

[Environment Code - Green Building Requirements for Municipal Buildings]

Ordinance amending the Environment Code to update the green building requirements for the design, construction, and operation of municipal 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 ~~striketrough italics Times New Roman font~~.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~striketrough 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. 161287 and is incorporated herein by reference. The Board affirms this determination.

Section 2. The Environment Code is hereby amended by revising Sections 700 through 709 and 712 through 713, deleting Section 710, and adding Section 714 to read as follows:

SEC. 700. FINDINGS AND PURPOSE.

The Board of Supervisors finds that:

1 1. Buildings are one of the distinguishing elements of human civilization. Traditional
2 building design and construction practices have significant negative environmental impacts. In
3 the United States, buildings consume 48% ~~percent~~ of all energy, 76% ~~percent~~ of all electricity,
4 and generate 38% ~~percent~~ of all carbon (CO₂) emissions. In San Francisco, buildings
5 consume 54% ~~percent~~ of all energy, 80% ~~percent~~ of all electricity, and generate 56% ~~percent~~ of
6 all carbon emissions. Advanced green buildings can generate their own energy, minimize
7 carbon emissions, produce and process their own water, emphasize reuse of buildings and
8 materials, and provide healthy interior environments.

9 2. The selection of sustainable design features and building materials is consistent
10 with the City's Precautionary Principle Policy. This policy requires that the City consider a full
11 range of alternatives in order to select products and procedures that minimize harm and
12 maximize the protection of public health and natural resources.

13 3. The United States Green Building Council (USGBC) is a non-profit organization
14 committed to a prosperous and sustainable future for our nation through cost-efficient and
15 energy-saving green buildings. LEED® is an internationally-recognized green building
16 certification system, developed by the USGBC.

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

22 5. The California Energy Commission has established a goal that all new commercial
23 construction in California will be Zero Net Energy by 2030, and 50% of existing commercial buildings
24 will be retrofit to Zero Net Energy by 2030.
25

1 **SEC. 701. DEFINITIONS.**

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

3 ~~(a)~~ "Alternative Daily Cover" or "ADC" means materials, other than soil, that have been
4 approved by the California Department of Resources Recycling and Recovery ("CalRecycle")
5 or a successor agency for use as a temporary overlay on an exposed landfill face. Material
6 used as Alternative Daily Cover, including Green Material, does not qualify as material diverted from
7 landfill.

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

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

19 ~~(d)~~ "Building" means:

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

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

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

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

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

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

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

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

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

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

~~(k)~~ "Commissioning Process" means an independent process to ensure the attainment of quality facilities pursuant to this Chapter. The commissioning process verifies and

1 documents that the energy using systems in buildings are installed, tested, and operate as
2 designed. ~~The Commissioning Process shall coordinate with, but not include, routine inspections~~
3 ~~performed by the code official having jurisdiction.~~

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

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

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

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

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

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

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

7 "Design Development Phase" means the transitional phase of architectural design in which the
8 design moves from the schematic phase to the construction document phase, in which the architect
9 prepares drawings and other presentation documents to crystallize the design concept and describe it
10 in terms of architectural, electrical, mechanical, and structural systems. In addition, the architect also
11 prepares a statement of the probable project cost. This phase is often charted in percentages of
12 completion leading up to the permit drawings. Such percentages refer to the level of details the plans
13 have achieved and benchmarks established in the cost estimation process.

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

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

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

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

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

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

10 ~~(x)~~ "Hazardous Material" means any material defined as hazardous in California Health
11 and Safety Code Sections 25100 et seq., as amended, and 25500 et seq., as amended.

12 ~~(y)~~ "Indoor Air Quality" or "IAQ" means the quality of ~~indoor~~ air, ~~including the~~
13 ~~concentration of particulates, fumes, odors, carbon dioxide, etc.~~ inside buildings, especially as it
14 relates to the health and comfort of building occupants. Factors such as gases (including carbon
15 dioxide, carbon monoxide, radon, formaldehyde, volatile organic compounds), particulates, and
16 microbial contaminants (mold, bacteria) that cause adverse health conditions can affect IAQ.

17 ~~(z)~~ "Indoor Environmental Quality" means the overall state of conditions within a building
18 that affect its occupants, including air quality, lighting, acoustics, thermal conditions, daylight, views,
19 ergonomics, and controllability of lighting and thermal systems. ~~the quality of the indoor environment,~~
20 ~~including air quality, thermal quality, acoustical quality, daylight, views and controllability of systems.~~

21 ~~(aa)~~ "Landfill" means a facility that (~~ai~~) accepts for disposal in or on land non-hazardous
22 waste such as household, commercial, and industrial waste, and waste generated during
23 construction, remodeling, repair and demolition operations, and (~~iib~~) has a valid current solid
24 waste facilities permit from the California Department of Resources Recycling and Recover
25 (CalRecycle).

