

Proposed AB 32 Administrative Fee Regulation

Draft Regulatory Language Workshop

**Office of Climate Change
California Air Resources Board
February 25, 2009
Sacramento**

Purpose of this Workshop

- Review draft regulatory language
 - Do the mechanics of the regulation work?
 - Does the language have the intended effect?

Outline

- Overview
- Approach
- Definitions
- Applicability
- Fee Methodology
- Example Calculation
- Outstanding Issues

Overview

- Authorized by AB 32, HSC section 38597
- Included in the Scoping Plan and approved by Board
- Required by 08/09 Budget
- Collected revenues shall be used to administer and implement AB 32 programs
 - ARB and other State agencies
 - Support Scoping Plan
 - Funding to be secured beginning with 09/10 Budget
 - Repay loans

Approach

ARB's approach:

- Broad-based, economy-wide
- “Upstream” sources
- Lower administration costs
- Consistency with existing programs
- Use of existing data

Applicability

Section 95201

The fee as currently drafted applies to approximately 75% of California's GHG emissions:

- Natural Gas
- Gasoline
- Diesel
- Coal
- Process emissions from refineries and cement manufacturers

Affected Entities: Natural Gas

- Public Utility Gas Corporations
- Purchasers/consumers of natural gas directly from interstate pipelines
- Producers of natural gas transported by in-state proprietary pipelines
- Natural gas producers consuming gas produced on-site
- Producers of “lease gas” that are subject to ARB’s mandatory reporting regulation

Affected Entities: Gasoline and Diesel

- Producers and importers of California gasoline
- Producers and importers of CARBOB
- Producers and importers of California diesel

Affected Entities: Coal

- Entities using coal as a fuel and subject to ARB's Mandatory Reporting Regulation
 - Cement manufacturers
 - Cogeneration facilities
 - Others

Affected Entities: Refineries

- Refineries that produce or consume
 - Catalyst coke
 - Petroleum coke
 - Refinery gas
 - Naphtha
 - Liquefied petroleum gas

Affected Entities: Cement Manufacturers

- Process emissions at cement manufacturing facilities
 - Direct CO₂ emissions from clinker manufacturing

Definitions

- Consistent with other ARB regulations, where applicable

Fee Calculation: Concept

- Equation would be codified in regulation
- Inputs would be adjusted annually
 - Affected entities reportable data
 - Approved budget

Fee Calculation: Concept

Cost per unit CO₂E
(Common Carbon Cost or CCC)

$$= \frac{\text{Total Revenue Requirement (\$)}}{\text{Total CO}_2\text{E from fuel burned and process emissions}}$$

Annual Information Required

- Report information required in regulation-discussed in detail in following slides
- Used to calculate common carbon cost
- Used to calculate applicable fees

Common Carbon Cost

ARB will annually calculate a cost per unit CO₂E, based on the following:

- Total revenue requirement
- Quantities of reported fuels and emissions
- Fuel emissions factors

Proposed AB 32 Administration Fee

Common Carbon Cost: Equation

$$CCC = \frac{TRR}{(Q_{ng} \times EF_{ng}) + (Q_g \times EF_g) + (Q_d \times EF_d) + (Q_c \times EF_c) + TEI}$$

Common Carbon Cost: Definition of the Terms

- $(Q_{ng} \times EF_{ng})$
 - Quantity of natural gas multiplied by the emission factor for natural gas
- $(Q_g \times EF_g)$
 - Volumetric sum of California gasoline produced or imported into California and the amount of finished CARBOB product produced or imported into California multiplied by the emission factor for California gasoline.
- $(Q_d \times EF_d)$
 - Quantity of California diesel supplied multiplied by the emission factor for California diesel

Common Carbon Cost: Definition of the Terms (cont.)

- $(Q_c \times E_{Fc})$
 - Quantity of bituminous coal multiplied by the emission factor for bituminous coal
 - Quantity of lignite coal multiplied by the emission factor for lignite coal
 - Quantity of anthracite coal multiplied by the emission factor for anthracite coal
 - Quantity of subbituminous coal multiplied by the emission factor for subbituminous coal

Common Carbon Cost: Definition of the Terms (cont.)

