

ATTACHMENT 1

State of California AIR RESOURCES BOARD

Resolution 10-30

July 22, 2010

Agenda Item No.: 10-7-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules, and regulations, and to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, the Legislature has enacted the Global Warming Solutions Act of 2006 (AB 32; Health and Safety Code section 38500 et seq.), which declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and creates a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020;

WHEREAS, AB 32 designates ARB as the State agency charged with monitoring and regulating sources of GHG emissions in order to reduce these emissions;

WHEREAS, section 38561(a) of the Health and Safety Code directs the Board to prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions by 2020;

WHEREAS, section 38561(b) of the Health and Safety Code requires the Scoping Plan to identify and make recommendations on direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that the Board finds necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of GHG emissions by 2020;

WHEREAS, section 38652(b) of the Health and Safety Code requires ARB, in adopting GHG regulations, to the extent feasible and in furtherance of achieving the statewide GHG emissions limit, to design the regulations in a manner that is equitable and seeks to minimize costs and maximize the total benefits to California; ensure that activities taken to comply with the regulations do not disproportionately impact low-income communities; ensure that activities undertaken pursuant to the regulations complement efforts to achieve and maintain ambient air quality standards and to reduce toxic air contaminant emissions; consider the cost-effectiveness of the regulations; consider overall societal benefits; minimize administrative burden; and minimize leakage;

WHEREAS, the Board acknowledges the importance of ensuring adequate and reliable energy supplies while the State implements AB 32;

WHEREAS, ARB has adopted the Climate Change Scoping Plan (Scoping Plan), which sets forth California's strategy for meeting the GHG emissions reductions required by AB 32;

WHEREAS, one of the measures contained within the Scoping Plan would require a one-time energy efficiency and co-benefits assessment for major industrial facilities, which include refineries, electricity generating facilities, oil and gas extraction and transmission facilities, cement plants, mineral plants, and hydrogen plants;

WHEREAS, the Scoping Plan measure envisioned that each applicable facility would assess individual combustion and other direct sources of GHG emissions within the facility to determine potential emission reduction opportunities, including those for criteria air pollutants and toxic air contaminants, and the impacts associated with implementation;

WHEREAS, ARB staff conducted three public workshops in 2009 and 2010 and participated in several stakeholder meetings in order to include the public and affected stakeholders in the regulatory development process;

WHEREAS, staff is proposing the adoption of a regulation to require energy efficiency and co-benefits assessment of large industrial facilities;

WHEREAS, the proposed regulation would adopt new article 2.1, subchapter 10, sections 95150 to 95162, title 17, California Code of Regulations, as set forth in Attachment A hereto;

WHEREAS, ARB staff has prepared a staff report entitled "Initial Statement of Reasons for Proposed Rulemaking: Regulation for Energy Efficiency and Co-Benefits Assessment of Large Industrial Facilities" (ISOR), which presents the rationale for the proposed regulation;

WHEREAS, the ISOR and the proposed regulatory language were made available to the public for at least 45 days prior to the public hearing to consider the proposed regulation;

WHEREAS, the Board has considered the impact of the proposed regulation on the economy of the State, and the potential adverse economic impacts on California business enterprises and individuals;

WHEREAS, the Board has considered the community impacts of the proposed regulation, including environmental justice concerns;

WHEREAS, the Board acknowledges that it is appropriate to establish an applicability threshold for the regulation based on total carbon dioxide equivalent (CO₂e) emissions, which includes both biogenic and non-biogenic sources of GHG emissions;

WHEREAS, the Board acknowledges that including biogenic sources of CO₂ in the total CO₂e emissions is an appropriate surrogate and will identify large facilities in California for the purpose of exploring opportunities for energy efficiency improvements that could result in GHG emission reductions as well as reductions of criteria air pollutants and toxic air contaminants;

WHEREAS, the California Environmental Quality Act (CEQA) requires that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board finds that:

