FILE NO. 161287

1	[Environment Code - Green Building Requirements for Municipal Buildings]
2	
3	Ordinance amending the Environment Code to update the green building requirements
4	for the design, construction, and operation of municipal buildings; and affirming the
5	Planning Department's determination under the California Environmental Quality Act.
6	NOTE: Unchanged Code text and uncodified text are in plain Arial font. Additions to Codes are in <i>single-underline italics Times New Roman font</i> .
7	Deletions to Codes are in surger-underline functs Times New Roman font. Board amendment additions are in double-underlined Arial font.
8	Board amendment deletions are in strikethrough Arial font. Asterisks (* * * *) indicate the omission of unchanged Code
9	subsections or parts of tables.
10	
11	Be it ordained by the People of the City and County of San Francisco:
12	
13	Section 1. CEQA Findings. The Planning Department has determined that the actions
14	contemplated in this ordinance comply with the California Environmental Quality Act
15	(California Public Resources Code Sections 21000 et seq.). Said determination is on file with
16	the Clerk of the Board of Supervisors in File No. 161287 and is incorporated herein by
17	reference. The Board affirms this determination.
18	
19	Section 2. The Environment Code is hereby amended by revising Sections 700
20	through 709 and 712 through 713, deleting Section 710, and adding Section 714 to read as
21	follows:
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23	SEC. 700. FINDINGS AND PURPOSE.
24	The Board of Supervisors finds that:
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- 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, and generate 38% percent of all carbon (CO 2) emissions. In San Francisco, buildings 4 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 The selection of sustainable design features and building materials is consistent with the City's Precautionary Principle Policy. This policy requires that the City consider a full 10 range of alternatives in order to select products and procedures that minimize harm and 11 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.
- 4. Green buildings provide financial benefits while protecting human and 17 18 environmental health. Total construction costs for buildings seeking LEED certification fall into the existing range of costs for buildings not seeking LEED certification. Green buildings, on 19 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
- will be retrofit to Zero Net Energy by 2030. 24
- 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 approved by the California Department of Resources Recycling and Recovery ("CalRecycle") 4 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. (b) "Beneficial reuse" means the reuse of material at a landfill that does not include 8 9 ADC but shall include, but not be limited to, use of the material for or as the following: alternative intermediate cover; final cover foundation layer; liner operations layer; leachate 10 and landfill gas collection system; construction fill; road base; wet weather operations pads 11 12 and access roads; and, soil amendments for erosion control and landscaping. "Beneficial 13 reuse" does not include disposal of material at a landfill.

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

- 19 (d) "Building" means:
- 20

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

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

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(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.

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(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.

7 (e) "CALGreen" means the California *State* Green Building *Standards* Code (*Cal. Code of* 8 *Regs. Title 24, Part 11*) as adopted by San Francisco *Green* Building Code *Chapter 13C*.

9 (f) "City department" means any department of the City and County of San Francisco.

10 City department does not include any other local agency or any federal or State agency,

11 including but not limited to, the San Francisco Unified School District, the San Francisco

12 Community College District, *the San Francisco Redevelopment Agency* <u>the Office of Community</u>

13 *Investment and Infrastructure or and* the San Francisco Housing Authority.

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

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

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

23

(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.* 

(1) "Construction and Demolition Debris" or "C & D Debris" means building materials 4 and solid waste generated from construction and demolition activities, including, but not 5 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 and Demolition Debris does not include refuse regulated under the 1932 Refuse Collection 10 and Disposal Ordinance or sections of the Municipal Code that implement the provisions of 11 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.* 

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

(o) "Deconstruction" means the process of taking apart a structure with the primary
 goal of preserving the value of all useful building materials, so that they may be reused or
 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. (q) "Department" means the Department of the Environment. 4 (r) "Design Phases" means the generally-accepted stages of architectural design: 5 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 in terms of architectural, electrical, mechanical, and structural systems. In addition, the architect also 10 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. (s) "Director" means the Director of the Department of the Environment or his or her 14 15 designee. 16 (+) "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 at inert fills or inert backfill sites does not constitute recycling. 19 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 that do not result in material being disposed at permitted landfills and transformation facilities. 22 23 (v) "Diversion Rate" means the percentage of total material that is diverted from disposal at permitted landfills and transformation facilities through processes such as source 24 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. "Green Material" means any plant material that is either separated at the point of generation 4 5 or separated at a centralized facility that employs methods to minimize contamination of waste streams. *Green Material includes, but is not limited to, yard trimmings, untreated wood wastes, paper products,* 6 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. (x) "Hazardous Material" means any material defined as hazardous in California Health 10 and Safety Code Sections 25100 et seq., as amended, and 25500 et seq., as amended. 11 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 relates to the health and comfort of building occupants. Factors such as gases (including carbon 14 dioxide, carbon monoxide, radon, formaldehyde, volatile organic compounds), particulates, and 15 16 microbial contaminants (mold, bacteria) that cause adverse health conditions can affect IAQ. (z) "Indoor Environmental Quality" means the overall state of conditions within a building 17 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 waste such as household, commercial, and industrial waste, and waste generated during 22 23 construction, remodeling, repair and demolition operations, and (*iib*) has a valid current solid waste facilities permit from the California Department of Resources Recycling and Recover 24 (CalRecycle). 25

