1	[Clean Construction Ordinance.]
2	
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; amending the Administrative Code to add Section
6	6.67 to allow City departments that are authorized to award public works contracts to
7	compare bids on the basis of clean construction practices; and amending the
8	Environment Code to add Section 411 to urge City departments with off-road
9	construction equipment to apply for funding to retrofit or replace such equipment, to
10	authorize the Department of the Environment to assist local businesses in applying for
11	such funding, and to require annual reporting.
12	Note: Additions are <u>single-underline italics Times New Roman</u> ; deletions are <u>strikethrough italics Times New Roman</u> .
13	Board amendment additions are <u>double underlined</u> . Board amendment deletions are strikethrough normal .
14	board amendment deletions are strikethrough normal .
15	Be it ordained by the People of the City and County of San Francisco:
16	Section 1. Findings.
17	(a) Air pollution is one of the major public health threats in San Francisco and contributes
18	to asthma and other respiratory diseases.
19	(b) Diesel engine emissions from off-road heavy-duty vehicles include fine particulate
20	matter that can be breathed deeply into the lungs and enter into a person's blood system. The State Air
21	Resources Board classifies diesel particulate emissions as a toxic air contaminant and estimates that
22	these emissions account for 70 percent of the cancer risks associated with airborne toxins.
23	(c) The City and County of San Francisco has an interest in the protection of public health
24	and the reduction of exposure to diesel emissions generated at publicly funded construction sites.
25	

1	(d) The City and County of San Francisco can reduce the exposure to diesel emissions from
2	off-road diesel equipment by requiring City contractors undertaking public works projects near
3	schools, hospitals, residential care facilities and similar sensitive areas to utilize off-road diesel
4	equipment with lower emissions.
5	(e) The City and County of San Francisco can further reduce the exposure to diesel
6	emissions from off-road diesel equipment by creating a bidding incentive for City Contractors to utiliz
7	the cleanest possible off-road diesel equipment on public works contracts.
8	(f) The City and County of San Francisco can reduce the exposure to diesel emissions from
9	off-road diesel vehicle fleets by seeking funding to retro-fit City owned equipment and other off-road
10	diesel equipment operated in the City from existing incentive programs such as the Carl Moyer Air
11	Quality Standards Attainment Program.
12	(g) Biodiesel is an available energy source that can be substituted in many diesel engines
13	for conventional diesel fuel. Biodiesel can reduce petroleum consumption; significantly reduce
14	emissions of particulate matter, carbon monoxide, hydrocarbons, carbon dioxide ("greenhouse gas")
15	and toxic air pollutants
16	(h) Under this Ordinance, the City and County of San Francisco wishes to exercise its
17	power to make economic decisions involving its own funds as a participant in the marketplace and to
18	conduct its own business as a municipal corporation to ensure that purchases and expenditures of
19	public monies are made in a manner consistent with clean construction practices.
20	(i) Nothing in this Ordinance shall be interpreted or applied so as to create any power or
21	duty in conflict with any federal or state law.
22	
23	Section 2. The San Francisco Administrative Code is hereby amended by adding
24	Section 6.25 to read as follows:

1	Sec. 6.25 CLEAN CONSTRUCTION.
2	(a) Definitions:
3	(1) "Biodiesel" means a fuel comprised of mono-alkyl esters of long chain fatty acids
4	derived from vegetable oils or animal fats, designated B100 or "neat biodiesel, " and meeting the
5	requirements of ASTM D 6751. B20 is a mixture of 20% biodiesel and 80% petroleum.
6	(2) "Clean Construction Project" means performing all work required to be performed
7	under a public works contract (1) utilizing only off-road equipment and off-road engines fueled by
8	biodiesel fuel grade B20 or higher and (2) utilizing only high use equipment that either (a) meets or
9	exceed Tier 2 standards for off-road engines or (b) operates with the most effective verified diesel
10	emission control strategy.
11	(3) "High Use Vehicles" means off-road vehicles or off-road engines used an aggregate of
12	20 or more hours during any portion of the project.
13	(4) "Major construction project" means a public work or improvement estimated to require
14	twenty (20) or more cumulative days of work to complete.
15	(5) "Most effective verified diesel emission control strategy" means a device, system or
16	strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code of
17	Regulations to achieve the highest level of pollution control from an off-road vehicle.
18	(6) "Off-road engine" means a diesel internal combustion engine (including the fuel system,
19	including without limitation, internal combustion engines used to power excavators, backhoes,
20	bulldozers or similar equipment used in any project subject to this Chapter. "Off-road engine" does
21	not include portable engines or stationary engines (engines that remain at one location for more than
22	<u>12 months).</u>
23	(7) "Off-road vehicle" means a vehicle that is propelled by an off-road engine of twenty-five
24	horsepower or greater, including, without limitation, excavators, backhoes, bulldozers and similar