1. The proposed regulation is necessary as a means to collect greenhouse gas, criteria pollutant, and air toxics emissions data;
2. The proposed regulation is necessary as a means toward ensuring future technologically feasible and cost-effective GHG reductions;
3. The proposed regulation is necessary as a means to obtain data needed to implement AB 32;
4. Requiring an energy efficiency and co-benefits assessment from electricity generating facilities, mineral plants, and hydrogen plants emitting GHG emissions of at least 500,000 metric tonnes (0.5 million metric tonnes) of CO₂e per year, and petroleum transportation fuel refineries and cement plants emitting GHG emissions of at least 250,000 metric tonnes (0.25 million metric tonnes) of CO₂e per year, is necessary to include the most significant California stationary GHG emission sources;
5. A facility-conducted assessment is important to ensure a comprehensive analysis of potential energy efficiency improvement opportunities, to limit the amount of time needed to conduct the assessment, and to limit the costs to the regulated community;
6. ARB staff is responsible for reviewing the facility operator Assessment Reports, and it is appropriate for ARB staff to designate selected Assessment Reports

for a third-party review to determine the completeness of the energy efficiency and co-benefits assessment;

7. The information collected from the facilities subject to the proposed regulation should be made available to the public in order to ensure transparency in informing the communities that are located near the facilities of the potential for emission reductions;
8. The facility information required in the proposed regulation is meant to be preliminary data gathered at a budgetary level to avoid reporting of confidential business information; however, any requests for confidentiality will be handled in accordance with the procedures specified in title 17, California Code of Regulations, sections 91000 through 91022;
9. The information gathered as a result of the proposed regulation is expected to provide ARB, industry, and the public with a broad range of opportunities available to reduce GHG, criteria air pollutant, and toxic air contaminant emissions and will aid in fulfilling ARB's responsibilities of AB 32, the Climate Change Scoping Plan, and other emission reduction programs;
10. The economic impacts of the proposed regulation have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR;
11. The proposed regulation is consistent with ARB's environmental justice policies and will equally benefit residents of any race, culture, or income level;
12. The requirements of the proposed regulation, which apply to businesses, are necessary for the health, safety, and welfare of the people of the State;
13. No reasonable alternative considered, or that has otherwise been identified and brought to the attention of the ARB, would be more effective in carrying out the purpose for which the regulation is proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed regulation; and

WHEREAS, pursuant to the requirements of the CEQA and the Board's regulations, the Board further finds that the proposed regulation will not result in any significant adverse impacts on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the adoption of sections 95150 through 95162, title 17, California Code of Regulations, as set forth in Attachment A hereto, with the modifications shown in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt sections 95150 through 95162, title 17, California Code of Regulations, after making the

modified regulatory language available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board encourages facility operators to implement cost-effective energy efficiency improvement opportunities identified as a result of the energy efficiency and co-benefits assessment.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to monitor the implementation of the regulation and to propose amendments to the regulation for the Board's consideration when warranted to resolve any implementation issues that may arise.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to designate selected facility operator Assessment Reports for a third-party review to determine the completeness of the energy efficiency and co-benefits assessment.

I hereby certify that the above is a true and correct copy of Resolution 10-30, as adopted by the Air Resources Board.

/S/

Mary Alice Morency, Clerk of the Board

Resolution 10-30

July 22, 2010

Identification of Attachment to the Resolution

Attachment A: The Proposed Regulation for Energy Efficiency and Co-Benefits Assessment of Large Industrial Facilities, as set forth in Appendix A to the Staff Report (released June 2010).

Attachment B: Staff's Suggested Modifications to the Original Proposal, presented at the July 22, 2010, Board hearing.

ATTACHMENT A

Proposed Regulation for Energy Efficiency and Co-Benefits Assessment of Large Industrial Facilities

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**PROPOSED REGULATION FOR ENERGY EFFICIENCY AND CO-BENEFITS
ASSESSMENT OF LARGE INDUSTRIAL FACILITIES**

Adopt new Article 2.1 in Subchapter 10, sections 95150 to 95162, title 17, California Code of Regulations, to read as follows:

**Article 2.1: Energy Efficiency and Co-Benefits Assessment of
Large Industrial Facilities**

§ 95150. Purpose

The purpose of this article is to require an energy efficiency assessment of California's large industrial facilities to determine the potential for greenhouse gas emission reductions and other pollution reduction co-benefits.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95151. Applicability

- (a) Except as provided in subsection 95152, this article applies to the following entities:
- (1) Operators of a facility with stationary sources in California that produce greenhouse gas emissions of 0.5 million metric tonnes of carbon dioxide (CO₂) equivalent (MMTCO₂e) or more annually. This total is to be determined by the reporting submitted by the facility operator to comply with the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations, for the calendar year 2009;
 - (2) Operators of any petroleum refinery in California that produces petroleum-based transportation fuels that are released into commerce and that produces greenhouse gas emissions of 0.25 MMTCO₂e or more annually as determined by the reporting submitted by the facility operator to comply with the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations, for the calendar year 2009; and

