Attachment I

FINAL REGULATION ORDER

REGULATION FOR IN-USE OFF-ROAD DIESEL VEHICLES

Amend sections 2449, 2449.1, and 2449.2, title 13, California Code of Regulations, to read as follows:

Note: The preexisting regulation text is set forth below in normal type. The Assembly Bill 8 2X (AB 8 2X or ABX2 8) amendments approved at the July, 2009, Board hearing are shown in <u>underline</u> to indicate additions and strikeout to indicate deletions.

§ 2449 General Requirements for In-Use Off-Road Diesel-Fueled Fleets

(c) Definitions

- (28) "Hour Meter Log" means a log of the hours that a vehicle operated directly taken from the vehicle's hour meter.
- (2928) "Implement of husbandry" is as defined in California Vehicle Code (Veh.Code) division 16.
- (3029) "Local Municipality" means a city, county, city and county, special district, or other public agency, or two or more public entities acting jointly, or the duly constituted body of an Indian reservation or rancheria. Agencies of the United States of America or the State of California, and departments, divisions, public corporations, or public agencies of this State or of the United States are not considered local municipalities.
- (3130) "Low-Population County Local Municipality Fleet" means a fleet owned by a local municipality (as defined above) that is located in a county as defined in title 13, CCR, section 2022(b)(2) and identified in section 2022(c)(2), Table 2, or, using the criteria set forth in title 13, CCR, section 2022.1(c)(4), a local municipality not located in a low-population county that has requested and has received Executive Officer approval to be treated like a municipality in a lowpopulation county. Fleets owned by such local municipalities shall be treated as small fleets even if their total maximum power exceeds 2,500 horsepower.

- (<u>32</u>31)"Low-use vehicle" means a vehicle that operated in California less than 100 hours during the preceding 12-month period running from March 1 to end of February. For example, when reporting in 2009, the hours of use between March 1, 2008 and February 28, 2009 would be used to determine low-use status. To be considered a low-use vehicle, the fleet owner must submit engine operation data from a functioning non-resettable hour meter.
 - (A) Vehicles used outside California Vehicles that operate both inside and outside of California can meet the low-use vehicle definition if they are used less than 100 hours per year in California.
 - (B) Three-year rolling average A vehicle operated only in California for the previous three years and owned by the same owner during that period will be considered low-use if it operated on average less than 100 hours per year during that previous three-year period.
 - (C) Emergency operation hours Hours used for emergency operations are not counted when determining low-use status.
- (3332) "Maximum power" (Max Hp) means the engine's net horsepower or net flywheel power certified to Society of Automotive Engineers (SAE) Method J1349 or International Organization for Standardization (ISO) Method 9249. If the engine's net horsepower or net flywheel power certified to SAE Method J1349 or ISO Method 9249 is not readily available, another net horsepower or net flywheel power from the manufacturer's sales and service literature or horsepower from the engine label may be used.
- (<u>34</u>33) "*Model year*" has the same meaning as defined in title 13, CCR, section 2421(a)(37).
- (<u>35</u>34) "Motor vehicle" has the same meaning as defined in Veh. Code section 415.
- (<u>36</u>35) "New fleet" means a fleet that is acquired or that enters California after March 1, 2009. Such fleets may include new businesses or out-of-state businesses that bring vehicles into California for the first time after March 1, 2009.
- (<u>37</u>36) "NOx index" means an indicator of a fleet's overall NOx emission rate. The NOx Index for a specific fleet is determined by summing the product of the maximum power of each engine times the NOx Emission Factor, and dividing by the fleet's total maximum power.
- (3837) "NOx target rate" means the NOx fleet average that a specific fleet must meet in a compliance year in order to show compliance with the fleet average requirements. The NOx Target Rate varies depending on a fleet's horsepower distribution. The NOx Target Rate for a specific fleet for each compliance year is determined by summing (adding) the product of the maximum power (Max Hp) of

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each engine times the NOx target, and dividing the resulting sum by the fleet's total maximum power.

