

Public Meeting

Reporting and Verification in a Cap-and-Trade Program

June 5, 2009

California Air Resources Board

California Cap-and-Trade Rulemaking Timeline

- Focus in 2009: work through implications of different issues and policy decisions
- Focus in 2010: finalize program design and develop regulatory language
- End of 2010: Board action on cap-and-trade regulation
- Extensive public process throughout

Purpose of Meeting

- Highlight differences between ARB's Mandatory Reporting Regulation and WCI's Essential Requirements for Reporting
- Discuss specific areas where ARB's Regulation may need to be modified to better support cap-and-trade program
- Discuss verification requirements under a cap-and-trade program

Your Comments

- ARB would like to receive input on the preliminary thinking in this presentation
- Stakeholders are asked to submit their comments online by June 26:
<http://www.arb.ca.gov/cc/capandtrade/comments.htm>

ARB Reporting Requirements Development Process

Today

- Reporting and Verification in Cap-and-Trade
 - ARB/WCI distinctions in reporting
 - Potential modifications to ARB Reporting Regulation, including verification requirements, for cap-and-trade program

Topics to be discussed in near future:

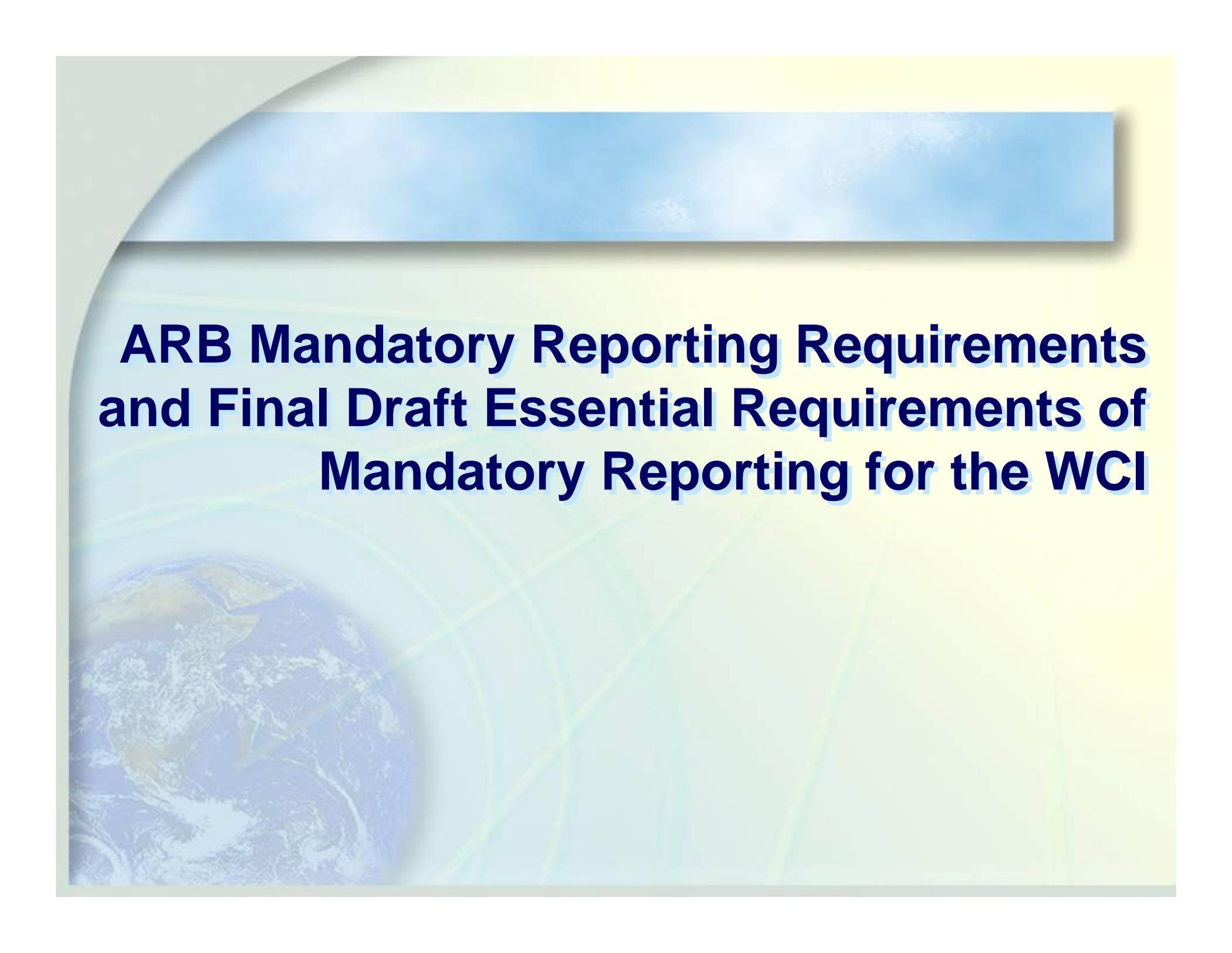
- Issues and alternative approaches for reporting cogeneration cap-and-trade
- Issues related to reporting transportation fuels