- (3) Operators of any cement plant in California that produces greenhouse gas emissions of 0.25 MMTCO₂e or more annually as determined by the reporting submitted by the facility operator to comply with the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations, for the calendar year 2009.
- (b) The Executive Officer may request a demonstration from any entity operating a facility to establish that a specified facility does not meet the applicability criteria specified in section 95151(a). Such demonstration must be provided to the Executive Officer within 30 days of a written request received from the Executive Officer.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95152. Exemptions.

The requirements of this article do not apply to the following:

- (a) Combined cycle electricity generating facilities built after 1995;
- (b) Petroleum refineries that do not produce transportation fuels; and
- (c) Mobile combustion sources as defined in section 95153(a)(40) or portable equipment as defined in section 95153(a)(53).

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95153. Definitions.

- (a) For the purposes of this article, the following definitions apply:
 - (1) "ARB" means the California Air Resources Board.
 - (2) "Assessment Report" or "report" means the report of the facility energy consumption and emissions analysis and energy efficiency improvement analysis prepared by an operator or third party entity and submitted to ARB pursuant to sections 95154 and 95155.

- (3) "Average recurring annual budgetary cost" means the expected annual budgetary cost associated with implementing an energy efficiency improvement project, averaged over the project life. The annual cost must include, but is not limited to, operation and maintenance of the energy efficiency improvement project.
- (4) "British Thermal Unit" or "Btu" means the quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit at about 39.2 degrees Fahrenheit.
- (5) "Budgetary cost estimate" means a cost estimate that is used for project comparison purposes, but does not require detailed engineering and therefore has a correspondingly lower accuracy.
- (6) "Calendar year" means the time period from January 1 through December 31.
- (7) "California Environmental Quality Act" or "CEQA" means California Public Resources Code Sections 21000 et seq.
- (8) "Carbon dioxide" or "CO₂" means the most common of the six primary greenhouse gases, consisting on a molecular level of a single carbon atom and two oxygen atoms.
- (9) "Carbon dioxide equivalent" or "CO₂ equivalent" or "CO₂e" means a measure for comparing carbon dioxide with other GHGs, based on the quantity of those gases multiplied by the appropriate global warming potential (GWP) factor and commonly expressed as metric tonnes of carbon dioxide equivalents (MTCO₂e).
- (10) "Cement plant" means an industrial structure, installation, plant, or building primarily engaged in manufacturing Portland, natural, masonry, pozzolanic, and other hydraulic cements, and typically identified by NAICS code 327310.
- (11) "Clinker" means the mass of fused material produced in a cement kiln from which finished cement is manufactured by milling and grinding.
- (12) "Combined cycle electricity generating facility" means an electricity generating facility that uses the waste heat from a gas turbine to provide heat energy for a steam turbine.
- (13) "Criteria air pollutant" means substances identified in title 17, California Code of Regulations, Section 70200. Examples include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter with aerodynamic diameters of 10 microns or less (PM₁₀) and PM 2.5.

- (14) "Distillate fuel oil" means a general classification for a petroleum fraction produced in conventional distillation operations. It includes diesel fuels and fuel oils.
- (15) "District" has the same meaning as defined in the California Health and Safety Code, Section 39025.
- (16) "Electricity generating facility" means a facility that generates electricity and includes one or more generating units at the same location.
- (17) "Emissions" means the release of greenhouse gases, criteria air pollutants, or toxic air contaminants into the atmosphere from sources and processes in a facility.
- (18) "Emissions data report" or "greenhouse gas emissions data report" means the report prepared by an operator each year and submitted by electronic means to ARB that provides the information required by the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations.
- (19) "Energy" means any source of usable heat or power, such as fuel or electricity.
- (20) "Energy efficiency" means a measure of the relative quantity of energy required to accomplish a task with the minimum energy expenditure.
- (21) "Energy efficiency assessment" means an assessment as specified in section 95154.
- (22) "Energy efficiency improvement project" means an undertaking involving such activities including, but not limited to, improvement in maintenance or other practices, monitoring systems, specific processes, or new or improved technologies, in order to increase energy efficiency at a facility.
- (23) "Entity" means a person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, or government agency.
- (24) "Equipment" means any stationary article, machine, or other contrivance, or combination thereof, used for specific purposes within a facility; equipment does not mean portable equipment, tactical support equipment, mobile vehicles, or generating units designated as backup or emergency generators in a permit issued by District.
- (25) "Executive Officer" means the Executive Officer of the ARB or his or her delegate.

