

Low Carbon Fuel Standard Workshop: Review of the Proposed Environmental Analysis Work Plan

December 2, 2008

California Environmental Protection Agency



Air Resources Board



Outline of Environmental Work Plan

- Introduction
- Baseline Determination
- Air Quality Impacts
 - GHG Benefits
 - CA Air Quality Impacts
 - Motor Vehicle Emissions
 - Public Health Risk and Cumulative Impacts
- Other Environmental Impacts

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II. Baseline Determination

- Baseline scenario for 2010 will include effects of the following rulemakings:
 - Federal Renewable Fuels Standard (RFS or EISA)
 - ARB ZEV Regulation
 - Federal Corporate Average Fuel Economy (CAFE)
 - Pavley Regulation

- Staff will extrapolate baseline from this “business as usual” (BAU) case for years 2011 – 2020.

Questions or comments?

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III. Air Quality Impacts GHG Benefits

- Summarize GHG benefits from compliance scenarios, including, but not limited to the scenarios in the “Supporting Documentation” released in the last working group meeting

Questions or comments?

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III. Air Quality Impacts CA Air Quality Impacts

- Emissions from Biomass Production, Transportation and Distribution
- Emissions from Alternative Fuel Facilities
- Emissions from Alternative Fuel Transport and Distribution
- Emissions from Existing Refineries
- Emissions from Ports

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III. Air Quality Impacts CA Air Quality Impacts

- Emissions from Biomass Production, Transportation and Distribution
 - Estimate criteria, toxic, and GHG emissions from feedstock production and T&D
 - Work with UC Davis to estimate sources of biomass and facilities that will use biomass
 - Perform calculations using EMFAC and other appropriate sources

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III. Air Quality Impacts CA Air Quality Impacts

- Emissions from Alternative Fuel Facilities
 - LCFS does not require new facilities, but should encourage development of low-carbon fuel facilities

- Staff will provide estimated criteria and toxic emissions from alternative fuel facilities such as, but not limited to:
 - Ethanol from multiple feedstocks
 - Biodiesel from multiple feedstocks
 - Renewable diesel from multiple feedstocks
 - Renewable fuels from MSW

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III. Air Quality Impacts CA Air Quality Impacts

- Emissions from Alternative Fuel Transport and Distribution
 - Estimate these emissions based on modes of transportation and distances traveled

- Emissions from Ports
 - Evaluate the impact of the LCFS on ports in CA

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III. Air Quality Impacts CA Air Quality Impacts

- Emissions from Existing Refineries
 - Examine possible scenarios that would cause refinery modifications
 - Describe possible impacts on refineries

Questions or comments?

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III. Air Quality Impacts Motor Vehicle Emissions

- GHG and criteria emission impacts for both on- and off-road vehicles
- Describe regulatory structure in place
- Estimate if there are any changes in emissions

Questions or comments?

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III. Air Quality Impacts Public Health Risk and Cumulative Impacts

- Map existing and proposed fuel production facilities
- Conduct cancer and non-cancer risk assessment for individual facilities
- Conduct cancer and non-cancer cumulative risk assessment for multiple facilities
- Summarize regional and statewide criteria pollutant impacts and public health risk
- Investigate cumulative impacts assessment method

Questions or comments?

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IV. Other Environmental Impacts

- Evaluate other impacts to water, land, forest, energy, waste disposal, etc
- Work with appropriate agencies on non-air issues
- As feasible, identify mitigation measures

Questions or comments?

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Comments Requested

- We are soliciting comments from stakeholders regarding our work plan for the LCFS environmental analysis.
- Please submit comments to Michelle Werner and Carolyn Lozo via email:
 - mwerner@arb.ca.gov
 - clozo@arb.ca.gov
- ***Please submit comments by December 16, 2008***

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