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Tracking Sheet

Meeting Date:

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Committee(s) Assignment:

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Mayor Daley

Ordinance

Amendment of Chapter 2-92 of Municipal Code by adding new Section 595 regarding requirements associated with diesel equipment use

Committee on Energy, Environmental Protection and Public Utilities



OFFICE OF THE MAYOR

CITY OF CHICAGO

RICHAHD M. DALEY MAYOR

March 9, 2011

TO THE HONORABLE, THE CITY COUNCIL OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the Commissioner of the Environment, I transmit herewith an ordinance amending the Municipal Code regarding requirements associated with diesel equipment use.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours, Kau

<u>O R D I N A N C E</u>

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION I. Chapter 2-92 of the Municipal Code of Chicago is hereby amended by inserting a new section 2-92-595, as follows:

2-92-595 Clean diesel contracting.

- (a) Definitions. For purposes of this section, the following definitions shall apply:
 - (1) "Biodiesel" means a fuel comprised of mono-alkyi esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of the American Society for Testing Materials ("ASTM") D 6751.
 - (2) "Biodiesel blend" means a blend of biodiesel meeting ASTM D 6751 with petroleum-based diesel fuel, designated BXX, where XX represents the volume percentage of biodiesel fuel in the blend.
 - (3) "CARS" means the California Air Resources Board.
 - (4) "Clean fleet score ("CPS") waiver grantee" means any construction firm to which the commissioner of environment has granted a clean fleet score annual waiver certificate pursuant to subsection (f) of this section.
 - (5) "Compression-ignition engine" means a reciprocating, internal-combustion engine that is not a spark-ignition engine.
 - (6) "Contract" means any contract, the amount of which is \$2,000,000 or more, awarded by the city and whose cost is to be paid from funds belonging to or administered by the city, for construction projects including, but not limited to, the construction, demolition, restoration, repair, renovation, environmental remediation or environmental abatement of any building, structure, tunnel, excavation, roadway, bridge, transit station or parcel of land. The term "contract" does not include a fixed-price, fixed term, and indefinite quantity contract, such as contracts commonly referred to as "job order contracts," unless the estimated value of an individual order under the contract is \$2,000,000 or more.
 - (7) "Contractor" means any person that enters into a contract with the city.
 - (8) "Department" means any city department or city agency that manages or supervises a contract awarded to a contractor.
 - (9) "Engine model year" means the year designating the annual new model production period during which the engine was produced, determined in accordance with 42 U.S.C. § 7521(b)(3), 40 C.F.R. § 86.082-2, 40 C.F.R. § 89.2, or 13 C.C.R. § 2421(a)(37) for purposes of compliance with US EPA or CARB emissions certification requirements and may differ from the model year of the vehicle or equipment powered by the engine.

- (10) "Heavy-duty diesel vehicle" means a motor vehicle with a gross vehicle weight rating of at least 8,500 pounds that is powered by a compression-ignition engine and which is not a "heavy-duty alternative-fuel vehicle."
- (11) "Heavy-duty alternative-fuel vehicle" means a motor vehicle with a gross vehicle weight rating of at least 8,500 pounds that is powered by an engine fueled at a minimum 80 percent, as measured by energy content, by natural gas, liquefied petroleum gas (commonly known as "propane"), hydrogen, or another fuel designated as an alternative fuel by the United States Department of Energy.
- (12) "Level 1 Control" means a verified diesel emission control retrofit device that achieves a particulate matter (PM) emission reduction of 25 percent or more from uncontrolled compression-ignition engine emission levels.
- (13) "Level 2 Control" means a verified diesel emission control retrofit device that achieves a particulate matter (PM) emission reduction of 50 percent or more from uncontrolled compression-ignition engine emission levels.
- (14) "Level 3 Control" means a verified diesel emission control retrofit device that achieves a particulate matter (PM) emission reduction of 85 percent or more from uncontrolled compression-ignition engine emission levels.
- (15) "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.
- (16) "Non-road engine" means a fifty horsepower or greater compression-ignition engine: (i) in or on a piece of equipment that is self-propelled (such as a cart or truck that is not a motor vehicle) or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or (ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as pushed or towed equipment); or (iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. The term "non-road engine" does not include an engine that is used in a motor vehicle or vehicle used solely for competition, or in a stationary source, except that this term shall include compression-ignition engines used to power portable generators, portable compressors or similar equipment used in any construction program or project.
- (17) "Non-road equipment" means equipment that is powered by a non-road engine.
- (18) "Non-road vehicle" means a vehicle that is powered by a non-road engine and that is not a motor vehicle or a vehicle used solely for competition.
- (19) "Reporting day" means the fifth day on which city business is transacted following the last working day of every reporting period.
- (20) "Reporting period" means (i) every 60 working day period from the beginning of work on the contract; or (ii) the period between the first working day and the last working day, if the contract is completed in less than a 60 working

day period; or (iii) any period following the last day of the last 60 working day period up to and including the last working day, if such period consists of not more than 75 working days and, if such period consists of more than 60 working days, the contractor provides a written notice to the department before the 60th working day that such period will consist of more than 60 working days.