1 "Land-disturbing activity" means any movement of earth or a change in the existing soil cover
2 or existing topography that may result in soil erosion from wind, or water, and the movement of
3 sediments into or upon waters, lands, or public rights-of-way within the City and County of San
4 Francisco, including, but not limited to building demolition, clearing, grading, grubbing, filling,
5 stockpiling, excavating and transporting of land.

6 (bb) "Leadership in Energy and Environmental Design" or "LEED®" is an internationally
7 recognized green building certification system developed by the USGBC, providing third-party
8 verification that a building or community was designed and built using strategies aimed at
9 improving performance across all the following metrics: energy savings; water efficiency; CO₂
10 emissions reduction; improved indoor environmental quality; and, stewardship of resources
11 and sensitivity to their impacts. LEED provides building owners and operators with a concise
12 framework for identifying an implementing practical and measurable green building design,
13 construction, operations, and maintenance solutions. LEED certified buildings are rated on a
14 scale from lowest to highest: LEED Certified, LEED Silver, LEED Gold and LEED Platinum.
15 Wherever specific LEED prerequisites or credits are cited, such references are to LEED
16 version 4 ("v4") building Design and Construction (BD+C) 2009. More recent LEED versions may
17 be used, provided the credits and points achieved are at least as stringent as LEED v4 BD+C
18 2009.

19 (cc) "LEED Accredited Professional with specialty" or "LEED AP with specialty" means an
20 employee of a City department or a consultant retained by the City through a design or
21 construction contract or other agreement who has ~~fulfilled all requirements and~~ passed the
22 LEED AP with specialty accreditation exam issued by GBCI and maintained this credential
23 through continuing education in applying LEED principles to technical fields of practice in building
24 design, construction and operations.

1 "LEED Online" is a web-based platform provided by USGBC for LEED project registration,
2 team collaboration, document management, project progress monitoring, and access to forms, reviewer
3 comments and certification credit language.

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

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

11 ~~(ff)~~ "Major AlterationRenovation" means any municipal construction project~~work~~ or
12 renovation to an existing structure other than repair or addition. A Major Renovation may include, but
13 is not limited to, a change in occupancy or use, or structural repair to an existing building or facility;
14 or remodeling, rehabilitation, reconstruction, historic restoration, or changes to the plan configuration
15 of wall and full-height partitions, where the scope of work is sufficient to support LEED certification
16 and that is extensive enough such that normal building operations cannot be performed while
17 the work is in progress, and/or a new certificate of occupancy, or similar official indication that
18 it is fit and ready for use, is required. Major Renovation does not encompass normal maintenance,
19 reroofing, floor covering, painting, wallpapering, or changes to mechanical and electrical systems.

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

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

1 "Municipal Construction Project" includes any planning, design, building, or construction
2 activity, including demolition, new construction, major renovation, or building additions performed
3 either by a City department at a City-owned Facility or City Leasehold, or by tenants at a City-owned
4 Facility.

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

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

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

15 ~~(v)~~ "Recycle" or "Recycling" means the process of collecting, sorting, cleansing,
16 treating, and reconstituting materials that would otherwise become solid waste, and returning
17 them to the economic mainstream in the form of raw material for new, reused, or reconstituted
18 products which meet the quality standards necessary to be used in the marketplace.

19 "Recycling" does not include "transformation," as defined in Section 40201 of California Public
20 Resources Code.

21 ~~(vi)~~ "Recycling Facility" means an operation or person that collects and processes
22 materials for recycling.

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

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

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

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

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

22 "Tenant Improvements" are municipal construction projects that involve changing the interiors
23 of commercial, institutional, or industrial properties and are undertaken by the City and/or tenants to
24 accommodate the needs of tenants. They include floor and wall coverings, ceilings, partitions, lighting,
25 heating, ventilation, air conditioning, fire protection, and security, where the scope of work is sufficient

1 to support LEED certification. Normal maintenance, reroofing, floor covering, painting or
2 wallpapering, or changes to mechanical and electrical systems are not Tenant Improvements unless
3 they are so extensive that normal building operations cannot continue while the work is in progress,
4 and/or a new certificate of occupancy, or similar official indication that the building is fit and ready for
5 use, is required.