- (26) "Facility" means any property, plant, building, structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties, in actual physical contact or separated solely by a public roadway or other public right-of-way, and under common operational control, that emits or may emit any greenhouse gases.
- (27) "Fluorine" means the most reactive nonmetallic element, generally designated with the symbol "F" and with an atomic weight of 18.9984.
- (28) "Fuel" means solid, liquid, or gaseous combustible material used to create heat or power.
- (29) "Global warming potential" or "GWP factor" means the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.
- (30) "Greenhouse gas" or "greenhouse gases" or "GHG" means carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).
- (31) "Greenhouse gas source" means any physical unit, process, or other use or activity that emits a greenhouse gas.
- (32) "Hydrocarbons" means chemical compounds containing predominantly carbon and hydrogen.
- (33) "Hydrofluorocarbons" or "HFCs" means a class of GHGs primarily used as refrigerants, consisting of hydrogen, fluorine, and carbon.
- (34) "Hydrogen" means the lightest of all elements, designated by the symbol "H" and with an atomic weight of 1.00797; commonly exists as a gas consisting on the molecular level of two hydrogen atoms.
- (35) "Kerosene" means a light distillate fuel that includes No.1-K and No. 2-K as well as other grades of range or stove oil that have properties similar to those of No. 1 fuel oil.
- (36) "Kiln" means a device, including any associated preheater or precalciner device that produce clinker by heating limestone and other materials for subsequent production of Portland or other cement.
- (37) "Kilowatt hour" or "kWh" means the electrical energy unit of measure equal to one thousand watts of power supplied to, or taken from, an electric circuit steadily for one hour. (A watt is a unit of electrical power equal to one ampere under pressure of one volt, or 1/746 horsepower.)

- (38) “Methane” or “CH₄” means a colorless, odorless, flammable gas consisting on the molecular level of a single carbon atom and four hydrogen atoms.
- (39) “Metric tonne” or “MT” or “tonne” means a common international measurement for the quantity of GHG emissions, equivalent to about 2204.6 pounds or 1.1 short tons.
- (40) “Mobile combustion source” means a source of emissions resulting from combustion by a vehicle or other non-stationary, self-propelled combustion sources that produces greenhouse gas, criteria pollutant, and toxic air contaminant emissions. Mobile combustion sources include, but are not limited to, passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks and vans, motorcycles, public transit buses, military tanks or other tracked military vehicles, mobile cranes, bulldozers, concrete mixers, street cleaners, golf carts, all terrain vehicles, trains, airplanes, boats, ships, implements of husbandry, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants.
- (41) “MMBtu” means million British thermal units. $MMBtu = MWhr \times 3.412$.
- (42) “MWhr” means megawatt hours; equal to one million watt hours.
- (43) “Nitrous oxide” or “N₂O” means a GHG consisting at the molecular level of two nitrogen atoms and a single oxygen atom.
- (44) “No. 1 fuel oil” means a light petroleum distillate fuel oil that meets the specifications of ASTM Specification D396-07.
- (45) “North American Industry Classification System” or “NAICS” means a standard for use by Federal statistical agencies in classifying business establishments for the collection, analysis, and publication of statistical data related to the business economy of the United States.
- (46) “Operational control” means the authority to introduce and implement operating, environmental, health, and safety policies. In any circumstance where this authority is shared among multiple entities, the entity holding the permit to operate from the District is considered to have operational control for purposes of this regulation.
- (47) “Operator” means the entity having operational control of a facility, or other entity, from which an Assessment Report is required under this regulation.
- (48) “Outside source” means a source of electricity not contained within a facility.