- (21) "Solicitation" means the process used to communicate procurement requirements and to request responses from interested vendors.
- (22) "Spark-ignition engine" means a gasoline-fueled engine or other engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle and uses a throttle to regulate intake air flow to control power during normal operation.
- (23) _ "Subcontractor" means any person that enters into a contract with a contractor to perform work on a contract.
- "Tier 1 Non-road Diesel Standards," "Tier 2 Non-road Diesel Standards,"
 "Tier 3 Non-road Diesel Standards," or "Tier 4 Non-road Diesel Standards" means US EPA's Tier 1, Tier 2, Tier 3, or Tier 4 Non-road engine emission standards, respectively, as specified in 40 C.F.R. § 89.112(a), 40 C.F.R. § 1039.101, and 40 C.F.R. § 1039.102.
- (25) "Ultra low sulfur diesel fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million.
- (26) "US EPA" means the United States Environmental Protection Agency.
- (27) "Verified diesel emission control retrofit device" means an emission control device or strategy that has been verified to achieve a specified diesel PM reduction by US EPA or CARB. "Verified diesel emission control retrofit device" does not mean the use of ultra low sulfur diesel fuel alone or a device installed by the engine manufacturer for purposes of compliance with US EPA or CARB emissions certification requirements.
- (28) "VIN" means vehicle identification number.
- (29) "Working day" means a day on which work is performed on a construction project site pursuant to a contract.

(b) Emission reduction. (1) Any solicitation for a contract advertised or otherwise communicated on or after June 1, 2011, and any contract entered into as a result of such solicitation shall include a specification that the contractor and any subcontractor, including a CFS waiver grantee, shall use ultra low sulfur diesel fuel for any heavy-duty diesel vehicle, non-road vehicle or non-road equipment used in the performance of the contract.

(2) Any solicitation for a contract advertised or otherwise communicated on or after June 1, 2011, and any contract entered into as a result of such solicitation shall include a specification that the contractor or any subcontractor, including a CFS waiver grantee, shall minimize idling of motor vehicles and non-road vehicles used in the performance of the contract during periods of inactivity and shall comply with the anti-idling requirements imposed by any applicable federal, state or local law.

- (3) Any solicitation for a contract advertised or otherwise communicated on or after January 1, 2014, and any contract entered into as a result of such solicitation shall include a specification that any contractor or any subcontractor, including a CFS waiver grantee, shall not use any of the following vehicles and equipment in the performance of the contract:
 - any heavy-duty diesel vehicle not meeting or exceeding the US (i) EPA's emission standards for heavy-duty diesel vehicles for the 1998 engine model year, unless such vehicle is fitted with a verified diesel emission control retrofit device; or
 - (ii) any non-road vehicle or non-road equipment not meeting or exceeding the US EPA's Tier 1 Non-road Diesel Standards, unless such vehicle or equipment is fitted with a verified diesel emission control retrofit device.
- (4) Any solicitation for a contract advertised or otherwise communicated on or after January 1, 2014, and any contract entered into as a result of such solicitation shall include a specification that the heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of such contract must incorporate such engine or retrofit technology so that the contractor, through such engine or retrofit technology used directly by the contractor and all subcontractors, shall have a minimum of 2.1 clean fleet score per a reporting period, as calculated by using the methodology described in subsection (c)(5) of this section. Such solicitation and contract shall also include a specification that the contractor may exclude from the calculation of the clean fleet score all of the heavy-duty diesel vehicles, nonroad vehicles and non-road equipment used in the performance of the contract during a reporting period that are owned or leased by any CFS waiver grantee.
- (5) Any solicitation for a contract advertised or otherwise communicated on or after January 1, 2017, and any contract entered into as a result of such solicitation shall include a specification that the heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of such contract must incorporate such engine or retrofit technology so that the contractor, through such engine or retrofit technology used directly by the contractor and all subcontractors, shall have a minimum of 3.0 clean fleet score per a reporting period, as calculated by using the methodology described in subsection (c)(5) of this section. Such solicitation and contract shall also include a specification that the contractor may exclude from the calculation of the clean fleet score up to fifty (50) percent of all the heavyduty diesel vehicles, non-road vehicles and non-road equipment used in the performance of the contract during a reporting period that are owned or leased by any CFS waiver grantee.
- (6) Any solicitation for a contract advertised or otherwise communicated on or after January 1, 2020, and any contract entered into as a result of such solicitation shall include a specification that the heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of such

