

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

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

EB – Effective Blend

NBV – Net Biodiesel Volume, excluding B5

TCV – Total Compression Ignition Fuels Volume

LN – Low-NOx Diesel

RD – Renewable Diesel

VM – Voluntary Mitigation

AB – Animal Biodiesel

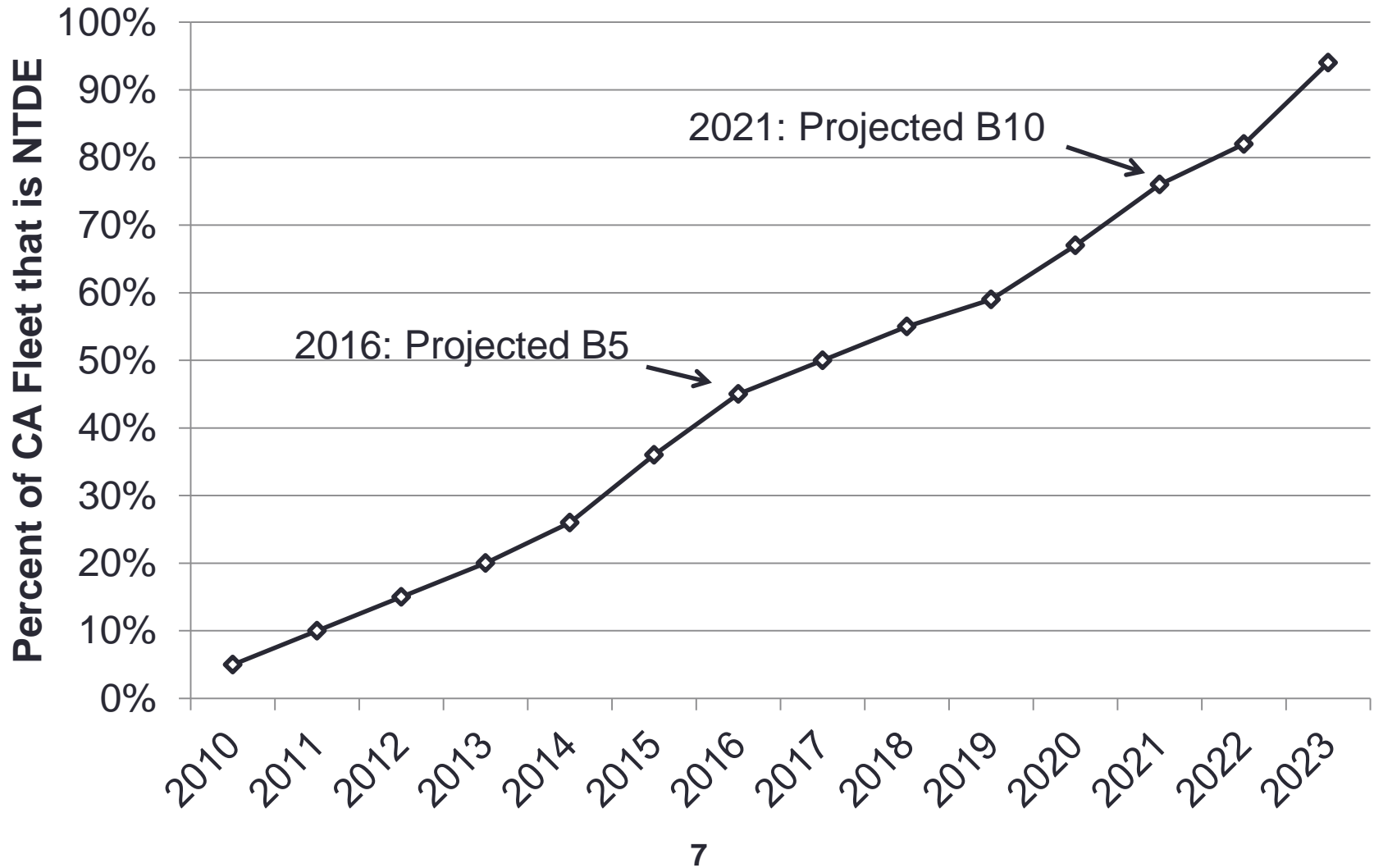
Benefits of Effective Blend Level

- 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



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

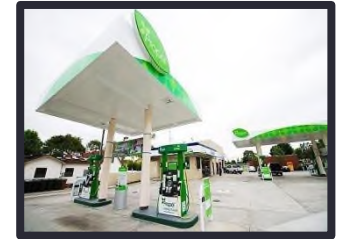
Options Considered for Extreme Ozone Non-Attainment Areas

- 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

Retail

- Maintain PTD records and volumes
- Light duty and medium duty data

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