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General Summary of the California Air Resources Board's Rule for Mandatory Reporting of Greenhouse Gases

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act (AB 32). Under AB 32, the California Air Resources Board (CARB) was tasked with developing and implementing a mandatory reporting rule for major sources of greenhouse gas (GHG) emissions. The CARB reporting rule became effective in January 2009. The first reports required by the rule were due in either April 1, 2009, or June 1, 2009, depending on the facility's source category.

Who Must Report?

The following sources of GHG emissions must report under the rule:

- Cement plants
- Petroleum refineries ($\geq 25,000$ metric tonnes of CO₂ in any calendar year)
- Hydrogen plants ($\geq 25,000$ metric tonnes of CO₂ in any calendar year)
- Electric generating facilities and cogeneration facilities (≥ 1 MW capacity and $\geq 2,500$ metric tonnes of CO₂ in any year)
- Electricity retail providers and marketers
- Other facilities that emit $\geq 25,000$ metric tonnes of CO₂, from stationary combustion sources, in any calendar year

Electric generating facilities powered by nuclear, hydroelectric, wind, or solar energy; portable equipment; backup and/or emergency generating units with a valid Permit to Operate; hospitals; and primary and secondary schools are not required to report. Emissions from mobile sources associated with these listed facilities may be reported but are not required.

What Must be Reported and How Will I Report?

The rule requires the reporting of annual emissions of CO₂, CH₄, N₂O, SF₆, HFCs, and PFCs. Emissions are based on the previous calendar year's data and are reported in metric tonnes per year. Not all pollutants are required to be reported for all source

categories, and emissions from the combustion of biomass are to be reported separately. Fuel use, at the individual meter level, is required to be reported for all sectors. Additional supporting data, such as emission factor development data, efficiency metrics, production data, and feedstock consumption data may also be required for some sectors. Reports are to be submitted using CARB's electronic reporting tool, which is available for download from CARB's website at <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-tool.htm>.

How are Emissions Calculated?

Sector-specific emission calculation methods are detailed in the rule. The specific sections of the rule should be consulted prior to the preparation of a GHG emission inventory. Data requirements and calculation methods vary by facility sector. The applicable rule section for each sector is listed below. The rule can be found on CARB's website at <http://www.arb.ca.gov/regact/2007/ghg2007/frofinal.pdf>.

- Section 95110 – Cement plants
- Section 95111 – Electricity generating facilities, retail providers and marketers
- Section 95112 – Cogeneration facilities
- Section 95113 – Petroleum refineries
- Section 95114 – Hydrogen plants
- Section 95115 – General stationary combustion sources

Additional information on sector-specific calculations can be found in CARB's *Mandatory Reporting of Greenhouse Gas Emissions: Instructional Guidance for Operators* (CARB, 2008). The Guidance document is available for download from CARB's website at <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep-guid/ghg-rep-guid.htm>.

What are the Recordkeeping Requirements?

Document retention and recordkeeping requirements are specified in Section 95105 of the rule. All documents and data used to prepare the GHG report, including but not limited to fuel use data, emission factors, instrument manuals, and maintenance and calibration records, must be retained for at least five (5) years following the submission of the annual report.

Each facility must develop and implement a GHG Inventory Program (see Section 95104(b)) to facilitate the collection of GHG data. The purpose of the GHG Inventory Program is to ensure that emissions calculations and electricity transaction information are transparent, accurate, and independently verifiable. In addition, beginning January 1, 2009, each facility is required to maintain a log documenting all procedural changes made in GHG accounting methods and instrumentation.

Verification

Beginning in 2010, emission reports submitted under the rule require independent, third party verification. The verification must be completed by October 1 for sources reporting in April and by December 1 for sources reporting in June. Annual verification is required for complex sources and triennial verification is required for smaller, less complex sources. All verifiers must be accredited by CARB and conflict of interest requirements must be met prior to the start of the verification process. It is the reporter's obligation to obtain and pay for the verification services. A list of the accredited verifiers is available on CARB's website at <http://www.arb.ca.gov/cc/reporting/ghg-ver/ghg-ver.htm>.

Where can I get more Information?

Additional information can be found on CARB's website at <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm> and by contacting Sierra Research staff.