- (<u>39</u>38) "Non-Profit Training Center" means an entity that operates a program for training in the use of off-road vehicles and qualifies as a non profit or not for profit organization under title 26 Internal Revenue Code section 501(a), (c)(3), (c)(5), or (c)(6).
- (4039) "Off-highway vehicle" is defined in Veh. Code division 16.5.
- (41) "Operator Log" means a log of the hours that a vehicle operated taken from records of vehicle operator hours.
- (4240) "Oxides of nitrogen" (NOx) means compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (4341) "Post-2007 Flexibility Engine" means an engine certified on or after January 1, 2007 to the implementation flexibility standards in title 13, CCR, section 2423(d). Such flexibility engines are generally labeled as follows by the engine manufacturer:

"THIS ENGINE COMPLIES WITH CALIFORNIA EMISSION REQUIREMENTS UNDER 13 CCR 2423(d)..." or "THIS ENGINE CONFORMS TO CALIFORNIA OFF-ROAD COMPRESSION-IGNITION ENGINE REGULATIONS UNDER 13 CCR, 2423(d)."

Post-2007 flexibility engines should use the emission standard to which the engine is certified. For example, a Tier 4 engine flexed back to Tier 2 emission levels should use the Tier 2 PM standard in title 13, CCR, section 2423(b)(1)(A) as the emission factor (converted from grams per kilowatt hour (g/kW-hr) to g/bhp-hr by multiplying by 0.746).

- (4442) "Queuing" means the intermittent starting and stopping of a vehicle while the driver, in the normal course of doing business, is waiting to perform work or a service, and when shutting the vehicle engine off would impede the progress of the queue and is not practicable. Queuing does not include the time a driver may wait motionless in line in anticipation of the start of a workday or opening of a location where work or a service will be performed.
- (4543) "Registered and driven safely on-road" means a vehicle meets the requirements to be registered for on-road operation in Veh. Code division 3,

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chap. 1, article 1, sections 4000 et seq. (i.e., required to be registered or could be registered), and the requirements to be driven safely on-road in "Equipment of Vehicles" requirements in Veh. Code division 12, chap. 1, sections 24000 et seq. and "Size, Weight, and Load" requirements in Veh. Code division 15, sections 35000 et seq. Having a California Special Construction Equipment plate as defined in California Veh. Code sections 565 and 570 does not constitute registration.

- (46) <u>"Replacement" means the addition of off-road diesel vehicles to a fleet that</u> had retired one or more off-road diesel vehicles of an equivalent horsepower.
- (4744) "Repower" means to replace the engine in a vehicle with another engine meeting a subsequent engine emissions standard (e.g., replacing a Tier 0 engine with a Tier 2 or later engine).
- (4845) "Responsible Official" means one of the following:
 - (A) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation,
 - (B) For a partnership or sole proprietorship: a general partner or the proprietor, respectively
 - (C) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA).
- (4946) "Retire" means to take an engine out of service and not operate it again in the State of California. To retire an engine, the vehicle with the engine may be moved outside of California, sold, or scrapped.
- (5047) "Snow removal operations" means removing snow from public roads, private roads, or driveways.
- (5148) "Specialty vehicle" means a vehicle for which no used vehicle with a cleaner engine that can serve an equivalent function and perform equivalent work is available.
- (5249) "Tier 0 Engine" means an engine not subject to the requirements in title 13, CCR, section 2423; Title 40, Code of Federal Regulations (CFR), Part 89; or Title 40, CFR, Part 1039.
- (5350) "Tier 1 Engine" means an engine subject to the Tier 1 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking,

and trading program with respect to the Tier 1 Family Emission Limits (FEL) listed in title 13, CCR, section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

