



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_x control may be further revised after environmental analysis is completed
- Reflects NO_x control until NTDE fleet turnover
- Encourages biodiesel growth
- Provides industry time to prepare for NO_x control
- Adds program review to ensure continued air quality safeguards

Proposed Alternative Diesel Fuels Regulation

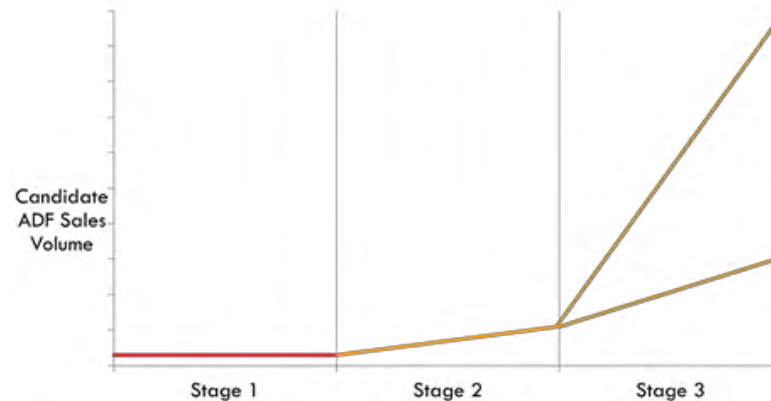
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- 13 CCR 2293.1-9 and appendix 1
- Modeled from last year with significant changes
- Two main provisions
 - ▣ Phase-in requirements, 3 stage evaluation of new ADFs and effects on the environment
 - ▣ Fuel specifications and in-use requirements for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

Feedstock Saturation	Time of Year	NOx Control Level
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

Biodiesel Saturation Level	Cetane Number or Biodiesel Cetane Index	Test Method
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_x 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_x 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

Property	Value	Test Method
Unadditized Cetane Number	≥ 47	ASTM D613-10ae1
API Gravity	≥ 27 degrees API	ASTM D287-12b
Sulfur	≤ 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

Biodiesel Saturation Level	Biodiesel Blend Level	Required level of DTBP
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_x 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

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Alternative Diesel Fuel Website:

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