- (49) "Oxides of nitrogen or NOx" means compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (50) "Perfluorocarbons" or "PFCs" means a class of greenhouse gases consisting on the molecular level of carbon and fluorine.
- (51) "Petroleum" means an oily, thick, flammable liquid that is a mixture of various hydrocarbons occurring naturally within the earth and includes oil derived from tar sands, shale, and coal.
- (52) "Petroleum refinery" or "refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, rearrangement, or reforming of unfinished petroleum derivatives.
- (53) "Portable" is as defined in title 17, California Code of Regulations, section 93116.2(a)(28).
- (54) "Portland cement" means hydraulic cement (cement that not only hardens by reacting with water but also forms a water-resistant product) produced by pulverizing clinkers consisting essentially of hydraulic calcium silicates, usually containing one or more of the forms of calcium sulfate as an inter-ground addition.
- (55) "Process" means an action or series of actions performed in progressive and interdependent steps by equipment within a facility to produce or aid in producing a product such as cement, fuel, electricity, hydrogen, or other chemicals.
- (56) "Process flow diagram" means a schematic representation of a facility which identifies the processes or systems within the facility and any interaction between the processes or systems such as transfer of material or energy from one process or system to another.
- (57) "Project life" means the length of time an energy efficiency improvement project is expected to be employed.
- (58) "Reactive Organic Gas" means a photochemically reactive chemical gas, composed of non-methane hydrocarbons, that may contribute to the formation of smog.
- (59) "Residual fuel oil" means a general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations.

- (60) "Source" means a piece of equipment, process or facility that emits greenhouse gases, criteria air pollutants or toxic air contaminants.
- (61) "Sulfur hexafluoride" or "SF₆" means a GHG consisting on the molecular level of a single sulfur atom and six fluorine atoms.
- (62) "System" means a group of interacting, interrelated, or interdependent processes within a facility.
- (63) "Tactical support equipment" means equipment using a portable engine, including turbines, that meets military specifications, owned by the U.S. Department of Defense and/or the U.S. military services or its allies, and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations. Examples include, but are not limited to, engines associated with portable generators, aircraft start carts, heaters and lighting carts.
- (64) "Third party" means an entity hired by, but not otherwise affiliated with, a facility to conduct the facility's "energy efficiency assessment" as defined and/or develop the facility Assessment Report.
- (65) "Ton" means a short ton equal to 2,000 pounds.
- (66) "Toxic air contaminant" means a substance identified by the Air Resources Board as a toxic air contaminant pursuant to H&SC Section 39657.
- (67) "Transportation fuel" means a fuel produced in a petroleum refinery to be sold into commerce for transportation purposes.
- (68) "Watt hour" means a unit of energy, especially electrical energy, equal to the work done by one watt acting for one hour.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95154. Energy Efficiency Assessment Requirements.

- (a) ***Facility Energy Consumption and Emissions Analysis.*** The operator of each applicable facility described in section 95151(a) must conduct an energy consumption and emissions analysis that identifies the facility's processes and equipment types used in the processes, and provides facility energy consumption and resulting greenhouse gas, criteria air pollutant, and toxic air contaminant

emissions. The energy consumption and emissions analysis must be provided to the Executive Officer according to the reporting schedule identified in section 95155 and include the information below and any additional information specified in section 95155:

- (1) Facility name, ARB identification number as assigned under the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, physical address, mailing address, geographic location (latitude and longitude at main gate or primary facility access point), NAICS code;
- (2) Company name (if different than facility name);
- (3) Name and contact information including email address and telephone number for the facility operator submitting the Assessment Report and for the person primarily responsible for preparing and submitting the Assessment Report, if different than the facility operator;
- (4) If the assessment is conducted by a third party, the name and contact information including email address and telephone number of the company conducting and submitting the Assessment Report and the person primarily responsible for preparing the Assessment Report;
- (5) Process flow diagram of the facility, identifying each process or system and its geographic location;
- (6) Name and description of each process or system and the equipment types used in each;
- (7) Types of energy used in each process or system (i.e., natural gas, purchased electricity, etc.), and whether the energy is purchased or produced by the facility;
- (8) Facility energy use and emissions as indicated below:
 - a. amount of fuel consumed in 2009 for each fuel type (in MMBtu);
 - b. amount of electricity consumed in 2009 (in MMBtu);
 - c. total energy consumption (sum of a. and b. above);
 - d. greenhouse gas emissions in 2009 reported as CO₂e emissions resulting from the fuel consumed in a. above and the electricity consumed in b. above;
 - e. criteria air pollutant emissions in 2009 reported by the facility to the District, except as provided in (10) below, as required by Health and Safety Code, section 40701(g), and District rules;
 - f. toxic air contaminant emissions reported by the facility to the District in 2009, except as provided in (10) below, as required by Health and Safety Code, sections 44340, 44341, and 44344 and the Emission Inventory Criteria and Guidelines Report for the Air Toxics "Hot Spots" Program, Title 17, California Code of Regulations, section 93300.5.
- (9) Facility energy use and emissions reported in (8)a. through (8)d. above must be consistent with the facility's verified or certified greenhouse gas emissions data report submitted in accordance with the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations for the 2009 calendar year;

