

In-Use Off-Road Diesel Vehicle Regulation



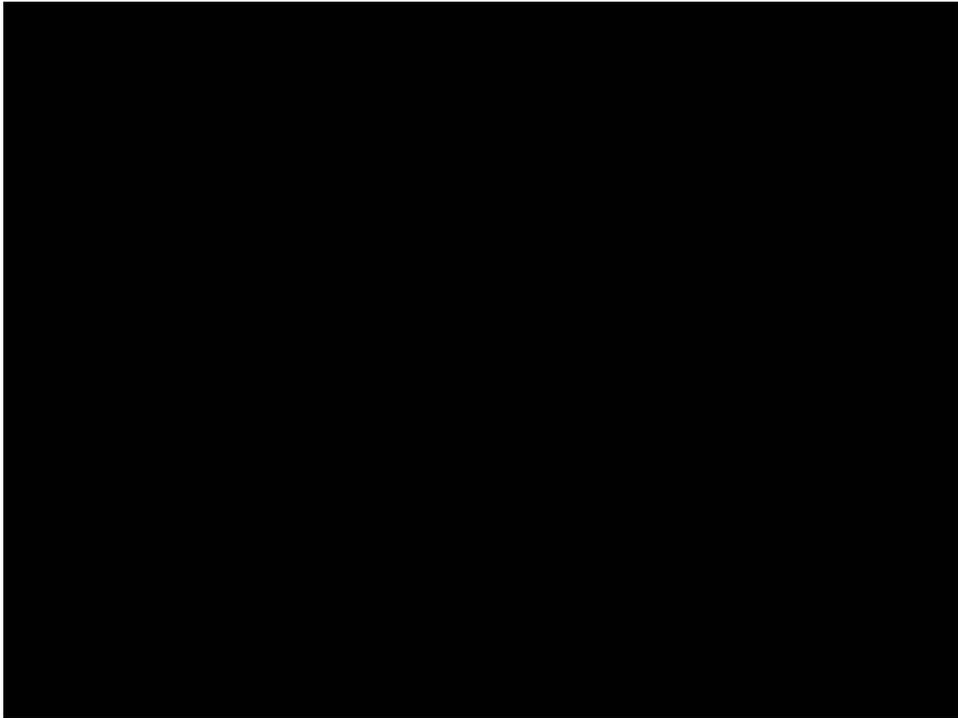
ARB Off-road Implementation Section Summer 2009

California Environmental Protection Agency
Air Resources Board



Outline

- Need for Emissions Reductions
- Exhaust Retrofit Technologies
- Off-Road Regulation Requirements
- Off-Road Compliance Steps and Examples
- DOORS
- Funding Programs
- Compliance Assistance and Outreach
- Contacts



Need for Emission Reductions



Need for Emission Reductions

- Reduce Diesel Particulate Matter (PM)
 - Cancer risk
 - Heart disease
 - Thousands of deaths per year in California
- Reduce oxides of nitrogen (NOx)
 - Ozone and secondary PM formation
 - Ozone is a serious lung irritant
 - Premature deaths and asthma
- Attain ozone and PM standards
 - Federal highway funds at risk

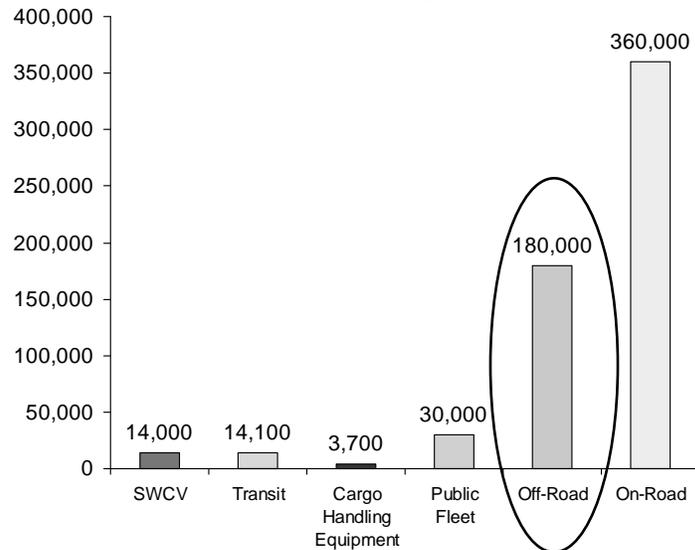
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Current In-Use Diesel Vehicle Regulations

- Many diesel groups already regulated
- Current ARB mobile diesel regulations
 - Urban Buses (2000)
 - Solid Waste Collection Vehicles (2003)
 - Transit Fleet Vehicles (2005)
 - Cargo Handling Equipment (2005)
 - Public Agency and Utility Vehicles (2005)
 - In-Use Off-Road Vehicles (2007)
 - Private On-Road Trucks (2008)
 - Agricultural Off-Road Vehicles (coming soon)

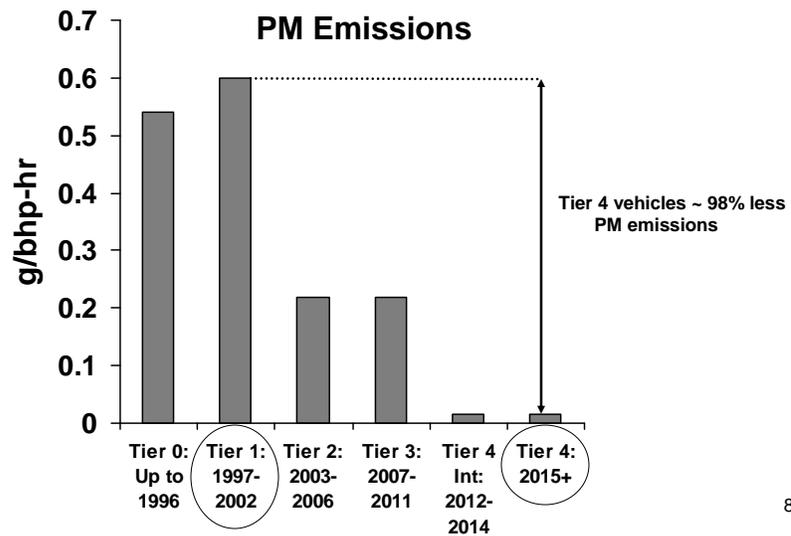
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In-Use Diesel Vehicle Population (2005)



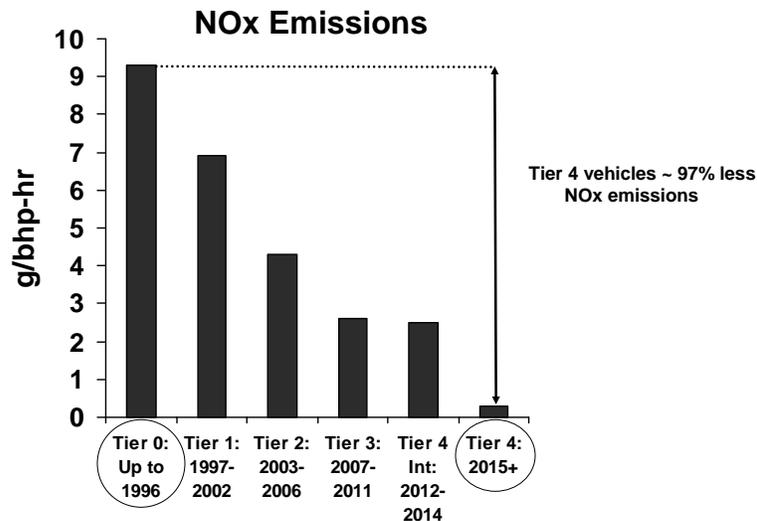
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New Engine Standards Make New Engines Cleaner (100-174 hp)



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New Engine Standards Make New Engines Cleaner (100-174 hp)



Cumulative Health Benefits

- **4,000 fewer premature deaths**
 - 110,000 fewer cases of asthma and lower respiratory symptoms
 - 680,000 work loss days prevented
 - 3,900,000 restricted activity days prevented
 - \$18 - \$26 billion in avoided health costs
 - 2020:
 - 32% reduction in NOx
 - 74% reduction in diesel PM
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Exhaust Retrofit Technologies



What is an Exhaust Retrofit?