- (5451) "Tier 2 Engine" means an engine subject to the Tier 2 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 2 FEL listed in title 13, CCR, section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).
- (5552) "Tier 3 Engine" means an engine subject to the Tier 3 new engine emission standards in title 13, CCR, section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 3 FEL listed in title 13, CCR, section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).
- (5653) "Tier 4 Final Engine" means an engine subject to the final after-treatmentbased Tier 4 emission standards in title 13, CCR, section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, CCR, section 2423(b)(2)(B) and/or Title 40, CFR, Part 1039.101.
- (5754) "Tier 4 Interim Engine" means an engine subject to the interim Tier 4 emission standards (also known as transitional) in title 13, CCR, section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, CCR, section 2423(b)(2)(B) and/or Title 40, CFR, Part 1039.101.
- (5855) "Total maximum power" means the sum of maximum power for all of a fleet's engines that are subject to this regulation. Low-use vehicles, dedicated snow-removal vehicles, and vehicles used solely for emergency operations need not be included in the sum.
- (5956) "Two-Engine Crane" means a mobile diesel-powered machine with a hoisting mechanism mounted on a specially constructed truck chassis or carrier; one engine provides motive power, and a secondary engine is used to lift and move materials and objects.
- (6057) "Verified Diesel Emission Control Strategy" (VDECS) means an emissions control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the Verification Procedures. VDECS can be verified to achieve Level 1 diesel PM reductions (25 percent), Level 2 diesel PM reductions (50 percent), or Level 3 diesel PM reductions (85 percent). VDECS may also be verified to achieve NOx reductions. See also definition of Highest Level VDECS.

- (6158) "VDECS Failure" means the condition of not achieving the emissions reductions to which the VDECS is verified. Such condition could be due to inappropriate installation, damage, or deterioration during use. If a Level 3 VDECS is emitting visible smoke, it should be assumed to have failed.
- (6259) "Workover rig" means a mobile self-propelled rig used to perform one or more remedial operations, such as deepening, plugging back, pulling and resetting liners, on a producing oil or gas well to try to restore or increase the well's production.

(g) **Reporting** – Reporting is required for each and every fleet. Large and medium fleets may report separately for different divisions or subsidiaries of a given company or agency. Fleet owners may submit reporting information using forms (paper or electronic) approved by the Executive Officer.

(1) Initial reporting – All fleet owners must submit the information in section 2449(g)(1)(A) through (G) to ARB by their initial reporting date. In the initial reporting, fleet owners must report information regarding each vehicle subject to this regulation that was in their fleet on March 1, 2009. Systems or non-diesel fueled vehicles that are used in place of a vehicle that would be subject to this regulation must also be reported. The initial reporting date for large fleets is April 1, 2009. The initial reporting date for medium fleets is June 1, 2009. The initial reporting date for small fleets is August 1, 2009. Reports must include the following information:

(G) Credit for Early Actions – Fleet owners claiming credit for early action must report information required under sections 2449(g)(1)(B)1. through 2449(g)(1)(B)5. and sections 2449(g)(1)(C)1. through 2449(g)(1)(C)6. for each vehicle for which credit is claimed. As appropriate, the following information must also be reported:

- 1. For each vehicle within the fleet that was repowered with a Tier 1 or newer engine prior to March 1, 2009, the date of repower;
- 2. For each vehicle within the fleet that was retrofit with the highest level VDECS available at the time of retrofit prior to March 1, 2009, the date of retrofit and whether Carl Moyer Incentive Program funding was used to pay for the retrofit;
- Fleet owners claiming early credit for retirement or replacement of any Tier *θ* vehicles per section 2449.1(a)(2)(A)2.a.ii. or 2449.1(a)(2)(A) 2.a.v. or or retirement per section 2449.2(a)(2)(A)2.a.iv. must report information on each and every vehicle within the fleet between March 1, 2006 and March 1, 2010 2009, as required under sections 2449(g)(1)(B)1. through 2449(g)(1)(B)4. and sections 2449(g)(1)(C)1. through 2449(g)(1)(C)6. as well as the date of any purchase and/or retirement between March 1, 2006 and March 1, 2010 2009.
- <u>4. Fleet owners claiming credit for reduced activity in the fleet per section</u> 2449.1(a)(2)(A)2.a.iv. or 2449.2(a)(2)(A)2.a.iii. must report to the

Executive Officer the total hours of use for each vehicle in the fleet, excepting vehicles claimed for early retirement credit, for the twelve month period January 1, 2007, to December 31, 2007 as well as the twelve month period March 1, 2009, to February 28, 2010. Fleets that do not have hourly reporting records of each vehicle in the fleet must submit to the Executive Officer copies of information that is verifiable and substantively demonstrates a reduction in fleet activity from July 1, 2007, to March 1, 2010.