- (10) Upon approval from the Executive Officer, the operator may provide the criteria and or toxics emissions inventory data indicated in (8) from a different calendar year(s) or a three-year average. Any request for approval for submittal of emissions inventory data from alternative calendar years or a three-year average must be made in writing by the operator and submitted to the Executive Officer no later than December 1, 2011. The Executive Officer has 30 days to approve or disapprove the request and will notify the operator in writing of the decision.
- (b) **Energy Efficiency Improvement Analysis.** The operator of each applicable facility described in section 95151(a) must conduct an analysis of the energy efficiency improvement opportunities that exist at the facility. The energy efficiency improvement analysis must:
1. Identify potential improvement projects for equipment, processes, or systems that cumulatively account for at least 95 percent of the facility's total greenhouse gas emissions reported in section 95154(a);
 2. Include a comprehensive assessment of potential energy efficiency improvement opportunities;
 3. Where appropriate or applicable, a facility operator may use an energy assessment conducted for their facility by a state- or federally-sponsored energy assessment program in order to meet applicable portions of the requirements in this subsection;.
 4. Be provided to the Executive Officer according to the reporting schedule identified in section 95155 and include information below and any additional information specified in section 95155 for each potential improvement evaluated:
 - a. Existing facility equipment, process, or system involved;
 - b. Type of potential improvement, including, but not limited to, equipment upgrades or modifications, process changes, changes to operating procedures or maintenance practices, or investment in new technologies; potential improvement projects should encompass low-cost projects that could be implemented quickly to mid- and long-term projects requiring higher capital expenditures and that may have more extensive facility impacts; emerging technologies that are not yet commercially available may also be considered;
 - c. Summary description of each potential improvement, including but not limited to, a description of the system(s) involved and the energy efficiency issues that have been identified, and a description of how the improvement would benefit energy efficiency;
 - d. Status of the improvement (i.e., under investigation, scheduled, on-going, completed, or not implementing);
 - e. For any improvement projects not being implemented, provide a description of the rationale for not implementing the project;
 - f. Estimated time frame for the project implementation and the estimated completion date for those that are under investigation, scheduled, or on-

going, and the actual completion date for those that have been implemented;

- g. Estimated total one-time budgetary costs (in 2010 dollars), including, but not limited to, capital costs of equipment, installation, design, construction, and permits;
 - h. Estimated total average recurring annual budgetary costs (in 2010 dollars), including, but not limited to, operation and maintenance;
 - i. Estimated project life;
 - j. Estimated average annual energy savings;
 - k. Estimated associated average annual GHG emission reductions and criteria pollutant and toxic air contaminant emission impacts;
 - l. Estimated annual cost savings (in 2010 dollars), if applicable;
 - m. Specification in detail of the estimation method, source test method, or other measurement method that was used to quantify the estimated GHG, criteria pollutant, and toxic air contaminant emission impacts in (10) above. The estimation method must include, but is not limited to, emission factors, control efficiency assumptions, and any other key assumptions used. The Executive Officer may work with the facility operator to determine appropriate values and may provide guidance for specific methodologies to be used;
 - n. Identification of any District air quality permit requirements, California Environmental Quality Act requirements, and other implementation considerations (including, but not limited to building, zoning, operational, safety, noise, water, and other environmental impacts).
- (c) **Alternative Approach Using Energy Consumption.** For the Energy Efficiency Improvement Analysis in (b) above, the operator may identify potential improvement projects for equipment, processes, or systems that cumulatively account for at least 95 percent of the facility's total energy consumption as reported in section 95154(a), provided that the Executive Officer finds that this approach is equivalent to the approach contained in section 95154(b). The operator must identify the equipment excluded from the analysis by equipment type and numbers of pieces of equipment per type.
- (d) **Fuel Use Measurement Accuracy.** The operator must employ the procedures for fuel use data measurements as required by the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, sections 95100 to 95133, title 17, California Code of Regulations.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, , 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, , 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95155. Reporting Requirements.