- TEI--Total emissions inventory for process emissions from refineries and cement manufacturing
 - Refineries: e missions from the following emitted on- or off-site
 - Catalyst coke
 - Petroleum coke
 - Refinery gas
 - Naphtha
 - Liquefied petroleum gas
 - Cement manufacturing: emissions from the clinker manufacturing process

Total Revenue Requirements

- Total Revenue Required (TRR) has two components:
 - Required Revenue: A B 32 expenditures budgeted for Fiscal Year for all State agencies based on approved State budget
 - Repayment of startup loans to ARB and CalEPA, totaling approximately \$57 Million
 - Repaid over first three years of fee

Sector Fee Calculations

- Concept the same for each sector
- Diverse sectors require unique approach in the following areas:
 - Affected entities
 - Data requirements
 - Calculation specifics

Natural Gas Fees

Reporting:

- Public utility gas corporations—therms of natural gas transported annually
- Purchasers/consumers of natural gas directly from interstate pipelines—therms of natural gas purchased or consumed
- Producers of natural gas transported by in-state proprietary pipelines—therms transported annually to a consumer or not transported on a public utility gas corp. pipeline

Natural Gas Fees (cont.)

Reporting:

- Natural Gas producers consuming gas produced on-site and subject to ARB's mandatory reporting regulation—therms of natural gas produced on-site that is consumed on-site
- Producers of “lease gas” that are subject to ARB's mandatory reporting regulation—emissions resulting from combustion of lease fuels

Natural Gas Fees

Fee Calculation:

- Fee rate based on the CCC and the emission factor for natural gas
- Fee based on the fee rate and the quantity of natural gas supplied/consumed
- For lease gas, fee is based on the emissions associated with the gas consumed on site or supplied and the common carbon cost

Gasoline and Diesel Fees

Reporting:

- Gallons of California gasoline, CARBOB, and California diesel supplied for use in the State

Fee Calculation:

- Fee rate based on the CCC and the emission factor for gasoline and diesel
- Fee based on the fee rate and the quantity of gasoline and diesel supplied
- Finished CARBOB product is calculated as the volume of CARBOB multiplied by one plus the maximum amount of oxygenate designated for each volume of CARBOB.

Coal Fees

Reporting:

- Tons of coal and the associated grade of coal combusted

Fee Calculation:

- Fee rate based on the CCC and the emission factor for each grade of coal
- Fee based on the fee rate and the quantity of each grade of coal

Refinery Process Fees

Reporting:

- GHG emissions as a result of gasoline and diesel refining process
 - Direct process emissions (Naphtha, LPG)
 - Emissions due to combustion of refining process by-products regardless of point of combustion from:
 - Catalyst coke
 - Petroleum coke
 - Refinery gas

Fee Calculation:

- Based on the quantity of emissions and CCC

Cement Manufacturing Process Fees

Reporting:

- Direct CO₂ emissions from clinker manufacturing

Fee Calculation:

- Based on the quantity of emissions and the CCC

Preliminary Fee Estimates

Fee in dollars per \$10 million of total required revenue

- Natural Gas—\$1.7/MMscf
- Gasoline and diesel—\$0.0003/gallon
- Coal—\$ 0.08/ton of coal
- Refineries Process Emission—\$0.00006/gallon produced
- Cement Manufacturers process emissions—\$0.014/ton of cement

Sector Fees: Sample Calculation

At a Total Required Revenue level of \$50 million, the CCC is \$0.14/metric ton CO₂E

Fee Rate

\$0.14/metric ton CO₂E x 0.011 ton CO₂E/gallon diesel =
\$0.0016/gallon diesel

Fee

A fuel importer who supplies 20 million gallons of California diesel would be assessed a fee of approximately \$32,000

Additional Sections

- **Payment and collection**
 - Timeline and Criteria
- **Enforcement:**
 - Requires accurate reporting in a timely manner
 - Entities retain records for 5 years
 - Provides for access to records and facilities for enforcement

Outstanding Issues

- **Determination of Required Revenue**
- **Imported Electricity**
- **Natural gas storage—double counting**
- **Reporting**

Tentative Timeline

March 11, 2009 Comments due on draft regulation

April 10, 2009 Release staff report and begin
45 day public comment period

April 27, 2009 Workshop on proposed
regulation

May 28/29, 2009 Board hearing

Questions or Comments?

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