(h) Record keeping - Fleet owners must maintain copies of the information reported under section 2449(g), as well as the records described in section 2449(h) below, and provide them to an agent or employee of the ARB within five business days upon request. Records must be kept at a location within the State of California.

(8) Credit for Reduced Activity – Each fleet owner that claims credit for reduced fleet activity with vehicle specific data per sections 2449.1(a)(2)(A)2.a.iv. or 2449.2(a)(2)(A)2.a.iii. shall maintain the records setting forth the total hours of use of each vehicle in the fleet for each of the twelve month periods indicated in 2449(g)(1)(G)4. A fleet that submits non-vehicle specific data claiming credit for reduced fleet activity, per sections 2449.1(a)(2)(A) 2.a.iv. or 2449.2(a)(2)(A)2.a.iii., must keep a record of all of the information submitted to ARB to support its claim of reduced fleet activity.

(9) Credit for Early Retirement or Replacement – Each fleet owner that claims credit for the retirement or replacement of vehicles from March 1, 2006, to March 1, 2010, per sections 2449.1(a)(2)(A)2.a.ii. or 2449.1(a)(2)(A) 2.a.v. or 2449.2(a)(2)(A)2.a.iv shall maintain records substantiating the fleet's claim of previous ownership for those vehicles.

(10) Record Retention – Each fleet owner shall maintain the records for each vehicle subject to the regulation until it is retired and for the overall fleet as long as the owner has a fleet or March 1, 2030, whichever is earlier. If vehicle ownership is transferred, the seller shall convey the vehicle records including vehicle data per section 2449(g)(1)(B), engine data per section 2449(g)(1)(C), and VDECS data per section 2449(g)(1)(D) to the buyer. If fleet ownership is transferred, the seller shall convey the fleet records including fleet data per sections 2449(g)(1)(A) through (G) to the buyer. Dealers must maintain records of the disclosure of regulation applicability required by Section 2449(j) for three years after the sale.

Note: Authority cited: Sections 39002, 39515, 39516, 39600, 39601, 39602, 39650, 39656, 39658, 39659, 39665, 39667, 39674, 39675, 40000, 41511, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.1, 42402.2, 42402.4, 42403, 43000, 43000.5, 43013,

43016, and 43018, and 43018.2, Health and Safety Code. Reference: Sections 39002, 39515, 39516, 39600, 39601, 39602, 39650, 39656, 39657, 39658, 39659, 39665, 39667, 39674, 39675, 40000, 41511, 42400, 42400.1, 42400.2, 42402.2, 43000, 43000.5, 43013, 43016, and 43018, and 43018.2, Health and Safety Code.

§ 2449.1 NOx Performance Requirements

(a) Performance Requirements

(2) BACT Requirements – Each year, each fleet must determine if it will be able to meet the fleet average requirements for the next March 1 compliance date, and if not, the following BACT requirement must be met. If a fleet does not meet the NOx target rate in section 2449.1(a)(1), it must meet the BACT turnover requirements in section 2449.1(a)(2)(A) below.

(A) Turnover Requirements for Fleets Not Meeting NOx Target Rate -

1. **Turnover Rate** – If a fleet does not meet the NOx Target Rate in section 2449.1(a)(1) on a compliance date on or before March 1, 2015, it must demonstrate on the applicable compliance date that it has turned over 8-the required percent of the total maximum power of the fleet that existed on March 1 of the previous year since March 1 of the previous year. If a fleet does not meet the NOx Target Rate in section 2449.1(a)(1) on a compliance date after March 1, 2015, it must demonstrate on the applicable compliance date that it turned over 10 percent of its total maximum power that existed on March 1 of the previous year. Any carryover turnover credit previous year since March 1 of the previous year. Any carryover turnover cate after year. The required may be applied towards the turnover required in a later year. The required turnover percents to demonstrate on each compliance date are described below in a. through e.

