UPDATED INFORMATIVE DIGEST

AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS

<u>Sections Affected</u>: Amend Division 3, Chapter 1, Subchapter 10, Article 2, sections 95100, 95101, 95102, 95103, 95104, 95105, 95106, 95107, 95108, 95109, 95110, 95111, 95112, 95113, 95114, 95115, 95130, 95131, 95132, and 95133, title 17, California Code of Regulations; repeal section 95125, title 17, California Code of Regulations; and adopt new sections 95100.5, 95116, 95117, 95118, 95119, 95120, 95121, 95122, 95123, 95129, 95150, 95151, 95152, 95153, 95154, 95155, 95156, and 95157, title 17, California Code of Regulations.

Background

In this rulemaking, the Air Resources Board (ARB or Board) has adopted proposed revisions to the California Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (mandatory reporting regulation or MRR). The regulation was originally developed pursuant to the California Global Warming Solutions Act of 2006 (AB 32), and adopted by the Board in December 2007. The proposed revisions to the MRR are necessary to support a California greenhouse gas (GHG) cap-and-trade program and to harmonize with the U.S. Environmental Protection Agency (U.S. EPA) federal mandatory GHG reporting requirements contained in Title 40, Code of Federal Regulations (CFR), Part 98. The revisions are also necessary, and authorized, to "prepare, adopt, and update" California's inventory of emissions related to climate change formerly conducted by the State Energy and Natural Resources Conservation and Development Commission pursuant to Chapter 8.5 (commencing with Section 25730) of Division 15 of the Public Resources Code. (California Health & Safety Code sections 39600, 39601, 39607, 39607.4, and 41511).

On October 28, 2010, ARB issued a notice of public hearing to consider the proposed regulation at the Board's December 16, 2010 hearing. A "Staff Report: Initial Statement of Reasons for Rulemaking" (Staff Report or ISOR) was also made available for public review and comment starting October 28, 2010. The Staff Report, which is incorporated by reference herein, described the rationale for the proposal. The text of the proposed regulation was included as Appendix A to the Staff Report. These documents were also posted on ARB's internet web site at: http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm.

On December 16, 2010, the Board conducted a public hearing to consider the staff's proposal for adoption. Written and oral comments were received at the hearing. At the same hearing, the staff presented modifications to the regulation as originally proposed in the Staff Report in response to comments received

since the Staff Report was published. The Board adopted Resolution 10-43, approving the proposed regulation for adoption with the modifications proposed by staff in Attachment B of the Resolution, and with modifications necessary and appropriate to clarify requirements, harmonize reporting, and to address stakeholder comments. Resolution 10-43 directed the Executive Officer to adopt the modified regulations after making the modified regulatory language available for public comment for a period of at least 15 days, in accordance with Government Code section 11346.8(c), and to make such additional modifications as may be appropriate in light of the comments received, or to present the regulation to the Board for further consideration if warranted in light of the comments.

A "Notice of Public Availability of Modified Text," together with a copy of the full text of the regulation modifications, with the modifications clearly indicated, was provided to the public and affected stakeholders on July 25, 2011, for a comment period from July 25, 2011 to August 11, 2011, pursuant to Government Code section 11346.8. Based on comments received, a second 15-day comment period with additional revisions to the regulation was provided for public comment. This second "Notice of Public Availability of Modified Text" and the regulation modifications, with the modifications clearly indicated, were released on September 12, 2011, with the deadline to submit public comments by September 27, 2011.

Description of the Regulatory Action

The purpose of the MRR is to meet the requirements of AB 32 to develop and maintain a comprehensive, effective, and reasonable mandatory GHG reporting program for California. The primary objectives of the revisions to the MRR include harmonization with U.S. EPA reporting requirements to the extent consistent with program needs, and the inclusion of requirements necessary to support the ARB cap-and-trade program for GHG emissions.

The proposed mandatory reporting regulation requires annual emissions reporting from facilities, fuel and carbon dioxide (CO₂) suppliers, and electric power entities that together account for approximately 87 percent of the total CO₂ emissions produced in California from industrial, commercial, and mobile sources of emissions, and similar portions of methane and nitrous oxide emissions. Overall, ARB estimates that approximately 750 facilities, suppliers and entities would be subject to GHG reporting under the proposed revised regulation, compared to about 600 under the current regulation.

