

## **Appendix A California Air Resources Board Reporting Requirements**

*Version 1 (September 2008)*

### **Background on the California Air Resources Board**

The California Air Resources Board is a part of the California Environmental Protection Agency, an organization which reports directly to the Governor's Office in the Executive Branch of California State Government. The mission of the ARB is to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state.

### **Background on AB 32**

The Global Warming Solutions Act of 2006 (AB 32, Nunez, Statutes of 2006, chapter 488) is the cornerstone of California's efforts to deal with climate change. In September 2006, the Legislature and the Governor codified the 2020 target and gave the ARB the primary responsibility of monitoring and regulating sources of greenhouse gases in order to reduce emissions. In 2007, ARB released a list of early regulatory actions, developed a mandatory reporting program, and established the 1990 baseline level at 427 MMT CO<sub>2</sub>e. Efforts are currently underway to develop and adopt a plan for achieving the 2020 target.

Local government GHG emissions inventory protocols are an integral tool in ARB's implementation of AB 32. More information is available at [www.arb.ca.gov/cc/protocols/localgov/localgov.htm](http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm).

### **Why Local Governments are Important**

Local governments can contribute significantly to California's efforts to reduce GHG emissions. Local governments have the ability to influence community-scale planning efforts and have direct control over emissions resulting from municipal operations, such as energy use in government buildings, fuel use in vehicle fleets, energy efficiency of water/wastewater treatment, and methane capture at solid waste facilities. Many local governments are already taking action to reduce greenhouse gas emissions resulting from these activities.

In order to effectively reduce GHG emissions, cities and counties must first measure their carbon footprint. The Local Government Operations Protocol provides the methods necessary for local governments to inventory emissions from municipal operation activities.

### **Baseline Emissions**

Currently, there is no ARB policy for establishing a baseline year for local governments. ARB may designate a specific baseline year from which to measure progress in the future.

### **Mandatory Greenhouse Gas Emissions Reporting**

On December 6, 2007, ARB approved a regulation for the mandatory reporting of GHG emissions from major sources, pursuant to AB 32. The regulation requires the mandatory reporting and verification of GHG emissions.

Local governments must use the methods provided by the State of California to quantify and report GHG emissions for facilities subject to mandatory reporting. GHG emissions from facilities subject to mandatory reporting must be reported separately from GHG emissions from facilities reported using the estimation methods outlined in the LGO Protocol.

The following sections highlight some of the differences between guidance in the Protocol and the requirements of California's mandatory reporting regulation.

## Facility Definition

California's mandatory reporting program requires reporting at the facility level. The regulation defines a facility as "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 gas..." The Protocol defines a facility similarly; however, it also allows local governments with facilities under financial control to report GHG emissions. Local governments with facilities subject to mandatory reporting should use the mandatory reporting program definition of facility to report GHG emissions from all facilities.

## Organizational Boundaries

The LGO Protocol encourages local governments to report GHG emissions using operational control. ARB's mandatory reporting program requires facilities to report GHG emissions using operational control. Local governments with facilities subject to mandatory reporting must use operational control to report GHG emissions using the LGO Protocol.

## Difference in Stationary Combustion Default Emission Factors

Stationary combustion default emission factors for California's mandatory reporting program are slightly lower than those included in the Protocol. ARB uses 3.664 as the CO<sub>2</sub> to carbon molar ratio, which is based on best available internationally accepted elemental atomic weights. It is also consistent with the European Union Emissions Trading Scheme. The Protocol uses 3.667 as the CO<sub>2</sub> to carbon molar ratio, which is consistent with IPCC, The Climate Registry and the California Climate Action Registry.<sup>29</sup>

For the purposes of reporting stationary source combustion emissions, local governments are encouraged to use the emission factors presented in this Protocol. However, if a local government facility is subject to mandatory reporting, then they should use the emission factors in the state regulation.

## Power Generation Facilities

Local governments that have operational control of power generation facilities shall use the methods provided in California's Mandatory Reporting regulation to estimate GHG emissions from these facilities. Please report GHG emissions based on stationary combustion by fuel type using the methods outlined in the regulation.

## Electricity Usage in Buildings

Local governments shall report GHG emissions from electricity usage in all facilities. Electricity usage at power generation facilities is exempt from quantifying and reporting. Local governments that operate power generation facilities subject to mandatory reporting only report net generation and do not quantify electricity usage at power generation facilities.

## De Minimis Emissions

California's mandatory reporting regulation limits GHG emissions claimed as de minimis to no more than 3 percent of total facility emissions, not to exceed 20,000 metric tons of CO<sub>2</sub> equivalent emissions. Emissions must still be estimated and reported for the selected de minimis sources, but alternative emission estimation methods can be used. Local governments with facilities subject to mandatory reporting should use the de minimis threshold outlined in the regulation and apply it consistently to all facilities.

---

<sup>29</sup> ARB uses the following formula:  $CO_2/C = 44.0098/12.011 = 3.66412455$ . This number is rounded to 3.664 for usage in the mandatory reporting program. The Protocol uses the following formula:  $CO_2/C = 44/12 = 3.666666666666667$  and rounds to 3.667 as the CO<sub>2</sub> to carbon molar ratio.

**Biogenic Emissions**

California's Mandatory Reporting regulation requires facilities to report combustion of biomass-derived fuels separately from fossil fuels. The LGO Protocol allows local governments to optionally report biogenic emissions, which includes stationary combustion of biomass-derived fuels. Local governments with facilities subject to mandatory reporting must report GHG emissions from combustion of biomass-derived fuels.

**Emergency Generators**

GHG emissions from emergency generators are reported in the LGO Protocol as a Scope 1 emission source. The Mandatory Reporting Regulation exempts generating units designated in air district permits as backup or emergency generators from sources to be reported at the facility level.

**Verification**

Local governments with facilities subject to mandatory reporting will be required to have the greenhouse gas emissions for these facilities verified beginning in 2010, for the year 2009 reported emissions. Facilities are subject to either annual or triennial verification. Only ARB accredited verification bodies may provide verification services for the purposes of mandatory greenhouse gas emissions reporting.

Local governments with facilities subject to mandatory reporting that report GHG emissions using the LGO Protocol should utilize the site visit schedule based on the mandatory reporting program; the California Climate Action Registry General Verification Protocol can be followed for the remaining local government facilities and sources.