- a) 2010: 8 percent.
- **b** 2011 and 2012: 4.8 percent.
- c) 2013: 14.4 percent for large fleets that did not meet the NOx fleet average target in 2011 or 2012, 11. 2 percent for large fleets that met the NOx fleet average target in 2011 but not 2012, and 8 percent for large fleets that met the NOx fleet average target in 2012 and for all medium fleets.
- d) 2014: 8 percent.
- e) 2015 and later: 10 percent.
- 2. Carryover turnover credit -
- a. Beginning All fleets other than those meeting the criteria in (i) or (ii) or (iii) below begin with zero carryover turnover credit on March 1, 2009. All fleets may begin accumulating carryover turnover credit on March 1, 20102009. To claim credit, fleets must submit to ARB and retain records as described in sections 2449(g) and (h).

ii. Credit for Early Replacement Retirement – Fleets that have replaced retired their Tier 0 vehicles at an average rate greater than 8 percent of total maximum power per year between March 1, 2006 and March 1, 2009 begin with will accumulate carryover turnover credit (in horsepower) equal to: [(Total maximum power of Tier 0 vehicles retired between March 1, 2006 and March 1, 2009) minus (Total maximum power of Tier 0 vehicles added between March 1, 2006 and March 1, 2009) minus (Total credit for early retirement claimed under section v. below)] minus [(Total maximum power of fleet on March 1, 2007 times 0.08) plus (Total maximum power of fleet on March 1, 2008 times 0.08) plus (Total maximum power of fleet on March 1, 2009 times 0.08)]. Tier 0 vehicles repowered with newer engines are counted under (i) above and shall not be counted under (ii). To claim such credit, fleets must keep adequate records as described in section 2449(h).

iv. Credit for Reduced Fleet Activity– Fleets that demonstrate a reduction in fleet activity will accumulate carryover turnover credit (in horsepower). Fleet activity is defined as the sum of [(Total maximum power of the vehicle) times (Number of hours the vehicle was operated in the applicable 12 month period)] for each vehicle in the fleet, including low-use vehicles.

- 1) Carryover turnover credit generated from reduced activity may only be applied toward the March 1, 2010, or March 1, 2011 compliance dates
- 2) Fleets that receive credit for the retirement of any vehicle prior to March 1, 2010, per section v. below, cannot count that vehicle in the calculation of reduced activity credit.
- 3) Carryover turnover credit shall be calculated for the fleet, not including those vehicles retired for credit under section v. below, as:

[(Fleet activity for January 1, 2007, to December 31, 2007) minus (Fleet activity for March 1, 2009, to February 28, 2010, including vehicles added to the fleet) divided by (fleet activity for January 1, 2007, to December 31, 2007)] multiplied by (Total maximum power of fleet on July 1, 2007, including low-use vehicles)

4) Fleet owners must use vehicle specific data, including but not limited to hour meter logs or operator logs linking operators to specific vehicles, from July 1, 2007, to March 1, 2010, as described in section 2449(g)(1)(G)4 to document vehicle activity. 5) Fleets that do not have hour meter logs or vehicle-specific operator logs or equivalent records that are verifiable and substantively demonstrate activity for all vehicles in the fleet: A. May use other verifiable indicators that are directly related to reduced vehicle operation to demonstrate an overall reduction in fleet activity from July 1, 2007, to March 1, 2010, including but not limited to records of overall off-road diesel fuel use for the fleet, as described in section 2449(g)(1)(G)4. However, such fleets must subtract the total credit for early retirement claimed under section v. below from their reduced activity credit.

B. May use indicators, including but not limited to revenue or total vehicle operator employment, that demonstrate a reduction in business or staffing but that do not directly correspond to vehicle or fleet activity. To qualify for a credit using such indirectly-correlated indicators, the fleet must be able to provide some evidence of overall reduced fleet activity. The Executive Officer will grant a fleet using such indicators a maximum 20 percent credit for demonstrated reduced activity not directly related to vehicular operation. Such fleets must also subtract from the 20 percent reduced activity credit any credits received for early retirement claimed under section v. below. Fleets must not apply for credit using indicators that would demonstrate reduced business or staffing if the fleet has information or records that demonstrate the fleet has not reduced overall vehicle activity.