1	equipment used in any project subject to this Chapter. "Off-road vehicle" does not include a
2	horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road engine
3	of sixty-five horsepower or less and that is not used in any construction program or project. "Off-road
4	vehicle" does not include portable equipment.
5	(8) "Sensitive Site" means a hospital or other medical institution with facilities for inpatient
6	care, a residential care facility providing lodging board and acre for a period of 24 hours or more to
7	seven or more persons, a child-care facility providing less than 24 hour care for 13 or more children,
8	or an elementary or secondary school, either public or private.
9	(9) "Tier 2 Standards" are those standards for an off-road engine as described in Division
10	3 Chapter 9, Article 4, Section 2423(b)(1)(A) of Title 13 of the California Code of Regulations, as
11	amended.
12	(b) Clean Construction on major construction projects.
13	(1) Requirement. For all contracts for a major construction project located within 500 feet
14	of a sensitive site solicited on or after one year from the effective date of this Ordinance, the
15	department head or officer calling for bids shall specify in the Advertisement for Bids that Clean
16	Construction is required for the performance of all work, unless the contract awarding department,
17	upon consultation with the Department of the Environment or for good cause shown, waives such
18	requirement for biodiesel fuel and/or emissions standards in advance as to specific, necessary
19	equipment.
20	(2) Contract Provisions and liquidated damages. Every contract for such public work or
21	improvement shall contain a provision requiring clean construction and the procedure for seeking
22	waiver in advance by the Department head, and providing for liquidated damages in the amount of
23	\$100 per day per vehicle operated in violation of this requirement.
24	

1	(3) Waivers. The contract awarding department, upon consultation with the Department of
2	the Environment or for good cause shown, may waives the requirement for biodiesel fuel and/or
3	emissions standards as to specific, necessary equipment provided that such waiver is issued in advance
4	of any violation of the clean construction and provided further that all such waivers for a specific
5	project may not exceed 25% of the total operating hours of all off-road vehicles or off-road equipment
6	used on the project.
7	(4) Clean Construction Projects encouraged in other City Contracts. In recognition
8	of the health and other environmental benefits of clean construction, contract-awarding departments
9	are encouraged to require contractors to meet the standards for clean construction projects, as
10	appropriate, in contracts for public works and improvements not otherwise covered by this ordinance.
11	
12	Section 3. The San Francisco Administrative Code is hereby amended by adding
13	Section 6.67 to read as follows:
14	
15	SEC. 6.67 COMPARISON OF BIDS ON BASIS OF CLEAN CONSTRUCTION.
16	To minimize the adverse impact to the surrounding environment, department heads authorized to
17	execute contracts for public works are authorized compare bids on the basis that the work will be
18	performed utilizing off-road equipment and off-road engines that meet or exceed the standards for
19	clean construction projects set forth in Section 6.25 ("clean construction" comparative bidding).
20	Department heads are particularly encouraged to utilize "clean construction" comparative bidding
21	wherever the project is located within 500 feet of a sensitive site and the construction activity will occur
22	for more than 20 days. The department head or officer calling for bids shall specify in the
23	Advertisement for Bids the monetary value that the department will attribute to clean construction and
24	shall evaluate responsive bids accordingly. Any contract awarded in consideration, in whole or in
25	