Proposed U.S. EPA Reporting Regulation

- EPA's proposed Mandatory Reporting Rule (MRR) is not intended to support a cap-and-trade program
- ARB will provide and post its comments on ARB's website

Meeting Agenda

- Opening Remarks (15 minutes)
- Staff Presentation (30 minutes)
- Clarifying Questions (10) minutes)
- Round-Table Discussion (2 hours)
- Other Issues (15 minutes)
- Adjourn

The background features a light blue and yellow gradient. A horizontal blue bar with a white, cloud-like pattern is positioned at the top. In the bottom left corner, there is a stylized, semi-transparent image of the Earth showing continents and oceans. The text is centered in the middle of the slide.

**ARB Mandatory Reporting Requirements
and Final Draft Essential Requirements of
Mandatory Reporting for the WCI**

Development and Purpose of Mandatory Reporting Regulation

- Originally written in response to AB 32 reporting requirements
- Preliminary ideas for foundation for future market program

WCI Essential Reporting Requirements

- Final Draft Essential Requirements of Mandatory Reporting for the Western Climate Initiative released May 7th
 - Includes revisions to some previously released requirements as well as new requirements for certain source categories not previously released

Reporting Sectors and Thresholds

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">• Specified sectors and combustion sources with emissions $\geq 25,000$ metric tons (MT) CO₂ per year• Power plants over 1MW and $\geq 2,500$ MT CO₂ per year• Electricity retail providers and marketers	<ul style="list-style-type: none">• Facilities $\geq 10,000$ MT CO₂ <i>equivalent</i>• Electricity retail providers and marketers as first jurisdictional deliverers

- WCI Design Recommendations and Scoping Plan have established the threshold for coverage in the cap-and-trade program at 25,000 MT CO₂ *equivalent*

Industrial Sectors

ARB Mandatory Reporting

- Cement, Refineries, Hydrogen Plants, Power Plants, Cogen, and other combustion sources

Final Draft WCI Essential Requirements

- ARB sources plus about 20 identified process and fugitive sources
- Sources in California include oil/gas production and distribution, petrochemical production, pulp and paper, lime, glass, electronics

Electricity Imports

ARB Mandatory Reporting

- Extensive information from retail providers and marketers to guard against paper reductions

Final Draft WCI Essential Requirements

- First jurisdictional deliverers report (retail providers and marketers bringing power across the border)

Fuels Combustion Emissions

- Existing Mandatory Reporting Regulation
 - Industrial stationary source fuel combustion
 - Mobile source fuel combustion at stationary facilities, optional reporting
- Additional reporting likely to be needed for second phase of cap-and-trade program
 - Transportation fuels
 - Residential & commercial fuels
 - Additional fossil fuels
 - Propane
 - Kerosene

Fuels in the 2012-2014 Phase of Cap-and-Trade

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•Emissions from fuel use at reporting industrial facilities•On-site mobile sources optional at reporting stationary facilities	<ul style="list-style-type: none">•Reporting by upstream fuel producers, suppliers•Point of regulation will vary by jurisdiction and fuel type•Methods to be developed 2010

NOTE:

Recently adopted Low Carbon Fuel Standard (LCFS) requires fuel providers to meet an average declining standard of 'carbon intensity.' This includes upstream fuel production emissions and indirect land-use change factors. LCFS takes effect 2011.