- v. Credit for Early Retirement Fleets that reduce overall horsepower from March 1, 2006, to March 1, 2010, accumulate carryover turnover credit (in horsepower) equal to: (Total horsepower of the fleet on March 1, 2006, including low-use vehicles) minus (Total horsepower of the fleet on March 1, 2010, including low-use vehicles).
- b. Accumulating carryover turnover credit
 - i. 2010-2015 From March 1, 2010 through March 1, 2015 for large fleets and from March 1, 2013 through March 1, 2015 for medium fleets, a fleet accumulates carryover turnover credit each year it turns over more than the required& percent of its maximum power specified in section 2449.1(a)(2)(A)1. The amount accumulated is the maximum power turned over in excess of the required& percent in the 12 months prior to March 1 of the year in which the carryover is calculated. From March 1, 2010, through March 1, 2012, a medium fleet accumulates carryover turnover credit each year the total horsepower it turns over exceeds 8 percent of its maximum power.
 - ii. After 2015 After March 1, 2015, a fleet <u>will</u> accumulates carryover turnover credit each year it turns over more than 10 percent of its

maximum power. The amount accumulated is the maximum power turned over<u>in excess of 10 percent</u> in the 12 months prior to March 1 of the year in which the carryover is calculated <u>plus</u> the carryover turnover credit used minus the required 10 percent.

Note: Authority cited: Sections 39002, 39515, 39516, 39600, 39601, 39602, 43000, 43000.5, 43013, 43016, and 43018, and 43018.2, Health and Safety Code. Reference: Sections 39002, 39515, 39516, 39600, 39601, 39602, 39650, 39656, 39657, 39658, 39659, 39665, 39667, 43000, 43000.5, 43013, 43016, and 43018, and 43018.2, Health and Safety Code.

§ 2449.2 PM Performance Requirements

(a) Performance Requirements -

(2) BACT Requirements – Each year, each fleet must determine if it will be able to meet the fleet average requirements for the next March 1 compliance date, and if not, the following BACT requirement must be met. If a fleet does not meet the Diesel PM Target Rate in section 2449.2(a)(1), it must meet the BACT Retrofit Requirements in section 2449.2(a)(2)(A). Fleets that fail to meet both an applicable NOx target rate in section 2449.1(a)(1) and the Diesel PM Target Rates in section 2449.2(a)(1) in a compliance year must first meet the BACT turnover requirements in section 2449.1(a)(2) in that year and then meet the BACT Retrofit Requirements in section 2449.2(a)(2)(A) in that year. (A) PM Retrofit Requirements for Fleets Not Meeting Diesel PM Target Rate 1. PM Retrofit Rate - If a fleet does not meet the Diesel PM Target Rate in section 2449.2(a)(1), it must demonstrate that it has retrofit the 20-required percent of its total maximum power (not including specialty vehicles retrofitted and exempted from turnover in section 2449.1(a)(2)(A)4.b.) with highest level VDECS since March 1 of the previous year, as described below. Any carryover retrofit credit previously accrued may be applied towards the 20 percent retrofits required. If the VDECS is not new (i.e., is being reused), it must have been taken from a vehicle that is no longer operating in California. Fleets may count acquisition of vehicles with Tier 4 interim or Tier 4 final engines or retirement of Tier 0 vehicles toward the retrofit requirement, as described below. The required retrofit percents to demonstrate on each compliance date are described below:

2010: 20 percent.

2011 and 2012: 12 percent.

2013: 36 percent for large fleets that did not meet the PM fleet average target in 2011 or 2012, 28 percent for large fleets that met the PM fleet average target in 2011 but not 2012, and 20 percent for large fleets that met the PM fleet average target in 2012 and for all medium fleets.

2014: 20 percent.

2. Carryover PM Retrofit Credit –

a. Beginning - All fleets other than those meeting the criteria in (i) or (ii) below for vehicles remaining in their fleets begin with zero carryover retrofit credit on March 1, 2009. <u>All fleets may begin accumulating carryover retrofit</u> credit on March 1, 2009.