1	part, on the basis of clean construction comparative bidding, shall include provisions (1) requiring the
2	contractor to certify that all work has been undertaken in compliance with the requirements for Clean
3	Construction Projects set forth in Section 6.25, (2) providing procedures for the contract awarding
4	department, upon consultation with the Department of the Environment or for good cause shown, to
5	waive the requirement for biodiesel fuel and/or emissions standards as to specific, necessary equipment
6	provided that such waiver is issued in advance of any violation of the clean construction requirements
7	and provided further that such waivers may not exceed 25% of the total operating hours of all off-road
8	vehicles or off-road equipment used on the project, and(3) providing for liquidated damages in the
9	amount of \$100 per day per vehicle operated at the project site in violation of Clean Construction
10	project standards. Except as provided herein, contracts awarded on the basis of "clean construction"
11	comparative bidding shall be subject to all provisions of Chapter 6 of the Administrative Code.
12	
13	Section 4. The San Francisco Environment Code is hereby amended by adding
14	Section 411 to read as follows:
15	(a) Definitions:
16	(1) "Most effective verified diesel emission control strategy" means a device, system or
17	strategy that is verified pursuant to Division 3 Chapter 14 of Title 13 of the California Code of
18	Regulations to achieve the highest level of pollution control from an off-road vehicle.
19	(2) "Off-road engine" means a diesel internal combustion engine (including the fuel system)
20	including without limitation, internal combustion engines used to power excavators, backhoes,
21	bulldozers or similar equipment used in any City construction projects. "Off-road engine" does not
22	include portable engines or stationary engines (engines that remain at one location for more than 12
23	months).
24	

(3) "Off-road vehicle" means a vehicle that is propelled by an off-road engine of twenty-five
horsepower or greater, including, without limitation, excavators, backhoes, bulldozers and similar
equipment used in any project subject to this Chapter. "Off-road vehicle" does not include a
horticultural maintenance vehicle used for landscaping purposes that is powered by an off-road engine
of sixty-five horsepower or less and that is not used in any construction program or project. "Off-road
vehicle" does not include portable equipment.
(4) "Tier 2 standards" are those standards for an off-road engine as described in Division
3 Chapter 9, Article 4, Section 2423(b)(1)(A) of Title 13 of the California Code of Regulations, as
amended.
(b) Grant Funding to Retro-fit or Replace City Equipment. Not later than August 1 st , 2007,
every City department that owns any off-road vehicles or off-road engines is urged to apply for
available incentive funding to retrofit or replace such vehicles and engines to meet or exceed (1)Tier 2
standards for off-road engines; (2) The most effective verified diesel emission control strategy for
emission reductions of particulate matter (PM) and, where available and compatible, for reductions of
oxides of nitrogen (NOx) for off-road vehicles; or (3) such emission standards and strategies as the
Director of the Department of the Environment may promulgate to reflect changing technologies
and/or maximize opportunities for funding under specific grant programs.
(c) Technical Assistance to Departments and Local Businesses. The Department of the
Environment annually shall prepare and distribute to City departments with off-road vehicles or off-
road engines summary information, including application procedures and deadlines, about available
local, state and federal public incentive programs to retrofit, repower, or replace older, more polluting
diesel equipment. The Department of the Environment shall also provide technical assistance to

1	businesses certified as Local Businesses Enterprises (LBEs) by the Human Rights Commission and
2	other local businesses in securing funding to retro-fit, repower or replace off-road vehicles or off-road
3	engines operated by such businesses within the City.
4	(d) Annual Reporting Requirement. The Department of the Environment shall include in the Annual
5	Report to the Mayor and the Board of Supervisors, required in Section 406(j), the following: (1)
6	information about the extent to which each City Department's off-road vehicle and off-road engine fleet
7	meets or exceed either Tier 2 standards for off-road engines or utilizs the most effective verified diesel
8	emission control strategy, (2) a summary of the results of grant applications made and awarded for the
9	prior year to retro-fit, repower or replace off-road vehicles and engines in the City's fleet, including
10	fleet upgrades funded and completed, (3) a summary of technical assistance provided to LBEs and
11	other local businesses, and results, if known, and (4) recommendations to the Board of Supervisors,
12	Mayor, and City Departments for procedural, policy, or legislative changes to reduce air pollution
13	emanating from off road vehicles and off-road engines.
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16	APPROVED AS TO FORM:
17	DENNIS J. HERRERA, City Attorney
18	By:
19	Catharine S. Barnes Deputy City Attorney
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