Under the MRR, the facilities, suppliers, and entities that are required to annually report their GHG emissions and other related data include electricity generating facilities, electricity retail providers, electricity marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, suppliers of transportation fuels, suppliers of natural gas and liquefied petroleum gas,

suppliers of carbon dioxide, operators of petroleum and natural gas systems, and various industrial sources that emit over 10,000 metric tons per year of CO_2 equivalent (CO_2 e) including facilities such as food processing, glass production, and paper manufacturing. Facilities emitting under 25,000 metric tons per year of CO_2 e (the cap-and-trade threshold) may choose to use a simpler abbreviated reporting option. The regulation requires facilities to report their facility GHG emissions and other data using the methods, equations, and emission factors specified by the regulation beginning in 2013. For 2012, facilities may report using U.S. EPA methods. The regulation incorporates U.S. EPA reporting requirements, to the extent consistent with program needs, for reporting in all years.

Operators subject to reporting must prepare and submit their GHG emissions estimates and other data as specified in the MRR. Greenhouse gas emissions reporting is required from those with operational control of facilities or other entities subject to reporting. Under the MRR, "operational control" for a facility means the authority to introduce and implement operating, environmental, health and safety policies. Those facilities or sources not required to report include nuclear, hydroelectric, wind, or solar electricity generating sources, primary and secondary schools, backup or emergency generators, and fugitive emissions from certain sources. Other specific exclusions are provided in the regulation; most of these are for process emissions sources not found in California.

The regulation provides specific reporting requirements for each industrial sector, defining which processes, product data, electricity transactions information, and greenhouse gases must be reported. In general, all facilities are required to report their on-site stationary source combustion emissions of CO₂, N₂O (nitrous oxide), and CH₄ (methane). Some industrial sectors, such as cement, glass, and refineries, must also report their process emissions, which occur from chemical or other non-combustion activities. Facilities report fugitive emissions, unless exempted, as specified in the regulation. The CO₂ emissions from biomass-derived fuels must be separately identified during reporting. In addition, the MRR requires that reporters provide their consumption of purchased or acquired electricity and thermal energy. referred to in the regulation as indirect energy usage. Reporting entities are also required to report product data, as specified in the regulation. Fuel and CO₂ suppliers are required to report certain production and sales information. Imports of electricity into California are reported by first deliverers of that power, who either indicate its source or designate it as "unspecified," to support emissions calculation.

All data specified in the MRR will be reported to the ARB annually. The first reports under the new requirements must be submitted in 2012 based on 2011 emission levels. Facilities subject to abbreviated reporting submit their first reports in 2013.

Except for small facilities emitting less than 25,000 metric tons of CO₂e subject to abbreviated reporting, submitted emissions and other required data must undergo third-party verification to ensure the completeness and accuracy of the data, and to confirm the use of required methods in preparing the emission estimates. Reports must be verified annually. Either a private contractor or an air pollution control district/air quality management district can perform verification services, provided they meet specified education, experience, and training qualifications, and are accredited by ARB pursuant to the MRR. To help ensure that verifiers are impartial and unbiased in their verification responsibilities, ARB also requires a conflict of interest screening before verifiers can perform verification services for individual facility operators.

Other items included in the MRR and discussed in the ARB Staff Report are the detailed quantification and reporting requirements for each industrial sector, required elements of verification services, emissions verifier accreditation requirements, specifications for claiming confidential data, and recordkeeping requirements. Complete details are provided in the regulation and Staff Report, which are available here:

http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm.

The Board's Action

At its December 16, 2010 public hearing, the Air Resources Board (the Board) adopted Resolution 10-43, which approved the amendment of Division 3, Chapter 1, Subchapter 10, Article 2, sections 95100, 95101, 95102, 95103, 95104, 95105, 95106, 95107, 95108, 95109, 95110, 95111, 95112, 95113, 95114, 95115, 95130, 95131, 95132, and 95133, title 17, California Code of Regulations; the repeal section 95125, title 17, California Code of Regulations; and adoption of new sections 95100.5, 95116, 95117, 95118, 95119, 95120, 95121, 95122, 95123, 95129, 95150, 95151, 95152, 95153, 95154, 95155, 95156, 95157, and 95158, title 17, California Code of Regulations, which provide for the mandatory reporting of greenhouse gas emissions and other data. The regulation specifies the types of facilities that must report their GHG emissions, requirements for reporting and estimating the GHG emissions, and requirements for emissions verification. The regulation was developed pursuant to the requirements of the California Global Warming Solutions Act of 2006.