Biomass Fuels

ARB Mandatory Reporting

- Counts towards the reporting threshold
- Reported separately from fossil CO₂
- Subject to verification

Final Draft WCI Essential Requirements

- Not counted in determining applicability if found carbon neutral
- Reported only when facilities also have fossil fuels to report
- Considering whether to exclude from scope of verification

General Stationary Combustion Sources

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•Use default emission factors for CO₂•Verify triennially<ul style="list-style-type: none">— Annual verification is required for general stationary combustion sources in the oil and gas sector, unlike other GSC•Option to test fuels or use CEMS data	<ul style="list-style-type: none">•Use default emission factors below the 25K cap•Capped facilities use fuel parameters determined by the operator or fuel supplier•Verify annually•CEMS are an option

Cogeneration

ARB Mandatory Reporting

- Report emissions and distribute fossil CO₂ by electricity, heat, and manufactured product

Final Draft WCI Essential Requirements

- Whether to require emissions distribution is under discussion

Cement Plants

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">• Plant-specific process emissions factor developed annually• Reporting includes efficiency metrics	<ul style="list-style-type: none">• Plant-specific process emissions factor developed monthly• Additional specified analytical methods• No efficiency metrics reported

Verification Requirements

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•Third Party Verification•Verification required beginning in 2010•Conflict of interest (COI) review•Annual verification and triennial verification	<ul style="list-style-type: none">•Annual third party verification after COI review for capped sources

Verifiers

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•ARB accredits all verifiers for California reporters	<ul style="list-style-type: none">•Both ARB and Climate Registry (TCR) verifiers (accredited through American National Standards Institute (ANSI) or Standards Council of Canada (SCC) will be grandfathered•Other verifiers to be accredited through ANSI or SCC

Verification Findings

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•Positive Verification Opinion: Conformance with regulation AND meets materiality threshold of 95%•Adverse Verification Opinion: Non-conformance with regulation OR does not meet materiality threshold of 95%	<ul style="list-style-type: none">•Same

Verifier Conflict of Interest (COI)

ARB Mandatory Reporting	Final Draft WCI Essential Requirements
<ul style="list-style-type: none">•Detailed conflict of interest (COI) requirements in reporting regulation	<ul style="list-style-type: none">•Similar



Clarifying Questions

The background features a light blue and yellow gradient. A horizontal blue bar with a white cloud-like pattern is positioned at the top. In the bottom left corner, there is a partial view of a globe showing continents and oceans. The main title is centered in a bold, dark blue font.

Potential Modifications to ARB Mandatory Reporting Regulation

Goals for Potential Modifications

- Achieve levels of completeness, accuracy, and transparency
- Reporting program elements need to support a successful cap-and-trade program
- Strive for consistency with WCI essential elements for reporting and federal reporting rule

Potential Modifications (1)

- Additional industrial process emissions methods
 - Oil and gas production and distribution, petrochemical production, pulp and paper, lime, glass, others

Potential Modifications (2)

- 10,000 metric ton CO₂e threshold
 - WCI: lower threshold critical to monitoring leakage, industry competitiveness
- Modified information from retail providers and marketers
 - First jurisdictional deliverers report

Potential Modifications (3)

- Distribution of emissions by cogeneration facilities
- Monthly emission factors for cement plants
- Align reporting and verification deadlines
- Adding upstream fuel sources (before 2015)

Potential Modifications (4)

- Verification changes due to market design:
 - Annual verification for all sources within cap
 - Verification opinion due date
 - Enforcement ramification and penalties for adverse verification opinions
 - Increase in liability insurance for verification bodies

Questions and Comments Roundtable Discussion Period

- Questions during the workshop can be sent to:
ccworkshops@arb.ca.gov
- Written comments on concepts presented here are requested by June 26th; please submit comments online:
www.arb.ca.gov/cc/capandtrade/comments.htm

Team Leads for Cap & Trade Rulemaking

Sam Wade, Mary Jane Coombs	Cap setting and allowance distribution
Ray Olsson	Market operations and oversight
Brieanne Aguila	Offsets and cap-and-trade project manager
Claudia Orlando	Electricity
Joshua Cunningham	Transportation
Manpreet Mattu	Reporting Energy efficiency
Bruce Tuter, Mihoyo Fuji	Industrial sectors
Karin Donhowe	Natural gas for residential and commercial
Mihoyo Fuji	Marginal abatement costs and leakage related issues
David Kennedy, Stephen Shelby, Barbara Bamberger, Mihoyo Fuji, Jeannie Blakeslee, Judy Nottoli, Jerry Hart	Impact analyses (environmental, economic, localized, small business, public health)

For More Information...

- Mandatory Reporting Web Page
 - <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>
- ARB's Cap-and-Trade Web Site
 - <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- Submit/View comments on Cap-and-Trade Web Site
 - <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>
- To stay informed, sign up for the Cap-and-Trade listserv:
 - http://www.arb.ca.gov/listserv/listserv_ind.php?listname=captrade-ej
- Western Climate Initiative
 - <http://www.westernclimateinitiative.org>