The operator of each applicable facility described in section 95151(a) must submit the data specified in section 95154 and the following information, collectively referred to as the Assessment Report, to the Executive Officer according to the following:

- (a) By December 15, 2011, the operator of each applicable facility described in section 95151(a) must submit the Assessment Report to the Executive Officer.
- (b) The facility operator must sign a statement certifying that the information contained in the Assessment Report is true, accurate, and complete and that the operator is duly authorized to represent the facility on all matters related to the Assessment Report.
- (c) If the Assessment Report is conducted by a third party, the third party assessor must sign a statement certifying that the information contained in the Assessment Report is true, accurate, and complete and that the operator is duly authorized to represent the third party on all matters related to the Assessment Report.
- (d) The Assessment Report must be submitted to the Air Resources Board using the following address:

California Air Resources Board
Stationary Source Division, Energy Assessments
1001 I Street
P.O. Box 2815
Sacramento, California 95812-2815

- (e) An alternative method of submittal, including electronic submittals, may be approved by the Executive Officer.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95156. Document Retention, Recordkeeping, and Additional Data Requirements.

- (a) **General Requirements.** The operator must establish and document a system that provides clarity, transparency, and completeness of data and processes sufficient to facilitate replication of the Assessment Report information as specified by this article. The operator must complete an Assessment Report that is in conformance with the data collection methodologies specified in their Assessment Report.
- (b) **Document Retention and Recordkeeping.** The operator must retain documents regarding the procedures used to obtain the data supplied as specified by this article for a minimum of five years following submittal of the Assessment Report.
- (c) **Additional Data Requirements.** Upon written request by ARB, the operator must within 30 days of receipt of the written request provide ARB access to all documents, including data and methodologies, used to develop the Assessment Report.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95157. Compliance Extension for Assessment Report Submittal.

A facility operator may be granted a compliance extension to the Assessment Report submittal deadline specified in section 95155(a) as provided below.

- (a) The Executive Officer may grant, in writing, up to a 90-day compliance extension upon determining the following conditions have been met:
 - (1) The facility operator has requested the compliance extension by November 15, 2011;
 - (2) The facility operator has described the reason(s) for the request for a compliance extension and has identified the additional time required for completion of the Assessment Report; and
 - (3) The requested compliance extension does not exceed 90 days.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95158. Assessment Report Review, Validation, and Public Disclosure.

- (a) Within 45 days of receipt of an Assessment Report, the Executive Officer will review the Assessment Report and determine whether it is complete as specified in section 95154, and whether the data submitted is valid and calculated using emissions calculation methodologies provided with the Assessment Report as required in section 95154(b) and using previously reported data, as required in section 95154(a). The Executive Officer will notify the facility operator of any deficiencies in the Assessment Report. The facility operator and the Executive Officer may mutually agree to a longer time period for reaching a decision on the completeness of the Assessment Report, and additional supporting documentation may be submitted by the facility operator before the Executive Officer deems the Assessment Report to be complete. If the Assessment Report is deemed incomplete, the Executive Officer will notify the facility operator in writing, via either an electronic submission or hard copy, of the determination of an incomplete Assessment Report and may require the operator to conduct a third-party assessment following the requirements in section 95159.
- (b) The Executive Officer will establish an Internet site ("Assessment Report Internet site") in which all Assessment Reports will be made available to the public. Completed Assessment Reports submitted to ARB will be posted on the Assessment Report Internet site by April 30, 2012.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95159. Third Party Assessment Report.