- iii. Credit for Reduced Fleet Activity– Fleets that demonstrate a reduction in fleet activity will accumulate carryover retrofit credit (in horsepower). Fleet activity is defined as the sum of [(Total maximum power of the vehicle) times (Number of hours the vehicle was operated in the applicable 12 month period)] for each vehicle in the fleet, including low-use vehicles.
 - 1) Carryover retrofit credit generated from reduced activity may only be applied toward the March 1, 2010, or March 1, 2011 compliance dates.
 - 2) Fleets that receive credit for the retirement of any vehicle prior to March 1, 2010, per section iv. below, cannot count that vehicle in the calculation of reduced activity credit.
 - 3) Carryover retrofit credit shall be calculated for the fleet, not including those vehicles retired for credit under section iv. below, as:

[(Fleet activity for January 1, 2007, to December 31, 2007) minus (Fleet activity for March 1, 2009, to February 28, 2010, including vehicles added to the fleet) divided by (fleet activity for January 1, 2007, to December 31, 2007)] multiplied by (Total maximum power of fleet on July 1, 2007, including low-use vehicles)

- 4) Fleet owners may use vehicle specific data, including but not limited to hour meter logs or operator logs linking operators to specific vehicles, from July 1, 2007, to March 1, 2010, as described in section 2449(g) to document vehicle activity.
- 5) Fleets that do not have hour meter logs or vehicle-specific operator logs or equivalent records that are verifiable and substantively demonstrate activity for all vehicles in the fleet:
 - A. May use other verifiable indicators that are directly related to reduced vehicle operation to demonstrate an overall reduction in fleet activity from July 1, 2007, to March 1, 2010, including but not limited to records of overall off-road diesel fuel use for the fleet, as described in section 2449(g)(1)(G)4. However, such fleets must subtract the total credit for early retirement claimed under section iv. below from their reduced activity credit.

- B. May use indicators, including but not limited to revenue or total vehicle operator employment, that demonstrate a reduction in business or staffing but that do not directly correspond to vehicle or fleet activity. To gualify for a credit using such indirectly-correlated indicators, the fleet must be able to provide some evidence of overall reduced fleet activity. The Executive Officer will grant a fleet using such indicators a maximum 20 percent credit for demonstrated reduced activity not directly related to vehicular operation. Such fleets must also subtract from the 20 percent reduced activity credit any credits received for early retirement claimed under section iv. below. Fleets must not apply for credit using indicators that would demonstrate reduced business or staffing if the fleet has information or records that demonstrate the fleet has not reduced overall vehicle activity.
- iv. Credit for Early Retirement Fleets that reduce overall horsepower from March 1, 2006, to March 1, 2010, begin with carryover retrofit credit (in horsepower) equal to: (Total maximum horsepower of the fleet on March 1, 2006, including low-use vehicles) minus (Total maximum horsepower of the fleet on March 1, 2010, including low-use vehicles).
- b. Accumulating carryover PM retrofit credit Beginning March 1, 2010 for large fleets, March 1, 2013 for medium fleets, and March 1, 2015 for small fleets, a fleet will accumulates carryover retrofit credit each year the total horsepower it retrofits plus the carryover retrofit credit it uses exceeds more than the required 20 percent of its maximum power specified in section 2449.2(a)(2)(A)1. The amount accumulated is the maximum power retrofit plus the carryover retrofit credit in excess of 20 the required percent in the past 12 months prior to March 1.
- **c.** Using carryover PM retrofit credit Accumulated carryover retrofit credit may be applied to meeting the retrofit requirements of section 2449.2(a)(2)(A)1. in a later year. The amount of carryover retrofit credit used to meet the retrofit requirements in any one year is subtracted from the carryover retrofit credit total available in subsequent years. The amount of actual retrofit plus the amount of carryover retrofit requirements equal the minimum BACT retrofit rate required by section 2449.2(a)(2)(A)(1).

Note: Authority cited: Sections 39002, 39515, 39516, 39600, 39601, 39602, 39650, 39656, 39658, 39659, 39665, 39667, 39674, 39675, 40000, 41511, 42400, 42400.1, 42400.2, 42400.3.5, 42402, 42402.1, 42402.2, 42402.4, 42403, 43000, 43000.5, 43013, 43016, and 43018, and 43018.2, Health and Safety Code. Reference: Sections 39002, 39515, 39516, 39600, 39601, 39602, 39650, 39656, 39657, 39658, 39659, 39665,

39667, 39674, 39675, 40000, 41511, 42400, 42400.1, 42400.2, 42402.2, 43000, 43000.5, 43013, 43016, and 43018, and 43018.2, Health and Safety Code.