



# ADF DRAFT REGULATION LANGUAGE WORKSHOP

November 21, 2014  
Industrial Strategies Division

# Overview

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- Current Alternative Diesel Fuels Regulation
- Stage Requirements
- Biodiesel Provisions
- Reporting
- In-use Requirements
- Discussion

# Current Regulation Approach

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- Current “snap shot” needs more work before filing with OAL
- Proposed NO<sub>x</sub> control may be further revised after environmental analysis is completed
- Reflects NO<sub>x</sub> control until NTDE fleet turnover
- Encourages biodiesel growth
- Provides industry time to prepare for NO<sub>x</sub> control
- Adds program review to ensure continued air quality safeguards

# Proposed Alternative Diesel Fuels Regulation

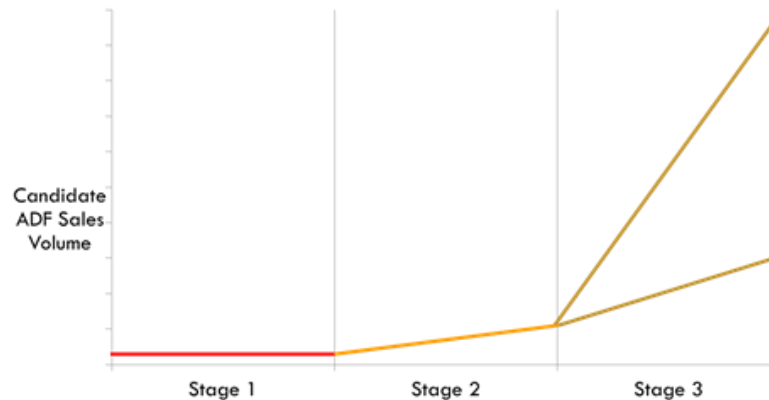
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- 13 CCR 2293.1-9 and appendix 1
- Modeled from last year with significant changes
- Two main provisions
  - ▣ Phase-in requirements, 3 stage evaluation of new ADFs and effects on the environment
  - ▣ Fuel specifications and in-use requirements for biodiesel as first ADF

# Commercial Stage In Requirements

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- 13 CCR 2293.5
- Basic overview
  - Stage 1: Pilot program
  - Stage 2: Multimedia & consensus fuel specification
  - Stage 3: Commercial use



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# Stage 1: Pilot Program

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- Submit chemical and physical properties
- No more than one million diesel gallon equivalents per year
- Establish plan for commercialization
- Concurrent variance from CDFA
- US EPA registration required
- Initial identification of possible environmental effects

# Stage 2: Fuel Specification Development

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- Multimedia evaluation required
- 30 million diesel gallon equivalent limit
- Specification development
- Engine manufacturer approval
- Executive Officer makes determination of potential emissions impacts, determined by statistically significant engine emissions impacts on criteria pollutants

# Stage 3A: Commercial Sales Subject to in-use requirements and fuel specifications

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- If EO determines potential adverse emissions impacts from ADF use, initiate evaluation of offsetting factor impacts on air quality
- If subsequent determination is reached of adverse emissions impacts, then conduct rulemaking to establish fuel specifications, or other in-use requirements



# Stage 3B: Commercial Sales not subject to fuel specifications and in-use requirements

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- If EO determines no potential adverse emissions impacts considering any offsetting factors, then ADF subject to Stage 3B.
- Includes primarily recordkeeping and reporting, mostly via LCFS submittals

# Biodiesel Provisions

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- 13 CCR 2293.6: In-use requirements for ADFs
- (a) biodiesel
- (a)(1) Phase-in period 2016-2018
- (a)(2) NOx control level

<b>Feedstock Saturation</b>	<b>Time of Year</b>	<b>NOx Control Level</b>
Low Saturation	Apr 1 to Oct 31	B5, 5 vol% biodiesel
	Nov 1 to Mar 31	B10, 10 vol% biodiesel
High Saturation	Jan 1 to Dec 31	B10, 10 vol% biodiesel