- Reduce specific pollutants
 - Controls one or more pollutants
 - PM, NOx, or both
 - Installed on in-use vehicle
- Systems include:
 - Diesel particulate filters (DPFs)
 - Flow through filters (FTFs)
 - Selective Catalytic Reduction (SCR)



Exhaust Retrofits Cont.

- Referred to as retrofits, filters or scrubbers
- “Repowers” are NOT considered retrofits
 - Repowers: replacing an engine with a cleaner one
- Verified by ARB - VDECS

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VDECS

- VDECS - verified diesel emission control strategy
- Verified with ARB
 - Ensures emission reductions and durability
 - Provides end user warranty

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ARB Verification of Retrofits

- Current list of verified devices:
www.arb.ca.gov/diesel/verdev/verdev.htm
- PM retrofits verified to Level 1, 2 or 3

Level	PM Reduction	Typical Device
1*	≥ 25%	Oxidation catalyst
2	≥ 50%	Flow-thru filter
3	≥ 85%	Particulate filter

* - No credit for Level 1 in off-road regulation

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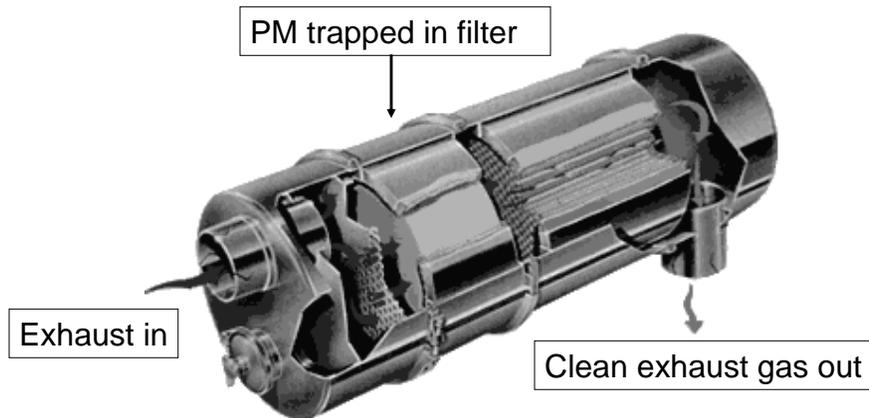
ARB Verification Cont.

- NOx Reduction not by “Level”
 - Labeled % NOx reduction
- Highest Level VDECS
 - Required by regulation
 - Maximum PM reductions
 - Not based on NOx reductions
 - DPFs most common



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How Does a Diesel Particulate Filter (DPF) Work?



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DPF Information Cont.

- PM will build up in DPF over time
- Must burn off PM periodically
 - Called “regeneration”
- Two types of regeneration:
 - Active regeneration – needs heat
 - Passive – no outside energy needed
- Requires periodic cleaning of ash
 - Must be managed as hazardous waste
 - Builds up in DPF
 - Ash cleaning required ~ yearly depending on usage

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Verified Level 3 Off-road Devices (as of 5/14/09)

Product	Applicability
Caterpillar DPF	Many 1996-2008 model year engines; 175-600 hp, passive
Cleaire Horizon	Conditionally verified, active plug-in
Cleaire Lonestar	Conditionally verified for many 1996 – 2009, passive + 40% NOx reduction
Cleaire Phoenix	Conditionally verified for many 1996-2009 model years, rubber tired, active
DCL MINE-X Sootfilter	Conditionally verified for 1996-2008 model year, rubber tired

Continued on next slide...

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Verified Level 3 Off-road Devices Cont. (as of 5/14/09)

Product	Applicability
Engine Control Systems' Combifilter	2007 or older, active plug-in
Engine Control Systems' PurifilterTM	Conditionally verified for many 1996-2008 model years, passive
ESW Canada's ThermacatTM	Many 1996-2009 model year engines, active
HUSS Umwelttechnik FS_MK	Most engines through 2007 model year, active fuel-burner

Verified Devices - www.arb.ca.gov/diesel/verdev/verdev.htm

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Verification Database

<http://www.arb.ca.gov/diesel/verdev/vdb/disclaimer.php>

Search by:

VDECS, Engine Family, or

Manufacturer / Model Year / Displacement

[Home](#) [Programs](#) [Rulemaking](#) [Board Meetings](#) [Laws & Regulations](#) [Data & Statistics](#)

RETROFIT DEVICE

4 Results Matching VCP7.0RZDARB

YEAR	ENG MFR	ENG FAMILY	DISP	DEVICE MFR	DEVICE NAME
1997	Caterpillar	VCP7.0RZDARB	7	Caterpillar	Diesel Particulate Filter
1997	Caterpillar	VCP7.0RZDARB	7	Caterpillar	DPF
1997	Caterpillar	VCP7.0RZDARB	7	Engine Control Systems	Purifier
1997	Caterpillar	VCP7.0RZDARB	7	Huss	FS-MK

Applicability

Who and What is Affected?



Who is Affected?

- Businesses
- Individuals
- Government agencies

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What is Affected?

- Diesel and alternative diesel fueled vehicles that are:
 - Off-road
 - Self-propelled (no portable equipment!)
 - 25 horsepower or greater
 - “drive” engines only (no auxiliary engines!)
 - Except a 2 engine crane auxiliary engine
 - Operate within California

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What is NOT Affected?

- Vehicles used only for:
 - Agricultural operations
 - Forest operations
- Personal use vehicles

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What is an off-road vehicle?

- Included:
 - Designed for off-road use, with off-road engines
 - Cannot be registered for on-road use
 - Workover rigs, 2 engine cranes
- Excluded:
 - vehicles designed to operate on-road regardless of use

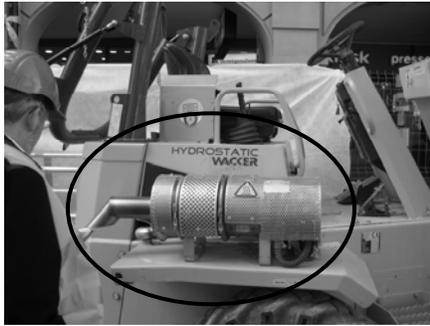
On-road vehicle, even if not currently licensed →



On-road vs. Off-road guidance document:
<http://www.arb.ca.gov/msprog/ordiesel/faq/faqonoffroad.pdf>

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Requirements



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Requirements Vary by Fleet Size

Fleet Size Category	Description
Small	Fleet with $\leq 2,500$ hp, or Municipal fleet in low population county*
Medium	Fleet with 2,501 to 5,000 hp
Large	Fleet with more than 5,000 hp, or State or Federal Government fleet

* Low population counties and fleets are listed online at:
<http://www.arb.ca.gov/msprog/ordiesel/lowpopulation.htm>