At the hearing, the staff presented and the Board approved modifications to the regulation originally proposed in the Staff Report released October 28, 2010, in response to comments received since the Staff Report was published. In addition, based on public comments received, the Board directed staff to provide various clarifications to the regulation, including the abbreviated reporting requirements, reporting of transportation fuels, and reporting exclusions. The

Board also directed staff to make the modified text available for a supplemental public comment period of at least 15 days.

First Fifteen-Day Changes

In accordance with section 11346.8 of the Government Code, the Resolution directed the Executive Officer to make other conforming modifications as may be appropriate, based on comments received, and to make the modified text available for a supplemental comment period of at least 15 days. Text of the modifications to the originally proposed regulation was made available for a supplemental comment period by issuance of a "Notice of Public Availability of Modified Text." This notice and the proposed modifications were posted on July 25, 2011.

A variety of changes were made to the originally proposed regulation to clarify the reporting requirements and address comments received during the initial 45-day comment period and Board hearing. To summarize, clarifications were added regarding applicability, abbreviated reporting, and exclusions, such as for livestock facilities. Some definitions were added or refined for completeness and consistency. Reporters subject to abbreviated reporting were given an additional year to comply with the program, and changes were made to allow use of less stringent data and methods during the first year of reporting in 2012. The requirements for estimating biomass fuels were clarified, as well as the measurement accuracy requirements. Based on stakeholder comments and internal review, the enforcement provisions were modified to clarify their scope. A variety of clarifications were included regarding reporting requirements; updates were made to the individual industry sector reporting requirements; minor modifications were made to the verification requirements; and the sections for petroleum and natural gas systems were updated to reflect U.S. EPA reporting requirements, including through the removal of proposed section 95158. A complete listing of the changes to the regulation is included in the Notice of Public Availability of Modified Text, dated July 25, 2011. The notice and the revised regulation in underline/strikeout format are available here: http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm.

Second Fifteen-Day Changes

Based on comments received during the first 15-day comment period, additional clarifications and corrections were made to the MRR. In accordance with section 11346.8 of the Government Code, text of the additional modifications to the originally proposed regulation was made available for a second supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text." The additional changes included additional clarifications for applicability, refinements to some definitions, and clarification for biomass fuel reporting and measurement accuracy. The enforcement provisions were reorganized to clarify the manner in which penalties may be assessed. Based on stakeholder

comments received during the 1st 15-day comment period, additional modifications were made to the reporting requirements for cement manufacturing, electric power entities, electricity generation, and other sectors. Also included were edits to revise potentially unclear language, the correction of typographical and minor errors, and edits to ensure internal consistency within the regulation. The second 15-day notice, which summarizes each of the changes, was released on September 12, 2011. The notice and the regulation with the additional revisions shown is available here: http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm.

Additional Modifications

After the close of the second 15-day comment period, the Executive Officer determined that no additional modifications should be made to the regulations, with the exception of nonsubstantial changes, including punctuation and formatting corrections, corrections of typographical errors, corrections to font styles and formatting, and corrections to citations and internal section references, which are fully described in the Final Statement of Reasons for the rulemaking, available here: http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm.

COMPARABLE FEDERAL REGULATIONS

U.S. EPA requires mandatory GHG reporting (*Mandatory Reporting of Greenhouse Gases; Final Rule.* 40 CFR Parts 86, 87, 89, 90, 94, and 98. United States Environmental Protection Agency. October 30, 2009). ARB's proposed revised MRR was developed to minimize, to the greatest extent possible, any redundant State and federal reporting. Without adoption of the proposed revised MRR, reporters would have to submit duplicative GHG emissions reports based on wholly different requirements, estimation methods, and reporting systems, in order to comply with different ARB and U.S. EPA reporting requirements for GHG data.

In addition, the U.S. EPA's Acid Rain Program requires the reporting of CO₂, SO₂, and NO_x emissions from certain fossil fueled power plants as part of its program to reduce atmospheric levels of sulfur dioxide and nitrogen oxides (see Title 40, Code of Federal Regulations, section 72.1 et seq.). Because of the very limited nature of this federal regulation related to GHG emissions reporting, the proposed revised ARB regulation is not duplicative of this federal requirement. Both the federal and State GHG reporting regulations incorporate Acid Rain reporting elements to avoid duplication. The missing data elements in the proposed amendments are also based on elements in the Acid Rain Program, which were developed to support emissions trading.