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

9 "Waiver Request" means a waiver request made by a City department in accordance with
10 Section 713.

11 "Whole Building Major Renovation Project" means a major renovation that includes
12 replacement of the building heating, ventilation and air conditioning (HVAC) system. A Whole Building
13 Major Renovation Project may, in addition to the aforementioned replacement, involve replacing
14 electrical distribution, lighting, fire protection, plumbing, and security systems, as well as changes to a
15 building envelope such as window replacements or exterior wall insulation.

16 "Zero Net Energy (ZNE) Building" means a building where the amount of energy produced by
17 on-site renewable energy resources is equal to the amount of the energy consumed annually by the
18 building.

19 **SEC. 702. MUNICIPAL GREEN BUILDING TASK FORCE.**

20 (a) Establishment and Purpose. The Board of Supervisors establishes the Municipal
21 Green Building Task Force (the "Task Force") to oversee and assist in enhancing the
22 environmental performance of municipal construction projects pursuant to this Chapter. The
23 Task Force shall review municipal construction projects subject to this Chapter during their
24 design and construction to ensure that the responsible City departments are complying with
25 the requirements of the Chapter, and may advise the Department of the Environment on

1 matters of policy related to this Chapter. The Task Force shall facilitate interdepartmental
2 communication and cooperation ~~about green building issues throughout the City~~, and act as an
3 educational forum to increase green building knowledge and share project-related successes
4 and lessons learned. The Task Force shall hear Waiver Requests from City departments and make
5 recommendations to the Director (or to the Executive Director of the Port of San Francisco for projects
6 located on property owned or managed by the Port of San Francisco) with respect to such requests.

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
9 of the following City departments and divisions, or their successor agencies:

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

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

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

15 (4) Landscape Architecture Division within San Francisco Public Works;

16 (5) San Francisco Public Works Buildings – Project Management;

17 (6) (4) Power Enterprise within The San Francisco Public Utilities Commission;

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

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

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

21 (10) (5) Project Management Division within The Recreation and Parks ~~Park~~
22 Department;

23 (11) (6) Capital Programs and Construction Division within The San Francisco
24 Municipal Transportation Agency;

25 (12) Capital Planning Program within Office of City Administrator;

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

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

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

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

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

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

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

24 (2) Develop and oversee a training program in green building practices,
25 including design, construction, ~~alteration,~~ renovation, operation and reuse of buildings for City

1 department heads and ~~city~~ architects, engineers, construction managers, building managers,
2 department managers and finance officers employed by the City in order to implement the
3 policies adopted by the Board of Supervisors;

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

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

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

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

15 (e) Each City department as designated in Section 702 shall designate an employee
16 contact person to represent the interest of that City department on the Task Force for municipal
17 construction projects and green building communications.

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

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

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

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

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

5 (a) In addition to complying with this Chapter *(except that municipal construction projects*
6 *located on property owned or managed by the Port of San Francisco will not be subject to Sections 705*
7 *and 706 of this Chapter)*, municipal construction projects *are subject to the applicable building*
8 *codes in effect at the time of permit application. Municipal construction projects located within the City*
9 *and County of San Francisco* shall comply with the requirements ~~of Chapter 13C~~ of the San
10 Francisco Green Building Code, ~~"The San Francisco Green Building Code."~~ *except that municipal*
11 *construction projects located on property owned or managed by the Port of San Francisco shall comply*
12 *with the Port of San Francisco Green Building Standards Code, and municipal construction projects*
13 *located at the San Francisco International Airport, which shall comply with this Chapter and the*
14 *California Building Standards Code (CCR Title 24). All other municipal construction projects located*
15 *outside the City and County of San Francisco shall comply with this Chapter and the local building*
16 *code promulgated by the authority having jurisdiction.*

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

21 (c) Municipal construction projects shall demonstrate compliance with locally-required
22 measures as provided in ~~In order to achieve LEED Gold certification, municipal construction projects~~
23 ~~must meet selected San Francisco-specific LEED credit requirements as further specified by~~
24 Section 706 ~~of and~~ this chapter.
25

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

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

22 (f) Municipal construction Pprojects of 10,000 5,000 Gross Square Feet or More. For
23 municipal Construction Pprojects with square footage of 10,000 5,000 gross square feet or
24 more the following applies:
25

1 (1) Conceptual Design Phase. During the conceptual design phase, the
2 sponsoring City department shall assemble a design team, which shall include a LEED AP
3 with specialty assigned to be the LEED Project Administrator. The LEED Project Administrator
4 shall prepare and submit a conceptual phase LEED Scorecard to the Department for review
5 by the Task Force. The conceptual phase LEED Scorecard shall demonstrate a LEED v4 Gold
6 rating or higher, including all locally-required measures ~~San Francisco-specific LEED credit~~
7 ~~requirements~~. The Task Force shall review and make recommendations on the conceptual
8 LEED Scorecard within 35 days of submittal.