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contract must incorporate such engine or retrofit technology so that the contractor, through such engine or retrofit technology used directly by the contractor and all subcontractors, shall have a minimum of 4.0 clean fleet score per a reporting period, as calculated by using the methodology described in subsection (c)(5) of this section. Such solicitation and contract shall also include a specification that the contractor may exclude from the calculation of the clean fleet score up to twenty-five (25) percent of all the heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of the contract during a reporting period that are owned or leased by any CFS waiver grantee.

(c) Compliance. (1) Any solicitation for a contract advertised or otherwise communicated on or after January 1, 2014, and any contract entered into as a result of such solicitation shall include a specification that the contractor shall submit a written compliance plan to the department with respect to compliance with the requirements of this section within 14 days following the notice to proceed. The plan shall detail the strategy to be used by the contractor to comply with the requirements of this section. The chief procurement officer and the commissioner of environment are authorized to determine the contents of a compliance plan by rules and regulations promulgated pursuant to subsection (h) of this section.

- (2) On every reporting day, the contractor must submit to the department a detailed report of all heavy-duty diesel motor vehicles, non-road vehicles and non-road equipment used in the performance of such contract during the reporting period preceding the reporting day. The report shall, on a form provided by the city, include the following:
 - names, addresses, and telephone numbers of the contractor, any subcontractor, and the person responsible for the operation of the vehicles or equipment listed on the report;
 - (ii) for each heavy-duty diesel vehicle, the manufacturer, engine manufacturer, engine model year, VIN, the specific type of fuel that was used, and estimated hours, of operation during the period covered by the report;
 - (iii) for each non-road vehicle and non-road equipment, the manufacturer, engine manufacturer, serial number or engine serial number, engine US EPA Tier rating, the specific type of fuel that was used, and estimated hours of operation during the period covered by the report;
 - (iv) for any heavy-duty diesel vehicle, non-road vehicle or non-road equipment fitted with a verified diesel emission control retrofit device, the retrofit device type, US EPA or CARB verification level and year of installation, in addition to the information required by subsections (c)(2)(ii) and (c)(2)(iii) of this subsection;
 - (v) a clean fleet score calculated in accordance with the provisions of this subsection; and

- (vi) a certification that the contractor has met the requirements of this section and the terms of the contract specified pursuant to the provisions of this section.
- (3) For the purpose of calculating a clean fleet score, each heavy-duty diesel vehicle, heavy-duty alternative-fuel vehicle, non-road vehicle and non-road equipment used in the performance of the contract shall be assigned a numerical value, as follows:
 - 0 points for any heavy-duty diesel vehicle with an engine model year of 2003 or earlier not fitted with any verified diesel emission control retrofit device;
 - 0 points for any non-road vehicle and non-road equipment meeting US EPA's Tier 1 Non-road Diesel Standards and not fitted with any verified diesel emission control retrofit device;
 - (iii) 1 point for any heavy-duty diesel vehicle with an engine model year of 2004, 2005 or 2006 and not fitted with any verified diesel emission control retrofit device;
 - (iv) 1 point for any heavy-duty diesel vehicle, non-road vehicle and nonroad equipment fitted with a Level 1 Control;
 - (v) 2 points for any non-road vehicle and non-road equipment meeting US EPA's Tier 2 Non-road Diesel Standards and not fitted with any verified diesel emission control retrofit device;
 - (vi) 2.25 points for any non-road vehicle and non-road equipment meeting US EPA's Tier 3 Non-road Diesel Standards and not fitted with any verified diesel emission control retrofit device;
 - (vii) 3 points for any heavy-duty diesel vehicle, non-road vehicle and non-road equipment fitted with a Level 2 Control;
 - (viii) 3 points for any heavy-duty alternative-fuel vehicle with an engine model year of 2004, 2005 or 2006;
 - (ix) 4 points for any heavy-duty diesel vehicle with an engine model year of 2007, 2008 or 2009 and not fitted with any verified diesel emission control retrofit device;
 - (x) 4 points for any heavy-duty alternative-fuel vehicle with an engine model year of 2007, 2008 or 2009;
 - (xi) 4 points for any non-road vehicle and non-road equipment meeting US EPA's Tier 4 Non-road Diesel Standards and not fitted with any verified diesel emission control retrofit device;
 - (xii) 4 points for any heavy-duty diesel vehicle, non-road vehicle or nonroad equipment fitted with a Level 3 Control;
 - (xiii) 5 points for any heavy-duty diesel vehicle with an engine model year of 2010 or later;
 - (xiv) 5 points for any heavy-duty alternative-fuel vehicle with an engine model year of 2010 or later; and
 - (xv) 5 points for any heavy-duty diesel vehicle, non-road vehicle and non-road equipment fitted with a verified diesel emission control retrofit device exceeding the efficiency levels of a Level 3 Control to the