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Determining Fleet Size

- Add up all off-road horsepower
- Add up all vehicles under common ownership or control
- Exclude:
 - Low use vehicles (used < 100 hrs/year),
 - Emergency use vehicles
 - Dedicated snow removal vehicles
 - Vehicles used > 50% of the time for agricultural operations

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Determining Fleet Size

Ajax Construction Fleet

- a) 5 Backhoes 100 hp Ea.
- b) 10 Dozers 200 hp ea. (1 is low use only)
- c) 1 Forklift 20 hp
- d) 1 Air Compressor 45 hp
- e) 1985 Watertruck 400 hp (Off-Road use only)

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Determining Fleet Size

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Regulatory Provisions Currently in Effect



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Provisions Currently in Effect

- 5-Minute Limit on Idling
- Disclosure of Applicability
- Can not add Tier 0 engines to fleet
- Written 5 minute idling policy
- Reporting



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5 Minute Limit on Idling

- Effective June 15, 2008
- Exemptions :
 - Queuing
 - Verify safe operating condition
 - Testing, servicing, repairing or diagnostic purposes
 - Accomplish work for which the vehicle was designed (such as operating a crane)
 - Bring machine system to operating temperature
 - Ensure safe operation
- Can apply to ARB Executive Officer to idle > 5 min. if reason not covered in exemptions

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Idling Limit Enforcement

- Field audits began September 15, 2008
- Fines
 - First time : \$300 per violation
 - Subsequent : \$1,000 to \$10,000 per violation
- Enforcement advisory located at:
<http://www.arb.ca.gov/msprog/ordiesel/guidance/idling.pdf>

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Disclosure of Applicability

- Disclosure of regulation applicability:
 - Persons selling in California to California buyer
 - Disclosure records must be kept for 3 years
 - Disclosure not required for manufacturers selling to dealers
 - Language must be included on the bill of sale, invoice, or price quote that is signed by buyer

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Disclosure of Applicability Cont.

“When operated in California, any off-road diesel vehicle may be subject to the California Air Resources Board In-Use Off-road Diesel Vehicle Regulation. It therefore could be subject to retrofit or accelerated turnover requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>”

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Disclosure of Applicability Enforcement

- Field audits began September 15, 2008
- Fines
 - First time \$500 per violation
 - Subsequent : \$1,000 to \$10,000 per violation
- Enforcement advisory located at:
<http://www.arb.ca.gov/enf/advs/advs378.pdf>

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Written 5 minute idling policy

- Beginning March 1, 2009
- Established by fleet owner
 - Required for medium and large fleets
 - Make idling policy available to all vehicle operators in fleet
- Enforcement advisory available at:
<http://www.arb.ca.gov/msprog/ordiesel/faq/advwrittenidling.pdf>
- Idling policy guidelines:
<http://www.arb.ca.gov/msprog/ordiesel/guidance/writtenidlingguide.pdf>

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No Tier 0 vehicles added to fleet

- Beginning March 1, 2009
 - MY 1998 and earlier engines – 25-49 hp
 - MY 1997 and earlier engines – 50-99 hp
 - MY 1996 and earlier engines – 100-174 hp
 - MY 1995 and earlier engines – 175-750 hp
 - MY 1999 and earlier engines – > 750 hp
- Enforcement advisory located at:
<http://www.arb.ca.gov/msprog/ordiesel/faq/advtier0.pdf>

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Initial Reporting

- Varies by fleet size
- Report fleet information as it was on March 1, 2009
- Report to ARB by designated reporting date
- **NO COST** to register vehicles with ARB

Fleet Size Category	Initial Reporting Date
Large	April 1, 2009
Medium	June 1, 2009
Small	August 1, 2009

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How Do Fleets Report?

- Use ARB's online reporting system (DOORS)

- Request hard copy forms to be mailed to fleet owner

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DOORS On-Line Reporting

- Diesel Off-road On-line Reporting System (DOORS)
 - On-line tool to compile and report fleet data
 - Meets the reporting requirements
 - Retains fleet data for future reporting
 - Includes automated compliance planning
 - “Request ARB review” by reporting deadline
- DOORS website:
https://secure.arb.ca.gov/ssldoors/doors_reporting/reporting.php

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Hard Copy Forms

- Fleets that do not have a computer or access to the internet can request hard copy forms
- Fleets can call the DOORS hotline, or email doors@arb.ca.gov
- A fleet should leave their name, address, and contact phone number when requesting hard copy forms

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Missed Your Reporting Deadline?

- Report as soon as possible!
- No fines yet issued for late reporting
- Potential fines accrue per day of noncompliance
- Act now, and minimize fines!

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DOORS Reporting Help

- For reporting assistance:
 - Call the DOORS toll free hotline
877-59DOORS (877-593-6677)
 - Email the DOORS help team:
doors@arb.ca.gov

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Vehicle Labeling

- All vehicles subject to the regulation must be labeled
 - ARB assigns Equipment Identification Number (EIN) after initial reporting period; label stays with vehicle for life
 - Fleets must label vehicles within 30 days of receiving EIN; labels not issued by ARB
 - Label specifications:



DB8B97

<http://www.arb.ca.gov/msprog/ordiesel/faq/faq-labeling.pdf>

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Future Regulatory Requirements



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Compliance Requirements

- Compliance requirements must be met by March 1 of each year

Fleet Size Category	Dates and Requirements
Large*	2010-2020 PM and NOx
Medium*	2013-2020 PM and NOx
Small	2015-2025 PM only

* Same requirements for large and medium fleets, only initial compliance date varies.

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NOx Requirements

Two ways to meet the NOx requirements (the lesser of the two can be done):

- NOx fleet average targets requirements
 - Meet NOx emissions targets set in regulation by any means

or

- Best Available Control Technology (BACT) requirements:
 - Turn over engines at a rate of 8% of total fleet horsepower per year (after 2015, the 8% turnover rate increases to 10%)

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NOx Emission Factors*

NO _x Emissions Factors by Horsepower and Year (g/bhp-hr)								
Year	Horsepower Groups							
	25-49	50-74	75-99	100-174	175-299	300-599	600-750	750+
1900	7.2	14.8	14.8	15.9	15.9	15.2	15.2	15.2
1969	7.2	14.8	14.8	15.9	15.9	15.2	15.2	15.2
1970	7.2	14.8	14.8	14.8	14.8	14.1	14.1	14.1
1972	7.2	14.8	14.8	13.6	13.6	13.0	13.0	13.0
1980	7.2	14.8	14.8	12.5	12.5	11.9	11.9	11.9
1988	7.1	9.9	9.9	9.3	9.3	8.9	8.9	8.9
1989	7.1	9.9	9.9	9.3	9.3	8.9	8.9	8.9
1996	7.1	9.9	9.9	9.3	6.9	6.9	6.9	8.9
1997	7.1	9.9	9.9	6.9	6.9	6.9	6.9	8.9
1998	7.1	6.9	6.9	6.9	6.9	6.9	6.9	8.9
1999	6.2	6.9	6.9	6.9	6.9	6.9	6.9	8.9
2000	6.2	6.9	6.9	6.9	6.9	6.9	6.9	6.9
2001	6.2	6.9	6.9	6.9	6.9	4.2	6.9	6.9
2002	6.2	6.9	6.9	6.9	6.9	4.2	4.2	6.9

* Only partial chart shown

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NOx Fleet Average Calculation Example

Example fleet of 3 vehicles:

Vehicle 1: 1996, 100 hp, NO_x EF = 9.3

Vehicle 2: 2000, 200 hp, NO_x EF = 6.9

Vehicle 3: 2002, 300 hp, NO_x EF = 4.2

NO_x Fleet Average

$$= [(9.3 \times 100) + (6.9 \times 200) + (4.2 \times 300)] / (100 + 200 + 300)$$

$$= 6.0$$

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NOx Fleet Average Emission Targets

NOx Fleet Average Targets: MEDIUM AND LARGE FLEET											
Horsepower Group	2010*	2011*	2012*	2013	2014	2015	2016	2017	2018	2019	2020
25-49 hp	5.8	5.6	5.3	5.1	4.9	4.6	4.4	4.2	4.0	3.7	3.5
50-74 hp	6.5	6.2	5.8	5.5	5.1	4.8	4.4	4.1	3.7	3.4	3.2
75-99 hp	7.1	6.7	6.2	5.7	5.2	4.8	4.3	3.8	3.3	2.8	2.4
100-174 hp	6.4	6.0	5.5	5.1	4.7	4.3	3.8	3.4	3.0	2.6	2.2
175-299 hp	6.2	5.8	5.3	4.9	4.5	4.1	3.6	3.2	2.8	2.3	1.9
300-599 hp	5.9	5.5	5.1	4.7	4.3	3.9	3.5	3.1	2.7	2.3	1.9
600-750 hp	6.1	5.6	5.2	4.8	4.4	4.0	3.6	3.2	2.7	2.3	1.9
Greater than 750 hp	7.2	6.8	6.5	6.1	5.7	5.3	4.9	4.5	4.1	3.8	3.4

* Targets in 2010, 2011, and 2012 are for LARGE fleets only

Vehicle 1 = 100 hp, NOx 2010 target is 6.4

Vehicle 2 = 200 hp, NOx 2010 target is 6.2

Vehicle 3 = 300 hp, NOx 2010 target is 5.9

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NOx Fleet Average Target Calculation Example

For 2010 compliance date:

Vehicle 1 (100 hp): NOx target = 6.4

Vehicle 2 (200 hp): NOx target = 6.2

Vehicle 3 (300 hp): NOx target = 5.9

NOx Fleet Average Target:

$$= [(6.4 \times 100) + (6.2 \times 200) + (5.9 \times 300)] / (100 + 200 + 300)$$

$$= 6.1$$

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Compare Target with Average

NOx fleet average = 6.0

NOx fleet average 2010 target = 6.1

$$\underline{6.0 < 6.1}$$

Since NOx fleet average is less than the NOx fleet target set for 2010, the fleet is in compliance

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NOx BACT Requirements

- Must turn over Tier 0 and Tier 1 (without PM standard) vehicles first
- Compliance options for NOx BACT turnover requirements:
 - Replace older vehicles with new or used vehicles
 - Replace diesel vehicles with electric or alternative fuel vehicles
 - Repower older engines with a Tier 2 or higher engines
 - Retire vehicles from fleet
 - Designate vehicles as low use (used < 100 hours per year)
 - Install NOx verified diesel emission control strategy (VDECS)

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Special Provisions for Attainment Counties

- Fleets captive to listed attainment counties
 - Do not need to meet turnover requirements or NOx fleet averages
- These counties are always in: they cannot fall out of this provision, and other counties cannot come in
- Fleets can travel within multiple attainment counties

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Attainment Counties



Attainment counties include:

Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba

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PM Requirements

Two ways to meet the PM requirements (the lesser of the two can be done):

- PM fleet average targets requirements
 - Meet PM emissions targets set in regulation by any means

or

- Best Available Control Technology (BACT) requirements:
 - Install verified diesel emission control strategy VDECS (also referred to as PM retrofits) on 20% of total fleet horsepower per year

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PM Fleet Average Calculation

- Same as for NOx
- Calculate fleet average
 - Emission factor for each engine
 - Weight by hp
- Calculate target for each model year
 - Read off target for each engine
 - Weight by hp
- Fleet average calculator or DOORS will do calculations for you

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PM BACT Requirements

- Install PM VDECS
 - Must use “highest level” VDECS
 - Level 2s or 3s only
- Convert to alternative fuel
- Replace with Tier 4 vehicle/engine
- Retirement of Tier 0s (shrinking fleet provision)
 - Cannot replace retired Tier 0s
 - Cannot add hp to fleet

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Annual Compliance Process

Large and Medium Fleets: NOx* and PM Requirements



Small Fleets: PM Requirements ONLY



*Captive attainment area fleets must only meet the PM requirements

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Alternative BACT Schedule NEW!

- For large fleets only
- In 2011/2012: 4.8% turnover, 12% retrofits
- In 2013: 14.4% turnover, 36% retrofits
- Can help spread out costs in the beginning years for large fleets
- Fleets do NOT have to follow this alternative schedule;
 - can still do the 8% turnover, 20% retrofit schedule

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NOx Final Compliance

- As of March 1, 2020 (for medium and large fleets only):
 - If 2020 NOx fleet average target is not met, the fleet must do the required NOx BACT turnover until that 2020 target is met

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PM Final Compliance

- As of March 1, 2021 (for medium and large fleets), and March 1, 2026 (for small fleets):
 - All vehicles must have the highest level VDECS installed; if not, the fleet is required to install the highest level VDECS at the required PM BACT retrofit rate
 - Fleets not meeting the NOx final compliance targets must do so first

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Restrictions on Adding Vehicles

- Cannot add Tier 0 vehicles after March 1, 2009
- Fleet averages met in the previous year
 - Fleets may not add vehicles that cause them to exceed the most recent targets
 - If the targets are exceeded, the fleet has 3 months to bring the fleet back into compliance
- BACT requirements met in the previous year
 - Small fleets: The vehicle must be Tier 2 or higher

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Adding Vehicles Cont.

- Large/Medium fleets: The vehicle must be Tier 2 or higher and have a NOx emission factor less than or equal to the current year NOx fleet average target

Horsepower Group	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020				
25-49 hp	T2					T4									
50-74 hp						T4I									
75-99 hp						T3					T4I				
100-174 hp											T4				
175-299 hp						T4I									
300-599 hp															
600-750 hp						T4I									
Greater than 750 hp															

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Annual Reporting

- Report changes from the previous year
 - Includes VDECS installed, vehicles replaced, etc.
- If final compliance target is not met, reporting must continue beyond last designated reporting date
- Reporting dates vary by fleet size:

Fleet Size Category	Reporting Date
Small	August 1 st : 2014-2026
Medium	June 1 st : 2012-2021
Large	April 1 st : 2010-2021

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Annual Record Keeping

- Records must be kept between reporting periods:
 - Changes in the fleet since last reported
 - Newly purchased vehicles
 - Rebuilt engines
 - VDECS that have failed
 - VDECS serial numbers
 - Manufacturer delays
 - Executive Officer approvals for extensions, approval of alternative fuels, idling exceptions, etc.
- Records must be kept until the vehicle is retired, or 2030 (whichever is earlier)

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Rental and Leased Vehicles

- Rented/leased < 1 year
 - Owner's responsibility
- Rented/leased \geq 1 year
 - Owner's responsibility, unless stated otherwise in contract
- Leases occurring before June 15, 2008
 - If in a year "lease" starting on or before June 15, 2007, vehicle must be included in the lessee's fleet (not owner)

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Out-of-State Fleets

- All vehicles operated in CA subject to regulation
- Out of state fleets that report now:
 - Can meet fleet average or BACT approach
- New fleets (enter CA after March 1, 2009)
 - Must be meeting fleet average to enter state
 - Stricter than for in-state fleets
- All vehicles brought into CA must be reported to ARB within 30 days of entering state

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Early Compliance Credit, Exemptions and Extensions



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Early Double Retrofit Credit

- Double credit for PM retrofits
 - January 1, 2010 for large fleets
 - NEW! March 1, 2012 for medium and small fleets
 - A VDECS installed early on a 200 hp vehicle would provide 400 hp credit towards the PM BACT requirements

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Early Double Retrofit Credit Cont.