# Biodiesel Provisions

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## □ (a)(3) Biodiesel Saturation Level

<b>Biodiesel Saturation Level</b>	<b>Cetane Number or Biodiesel Cetane Index</b>	<b>Test Method</b>
Low Saturation	<56	ASTM D613-10ae1; or ASTM D6890-13a; or ARB SOP
High Saturation	≥56	ASTM D613-10ae1; or ASTM D6890-13a; or ARB SOP

- Staff developing saturation test method based on GC-MS and calculation, biodiesel cetane index
- **Soliciting comments on proposed test method**

# Sunset Provisions

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- (a)(4) Sunset of in-use requirements through B20 still under development
- Previously suggested 90 percent penetration of NTDEs for B6 to B20
- Uncertainty remains regarding:
  - ▣ Impact of remaining 10 percent of fleet
  - ▣ Emissions from off-road vehicles

# Exemption Provisions

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- (a)(5) Exempts fuel providers from in-use requirements
- Process for NO<sub>x</sub> control exemptions
- For fleets and fuel distributors who can demonstrate vehicle use of 90 percent light duty or medium duty (14,500 lbs GWVR) or NTDE.

# Program Review Provisions

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- (a)(6) In-use requirement program review
- NO<sub>x</sub> controls effective in maintaining air quality
- Conduct a mid-term review of efficacy of program, including a review of offsetting factors.

# Biodiesel In-Use Requirements

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- 13 CCR 2293.7: Fuel Specifications for ADFs
- (a) biodiesel

<b>Property</b>	<b>Value</b>	<b>Test Method</b>
Unadditized Cetane Number	$\geq 47$	ASTM D613-10ae1
API Gravity	$\geq 27$ degrees API	ASTM D287-12b
Sulfur	$\leq 15$ ppm	ASTM D5453-93

- 4 CCR sections 41 40-41 48, 4200, and 4202-4205

# Reporting and Recordkeeping

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- 13 CCR 2293.8
- Reporting provisions depend upon operation under stage 3A vs 3B
- Biodiesel Recordkeeping
  - Producers
    - Total B100 volume by feedstock
    - Biodiesel blend volumes
    - Product transfer documentation (B100/biodiesel blends)
    - B100/blends volume sold under exemption
  - Importers
    - Same as producers except volume sold under exemption



# Reporting and Recordkeeping cont'd

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## □ Biodiesel Recordkeeping

### □ Blenders

- Total B100/Biodiesel blend volumes
- Product transfer documentation (B100/biodiesel blends)

### □ Distributors

- Product transfer documentation

### □ Retailers

- Product transfer documentation
- Copy of in-use requirement exemptions

# In-use Requirements

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- 13 CCR 2293 Appendix 1
- (a) Biodiesel
- (a)(1) Additives

<b>Biodiesel Saturation Level</b>	<b>Biodiesel Blend Level</b>	<b>Required level of DTBP</b>
Low Saturation	>B5 to <B10	≥ 0.5 percent
	B10 to <B15	≥0.75 percent
	B15 to B20	≥1.0 percent
High Saturation	B10 to <B15	≥ 0.25 percent
	B15 to B20	≥0.5 percent

# In-use Requirements

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- (a)(2) Certification
- Allows testing to demonstrate effectiveness of innovative methods of attaining NO<sub>x</sub> equivalence with CARB diesel
- Allows for certification of additives, blendstocks or a mixture of the blendstocks and additives
- Certification relative to CARB reference diesel

# Discussion

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# Next Steps

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- Feedback appreciated by December 5, 2014
- OAL Submittal December 16, 2014
- Board Hearing Notice & Staff Report released January 2, 2015
- Board Hearing February 19 or 20, 2015

# Contacts

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Alternative Diesel Fuel Website:

<http://www.arb.ca.gov/fuels/diesel/altdiesel/biodiesel.htm>