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

18 (3) Project Closeout Consultation. At the completion of construction, the LEED
19 Project Administrator shall submit the final LEED documentation to ~~the~~ GBCI for certification.
20 Upon receiving the LEED certification ~~rating~~ from ~~the~~ GBCI, the LEED Project Administrator
21 shall submit a copy of the LEED certificate ratings and the final LEED Scorecard to the
22 Department for review by the Task Force.

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

1
2 **SEC. 706. LOCALLY-REQUIRED MEASURES SAN FRANCISCO-SPECIFIC LEED CREDIT**
3 **REQUIREMENTS FOR MUNICIPAL CONSTRUCTION PROJECTS.**

4 All municipal construction projects shall comply with the following locally-required measures:

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

7 ~~(a) (1) Stormwater Management. Municipal construction projects that create and/or replace~~
8 ~~5,000 or more square feet of impervious surface in separate and combined sewer areas, and projects~~
9 ~~that create and/or replace from 2,500 up to but not including 5,000 square feet of impervious surface~~
10 ~~in separate sewer areas only, shall implement post-construction stormwater controls that comply with~~
11 ~~the Stormwater Management Ordinance (Public Works Code Sections 147-147.6).~~

12 ~~(b) Construction Site Runoff. Municipal construction projects that involve land-disturbing~~
13 ~~activities on 5,000 or more square feet of ground surface shall implement construction site run-off best~~
14 ~~management practices in compliance with the Construction Site Runoff Ordinance (Public Works Code~~
15 ~~Sections 146-146.11). Persons commencing Construction Projects after January 1, 2014, must obtain a~~
16 ~~Construction Site Runoff Control Permit prior to the commencement of land-disturbing activities.~~

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

24 ~~(b)(2) Indoor Water Use Reduction. Municipal construction projects subject to a LEED~~
25 ~~certification requirement shall demonstrate~~~~The LEED Project Administrator shall submit~~

1 ~~documentation verifying~~ a minimum 30% reduction in the use of indoor potable water, as
2 calculated to meet and achieve LEED credit Indoor Water Use Reduction WE3-2.

3 (c) (3) Renewable Energy Efficiency, Better Roofs, and Energy Resilience.

4 (1) As provided in Administrative Code Section 99.3, the municipal construction project
5 shall receive electric service from the San Francisco Public Utilities Commission ("SFPUC") unless
6 SFPUC determines that such service is not feasible or that the City's lease or contract, if any, does not
7 permit such service. The municipal construction project design team shall work with SFPUC to
8 arrange for electric service and LEED Project Administrator shall confer with SFPUC on
9 renewable energy opportunities and interconnection requirements for municipal construction
10 projects, including photovoltaics, and solar hot water, and wind power. The LEED Project
11 Administrator shall submit documentation verifying that:

12 (2) (A) For municipal construction projects subject to a LEED certification
13 requirement, the design team shall demonstrate that tThe project meets LEED prerequisite
14 Minimum Energy Performance EA 1 Energy Performance requirement and demonstrates
15 compliance with Title 24, Part 6 California Energy Standards in effect at the time of the permit
16 application; ~~and,~~

17 ~~(B) The project includes a combination of photovoltaic and/or solar thermal~~
18 ~~area meeting the requirements of San Francisco Green Building Code Chapter 5, Division 5.2, or~~
19 ~~demonstrates applicability of exceptions therein.~~

20 (3) For each municipal new construction or whole building major renovation project
21 the project design team shall set a target for annual net energy consumption, and report this target to
22 the Task Force. The Department in collaboration with the Task Force shall provide guidance as to the
23 tools and methods to be used for setting annual net energy consumption targets. This provision shall
24 apply to projects for which the initial appropriation request, either whole or partial, is submitted to the
25 Board of Supervisors after March 1, 2017.

1 (4) For each municipal new construction or whole building major renovation project
2 with an estimated height of no more than three stories above grade, project design teams shall
3 determine the feasibility of designing and constructing such project to have zero net annual site energy
4 consumption, including all building end uses. The Department in collaboration with the Task Force
5 shall provide guidance as to the tools and methods to be used for determining feasibility. The design
6 team shall submit determinations of feasibility to the Task Force. This provision shall apply to projects
7 for which the initial appropriation request, either whole or partial, is submitted to the Board of
8 Supervisors after March 1, 2017.

