

AMENDMENT OF THE WHOLE  
3/7/07

FILE NO. 061432

ORDINANCE NO.

1 [Clean Construction Ordinance.]

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3 **Ordinance amending the Administrative Code to add Section 6.25 to require City**  
4 **Contractors to adopt clean construction practices including biodiesel fuel and**  
5 **emissions controls within ~~one year~~ eighteen months; amending the Administrative Code**  
6 **to add Section 6.67 to allow City departments that are authorized to award public works**  
7 **contracts to compare bids on the basis of clean construction practices; and amending**  
8 **the Environment Code to add Section 411 to authorize the Department of the**  
9 **Environment to assist local businesses with off-road construction equipment in**  
10 **applying for funding to retrofit or replace such equipment and to require annual**  
11 **reporting, and making findings, including environmental findings.**

12 Note: Additions are *single-underline italics Times New Roman*;  
13 deletions are ~~*strikethrough italics Times New Roman*~~.  
14 Board amendment additions are double underlined.  
15 Board amendment deletions are ~~strikethrough normal~~.

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

17 Section 1. Findings.

18 (a) Air pollution is one of the major public health threats in San Francisco and  
19 contributes to asthma and other respiratory diseases.

20 (b) Diesel engine emissions from off-road heavy-duty vehicles include fine  
21 particulate matter that can be breathed deeply into the lungs and enter into a person's blood  
22 system. The State Air Resources Board classifies diesel particulate emissions as a toxic air  
23 contaminant and estimates that these emissions account for 70 percent of the cancer risks  
24 associated with airborne toxins.

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1 (c) The City and County of San Francisco has an interest in the protection of public  
2 health and the reduction of exposure to diesel emissions generated at publicly funded  
3 construction sites.

4 (d) The City and County of San Francisco can reduce the exposure to diesel  
5 emissions from off-road diesel equipment by requiring City contractors undertaking public  
6 works projects near schools, hospitals, residential care facilities and similar sensitive areas to  
7 utilize off-road diesel equipment with lower emissions.

8 (e) The City and County of San Francisco can further reduce the exposure to diesel  
9 emissions from off-road diesel equipment by creating a bidding incentive for City Contractors  
10 to utilize the cleanest possible off-road diesel equipment on public works contracts.

11 (f) The City and County of San Francisco can reduce the exposure to diesel  
12 emissions from off-road diesel vehicle fleets by seeking funding to retro-fit City owned  
13 equipment and other off-road diesel equipment operated in the City from existing incentive  
14 programs such as the Carl Moyer Air Quality Standards Attainment Program.

15 (g) Biodiesel is an available energy source that can be substituted in many diesel  
16 engines for conventional diesel fuel. Biodiesel can reduce petroleum consumption, and  
17 significantly reduce emissions of particulate matter, carbon monoxide, hydrocarbons, carbon  
18 dioxide ("greenhouse gas") and toxic air pollutants.

19 (h) The California Air Resources Board is expected to adopt a regulation in 2007  
20 requiring construction equipment owners to begin cleaning up their fleets starting in 2009.

21 (i) A study of construction sites by the Northeast States for Coordinated Air Use  
22 Management found that workers and nearby residents were exposed to levels of fine  
23 particulate matter up to 16 times higher than average.

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1 (j) According to the Air Resources Board emission inventory, construction  
2 equipment is the largest source of diesel soot in the San Francisco Bay Area, accounting for  
3 40 percent of diesel particulate emissions.

4 (k) San Francisco Bay Area is second only to Los Angeles in the health impacts  
5 from diesel pollution. Over 500 premature deaths, 400 hospital admissions and more than  
6 300 emergency room visits for asthma were attributable to diesel pollution in 2005 according  
7 to the Union of Concerned Scientists.

8 (l) A recent analysis of air toxics by the Bay Area Air Quality Management District  
9 found that 80% of the air toxic cancer risk is from diesel particulate pollution. Eastern San  
10 Francisco ranked among the highest areas for diesel emissions in the entire bay area.

11 (m) Under this Ordinance, the City and County of San Francisco wishes to exercise  
12 its power to make economic decisions involving its own funds as a participant in the  
13 marketplace and to conduct its own business as a municipal corporation to ensure that  
14 purchases and expenditures of public monies are made in a manner consistent with clean  
15 construction practices.

16 (n) Nothing in this Ordinance shall be interpreted or applied so as to create any  
17 power or duty in conflict with any federal or state law.

