances,  
18 including but not limited to the following:

19 (1) Unforeseen site conditions; or

20 (2) Specified system or products become unavailable.

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

22 (d) (e) The Director may not waive the requirements of Sections 706(a)(1), 707, and  
23 708, except in the case of emergencies as provided in subsection (a)(1). ~~Departments seeking~~  
24 ~~waivers of the requirements of Section 710(b) must follow the procedures provided for in Section~~  
25 ~~710(b)(2)(F).~~ Granting of a waiver for any requirement of this Chapter does not waive any

1 requirement of the San Francisco Building Code, ~~Chapter 13C~~ the San Francisco Green Building  
2 Code, the Port of San Francisco Building Code, the Port of San Francisco Green Building Standards  
3 Code, or the California Green Building Standards Code (CCR Title 24, Part 11).


4 (e) ~~(d)~~ The Director shall report to the Commission on the Environment regularly on  
5 waivers requested, granted and denied.  
6

7 Section 3. Effective Date. This ordinance shall become effective 30 days after  
8 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the  
9 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
10 of Supervisors overrides the Mayor's veto of the ordinance.  
11

12 Section 4. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors  
13 intends to amend only those words, phrases, paragraphs, subsections, sections, articles,  
14 numbers, punctuation marks, charts, diagrams, or any other constituent parts of the Municipal  
15 Code that are explicitly shown in this ordinance as additions, deletions, Board amendment  
16 additions, and Board amendment deletions in accordance with the "Note" that appears under  
17 the official title of the ordinance.  
18

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

21 By:

22   
23 THOMAS J. OWEN  
24 Deputy City Attorney  
25

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## LEGISLATIVE DIGEST

[Environment Code - Green Building Requirements for City Buildings]

**Ordinance amending the Environment Code to update the green building requirements for the design, construction, and operation of City buildings; and affirming the Planning Department's determination under the California Environmental Quality Act.**

### Existing Law

Chapter 7 of the Environment Code contains a number of "green building" standards for buildings owned or leased by the City. These standards include construction and operating requirements for energy efficiency, water conservation, toxics reduction, and recycling and composting of refuse. Chapter 7 also includes provisions for administration and enforcement of the requirements.

### Amendments to Current Law

The proposal is an ordinance that would amend the Environment Code to modify and update the provisions of Chapter 7. In addition to technical and administrative updates, the proposal contains some more substantive changes:

**Application of Chapter 7 to City Tenants.** Current law applies to construction projects by a City department at a City-owned or -leased facility.

The proposal would clarify the application of Chapter 7 to include construction projects by a tenant of the City at a City-owned facility.

**Threshold for Requiring LEED Gold Certification.** Current law requires that City construction projects of 5,000 square feet or more meet the requirements for LEED Gold certification. LEED (Leadership in Energy and Environmental Design) is a green building certification system providing third-party verification that a building or community was designed and built to improve performance in areas such as: energy savings, water efficiency, CO<sub>2</sub> emissions reduction, improved indoor environmental quality, and stewardship of resources. "Gold" is the second-highest LEED rating level.

The proposal would raise the threshold for requiring LEED Gold certification to projects of 10,000 square feet or more, although smaller projects would still be required to qualify for the maximum LEED credits practicable for the project and to comply with other applicable requirements under Chapter 7 and the California Green Building Standards Code.

**Energy Efficiency, Better Roofs, and Energy Resilience.** The proposal would add a requirement that the project design include a target for annual net energy consumption. For projects of three or fewer stories, the project design would have to address the feasibility of designing and constructing the project to have zero net annual site energy consumption, including all building end uses. All projects subject to the Chapter would have to include a combination of photovoltaic, solar thermal, and/or living roof area meeting the requirements of the City's Better Roofs ordinances. And the proposal would require project sponsors to confer with the Department of Emergency Management and the Office of Resilience and Recovery on opportunities for the project site to deliver essential services to the community during disaster recovery, and specifically analyze the costs and benefits of incorporating onsite battery systems to store electricity from solar photovoltaic systems to supply power for essential services in the event of disaster.

The proposal would eliminate the separate specifications in Chapter 7 for energy efficient lighting retrofit requirements.