Public Workshop on the Commercialization of New Alternative Diesel Fuels

California Air Resources Board
Stationary Source Division
Alternative Fuels Branch

February 13, 2014
Workshop Agenda

• Overview of Proposed Regulation
• 45-Day comments
• Modifications to Proposed Regulation
• Timeline
• Discussion
Overview of Proposed Regulation

• Supports commercialization of alternative diesel fuels (ADFs) via 3-stage process
  
  Stage 1: Pilot stage
  Stage 2: Fuel specification development
  Stage 3A: Commercial sales with significance threshold
  Stage 3B: Commercial sales with no significance threshold

• Recognizes biodiesel as Stage 3A ADF with B10 significance threshold
Biodiesel in Stage 3A

• Provides responsible approach to biodiesel growth
• Maintains air quality protections of CARB diesel
• Establishes effective blend (EB) calculation
  • B9.5 trigger to avoid statewide NOx increase
  • Recognizes NOx benefits from renewable diesel, low-NOx diesel
  • Accounts for lower NOx animal based feedstock

\[
EB = 100 \times \left[ \frac{NBV - 0.5\, LN - 0.73\, RD - VM - 0.55\, AB}{TCV} \right]
\]

- **EB** – Effective Blend
- **NBV** – Net Biodiesel Volume, excluding B5
- **LN** – Low-NOx Diesel
- **RD** – Renewable Diesel
- **VM** – Voluntary Mitigation
- **TCV** – Total Compression Ignition Fuels Volume
- **AB** – Animal Biodiesel
Benefits of Effective Blend Level

- Accounts for current mitigating market factors
- Allows low carbon fuels to work together
- Long term policy sends positive market signal
Regulation Safeguards

• Statewide effective blend calculated annually
• Milestones 75% and 95% of significance threshold
• At 75% (B7.5): submit mitigation plans, enhanced monthly reporting
• At 95% (B9.5): mitigation measures kick in
• Biodiesel mitigation required before significance threshold is reached
  1) Approved emissions equivalent additives
  2) Low NOx emitting diesel base fuels (i.e., renewable diesel, GTL)
  3) ADF formulation certified emissions equivalent to CARB diesel
New Engines Eliminate NOx Impact in Long Run

Percent of CA Fleet that is NTDE

2016: Projected B5
2021: Projected B10
45-Day Rulemaking Comments

- Six comment letters received
- Several technical comments suggested improvements
- SCAQMD comment requested additional protections for extreme ozone non-attainment areas (South Coast Air Basin, San Joaquin Valley)
- CEQA comments from two commenters
Options Considered for Extreme Ozone Non-Attainment Areas

• Increased and more frequent regional reporting
• B10 per gallon cap on biodiesel use
• Regional effective blend calculation
• Producer/Importer effective blend calculation
Proposed Modification for Producer/Importer Effective Blend Calculation

• Statewide (other than extreme ozone non-attainment areas)
  • Effective blend calculation applies
  • Compliance plans due at EB of B7.5
  • NOx mitigation required at EB of B9.5

• Extreme ozone non-attainment areas (i.e., SCAB, SJV)
  • Biodiesel producers/importers subject to individual EB
  • Compliance plans due at EB of B5
  • NOx mitigation required at EB of B7.5
Producer/Importer Effective Blend Calculation

Producer
- Calculate EB
- B5 – Submit compliance plan, additional info
- B7.5 – Mitigation

Blending
- Additional recordkeeping
  - B99/B100 vol
  - BD supplier, producer name
  - Volumes by blend level
- Method of mitigation
- Maintain transaction records

Distributor
- Maintain transaction records
- Maintain records of customer invoices
- BD supplier, producer name

Retail
- Maintain PTD records and volumes
- Light duty and medium duty data
- Volumes by blend level
- Method of mitigation
- Maintain transaction records
Other Proposed Regulation Modifications

- Clarifications
  - Engine manufacturer approval of ADFs

- Revise definitions
  - Biodiesel blend, hydrocarbon, significance level, supplier

- Technical correction to statewide effective blend equation
  - Adjust TCV term

- Format corrections
  - Missing section heading
California Environmental Quality Act

• CEQA analysis required under rulemaking
• No significant adverse impacts from rulemaking
• Staff reviewing CEQA comments
• Comments and responses to be made publicly available
Timeline

- February 18, 2014 – Workshop comments
- February 20, 2014 – 15-Day proposed modifications
- March 10, 2014 – CEQA comments/responses published
- March 20, 2014 – Board hearing
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Alternative Diesel Fuel Website:
http://www.arb.ca.gov/fuels/diesel/altdiesel/biodiesel.htm
Discussion
Thank You