9 (5) Each municipal new construction project shall include a combination of
10 photovoltaic, solar thermal, and/or living roof area, meeting the requirements of Planning Code
11 Section 149 and San Francisco Green Building Code Chapter 5, Division 5.2, or demonstrate the
12 applicability of any exceptions to those requirements. Compliance with the Living Roofs Alternative
13 approved by the Planning Department in accordance with Planning Code Section 149 shall be
14 acceptable in lieu of compliance with San Francisco Green Building Code Sections 5.201.2 and
15 5.201.1.3. In such cases, the applicable requirements of CCR Title 24, Part 6, Section 110.10 for the
16 solar zone shall continue to apply.

17 (6) For each municipal new construction or whole building major renovation project,
18 the project design team shall analyze the costs and benefits of incorporating onsite batteries that store
19 electricity from onsite solar photovoltaic systems and can be temporarily separated from the electricity
20 grid to supply the community with electricity in the event of disaster. The Task Force, in consultation
21 with Department of Emergency Management, shall define the building types subject to this requirement
22 and parameters for sizing batteries and analyzing costs and benefits. Cost-benefit analyses shall be
23 submitted to the Task Force and Department of Emergency Management. This provision shall apply to
24 projects for which the initial appropriation request, either whole or partial, is submitted to the Board of
25 Supervisors after March 1, 2017, and shall remain in effect through December 31, 2025.

1 (d) (4) Commissioning. For each municipal construction project subject to a LEED
2 certification requirement, the design team shall demonstrate~~The LEED Project Administrator shall~~
3 ~~submit documentation verifying that the project achieves Option 1 of facility has been or will meet the~~
4 ~~criteria necessary to achieve~~ LEED credit ~~EA 3.0 (Enhanced and Monitoring-Based~~
5 Commissioning), in addition to LEED prerequisite ~~EAp1 (Fundamental Commissioning and~~
6 Verification of Building Energy Systems.)

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

10 (e) (6) Construction Debris Management. All municipal construction projects shall
11 demonstrate a minimum 75% diversion from landfill. For all municipal construction projects subject to
12 a LEED certification requirement, t~~The LEED Project Administrator shall submit documentation~~
13 ~~verifying that the project achieves LEED credit Construction and Demolition Waste Management~~
14 ~~(75%; 2 points) the diversion of a minimum of 75% of the project's construction and demolition debris,~~
15 ~~as calculated to achieve LEED credit MR2.2.~~ The project must also satisfy the requirements of
16 Section 708.

17 (f) Indoor Air Quality. For each municipal construction project subject to a LEED
18 certification requirement, the LEED Project Administrator shall submit documentation verifying that
19 the project achieves LEED credit Enhanced Indoor Air Quality Strategies (1 point), LEED credit
20 Construction Indoor Air Quality Management Plan (1 point), and LEED credit Indoor Air Quality
21 Assessment Option 2: Air Testing (2 points).

22 ~~(7) IAQ Management: During Construction. The LEED Project Administrator shall~~
23 ~~submit documentation verifying that the sponsoring City department has prepared and implemented an~~
24 ~~Indoor Air Quality Management Plan that achieves LEED credit EQ 3.1. This requirement includes~~
25 ~~meeting or exceeding the recommended Control Measures of the Sheet Metal and Air Conditioning~~

1 *National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under*
2 *Construction, 2nd Edition 2007, ANSI-SMACNA 008-2008 (Chapter 3).*

3 *(8) IAQ Management: Before Occupancy. The LEED Project Administrator shall*
4 *submit documentation verifying that the sponsoring City department has prepared and implemented an*
5 *Indoor Air Quality Management Plan that achieves LEED credit EQ 3.2.*

6 *(g) (9) Low Emitting Materials. For each municipal construction project subject to a LEED*
7 *certification requirement, t*The LEED Project Administrator shall submit documentation verifying
8 *that the project achieves LEED Low Emitting Materials (3 points). is using low-emitting materials,*
9 *subject to onsite verification, achieving LEED credits EQ 4.1. EQ 4.2. EQ 4.3. and EQ 4.4 wherever*
10 *applicable.*

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

14 *(B) Interior paints and coatings applied on-site shall achieve LEED credit EQ*
15 *4.2. including:*

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

18 *(ii) Anti-corrosive and anti-rust paints applied to interior ferrous metal*
19 *substrates shall not exceed the VOC content limit of Green Seal Standard GC-03 (2nd Edition, 1997) of*
20 *250 g/L.*

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

23 *(C) Flooring systems shall achieve LEED credit EQ 4.3 Option 1. including:*

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

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

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

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

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

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

19 (h) Toxics Reduction and Pollution Prevention.