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. (bb) "Leadership in Energy and Environmental Design" or "LEED<sup>®</sup>" is an internationally 6 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; CO<sub>2</sub> 10 emissions reduction; improved indoor environmental quality; and, stewardship of resources and sensitivity to their impacts. LEED provides building owners and operators with a concise 11 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 scale from lowest to highest: LEED Certified, LEED Silver, LEED Gold and LEED Platinum. 14 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<del>2009</del>. 18 (cc) "LEED Accredited Professional with specialty" or "LEED AP with specialty" means an 19 20 employee of a City department or a consultant retained by the City through a design or

- construction contract or other agreement who has *fulfilled all requirements and* passed the
- 22 LEED <u>AP with specialty</u> accreditation exam issued by GBCI <u>and maintained this credential</u>
- 23 through continuing education in applying LEED principles to technical fields of practice in building
- 24 *design, construction and operations*.
- 25

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. (*dd*) "LEED Project Administrator" means the individual member of the design team 4 who registers a project with GBCI, and subsequently administers the LEED documentation 5 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 project. 10 (ff) "Major Alteration Renovation" means any municipal construction projectwork or 11 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 and that is extensive enough such that normal building operations cannot be performed while 16 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 USGBC. 22 23 (*hh*) "Mixed Construction & Demolition debris" or "Mixed C & D Debris" means 24 "Construction and Demolition Debris" or "C&D Debris." but excluding materials sourceseparated for reuse or recycling. 25

### "Municipal Construction Project" includes any planning, design, building, or construction

- 2 *activity, including demolition, new construction, major renovation, or building additions performed*
- 3 <u>either by a City department at a City-owned Facility or City Leasehold, or by tenants at a City-owned</u>
- 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.
- *(jj)* "Person" means a natural person, a firm, joint stock company, business concern,
   association, partnership or corporation or, to the extent permitted by law, governmental entity,
   including the City and County of San Francisco and its departments, boards and commissions
   for projects within the nine counties surrounding the San Francisco Bay, and its or their
   successors or assigns.
- 12 (*kk*) "Recover" or "Recovery" means any activity, including source reduction,
- 13 deconstruction and salvaging, reuse, recycling and *com posting composting*, which, causes
- 14 materials to be recovered for use as a resource and diverted from disposal.
- 15 (*III*) "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.
- "Recycling" does not include "transformation," as defined in Section 40201 of California Public
  Resources Code.
- (*mm*) "Recycling Facility" means an operation or person that collects and processes
   materials for recycling.
- (*nn*) "Registered Facility" means a facility that accepts mixed construction and
   demolition debris for processing and recycling and holds a valid registration issued by the City
   and County of San Francisco pursuant to Chapter 14 of the Environment Code.

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

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

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

<u>"Tenant Improvements" are municipal construction projects that involve changing the interiors</u>
 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	<u>use, is required.</u>
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	<u>"Zero Net Energy (ZNE) Building" means a building where the amount of energy produced by</u>
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 <i>interdepartmental</i>
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) <i>The</i> 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 <i>the Department of <u>San Francisco</u></i> 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 <i>half the Task</i>
11	<u>Force members and the public member</u> <del>one member of the Task Force</del> shall <u>hold the credential of</u> <del>be a</del>
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.
18	
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, <i>alteration</i> , renovation, operation and reuse of buildings for <u>City</u>

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.

- 24
- 25

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 SEC. 704. DUTIES OF CITY DEPARTMENTS. 5 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) (c) Each City department <u>as designated in Section 702</u> 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) (d) 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.
- (g) (e) Appropriate City department personnel shall attend green building related
   training offered by the Department.
- 23 (h) (f) The San Francisco Public Utilities Commission may provide energy- or water-
- related technical project design review assistance directly to City project teams or through
- 25 technical assistance contracts.