- NEW! Double credit for NOx retrofits until March 1, 2011
 - A VDECS that reduces NOx by 60% installed early on a 200 hp vehicle would provide 400 hp credit towards the NOx BACT requirements
 - If VDECS reduces NOx by 30%, 200 hp credit towards NOx BACT requirements

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Other Early Credit

- Single credit for repowers completed before March 1, 2009
 - A repower from a Tier 0 to Tier 1 will receive NOx BACT credit only until March 1, 2009
 - A repower completed on a 300 hp machine would provides a 300 hp credit towards the NOx BACT requirements

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Other Early Credit Cont.

- Credit for replacement of Tier 0s in excess of an average 8%/year turnover rate between March 1, 2006 and March 1, 2009
 - If a fleet retired/replaced its Tier 0 machines at a rate of 10% per year between 2006 and 2009, the fleet would obtain a 6% early credit towards the NOx BACT requirements
- Double credit for electric vehicles until 2016
 - If an electric vehicle is replacing a 200 hp diesel vehicle, 400 hp with a 0 NOx and 0 PM emission factor should be included in the NOx and PM fleet averages

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Early Credits – New!

- PM and NOx credit for reduced fleet activity between July 1, 2007 and March 1, 2010
 - If a 10,000 hp fleet reduced their hours of operation by 10%, they would receive a 1,000 hp credit towards the PM and NOx BACT requirements
 - Can only use this credit in 2010 and 2011
- PM and NOx credit for fleet hp reduction since March 1, 2006
 - If a fleet shrunk from 10,000 hp to 5,000 hp, they receive 5,000 hp credit towards the NOx and PM BACT requirements

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Exemptions from Engine Turnover Requirements

- Small fleets
- Captive area attainment fleets
- Vehicles less than 10 years old
- Specialty vehicles if certain criteria are met
- Vehicles retrofit in past 6 years
- Tier 4 or Tier 4 Interim vehicles
- NEW! Up to 15% of fleet hp exempt from turnover if retrofit before March 1, 2011

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Exemptions from Retrofit Requirements

- Engines in vehicles less than 5 years old
- Engines for which there is no retrofit available or for which one cannot be safely installed
- New engines that come with an OEM diesel particulate filter
- Engines already retrofit with the highest level VDECS at time of installation

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Other Exemptions and Compliance Extensions

- Exempt from all but recordkeeping/reporting
 - Low-use vehicles
 - Operated less than 100 hours/year
 - Emergency vehicles
 - Dedicated snow removal vehicles
- Compliance extensions
 - Manufacturer delays for retrofits or new engines
 - Delay of Tier 4 interim or final vehicles

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Fines for Non-Compliance

- Violation of the NOx provisions
 - Up to \$1,000 per vehicle per day of non-compliance
- Violation of the PM provisions
 - Up to \$10,000 per vehicle per day of non-compliance
 - If a citation is given, and the violation is not corrected, the fines can go up to \$40,000 per vehicle per day of non-compliance

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Off-Road Compliance Steps and Examples



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Getting Started

1. Go to the DOORS homepage or call us
 - Download from the DOORS homepage an explanation of terms, sample forms, and other material to see what information you will need to collect
 - Create a DOORS account with ARB
 - Or, call the DOORS hotline for hardcopy forms
2. Determine which vehicles are subject to the regulation
 - Dedicated agricultural and personal use vehicles are exempt
 - On-road vehicles and portable equipment are exempt

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Getting Started Cont.

3. Gather vehicle data for applicable vehicles
 - Engine model year, vehicle model year, engine hp
 - Are any vehicles low use, emergency, snow-removal, or part-time agricultural?
4. Report your fleet information in DOORS
 - Call the DOORS hotline for assistance if needed
5. DOORS will determine fleet size
 - It will calculate total fleet hp, excluding any exempted vehicles from 3. above, including low use vehicles

84

Getting Started Cont.

6. DOORS will determine compliance requirements
 - Based on fleet size, DOORS will indicate whether the fleet must comply with the NOx requirements
 - DOORS will credit your fleet as a captive area attainment fleet if you have so indicated
 - Determine first compliance date, also based on fleet size
7. DOORS will calculate early credit
 - Add up hp credit for any early repowers, exhaust retrofits, or replacements

85

Getting Started Cont.

8. DOORS will calculate NOx and PM fleet averages and targets
 - Determine if the fleet is currently meeting fleet targets
 - If fleet is meeting the NOx and/or PM targets, no turnover and/or exhaust retrofitting is required
9. DOORS will determine the minimum turnover/retrofit requirements for compliance via BACT or fleet average targets
 - Fleet owner may either use a compliance plan:
 - Automatically generated by DOORS or
 - Customized

86

Other Considerations

- Hours in fleet average provision
 - Hours of operation can be used in the fleet average calculations
 - Beneficial for fleets with many minimal use Tier 0 vehicles
 - However, an 18% penalty is applied to fleet averages
- Use ARB Fleet Average Calculator or DOORS compliance tool to evaluate compliance options

87

Funding Programs



88

PLACE Program for Off-Road Vehicles

- Help some fleets obtain loans for which they would not otherwise qualify
- Must meet criteria
- Apply at participating lenders
- More info:

<http://www.arb.ca.gov/ba/loan/off-road/off-road.htm>

or call the ARB Diesel Hotline at:
(866) 6-DIESEL

89

Carl Moyer Incentive Program

- Statewide program with \$140 million/yr in incentive monies
- Program provides incentive money to clean up equipment in California
 - Equipment includes: off-road, on-road, marine, locomotive, agricultural
- Monies granted by local air districts

90

Is Incentive Funding Available?

- Eligible off-road projects include engine repowers, exhaust retrofits, equipment replacement
- Vehicle owner has to pay a small portion of the project costs
- Must do more than required by regulation
- More information is located at:
www.arb.ca.gov/msprog/moyer/moyer.htm

91

What is the SOON Program?

- Surplus Off-road Opt-in for NOx program
- Local air districts may opt into this program
- South Coast Air District has mandatory program
 - Only mandatory for large, older fleets that operate in the district
 - If fleets meet the applicable criteria, district may require them to apply for SOON funding
 - See SCAQMD's website for more information:
<http://www.aqmd.gov/tao/implementation/soonprogram.htm>

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Compliance Assistance and Outreach



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Compliance Assistance and Outreach

- Staff will be available to work with individual fleets on their compliance plans
- Over two dozen Off-road Implementation Seminars conducted 2008 to present
- Fourth round of trainings July – September 2009
 - contact Eric Walton (ewalton@arb.ca.gov) with questions
- Staff available to give off-road presentations at the request of fleet owners, industry groups, equipment dealers and manufacturers

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Off-Road Fleet Average Calculator Overview

- NOT for reporting!
- Microsoft Excel spreadsheet tool designed by ARB staff
- Fleet enters in horsepower and model year of each engine
- Calculates the NOx and PM fleet averages, targets, and BACT requirements for each year
- Also calculates early credit and carryover credits earned by fleets
- Available at:
<http://www.arb.ca.gov/msprog/ordiesel/complianceplan.htm>

Enter in Baseline fleet information

If you installed any exhaust retrofits, or repowered (with a cleaner engine) any vehicles before 2007, enter those retrofits and repowers below under "Baseline" information.