extent that the verified diesel emission control retrofit device provides emissions reductions equivalent to the US EPA requirements for heavy-duty diesel vehicles engine model year 2010.

- (4) Each heavy-duty diesel vehicle, non-road vehicle and non-road equipment used in the performance of the contract shall be assigned only the maximum assigned point value for which it qualifies during one reporting period; provided, however, that the maximum assigned value for each heavy-duty diesel vehicle, non-road vehicle and non-road equipment listed in subsections (c)(3)(i) through (c)(3)(vii) of this section that consumed only a B20 or greater biodiesel blend during the reporting period shall be increased by one half point.
- (5) The clean fleet score for each reporting period shall be calculated by adding the numerical point values allocated, in accordance with subsections (c)(3) and (c)(4) of this section, to each heavy-duty diesel vehicle, non-road vehicle and non-road equipment used in the performance of the contract during the reporting period and dividing the total numerical point values by the total number of all heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of the contract during the reporting period; provided, however, the contractor may, to the extent specified in the contract pursuant to subsections (b)(4), (b)(5) and (b)(6) of this section, exclude from the calculation of the clean fleet score heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of that are owned or leased by all CFS waiver grantees.

(d) Costs. All costs associated with meeting the requirements imposed pursuant to this section are incidental to the overall contract. No additional time or monies will be granted to the contractor for compliance with the requirements imposed pursuant to this section and any regulations promulgated pursuant thereto.

(e) Enforcement. Any solicitation for a contract subject to the provisions of this section and any contract entered into as a result of such solicitation shall include terms necessary to enforce the provisions of this section, including, but not limited to, terms

- (1) requiring the contractor and subcontractors to comply with the provisions of this section;
- (2) specifying that any city agency may conduct an audit to verify the contractor's compliance with the requirements of this section and the terms of the contract specified pursuant to the provisions of this section;
- (3) specifying that the commissioner or head of the department or the commissioner of environment or any other city agency designated by the commissioner or head of the department or the commissioner of environment is authorized to inspect or to have inspected any vehicle or equipment in order to ensure full compliance with contract requirements specified pursuant to subsections (b)(1), (b)(2), and (b)(3) of this section;

specifying that in the event of violation of any of the specifications required pursuant to subsections (b)(1), (b)(2), and (b)(3) of this section, liquidated damages shall be assessed against the contractor in the amount of \$5,000 for each violation and that each day of noncompliance shall be a separate violation; provided, however, the damages shall not exceed a total of \$50,000 for any one vehicle or piece of equipment; that such liquidated damages are not imposed as a penalty but as an estimate of the damages that-the city will sustain from delay in completion of the project and inspection and other enforcement costs, as well as the resultant damages to the public health of its citizens, which damages by their nature are not capable of precise proof; and authorizing the city to withhold and deduct from monies otherwise payable to the contractor the amount of liquidated damages due to the city;

(5) specifying that in the event the contractor has not met the minimum clean fleet score specified pursuant to subsections (b)(4), (b)(5) or (b)(6) of this section during any reporting period, liquidated damages shall be assessed against the contractor in the dollar amount that shall be calculated as follows:

(RCFS - ACFS) x \$500.00 x the number of working days in the reporting period; where RCFS stands for the minimum required clean fleet score during the reporting period and ACFS stands for the actual clean fleet score obtained by the contractor in the reporting period.

Such solicitation or contract shall also specify that noncompliance during each reporting period shall be a separate violation; that such liquidated damages are not imposed as a penalty but as an estimate of the damages that the city will sustain from delay in completion of the project and inspection and other enforcement costs, as well as the resultant damages to the public health of its citizens, which damages by their nature are not capable of precise proof; and authorizing the city to withhold and deduct from monies otherwise payable to the contractor the amount of liquidated damages due to the city; and

(6) specifying that any person who knowingly makes a false statement of material fact to any city agency with respect to compliance with any of the contract requirements specified pursuant to any of the provisions of this section or rules and regulations promulgated thereunder shall be fined not less than \$1,000.00 nor more than \$5,000.00 for each such false statement. For purposes of this section, a person knowingly makes a false statement of material fact when such person makes a false statement of material fact as described in subsection (d) of section 1-21-010 of this Code.