# 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 <u>(except that municipal construction projects</u>
- 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 <u>codes in effect at the time of permit application. Municipal construction projects located within the City</u>
- 9 *and County of San Francisco* shall comply with the requirements *of Chapter 13C* of the San
- 10 Francisco <u>Green</u> 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 <u>California Building Standards Code (CCR Title 24)</u>. 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.*
- (b) As described in this Chapter, the LEED rating system shall be used to certify the
  environmental design of the City's municipal construction projects. The minimum requirement
  for municipal construction projects of <u>10,000 gross</u> <u>5,000</u> square feet or more shall be LEED
  Gold certification by GBCI.
- 21 (c) <u>Municipal construction projects shall demonstrate compliance with locally-required</u>
- 22 <u>measures as provided in</u> 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

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

(e) Municipal construction Pprojects Less Than 10,000 5,000 Gross Square Feet. For 5 6 *municipal* construction projects less than  $10,000 \frac{5,000}{5,000}$  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 Scorecard shall demonstrate the maximum LEED credits that are practicable for the project. 11 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 specialty, shall prepare and submit a final as-built LEED Scorecard to the Department 14 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 Tile 24, Part 11). (f) Municipal construction Pprojects of 10,000 5,000 Gross Square Feet or More. For 22 23 *municipal C*construction *P*<sub>p</sub>rojects with square footage of  $10,000 \frac{5,000}{5,000}$  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 shall prepare and submit a conceptual phase LEED Scorecard to the Department for review 4 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 the *municipal* construction project with the GBCI as a LEED registered project. At the 11 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 *credit requirements*. These interim LEED Scorecards shall be available for review by the Task 16 Force. 17

(3) Project <u>Closeout</u> Consultation. At the completion of construction, the LEED
Project Administrator shall submit the final LEED documentation to the GBCI for certification.
Upon receiving the LEED <u>certification</u> rating from the GBCI, the LEED Project Administrator
shall submit <u>a copy of</u> the LEED <u>certificate</u> ratings and the final LEED Scorecard to the
Department for review by the Task Force.
(g) The USGBC <u>regularly</u> updates the LEED rating system on a three year cycle. The

Director shall *as necessary* adopt by *the* regulation the current applicable versions of LEED
 pursuant to Section 703(b).

2	SEC. 706. <u>LOCALLY-REQUIRED MEASURES</u> 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. <u>Municipal construction projects that create and/or replace</u>
- 8 <u>5,000 or more square feet of impervious surface in separate and combined sewer areas, and projects</u>
- 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 <u>(b)(2)</u> Indoor Water Use Reduction. <u>Municipal construction projects subject to a LEED</u>
- 25 <u>certification requirement shall demonstrate</u> The LEED Project Administrator shall submit

1 <i>documentation verifying</i> a minimum 30% reduction in the use of indoor po	potable water, as
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- 2 calculated to meet and achieve LEED credit <u>Indoor Water Use Reduction</u> <u>WE3.2</u>.
- 3 (c) (3) Renewable Energy <u>Efficiency, Better Roofs, and Energy Resilience</u>.
- 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 <u>arrange for electric service and LEED Project Administrator</u> shall confer with SFPUC on
- 9 renewable energy opportunities <u>and interconnection requirements</u> for municipal construction
- 10 projects, including photovoltaics, <u>and</u> solar hot water. <u>and wind power. The LEED Project</u>
- 11 *Administrator shall submit documentation verifying that:* 
  - (2) (A) For municipal construction projects subject to a LEED certification
- 13 <u>requirement, the design team shall demonstrate that t</u> he project meets LEED prerequisite
- 14 <u>Minimum Energy Performance</u> EA 1 Energy Performance requirement and demonstrates
- 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	<u>certification requirement, the design team shall demonstrate</u> The LEED Project Administrator shall
3	submit documentation verifying that the project achieves Option 1 of facility has been or will meet the
4	eriteria necessary to achieve LEED credit EA 3.0 (Enhanced and Monitoring-Based
5	Commissioning), in addition to LEED prerequisite EAp1 (Fundamental Commissioning and
6	<u>Verification.</u> 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, tF he 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, t7 he 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	<del>250 g/L.</del>
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.

and Rug Institute Green Label program.

3 (iii) Hard surface flooring, including linoleum, laminate flooring, wood flooring, ceramic flooring, rubber flooring, and wall base shall be certified as compliant with the 4 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, particleboard, and medium density fiberboard composite wood products shall additionally meet 10 California Air Resources Board Air Toxics Control Measure for Composite Wood (17 CCR 93120 et 11 12 seq.), by or before the dates specified in those sections. 13 (E) Project sponsors are encouraged to achieve LEED Pilot Credit 2: Persistent Bioaccumulative Toxic Chemicals Source Reduction: Dioxins and Halogenated Organic Compounds. 14 15 This standard is consistent with Environment Code Chapter 5: Non-PVC Plastics. (10) Indoor Chemical and Pollutant Source Control. The LEED Project Administrator 16 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 departments for these projects, the purchased furniture shall comply with regulations promulgated 22 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 <i>trash waste</i> 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 Environment Code), the departments shall provide sufficient space to allow the collection, 4 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 <u>All</u> areas designated for the collection,* storage and loading of recyclable, compostable and *trash* waste materials shall be integrated 10 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 <u>trash</u> 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 <u>trash</u> waste materials.