- (a) In the event that an operator is required per section 95158(a) to complete a new Assessment Report, conducted by a third party, all requirements of sections 95154 through 95156 will apply.
 - (1) Within 60 days of receiving notification from ARB of its determination of an incomplete Assessment Report, the operator must submit a written application to the Executive Officer for approval of the operator's chosen third party assessor. The application must include the following:
 - a. third party assessor company name;
 - b. third party assessor contact name, title, address, phone number, and email address;
 - c. demonstration of the third party assessor's qualifications to effectively conduct a facility-wide Assessment Report as required by this regulation;
 - d. a cost estimate from the third party assessor for conducting the assessment;

- e. a signed statement from the third party assessor that they have no interest, material or otherwise, in the facility or relationship with facility personnel or owners that could be construed as adversely affecting their impartiality; and
 - f. a signed statement from the facility operator that they have no interest, material or otherwise, in the third party assessor or relationship with the third party assessor's company or personnel that could be construed as adversely affecting their impartiality;
- (2) The Executive Officer will approve the third party assessor selected by the facility upon determining that the requirements of (a)(1) above have been met.
- (3) The operator must submit the completed third party Assessment Report within 90 days of receiving Executive Officer approval of the third party assessor.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95160. Confidentiality.

- (a) Emissions data submitted to the ARB under this article is public information and would not be designated as confidential.
- (b) Any entity submitting information to the ARB pursuant to this article may designate information that is not emissions data as confidential because they believe it to be a trade secret or otherwise exempt from public disclosure under the California Public Records Act (Government Code section 6250 et seq.). All such requests for confidentiality will be handled in accordance with the procedures specified in title 17, California Code of Regulations, sections 91000 to 91022.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95161. Enforcement.

- (a) Submission of inaccurate information to the Executive Officer or an agent or representative of the Air Resources Board, will constitute a separate violation of the requirements of this article for each day after the information has been received by the Executive Officer.
- (b) Failure to submit any report or to include in a report all information required by this article, or late submittal of the report, will constitute a separate violation of this article for each day that the report has not been submitted beyond the required submittal date, as specified in section 95155. For the purposes of this section, “report” means any document required to be submitted by this article.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 38580, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 38580, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

§ 95162. Severability.

Each part of this article will be deemed severable, and in the event that any provision of this article is held to be invalid, the remainder of this article will continue in full force and effect.

NOTE: Authority Cited: Sections 38510, 38530, 38560, 38562, 39600, 39601, 39659, and 41511, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38530, 38550, 38551, 38560, 38561, 38562, 38563, 39003, 39500, 39600, 39601, 39659, and 4151, Health and Safety Code.

ATTACHMENT B TO THE RESOLUTION

PUBLIC MEETING TO CONSIDER THE ADOPTION OF PROPOSED REGULATION FOR ENERGY EFFICIENCY AND CO-BENEFITS ASSESSMENT OF LARGE INDUSTRIAL FACILITIES

Staff's Suggested Modifications to the Original Proposal

AS PRESENTED AT THE JULY 22, 2010 HEARING OF THE AIR RESOURCES BOARD

Shown below are staff's suggested modifications to the originally proposed amendments to the regulatory text set forth in Attachment A to Resolution 10-30. The text of all proposed modifications will be made available to the public for a fifteen-day comment period prior to final adoption.

Criteria Pollutant and Toxic Air Contaminant Emissions Reported to the Air Pollution Control and Air Quality Management Districts (Districts)

Staff is proposing to modify the proposed regulatory language to add accommodation for a 12-month period instead of calendar year period when including criteria pollutants and toxic air contaminants that were reported to the district, since some districts require reporting on a 12-month (i.e., July to June) basis.

Additional Guidance for Facilities Not Required to Report Emissions to the Local Air District

Staff is proposing to modify the proposed regulatory language to provide guidance to facilities that are not required to report their criteria air pollutant and/or toxic air contaminant emissions to their local air quality management or air pollution control district (district). The modification will require the emissions to be reported in accordance with the existing regulations and district rules and will ensure the same requirements will apply to all facilities, regardless of district reporting status.

Assessing Energy Efficiency Improvement Project Estimated Time Frame

Staff is proposing to modify the proposed regulatory language to clarify that the estimated implementation time frame is needed for all projects that are identified in the assessment. Additionally, the proposed modification would clarify that the facility must provide the estimated or actual completion year, instead of completion date, for those projects that are scheduled, on-going, or already completed.

Third Party Assessor Certification Statement

Staff is proposing to modify the proposed regulatory language to clarify that, if the Assessment Report is conducted by a third party, the third party assessor must certify that they are duly authorized to represent the facility and operator on all matters related to the Assessment Report. The previously proposed language required the third party to certify that the operator was duly authorized to represent the third party, which was not the original intent.

Additional Modifications As Needed

Staff may propose additional modifications as needed, and all proposed modifications will be made available to the public for a fifteen-day comment period prior to final adoption.