If claiming credit for an electric or alternative fuel vehicle added to the fleet before January 1, 2007, enter its hp in the horsepower column under "Baseline" information. If the vehicle was airport GSE, enter 0.2 hp (and not the full horsepower) in the horsepower column below.

Hp Repowered	Hp PM Retrofit =	Credit for NOx Retrofit =	PM Fleet Average =	NOx Fleet Average =	Tier 0 Hp Turnover =
750.0	0.0	0.0	0.41	7.0	0.0

Equipment Name (Optional)	Model Year	Has this Vehicle been Repowered with a New Engine? (Y/N)	Horsepower	Does this Vehicle Have an On-Road Engine or Electric Motor? (Enter ON or E)	Engine Tier	PM Exhaust Retrofit Level (Enter 1, 2, 3, or NA)	NOx Exhaust Retrofit (Enter % Reduction or NA)	Fleet Average PM Factor (g/bhp-hr)	Fleet Average NOx Factor (g/bhp-hr)	Model Year
1	1995		250		T0	NA	NA	0.540	9.300	1995
2	1995		250		T0	NA	NA	0.540	9.300	1995
3	1995		250		T0	NA	NA	0.540	9.300	1995
4	1995		250		T0	NA	NA	0.540	9.300	1995
5	1995		250		T0	NA	NA	0.540	9.300	1995
6	1995		250		T0	NA	NA	0.540	9.300	1995
7	2000		250		T1	NA	NA	0.400	6.900	2000
8	2000		250		T1	NA	NA	0.400	6.900	2000
9	2006	Y	250		T3	NA	NA	0.150	2.600	2006
10	2006	Y	250		T3	NA	NA	0.150	2.600	2006
11	2006	Y	250		T3	NA	NA	0.150	2.600	2006

37 If you wish to add more vehicles into the fleet average calculator, but there are not enough rows:

38 Insert additional rows ABOVE the red line, copy the equations present in each row into the newly inserted blank rows, then add the vehicles into the calculator.

39 For help adding rows, search the Microsoft Excel help (located under Help on the tool bar) for "Insert cells, rows, or columns."

40 For help copying formulas, search the Microsoft Excel help for "Move or copy rows and columns." Copy a row (that contains equations, is not blank) and paste that row into the newly inserted row.

Microsoft Excel - ARBFleetWorksheet-Dec 2007.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

75% Arial 10

B21

17	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AG
18	Early credit calculated							Early Turnover Credit Earned through 2009 (hp):	750.0	NOx Requirement			
19								Early PM Retrofit Credit Earned through 2009 (hp):	0.0	Fleet Average			
20													
21	NOx Fleet Average =	Tier 0 Hp Turnover =	Hp Repowered =					Hp PM Retrofit =	Hp Turnover Credit for NOx Retrofit =	PM Fleet Average =	NOx Fleet Average =	NOx Fleet Average =	
22	7.0	0.0	0.0					0.0	0.0	0.41	7.0		
23	2009												
24	Fleet Average NOx Factor (g/bhp-hr)	Model Year	Has this Vehicle been Repowered with a New Engine? (Y/N)	Horsepower	Does this Vehicle Have an On-Road Engine or Electric Motor? (Enter ON or E)	Engine Tier	PM Exhaust Retrofit Level (Enter 1, 2, 3, or NA)	NOx Exhaust Retrofit (Enter % Reduction or NA)	Fleet Average PM Factor (g/bhp-hr)	Fleet Average NOx Factor (g/bhp-hr)	Model Year	Hp	
25	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
26	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
27	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
28	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
29	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
30	9.300	1995		250		T0	NA	NA	0.540	9.300	1995		
31	6.900	2000		250		T1	NA	NA	0.400	6.900	2000		
32	6.900	2000		250		T1	NA	NA	0.400	6.900	2000		
33	2.600	2006	Y	250		T3	NA	NA	0.150	2.600	2006		
34	2.600	2006	Y	250		T3	NA	NA	0.150	2.600	2006		
35	2.600	2006	Y	250		T3	NA	NA	0.150	2.600	2006		
36													
37													
38													
39													
40													

READ ME FIRST! Enter Fleet Information / Summary Results / Source Data

Microsoft Excel - ARBFleetWorksheet-Dec 2007.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

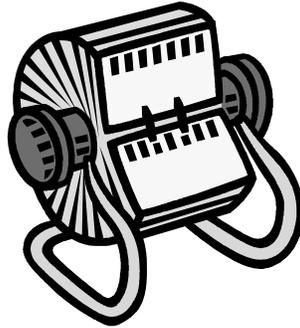
75% Arial 10

B21

11	AG	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
12	Compliance Options							Tier 0 Retirement YDEC Credit	0.0	Carryover Hp Turnover =	750.0	Carryover Credit	
13								Carryover Hp Retrofit =	0.0				
14	IN COMPLIANCE												
15													
17	NOx Requirements Fulfilled?		YES		PM Requirements Fulfilled?		YES		NOx Requirements Fulfilled?				
18	NOx Requirements (Comply with either Fleet Average or BACT)				PM Requirements (Comply with either Fleet Average or BACT)				NOx Requirements (Comply with either Fleet Average or BACT)				
19	Fleet Average		BACT		Fleet Average		BACT		Fleet Average				
20	NOx Fleet Target =	NA	Needed Hp Turnover =	220.0	PM Fleet Target =	NA	Needed Hp Retrofit =	550.0	NOx Fleet Target =	NA	Needed Hp Turnover =	NA	NOx Fleet Target =
21	NOx Fleet Average =	7.0	Current Hp Turnover =	750.0	PM Fleet Average =	0.41	Current Hp Retrofit =	0.0	NOx Fleet Average =	7.0	Current Hp Turnover =	NA	NOx Fleet Average =
22	7.0												
23	2010												
24	Fleet Average NOx Factor (g/bhp-hr)	Model Year	Horsepower	Does this Vehicle Have an On-Road Engine or Electric Motor? (Enter ON or E)	Engine Tier	PM Exhaust Retrofit Level (Enter 1, 2, 3, or NA)	NOx Exhaust Retrofit (Enter % Reduction or NA)	Fleet Average PM Factor (g/bhp-hr)	Fleet Average NOx Factor (g/bhp-hr)	Model Year	Horsepower	Does this Vehicle Have an On-Road Engine or Electric Motor? (Enter ON or E)	
25	9.300	1995	250		T0	NA	NA	0.540	9.300	1995	250		
26	9.300	1995	250		T0	NA	NA	0.540	9.300	1995	250		
27	9.300	1995	250		T0	NA	NA	0.540	9.300	1995	250		
28	9.300	1995	250		T0	NA	NA	0.540	9.300	1995	250		
29	9.300	1995	250		T0	NA	NA	0.540	9.300	1995	250		

READ ME FIRST! Enter Fleet Information / Summary Results / Source Data

ARB Website and Contacts



California Environmental Protection Agency
Air Resources Board



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In-Use Off-Road Vehicle Regulation Homepage: www.arb.ca.gov/ordiesel

The screenshot shows the ARB website homepage for In-Use Off-Road Diesel Vehicle Regulation. At the top, there is a navigation bar with links for Home, Programs, Rulemaking, Board Meetings, Laws & Regulations, Data & Statistics, Permits, Etc., and Events. Below this is a main content area with a central navigation menu containing buttons for Free Training Seminars, DOORS Reporting Forms, Compliance Planning Tools, and Regulation Language. A callout box with an arrow points to the 'Knowledge Center Overview, Answers, Fact Sheets' button, stating 'Guidance documents, FAQs and fact sheets located here!'. On the left side, there are sections for 'Up Links' (listing ARB Programs, Diesel Program, Mobile Vehicles and Equipment, Mobile Sources, Operators, and Off-Road Diesel) and 'LOCAL LINKS' (listing Archived Documents, Background, Contacts, Current Regulation, DOORS Public Information, EIR Label Vendors, Fact Sheets, FAQs, Advisories, Fleet Average Calculator, Join Email list, Low Population Counties, ORAG, Related Links, Reporting Forms and Tools, Rulemaking Documents, Original Regulation, Jan 2009 Amendments, July 2009 Amendments, and Workshops / Meetings). A 'What's New?' section on the right contains several news items with dates and descriptions of recent events and regulatory changes.