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

25

(b) Surplus Furniture, Equipment, Computers and Supplies. The Virtual Warehouse
Program facilitates the reuse, recycling, and disposal of surplus City materials. To the extent
permitted by law, all surplus furniture, equipment, computers and supplies purchased with
San Francisco City and County funds shall be turned in to the Virtual Warehouse. Before
buying any new furniture, equipment or supplies-, City employees shall check the Virtual
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

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\* \*

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

15 (1) With each application for progress payment, the contractor shall submit a signed Summary of Diversion to the City Representative showing C&D debris material 16 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, and how they were diverted from disposal through reuse or recycling, plus supporting 19 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
- 10

18

# 11 SEC. 709. WATER CONSERVATION RETROFIT REQUIREMENTS.

- (a) On or before January 1, 2017, the <u>*City*</u> department responsible for any City-owned
   facility's operation and maintenance shall take all steps necessary to bring the facility into
   compliance with this Section.
- 15 (b) The *<u>City</u>* 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.
  - (1) This subsection applies to all City-owned facilities.
- (2) City leaseholds are subject to the all the requirements of the Commercial
  Water Conservation Ordinance of Chapter 13A of the San Francisco Building Code, including
  provisions requiring the replacement of non-compliant water closets and urinals on or before
  January 1, 2017.
- (3) The responsible <u>*City*</u> department shall ensure that all water closets in City owned facilities with a rated flush volume exceeding 1.6 gallons per flush <u>and all urinals with a</u>
   *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. <u>All wall-mounted urinals with a rated flush volume</u> 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 volume exceeding 1.0 gallon per flush shall be replaced with and high-efficiency urinals that use no 4 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. (5) The responsible City department shall be responsible for the costs of 10 compliance and for ensuring that all applicable contract documents for the replacement of 11 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 and urinals that are more water-efficient than those specified in the foregoing sections exist-24 25

City departments shall install fixtures identified on a SFPUC list of other water-efficient water
 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 <u>*City*</u> 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.
- (4) The <u>*City*</u> department shall be responsible for the costs of compliance and for
  ensuring that all applicable contract documents for the replacement of showerheads contain
  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.

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

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

departments shall install fixtures identified on a SFPUC list of other water-efficient faucets or
 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.*
- (b) City departments shall be responsible for the cost of compliance and for ensuring that all
   applicable contract documents for the replacement and installation of light fixtures and exit signs
- 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.*
- 25

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	<del>vacated.</del>
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;

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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	<del>cost-effective; or,</del>
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.

(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.

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

- (1) A report of the compliance of *<u>municipal</u>* construction projects under the LEED rating
   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.

(a) Waivers from the requirements of this Chapter are available under the followingcircumstances:

20 (1) Emergency. A City department may grant itself a waiver from any

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,
- the City department shall report to the Director on a form provided by the Director regarding
- the emergency that prevented compliance with this Chapter within five business days. City
- 25

departments desiring an emergency waiver from the requirements of Section 706(a)(1) shall
 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 <u>Codes, the Port of San Francisco Building Standards Code, or other state or local requirement.</u>

7 <u>Waivers may be requested</u> the Director on a form provided by the Director <u>and submitted to the Task</u>

8 *<u>Force if compliance with this Chapter is cost prohibitive</u>. The Task Force shall provide the Director* 

9 with a recommendation with respect to the waiver request. <u>Where a project is located on property</u>

10 <u>owned or managed by the Port of San Francisco, the Task Force shall provide the Executive Director</u>

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 <u>Executive Director of the Port of San Francisco</u> may grant a waiver upon a finding that the

14 requesting <u>*City*</u> department <u>*project team*</u> has:

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

18 (B) If applicable for Section 705, <u>or equivalent provisions in the Port of San</u>

19 *<u>Francisco Green Building Standards Code</u>*, 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 <u>standard for a specific project. Such waiver requests shall provide justification and details for alternate</u>
- 25 <u>compliance. Waivers for alternate compliance may be requested on a form provided by the Director</u>

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 Francisco with a recommendation with respect to the waiver request. The Director (or, where a project 4 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 or City 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 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 <u>Francisco Green Building Standards Code</u>, 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) (c) 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

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

3

Section 4. Scope of Ordinance. In enacting this ordinance, the Board of Supervisors 4 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 the official title of the ordinance. 9 10 11 APPROVED AS TO FORM: **DENNIS J. HERRERA, City Attorney** 12

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14	By:NEHA GUPTA
15	Deputy City Attorney n:\legana\as2017\1700121\01167018.docx
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