18 Section 2. The San Francisco Administrative Code is hereby amended by adding  
19 Section 6.25 to read as follows:

20 **SEC. 6.25. CLEAN CONSTRUCTION.**

21 (a) Definitions:

22 (1) "Biodiesel" means a fuel comprised of mono-alkyl esters of long chain fatty acids  
23 derived from vegetable oils or animal fats, designated B100 or "neat biodiesel", and meeting the  
24 requirements of ASTM D 6751. B20 is a mixture of 20% biodiesel and 80% petroleum.

1           (2) "City" means the City and County of San Francisco.

2           (3) "Clean Construction" means performing all work required to be performed under a  
3 public works contract (1) utilizing only off-road equipment and off-road engines fueled by biodiesel  
4 fuel grade B20 or higher and (2) utilizing only high use equipment that either (a) meets or exceed Tier  
5 2 standards for off-road engines or (b) operates with the most effective verified diesel emission control  
6 strategy.

7           (4) "Director" means the Director of the Department of the Environment, or his or her  
8 designee.

9           (5) "High Use Vehicles" means off-road vehicles or off-road engines used an aggregate of  
10 20 or more hours during any portion of the project.

11           (6) "Major construction project" means a public work to be performed within the  
12 geographic limits of the City that is estimated to require twenty (20) or more cumulative days of work  
13 to complete.

14           (7) "Most effective verified diesel emission control strategy" means a device, system or  
15 strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code of  
16 Regulations to achieve the highest level of pollution control from an off-road vehicle.

17           (8) "Off-road engine" means a diesel internal combustion engine (including the fuel system)  
18 including without limitation, internal combustion engines used to power excavators, backhoes,  
19 bulldozers or similar equipment used in any project subject to this Chapter. "Off-road engine" does  
20 not include portable engines or stationary engines (engines that remain at one location for more than  
21 12 months).

22           (9) "Off-road vehicle" means a vehicle that is propelled by an off-road engine of twenty-five  
23 horsepower or greater, including, without limitation, excavators, backhoes, bulldozers and similar  
24 equipment used in any project subject to this Chapter. "Off-road vehicle" does not include a  
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1 horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road engine  
2 of sixty-five horsepower or less and that is not used in any construction program or project. "Off-road  
3 vehicle" does not include portable equipment.

4 (10) Public work means a contract for the erection, construction, renovation, alteration,  
5 improvement, demolition, excavation, installation, or repair of any public building, structure,  
6 infrastructure, bridge, road, street, park, dam, tunnel, utility or similar public facility that is performed  
7 by or for the City, and the cost of which is to be paid wholly or partially out of moneys deposited in the  
8 City Treasury or out of trust monies under the control of or collected by the City.

9 (11) "Sensitive Site" means a hospital or other medical institution with facilities for inpatient  
10 care, a residential care facility providing lodging board and care for a period of 24 hours or more to  
11 seven or more persons, a child-care facility providing less than 24 hour care for 13 or more children,  
12 or an elementary or secondary school, either public or private.

13 (12) "Tier 2 Standards" are those standards for an off-road engine as described in Division  
14 3 Chapter 9, Article 4, Section 2423(b)(1)(A) of Title 13 of the California Code of Regulations, as  
15 amended.

16 (b) Clean Construction on major construction projects.

17 (1) Requirement. Clean Construction shall be required on public works contracts as  
18 follows: (A) For all contracts solicited on or after a date ~~one year~~ eighteen months from the  
19 effective date of this Ordinance for major construction projects located within 500 feet of a sensitive  
20 site; and (B) For all contracts solicited on or after a date two years from the effective date of this  
21 Ordinance for major construction projects. For all such contracts, the department head or officer  
22 calling for bids shall specify in the Advertisement for Bids that Clean Construction is required for the  
23 performance of all work unless a waiver of all or part of the requirements of this Chapter has been  
24 granted under Section 6.25(b)(3).

1           (2) Contract Provisions and liquidated damages. Every contract for which Clean  
2           Construction is required under Section 6.25(b)(1)(A) or Section 6.25(b)(1)(B) shall contain provisions,  
3           in a form to be approved by the City Attorney: (A) requiring Clean Construction, (B) authorizing  
4           waivers as set forth in Section 6.25(b)(3), and (C) specifying liquidated damages in the amount of \$100  
5           per day per each piece of off-road equipment and each off-road engine utilized to complete work on the  
6           project in violation of the Clean Construction requirements.