Off-Road Contacts

General Off-Road Regulation Questions:

Diesel vehicle information hot line:

(866) 6-DIESEL

(866) 634-3735

Email: 8666diesel@arb.ca.gov

Off-Road Reporting (DOORS) Questions:

DOORS hot line:

(877) 59-DOORS

(866) 593-6677

Email: doors@arb.ca.gov

Websites:

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

DOORS Reporting -

https://secure.arb.ca.gov/ssldoors/doors_reporting/reporting.php

101

Have on-road vehicles???

www.arb.ca.gov/truckstop

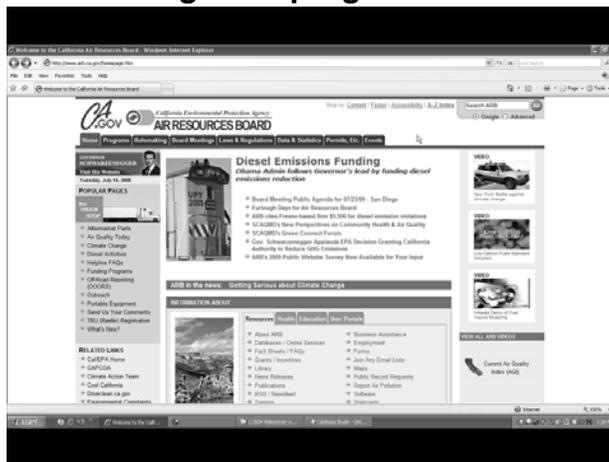
102

Introduction to DOORS



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Finding the Reporting Homepage <http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>



Or go directly to the DOORS website at:
https://secure.arb.ca.gov/ssldoors/doors_reporting/reporting.php

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DOORS Log-in Screen



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DOORS Reporting Homepage

CA.GOV  [Skip to: Content | Footer | Accessibility | A-Z Index](#)
 Google Advanced

AIR RESOURCES BOARD

DIESEL OFF-ROAD ON-LINE REPORTING SYSTEM (DOORS)

Select the fleet with which you want to work, then select the action below:	<input type="text" value="enter a fleet"/> An * indicates fleets that you have submitted for ARB review.	
Select the action you would like to take, then click on "Take Action":	<input type="text" value="Upload Fleet Data"/>	<input type="button" value="Take Action"/> <input type="button" value="Exit"/>
The green area below applies to and works for fleets that have been reviewed by ARB.		
Select the fleet with which you want to work, then select the action below:	<input type="text" value="Sample Fleet with about 50 vehicles"/>	
Select the action you would like to take, then click on "Take Action":	<input type="text" value="View EINs"/>	<input type="button" value="Take Action"/> <input type="button" value="Exit"/>

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DOORS – Online Forms

The screenshot shows the 'DOORS - REPORTING HOME' web application. At the top, there is a navigation bar with the California Environmental Protection Agency logo and 'AIR RESOURCES BOARD'. Below this, a 'REPORTING DEADLINES' section lists: Large Fleets - April 1, 2009; Medium Fleets - June 1, 2009; and Small Fleets - August 1, 2009. A note states: 'By these dates, you must report your whole inventory as it existed on March 1, 2009. You are not required to finish reporting by March 1, 2009.' The main form area has two sections. The first section asks to 'Select the fleet with which you want to work, then select the action below.' It includes a dropdown menu for 'enter a fleet' and a 'Take Action' button. The second section asks to 'Select the action you would like to take, then click on "Take Action".' It includes a dropdown menu for 'Enter Fleet Data Online' and an 'Exit' button. A note in the center states: 'While in the DOORS forms, do NOT hit the "Return" or "Enter" key, you must click on the appropriate button or you will be returned to this homepage- enter a fleet An * indicates fleets that you have submitted for ARB review.' At the bottom, there are links for 'Back to Top', 'Contact Us', and 'A-Z Index', along with a footer for 'Decisions Pending and Opportunities for Public Participation' and 'Conditions of Use | Privacy Policy'.

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Owner Information

The screenshot shows the 'Owner Information' form. At the top, there is a navigation bar with buttons for 'Reporting Home', 'Edit Owner', 'Add/Edit Vehicle', 'Add/Edit Engine', 'Add/Edit VDECS', and 'Done'. Below the navigation bar is an 'Enter Data' button. The form contains the following fields: 'Explanation of terms' (a link), 'Legal owner name' (text input), 'Company / Agency name' (text input), 'Company / Agency type (optional)' (dropdown menu), 'Company / Agency tax id' (text input), 'Address1' (text input), 'Address2' (text input), 'City' (text input), 'State abbreviation' (dropdown menu with 'CALIFORNIA' selected), 'Zip' (text input), 'Responsible person' (text input), 'Responsible Person title' (text input), and 'Is your fleet in a low population county?' (dropdown menu with 'No' selected).

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Vehicle Information

The screenshot shows the 'DOORS - Edit Vehicle' page for 'Construction Inc' with DOORS ID 4133. The page includes a navigation bar with buttons for 'Reporting Home', 'Edit Owner', 'Add/Edit Vehicle', 'Add/Edit Engine', 'Add/Edit VECS', and 'Exit'. Below the navigation bar, there is a table for adding vehicle information. The table has columns for 'Line #', 'Veh serial num', 'Year veh num', 'Type', 'Manufacturer', 'Model', 'MY', 'Low-use', and 'Low-use outside'. The first row is pre-filled with '1', an empty field, '2008', 'Bore/Drill Pigs', 'A&L', an empty field, '1945', 'No', and 'No'. An 'Enter Data' button is located below the table. The page also includes a footer with links for 'Back to Top', 'Contact Us', and 'A-Z Index', and a section for 'Decisions Pending and Opportunities for Public Participation'.

Line #	Veh serial num	Year veh num	Type	Manufacturer	Model	MY	Low-use	Low-use outside
1		2008	Bore/Drill Pigs	A&L		1945	No	No

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Adding Engine Information

This screenshot is identical to the one above, showing the 'DOORS - Edit Vehicle' page for 'Construction Inc' with DOORS ID 4133. The table for adding vehicle information is the same, with the first row containing '1', an empty field, '2008', 'Bore/Drill Pigs', 'A&L', an empty field, '1945', 'No', and 'No'. The 'Enter Data' button and the rest of the page layout are also identical.