20 (1) For all municipal new construction, major renovation and tenant improvement
21 projects that include furniture within the project scope, or for purchases made by or on behalf of City
22 departments for these projects, the purchased furniture shall comply with regulations promulgated
23 under this Chapter pertaining to the following environmental attributes, subject to verification by the
24 Department of the Environment:

25 (A) Added flame retardant chemicals;

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

2 (C) Use of certified wood;

3 (D) Polyvinyl chloride (PVC) content;

4 (E) Antimicrobial chemicals;

5 (F) Fluorinated chemicals;

6 (G) Required ecolabels; and

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

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

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

15 (B) Fluorinated chemicals;

16 (C) Recycled content and recyclability;

17 (D) Antimicrobial chemicals;

18 (E) Required ecolabels; and

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

20 (3) These requirements shall apply to projects for which the initial appropriation request, either
21 whole or partial, is submitted to the Board of Supervisors after March 1, 2017.

22 **SEC. 707. COLLECTION, STORAGE AND LOADING OF RECYCLABLE AND**
23 **COMPOSTABLE MATERIALS.**

24 (a) ~~All~~ City departments shall ensure that adequate, accessible, and convenient
25 recycling, composting and ~~trash waste~~ areas are provided within City-owned facilities and

1 leaseholds, and that all contract documents for construction activities contain this
2 requirement. In accordance with the City and County of San Francisco's solid-waste diversion
3 goals, and the Mandatory Recycling and Composting Ordinance (Chapter 19 of the
4 Environment Code), the departments shall provide sufficient space to allow the collection,
5 storage and loading of 100% ~~percent~~ of the facility's recyclable, compostable and trash waste
6 materials. That space must be sufficient to accommodate containers consistent with both
7 current methods and goals of refuse collection, storage and loading, and with projected needs
8 when full zero waste goals are met.

9 (1) ~~The departments shall integrate all~~ All areas designated for the collection,
10 storage and loading of recyclable, compostable and trash waste materials shall be integrated
11 into the design and construction of the project. The departments shall ensure that areas for
12 collection, storage and loading of recyclable and compostable materials are at least as
13 convenient and usable as spaces provided for non-recyclable waste disposal, and located in
14 the same areas whenever possible. When separate locations must be provided due to space
15 constraints, the locations for collection, storage and loading of recyclable and compostable
16 materials shall be at least as convenient as non-recyclable trash waste disposal locations.

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

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

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

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

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

10
11 **SEC. 708. CONSTRUCTION AND DEMOLITION DEBRIS MANAGEMENT.**

12 * * * *

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

15 (1) With each application for progress payment, the contractor shall submit a
16 signed Summary of Diversion to the City Representative showing C&D debris material
17 diversion and disposal coinciding with the time period of the progress payment. This summary
18 shall quantify all materials generated by the municipal construction and/or demolition project,
19 and how they were diverted from disposal through reuse or recycling, plus supporting
20 documentation in the form of weight slips or other similar proof. The means used to reuse or
21 recycle debris material must be consistent with the Construction and Demolition Debris
22 Management Plan ("CDDMP") for the project. No material may be taken to any landfill without
23 prior approval pursuant to Section 708(a)(3), and landfill documentation provided with the
24 Summary of Diversion must show that material was used as specified in the CDDMP. Failure
25 to submit the Summary of Diversion and supporting documentation to the City Representative

1 shall render the application for progress payment incomplete and delay progress payment.
2 The Summary of Diversion must be submitted on a form specified by regulation of the Director
3 under Section 703(b).

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

9 * * * *

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

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

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

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

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

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

23 (3) The responsible City department shall ensure that all water closets in City-
24 owned facilities with a rated flush volume exceeding 1.6 gallons per flush ~~and all urinals with a~~
25 ~~rated flush volume exceeding 1.0 gallon per flush~~ are replaced with high-efficiency water closets

1 that use no more than 1.28 gallons per flush. All wall-mounted urinals with a rated flush volume
2 exceeding 1.0 gallon per flush shall be replaced with ~~and~~ high-efficiency urinals that use no more
3 than 0.125 0.5 gallons per flush, ~~respectively~~. All non-wall mounted urinals with a rated flush
4 volume exceeding 1.0 gallon per flush shall be replaced with ~~and~~ high-efficiency urinals that use no
5 more than 0.5 gallons per flush, ~~respectively~~.