7           (3) Waivers. Waivers from the requirements of this Chapter are available under the  
8           following circumstances:

9           (A) Emergency. A contract awarding department may grant itself a waiver from this  
10           Chapter when the contract awarding authority certifies in writing to the Director, prior to the  
11           Controller's contract certification, that the contract is being awarded under the emergency provisions  
12           of Administrative Code Section 6.60 and that there is no immediately available contractor capable of  
13           performing the work as Clean Construction. In such case, the contract awarding authority shall within  
14           two business days notify the Director in writing of the emergency that prevented compliance with this  
15           Chapter and describe steps being taken to safeguard public and City employee health during the  
16           noncomplying work, and shall explain steps to reduce the likelihood that a similar emergency waiver  
17           would be required in the future.

18           (B) Performance Standards. The Director may grant a waiver in whole or part from this  
19           Chapter prior to the solicitation of bids upon a showing by the contract awarding authority that there  
20           are no complying off-road vehicles or off-road engines for some or all of the required work, provided  
21           that the contract awarding authority provides a written memorandum explaining the need for the  
22           waiver and the steps that will be taken to safeguard public and City employee health during the  
23           noncomplying work.

1           (C) Cost prohibitive. The Director may grant a waiver in whole or part from this Chapter  
2 prior to the solicitation of bids upon a showing by the contract awarding authority that compliance  
3 would be cost prohibitive under the circumstances, provided that the contract awarding authority  
4 provides a written memorandum explaining the need for the waiver and the steps that will be taken to  
5 safeguard public and City employee health during the noncomplying work.

6           (D) Other. The Director may grant a waiver in whole or part from this Chapter prior to the  
7 solicitation of bids or may waive the biodiesel and/or emissions standards for Clean Construction in  
8 advance of any violation of the Clean Construction requirements as to specific off-road equipment or  
9 off-road engines essential to complete the work provided that the contract awarding authority provides  
10 a written memorandum demonstrating a reasonable basis for the waiver including a reasonable plan to  
11 minimize the use of noncomplying equipment or engines, and the steps that will be taken to safeguard  
12 public and City employee health during the noncomplying work, and further provided that such post-  
13 award waivers for specific equipment may not exceed 25% of the total operating hours of all off-road  
14 vehicles or off-road engines used on the project.

15           (E) Rules and Regulations. After a public hearing, the Director, in consultation with the  
16 contract awarding authorities, may promulgate rules, regulations or guidelines as necessary or  
17 appropriate to carry out the purposes and requirements of this Chapter and may adopt forms necessary  
18 to implement this Chapter.

19           (F) Publication of Waivers Granted. The Department of the Environment and the contract  
20 awarding authorities shall maintain and post a list of all waivers granted on their Departmental  
21 Websites in a manner that can easily be accessed by the public.

22           (4) Clean Construction Projects encouraged for other City Contracts. In recognition of the  
23 health and other environmental benefits of Clean Construction, contract-awarding authorities are  
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1 encouraged to require contractors to meet the standards for Clean Construction, as appropriate, in  
2 contracts not otherwise covered by this Chapter.

3 (5) Penalty.

4 (A) Whenever any City department finds, after an investigation by the contract awarding  
5 authority and the City Attorney, that a person or entity being considered for a contract, or under  
6 contract, with the City has, in connection with the bidding, execution or performance of any City  
7 contract, falsely represented to the City the nature or character of the off-road vehicles and/or off-road  
8 engines to be utilized, or utilized, on the contract, the City department shall have the authority to  
9 impose such sanctions or take such other actions as are designed to ensure compliance with the  
10 provisions of this Chapter.

11 (B) Measures which are available to the City to enforce this Chapter upon finding a  
12 violation pursuant to Section 6.25 (b)(5)(A) include, but are not limited to the following:

13 (i) Refusal to certify the award of a contract;

14 (ii) Suspension of a contract;

15 (iii) Ordering the withholding of City funds due the contractor under any City  
16 contract;

17 (iv) Ordering the recession of a contract based upon a material breach of contract  
18 provisions or pertaining to representations made in bidding, execution or performance of the contract;

19 (v) Debarment of a bidder, proposer or contractor from eligibility for providing  
20 commodities or services to the City for a period not to exceed five years, with a right to review and  
21 reconsideration by the City upon a showing of corrective action indicating violations are not likely to  
22 reoccur.

23 (C) Nothing in this Chapter shall be construed to relieve a contractor of responsibility to  
24 perform the contract.