(f) Clean fleet score annual waiver. (1) Any construction firm may apply to the commissioner of environment for a clean feet score annual waiver certificate. Applications for a clean feet score annual waiver certificate shall be on a form provided by the department of environment and shall be accompanied by a non-refundable application fee of \$100.00. The

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application shall also include all of the following information and statements which shall be verified by affidavit:

list of all heavy-duty diesel vehicles, non-road vehicles and non-road equipment owned or leased by the applicant at the time of application, including the horsepower, and, to the extent applicable, the manufacturer, engine manufacturer, engine model year, VIN, serial number or engine serial number, and engine US EPA Tier rating of each of such vehicles and equipment (for purposes of this subsection, "listed vehicles and equipment");

a statement that the sum total horsepower of all of the listed vehicles and equipment is less than or equal to 2,500 horsepower (hp); and

i) a statement that repowering, replacing or retrofitting all or some of the listed vehicles and equipment in order to comply with contract requirements that shall be specified in accordance with the provisions of this section will cause the applicant to suffer an undue financial hardship.

- (2) If, upon review of the application, the commissioner of environment or the commissioner's designee determines that the applicant has met all of the requirements set forth in subsection (f)(1) of this section, the commissioner is authorized to grant a clean feet score annual waiver certificate to the applicant.
- (3) Any contractor may exclude from the calculation of the clean fleet score, to the extent allowed in subsection (b)(4), (b)(5), and (b)(6) of this section, the heavy-duty diesel vehicles, non-road vehicles and non-road equipment used in the performance of the contract during a reporting period that are owned or leased by any CFS waiver grantee.
- (4) A clean fleet score annual waiver certificate granted pursuant to this subsection shall be valid as long as the grantee continues to qualify for such waiver; provided, however, no such waiver shall be valid for more than a one year period from the time it has been granted; and further provided that the commissioner may renew the clean fleet score annual waiver certificate for additional one year periods upon submission by the CFS waiver grantee of a statement verified by affidavit that any of the information and statements that the CFS waiver grantee submitted to the commissioner to qualify for the waiver are not changed.
- (5) Any person who knowingly makes a false statement of material fact to the commissioner of environment with respect to a clean feet score annual waiver certificate application specified in this subsection or rules and regulations promulgated thereunder shall be subject to the penalties provided in section 1-21-010 of this Code. For purposes of this section, a person knowingly makes a false statement of material fact when such person makes a false statement of material fact as described in subsection (d) of section 1-21-010 of this Code.
- (6) No clean fleet score annual waiver certificate shall be granted as of January 1, 2023.

(g) Recordkeeping. The contractor shall maintain copies of plans, reports and clean fleet scores prepared or calculated and submitted in accordance with subsections (c)(1) and (c)(2)

- (ii)
- (iii)

(i)

of this section for a period of three years after the completion of the contract, and, if requested by any city agency, shall make them available for the purpose of auditing.

(h) *Regulations.* The chief procurement officer and the commissioner of environment are authorized to jointly adopt rules and regulations they may deem appropriate for the administration and enforcement of the provisions of this section.

(i) Scope. (1) This section shall not apply to any contract to the extent that the requirements imposed by this section are inconsistent with procedures or standards required by any law or regulation of the United States or the State of Illinois to the extent such inconsistency is not permitted under the home rule powers of the city.

(2) Any contractor, subcontractor or CFS waiver grantee, performing a contract that the commissioner of aviation is authorized to enter into in relation to the design, construction, operation and maintenance of all public airports owned or operated by the city, including, but not limited to, O'Hare Modernization Program contracts, as the term "O'Hare Modernization Program" is defined in section 2-20-025(a) of this Code, shall comply with (i) the construction air quality specifications set forth in any such contract, and (ii) all contract requirements that shall be specified in accordance with the provisions of this section; provided, however, for the purpose of this subsection (i)(2)(ii), any contractor may exclude from the calculation of the clean fleet score the vehicles and equipment used in the performance of the contract during a reporting period that are owned or leased by any CFS waiver grantee to the extent allowed in subsection (b)(4), (b)(5), and (b)(6) of this section.

(j) Sunset. Unless otherwise provided by ordinance, the provisions of subsections (c)(1) and (c)(2) of this section shall expire on December 31, 2030.

SECTION II. This ordinance shall take effect 10 days after its passage and approval.