Line #	Veh serial num	Year veh num	Type	Manufacturer	Model	MY	Low-use	Low-use outside
1		2008	Bore/Drill Pigs	A&L		1945	No	No

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Viewing Your Fleet Data

erial num	Your veh num	Type	Manufacturer	Model	MY	Low-use	Low-use outside	Specialty	Emergency	Snow removal	Agricul-ture
0DT606983		Off-Highway_Trucks	DEERE	350DW	2007	No	No	No	No	No	No
0DT610629		Off-Highway_Trucks	DEERE	350DW	2007	No	No	No	No	No	No
4JZ600860		Tractors/Loaders/Backhoes	DEERE	544JX	2006	No	No	No	No	No	No
4JZ595574		Tractors/Loaders/Backhoes	DEERE	624JX	2005	No	No	No	No	No	No
4JZ595840		Tractors/Loaders/Backhoes	DEERE	624JX	2006	No	No	No	No	No	No
4JZ601450		Tractors/Loaders/Backhoes	DEERE	624JX	2007	No	No	No	No	No	No
4JZ601451		Tractors/Loaders/Backhoes	DEERE	624JX	2006	No	No	No	No	No	No
4JZ615076		Tractors/Loaders/Backhoes	DEERE	624JX	2008	No	No	No	No	No	No
4JZ615706		Tractors/Loaders/Backhoes	DEERE	624JX	2008	No	No	No	No	No	No
4JZ617525		Tractors/Loaders/Backhoes	DEERE	624JX	2008	No	No	No	No	No	No
4HX588041		Tractors/Loaders/Backhoes	DEERE	644HX	2003	No	No	No	No	No	No
4JX600366		Tractors/Loaders/Backhoes	DEERE	644JX	2006	No	No	No	No	No	No
erial num	Your veh num	Type	Manufacturer	Model	MY	Low-use	Low-use outside	Specialty	Emergency	Snow removal	Agricul-ture
4JX600814		Tractors/Loaders/Backhoes	DEERE	644JX	2006	No	No	No	No	No	No
4JX607478		Tractors/Loaders/Backhoes	DEERE	644JX	2007	No	No	No	No	No	No
4JX607480		Tractors/Loaders/Backhoes	DEERE	644JX	2007	No	No	No	No	No	No
4JZ616781		Tractors/Loaders/Backhoes	DEERE	644JX	2008	No	No	No	No	No	No
2DX617195		Graders	DEERE	672DX	2008	No	No	No	No	No	No
4JX606666		Tractors/Loaders/Backhoes	DEERE	744JX	2007	No	No	No	No	No	No
2DX611787		Graders	DEERE	872DX	2007	No	No	No	No	No	No
2DX618153		Graders	DEERE	872DX	2008	No	No	No	No	No	No

111

ARB Review

Request ARB Review (Don't forget this step!)

Receive EINs to label vehicles



112

After ARB Reviews the Data

returned to this homepage.

- View EINs
- View VDECS
- Add/Edit Owner/Fleet
- Non-diesel Engine
- Non-standard Engine Certification
- Systems Replacing Diesel Vehicles
- Soon, Moyer, Other Vehicle Program
- View Fleet Summary
- Compliance Plan
- Reassign Vehicle
- Executive Order Tracking
- Report Stolen Vehicle
- Certificate of Reported Compliance
- View EINs

mitted for ARB review.

Take Action

Exit

reviewed by ARB.

Take Action

Exit

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Fleet Information and EINs

The screenshot shows the 'DOORS - Reporting Home' page in a Mozilla Firefox browser. The page header includes the California Air Resources Board logo and navigation links. The main content area is titled 'DOORS - Reporting Home' and contains several sections:

- REPORTING DEADLINES:** Large Fleets - April 1, 2009; Medium Fleets - June 1, 2009; Small Fleets - August 1, 2009. A note states: 'By these dates, you must report your vehicle inventory as it existed on March 1, 2009. You are not required to finish reporting by March 1, 2009.'
- Instructions:** 'While in the DOORS Home, do NOT hit the "Enter" or "Enter" key, you must click on the appropriate buttons as you will be returned to this homepage. enter a fleet - [icon] An * indicates fleets that you have submitted for ARB review.'
- Action Selection:** A table with columns for 'Select the fleet with which you want to work, then select the action below', 'Enter Fleet Data Online', and 'Take Action' / 'Exit'.
- ARB-Reviewed Fleets:** A section titled 'The green area below applies to and works for fleets that have been reviewed by ARB.' It shows a table with 'Construction Inc.' and 'Certificate of Reported Compliance' as an action.
- Footer:** Includes links for 'Back to Top', 'Contact Us', and 'A-Z Index', along with information about the Board's mission and public participation.

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Accounting for Early Credit in DOORS

- Reporting of some information will need to be completed after your fleet is reviewed and approved by ARB
 - Repowers
 - Previously retired vehicles
 - Adding a second engine to a vehicle
 - Scrapers that cannot be separated, 2 engine cranes

115

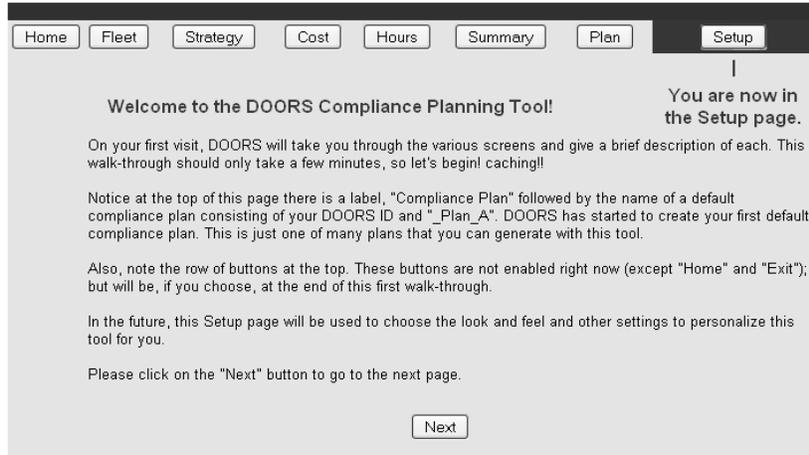
Fleet Summary

Home	View EINs	Add/Edit Owner/Fleet	Reassign Vehicle	Compliance Plan	Exit
DOORS ID: 81		Name: New Fleet			
Current Diesel and Non-diesel Vehicles*	# vehicles	Horsepower			
Total in fleet (Separable vehicles, scrapers, may count as two vehicles)	3	433.0			
Exempt from regulation and reporting (awaiting sale, San Nicolas or San Clemente Island)	0	0.0			
Exempt but must report (low-use, emergency, snow-removal, and ag)	0	0.0			
Total in fleet average calculation	3	433.0			
Fleet size	Small				
Non-diesel fueled engines	2	400.0			
On-road engines	1	345.0			

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Compliance Planning (in progress)

– First time walkthrough



The screenshot shows a web application interface for the DOORS Compliance Planning Tool. At the top, there is a navigation bar with buttons for Home, Fleet, Strategy, Cost, Hours, Summary, Plan, and Setup. The Setup button is highlighted. Below the navigation bar, the page content is as follows:

Welcome to the DOORS Compliance Planning Tool! **You are now in the Setup page.**

On your first visit, DOORS will take you through the various screens and give a brief description of each. This walk-through should only take a few minutes, so let's begin! caching!!

Notice at the top of this page there is a label, "Compliance Plan" followed by the name of a default compliance plan consisting of your DOORS ID and "_Plan_A". DOORS has started to create your first default compliance plan. This is just one of many plans that you can generate with this tool.

Also, note the row of buttons at the top. These buttons are not enabled right now (except "Home" and "Exit"); but will be, if you choose, at the end of this first walk-through.

In the future, this Setup page will be used to choose the look and feel and other settings to personalize this tool for you.

Please click on the "Next" button to go to the next page.