1 Section 3. The San Francisco Administrative Code is hereby amended by adding  
2 Section 6.67 to read as follows:

3 **SEC. 6.67. COMPARISON OF BIDS ON BASIS OF CLEAN CONSTRUCTION.**

4 To minimize the adverse impact to the surrounding environment, department heads authorized  
5 to execute contracts for public works are authorized to compare bids on the basis that the work will be  
6 performed utilizing off-road equipment and off-road engines that meet or exceed the standards for  
7 Clean Construction set forth in Section 6.25 ("Clean Construction Comparative Bidding").  
8 Department heads are particularly encouraged to utilize Clean Construction Comparative Bidding  
9 wherever the project is located within 500 feet of a Sensitive Site and the construction activity will  
10 occur for more than 20 days. The department head or officer calling for bids shall specify in the  
11 Advertisement for Bids the monetary value that the department will attribute to Clean Construction and  
12 shall evaluate responsive bids accordingly. Any contract awarded in consideration, in whole or in  
13 part, on the basis of Clean Construction Comparative Bidding shall include provisions (1) requiring  
14 the contractor to certify that all work has been undertaken in compliance with the requirements for  
15 Clean Construction set forth in Section 6.25, (2) providing procedures to request a waiver of the  
16 biodiesel fuel and/or emissions standards as to specific, necessary equipment as set forth in Section  
17 6.2(b)(3)(D), and (3) providing for liquidated damages in the amount of \$100 per day per vehicle  
18 operated at the project site in violation of Clean Construction standards. Except as provided herein,  
19 contracts awarded on the basis of Clean Construction Comparative Bidding shall be subject to all  
20 provisions of Chapter 6 of the Administrative Code.

21 Section 4. The San Francisco Environment Code is hereby amended by adding  
22 Section 411 to read as follows:

23 **SEC. 411. CLEAN CONSTRUCTION ASSISTANCE AND REPORTING.**

24 (a) Definitions:  
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1           (1) "Most effective verified diesel emission control strategy" means a device, system or  
2 strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code of  
3 Regulations to achieve the highest level of pollution control from an off-road vehicle.

4           (2) "Off-road engine" means a diesel internal combustion engine (including the fuel system)  
5 including without limitation, internal combustion engines used to power excavators, backhoes,  
6 bulldozers or similar equipment used in any City construction projects. "Off-road engine" does not  
7 include portable engines or stationary engines (engines that remain at one location for more than 12  
8 months).

9           (3) "Off-road vehicle" means a vehicle that is propelled by an off-road engine of twenty-five  
10 horsepower or greater, including, without limitation, excavators, backhoes, bulldozers and similar  
11 equipment used in any project subject to this Chapter. "Off-road vehicle" does not include a  
12 horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road engine  
13 of sixty-five horsepower or less and that is not used in any construction program or project. "Off-road  
14 vehicle" does not include portable equipment.

15           (4) "Tier 2 standards" are those standards for an off-road engine as described in Division 3  
16 Chapter 9, Article 4, Section 2423(b)(1)(A) of Title 13 of the California Code of Regulations, as  
17 amended.

18           (b) Technical Assistance to Local Businesses. The Department of the Environment shall  
19 provide technical assistance to businesses certified as Local Businesses Enterprises (LBEs) by the  
20 Human Rights Commission and other local businesses in securing available local, state and federal  
21 public incentive funding to retro-fit, repower or replace off-road vehicles or off-road engines operated  
22 by such businesses within the City.

23           (c) Annual Reporting Requirement. The Department of the Environment annually shall  
24 prepare and distribute to City departments with off-road vehicles or off-road engines summary  
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1 information, including application procedures and deadlines, about available local, state and federal  
2 public incentive programs to retrofit, repower, or replace older, more polluting diesel equipment. The  
3 Department of the Environment shall include in the Annual Report to the Mayor and the Board of  
4 Supervisors, required in Section 406(j), the following: (1) information about the extent to which each  
5 City Department's off-road vehicle and off-road engine fleet meets or exceeds either Tier 2 standards  
6 for off-road engines or utilizes the most effective verified diesel emission control strategy, (2) a  
7 summary of the results of grant applications made and awarded for the prior year to retro-fit, repower  
8 or replace off-road vehicles and engines in the City's fleet, including fleet upgrades funded and  
9 completed, (3) a summary of technical assistance provided to LBEs and other local businesses, and  
10 results, if known, and (4) recommendations to the Board of Supervisors, Mayor, and City Departments  
11 for procedural, policy, or legislative changes to reduce air pollution emanating from off road vehicles  
12 and off-road engines.

13 Section 5. Environmental Findings.

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

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

20 By: \_\_\_\_\_  
21 CATHARINE S. BARNES  
22 Deputy City Attorney

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