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

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

13 (6) Installation of water closets and urinals:

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

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

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

23 (8) Should the General Manager of the SFPUC determine that water closets
24 and urinals that are more water-efficient than those specified in the foregoing sections exist.
25

1 City departments shall install fixtures identified on a SFPUC list of other water-efficient water
2 closets and urinals that City departments may use pursuant to Section 703(b).

3 (d) Water Conservation Requirements for Shower Heads.

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

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

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

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

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

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

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

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

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

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

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

13
14 **~~SEC. 710. ENERGY EFFICIENT LIGHTING RETROFIT REQUIREMENTS.~~**

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

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

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

24 ~~(2) Fluorescent Fixtures.~~

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

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

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

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

15 ~~(iv) "Compliance Deadline" is the final date by which all fixtures using~~
16 ~~4-foot or 8-foot linear fluorescent lamps to provide illumination are to be in compliance.~~

17 ~~(B) Compliance Deadline. The Compliance Deadline is December 31, 2011.~~

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

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

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

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

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

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

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

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

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

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

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

5
6 **SEC. 712. REPORT TO THE BOARD OF SUPERVISORS.**

7 No later than July 1, 2018 ~~2014~~, the Director, in consultation with the Task Force and
8 affected City departments and with input from members of the public who have asked to be
9 informed by the Task Force or the Department, shall submit to the Board of Supervisors a
10 report on the effects of this Chapter, including but not limited to the following:

- 11 (1) A report of the compliance of municipal construction projects under the LEED rating
12 system, including a report on waivers;
13 (2) A report of City departments' compliance with this Chapter;
14 (3) An assessment of whether this Chapter has achieved its stated goals; and
15 (4) Recommended changes, if any, to this Chapter.

16
17 **SEC. 713. WAIVERS.**

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

- 20 (1) Emergency. A City department may grant itself a waiver from any
21 requirement of this Chapter, except the requirements of Section 706(a)(1), when it is
22 necessary to respond to an emergency which endangers public health or safety. In such case,
23 the City department shall report to the Director on a form provided by the Director regarding
24 the emergency that prevented compliance with this Chapter within five business days. City
25

1 departments desiring an emergency waiver from the requirements of Section 706(a)(1) shall
2 confer with the General Manager of the San Francisco Public Utilities Commission.

3 (2) Cost Prohibitive. If the sponsoring City department determines that compliance
4 with this Chapter is cost prohibitive, Aa City department may request a waiver from any provision
5 of this Chapter that is not otherwise required by the San Francisco Building Inspection Commission
6 Codes, the Port of San Francisco Building Standards Code, or other state or local requirement.
7 Waivers may be requested the Director on a form provided by the Director and submitted to the Task
8 Force if compliance with this Chapter is cost prohibitive. The Task Force shall provide the Director
9 with a recommendation with respect to the waiver request. Where a project is located on property
10 owned or managed by the Port of San Francisco, the Task Force shall provide the Executive Director
11 of the Port of San Francisco with a recommendation with respect to the waiver request. The Director
12 (or, where a project is located on property owned or controlled by the Port of San Francisco, the
13 Executive Director of the Port of San Francisco) may grant a waiver upon a finding that the
14 requesting City department project team has:

15 (A) Demonstrated which specific requirements are cost prohibitive as
16 weighed against the potential economic, environmental and health benefits posed by a
17 particular requirement; and

18 (B) If applicable for Section 705, or equivalent provisions in the Port of San
19 Francisco Green Building Standards Code, developed a reasonable plan to maximize the number
20 of LEED points attainable.

21 (3) Alternate Compliance. A City department may request a waiver from LEED Gold
22 certification if utilizing an independently verified green building rating system or standard that is
23 determined by the Task Force to be at least as stringent as LEED, or to be a more appropriate
24 standard for a specific project. Such waiver requests shall provide justification and details for alternate
25 compliance. Waivers for alternate compliance may be requested on a form provided by the Director

1 and submitted to the Task Force. The Task Force shall provide the Director with a recommendation
2 with respect to the waiver request. Where a project is located on property owned or managed by the
3 Port of San Francisco, the Task Force shall provide the Executive Director of the Port of San
4 Francisco with a recommendation with respect to the waiver request. The Director (or, where a project
5 is located on property owned or managed by the Port of San Francisco, the Executive Director of the
6 Port of San Francisco) may grant a waiver upon finding that the requester has provided adequate
7 justification.

