

Off-road Regulation: Supplemental Amendments

Proposed Amendments to the Off-Road Diesel Regulation

UPDATED 10/07/2010
Replacing slides 71 - 107



September and October 2010

California Environmental Protection Agency

Air Resources Board



Outline

- Overview
- Major Relief Provisions
- Minor Amendments and Clarifications
- Inventory Impacts of Amendments
- Next Steps



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Why is the Regulation Still Needed?

- Health impacts still significant
- Even with recession and revised emission estimates, localized risk impacts remain
- Near- and long-term reductions still needed for air quality, SIP



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Major Changes Proposed

- Delay implementation
- Allow compliance without retrofits
- Remove balloon payment
- Ease annual requirements
- Preserve credits
- Incentivize early action

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AGC/ARB Agreement

- Agreement between The Associated General Contractors of America (AGC) and ARB
- Proposed additional changes to off-road regulation
- Press releases dated 10/07/2010:
 - ARB press release:
www.arb.ca.gov/newsrel/newsrelease.php?id=159
 - AGC press release:
www.agc.org/cs/news_media/press_room/press_release?pressrelease.id=668

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Significant Cost Savings to Fleets

- 2010 to 2014 costs down by 90%
- Peak year cost moved from 2013 to 2016/2017, lowered over 50%
- Overall 20 year costs down by over 50%

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Proposed Relief Provisions



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Overview of Existing Regulation

Compliance requirements and deadlines vary by fleet size

Fleet Size Category	Description	Previous Dates and Requirements
Small	2,500 hp and under	2015-2025 PM only (no vehicle or engine turnover)
Medium	2,501 to 5,000 hp	2013-2020 PM and NOx
Large	Over 5,000 hp State and federal government fleets	2010-2020 PM and NOx

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Existing NOx and PM Requirements

In each year, two ways to meet the NOx and PM requirements:

- Fleet average targets for NOx and PM
or
- **NOx:** Turn over certain % of fleet horsepower per year (8-10% most years)
- **PM:** Install exhaust retrofits on certain % of fleet horsepower per year (20% most years)

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Overview of Proposed Amendments

1. Delay performance requirements by four years (two years for medium and small fleets)
2. Combine NOx and PM, lower annual requirements, and allow fleets to comply through turnover only
3. Provide easier compliance path for fleets under 500 hp
4. Increase low use threshold
5. Extend double credit for retrofits
6. Maintain turnover rate for a longer period, from 2017 to 2022

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1. Delay Regulation Start Date

- Large fleets: 2014
- Medium fleets: 2015
- Small fleets: 2017
- Staff considering additional changes to compliance date (March 1st vs. January 1st)



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2. Combine NOx and PM Fleet Averages and BACT Requirements

- Combine fleet averages
 - Approx. same number of fleets will face requirements
- Combined BACT (turnover or retrofits) at 8 to 10% annually (4.8% in 2014)
 - Lowers total horsepower fleets are required to address each year from 28% of the fleet hp to 4.8 to 10% of the fleet hp
 - Fleets can comply through turnover only

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3. Provide Simpler Option for Smallest Fleets

- New path for fleets under 500 Hp
 - 45% of all fleets
 - 4% of the emissions statewide
- Fleets can opt to phase out Tier 0 and Tier 1 vehicles from 2017 to 2027
 - No fleet averaging, or retrofits
- BACT remains an option

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4. Raise low-use threshold

- Raise threshold from 100 to 200 hours per year
 - Low use vehicles do not face requirements or count toward fleet horsepower

5. Further Incentivize Retrofits

- Double credit period extended
 - Large fleets to 2013
 - Medium fleets to 2014
 - Small fleets to 2016

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6. Maintain NOx Turnover for a Longer Period

- Lower NOx fleet averages from 2017 to 2022
 - Require fleets to move to more Tier 4i and Tier 4
 - Continue turnover for a longer period for most fleets
 - More NOx benefits in later years
 - Total cost of the regulation still reduced

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Changes From Previous Proposal Workshopped Sept. 30, Oct. 5,6

- Additional 2 years delay for large fleets
 - Retrofit double credit extended as well
- Considering additional changes to compliance date (March 1st vs. January 1st)
- Increase low-use threshold from 150 to 200 hrs/year
- Changes to early credits still under consideration

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Updates to Minor Amendments and Clarifications



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Minor Amendments - 1

- Remove requirements to report emissions factors for FLEX engines
 - Flex engines will be treated as one tier previous
- Clarify turnover exemption for up to 15% of a fleet's horsepower if retrofit by March 1, 2011
- Adding vehicle requirements updated
 - Tier 2 required one year earlier than proposed in June/July workshops
 - Large/Medium fleets, Tier 2 required as of March 1, 2011

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Minor Amendments - 2

- Remove hours in fleet average provisions
- Incentivize diesel electric hybrids
- Yard trucks to remain separated between on-road and off-road
- Remove PM compliance after final compliance date requirements
- Recalibrate SOON targets to work with revised NOx targets

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Other Possible Amendments Being Considered

- Treat Captive Attainment Area fleets as small fleets
 - No requirements until 2017
 - Require label addition of "CAAF" or similar
- Require labels on both sides of the vehicle
 - Long lead time to continue labeling would be provided

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On-road /Off-road 'Bubble' Concept

- Options and Ideas
 - Allow retrofitting additional on-road trucks to count toward off-road requirements
 - Trucks under 26,000 lbs GVWR
 - Considering 1 retrofit truck = 200 off-road hp
 - All vehicles newer than 7-8 years old
 - Pilot program with individual fleets
 - Apply to Executive Officer to demonstrate reduced emissions
- Suggestions

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More Flexible Moyer Funding for Small Fleets

- Under current Moyer guidelines, to be funded, projects must be completed three years prior to first compliance date
- Proposed change - Allow small off-road fleets to receive funding for projects that are two years surplus
- To be included in Moyer Guideline changes proposed to Board at March 2011 hearing
- Delays will increase eligibility for medium and small fleets

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Next Steps



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What to Expect During Delay

- ARB still to enforce reporting, labeling, idling requirements
 - Performance requirements delayed two years
- How can ARB assist other agencies seeking emission reductions (local districts etc.)?
 - DOORS Data?
 - Certification of clean fleets?
 - Help checking status of fleets bidding on jobs?
 - Other ideas?

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Timing of Next Steps

- Complete workshop series
 - October 12, 2010
- Publish staff report
 - October 20, 2010
 - Begins formal comment period
- Board hearing
 - December 16 & 17, 2010

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For More Information...

Off-Road Regulation information: www.arb.ca.gov/ordiesel

Listserv (ordiesel):

www.arb.ca.gov/listserv/listserv_ind.php?listname=ordiesel

DIESEL HOTLINE:

(866) 6-DIESEL (866-634-3735)

Email: 8666diesel@arb.ca.gov

DOORS Reporting Questions:

(877) 59-DOORS (877-593-6677)

Email: doors@arb.ca.gov

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