8 (4) ~~(3)~~ Other. If, due to specific circumstances, compliance would defeat the
9 intent of this Chapter or create an unreasonable burden on the municipal construction project
10 or City department, the City department may request a waiver from that requirement ~~from the~~
11 ~~Director~~ on a form provided by the Director. The Task Force shall provide the Director with a
12 recommendation with respect to the waiver request. Where a project is located on property owned
13 or managed by the Port of San Francisco, the Task Force shall provide the Executive Director of the
14 Port of San Francisco with a recommendation with respect to the waiver request. The Director (or, in
15 the case of projects located on property owned or managed by the Port of San Francisco, the Executive
16 Director of the Port of San Francisco) may grant a waiver upon a finding that the requesting City
17 department has~~The Director may grant a waiver upon a finding that the requesting Department has:~~

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

19 (B) If applicable for Section 705, or equivalent provisions in the Port of San
20 Francisco Green Building Standards Code, developed a reasonable plan to maximize the number
21 of LEED points attainable.

22 (b) After the end of the 50% Design Development Phase, the Director or the Executive Director
23 of the Port of San Francisco will only accept waiver requests for consideration if the project design
24 team can demonstrate extenuating circumstances, including but not limited to the following:

25 (1) Unforeseen site conditions; or

1 (2) Unavailability of specified system or products.

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

3 (d) ~~(e)~~ The Director (or, where a project is located on property owned or managed by the Port
4 of San Francisco, the Executive Director of the Port of San Francisco) may not waive the
5 requirements of Sections 706(a)~~(1)~~, 707, and 708, except in the case of emergencies as
6 provided in subsection (a)(1) of this Section 713. ~~Departments seeking waivers of the requirements~~
7 ~~of Section 710(b) must follow the procedures provided for in Section 710(b)(2)(F).~~ Granting of a
8 waiver for any requirement of this Chapter, or the Port of San Francisco Green Building Standards
9 Code does not waive any requirement of the San Francisco Building Inspection Commission
10 Codes Chapter 13C, the Port of San Francisco Building Standards Code, or the California Building
11 Standards Code (CCR Title 24, Part 6 and Part 11) as applicable.

12 (e) ~~(d)~~ The Director (or, when a project is located on property owned or managed by the Port
13 of San Francisco, the Port of San Francisco representative to the Task Force) shall regularly report to
14 the Task Force on waivers requested, granted and denied. The Director in consultation with the Task
15 Force shall report to the Commission on the Environment regularly on waivers requested,
16 granted and denied.

17 **Sec. 714. PREEMPTION.**

18 The City recognizes that in some circumstances state or federal law governs some of the matters
19 addressed in this Chapter. Nothing in this Chapter shall be interpreted or applied by a court or an
20 agency of City government so as to create any requirement, power, or duty in conflict with federal or
21 state law or with a requirement of any government agency, including any agency of City government,
22 implementing federal or state law.

23
24 Section 3. Effective Date. This ordinance shall become effective 30 days after
25 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the

1 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board
2 of Supervisors overrides the Mayor's veto of the ordinance.

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

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

13
14 By:


NEHA GUPTA
Deputy City Attorney

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City and County of San Francisco
Tails
Ordinance

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 161287

Date Passed: March 07, 2017

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

February 13, 2017 Land Use and Transportation Committee - RECOMMENDED

February 28, 2017 Board of Supervisors - PASSED, ON FIRST READING

Ayes: 11 - Breed, Cohen, Farrell, Fewer, Kim, Peskin, Ronen, Safai, Sheehy, Tang and Yee

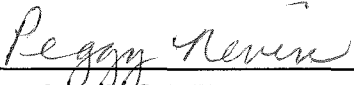
March 07, 2017 Board of Supervisors - FINALLY PASSED

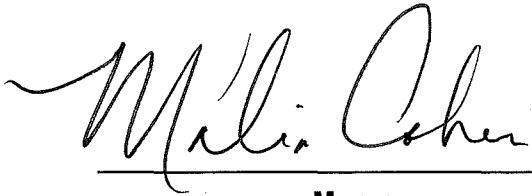
Ayes: 10 - Breed, Cohen, Farrell, Fewer, Peskin, Ronen, Safai, Sheehy, Tang and Yee

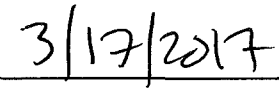
Excused: 1 - Kim

File No. 161287

I hereby certify that the foregoing
Ordinance was FINALLY PASSED on
3/7/2017 by the Board of Supervisors of the
City and County of San Francisco.


for **Angela Calvillo**
Clerk of the Board


Mayor


Date Approved