Comments on the Local Government Operations Protocol, June 19, 2008 Draft

Prepared by: Garrett Fitzgerald, Sustainability Coordinator, City of Oakland

General Comments
The City of Oakland recognizes the tremendous amount of work that the California Air Resources Board, California Climate Action Registry and ICLEI have invested in creating this robust draft Protocol document. We are generally quite pleased with the result. Below are a number of targeted comments aimed at helping the team to further improve and finalize the Protocol. We would be happy to further discuss these ideas should that be helpful.

Section 2.3
Page 16
Rename this section to remove the word scopes

Section 3.1.1 (which should be renamed 3.1)
Page 18
The Protocol should include acknowledgement that local governments will occasionally encounter situations in which complex relationships with special service providers not covered in the examples provided will make a control approach (operational/financial) difficult to determine. Local governments should be encouraged to use their best judgments regarding how to define control in these situations and to strive for consistency in accounting over time to enable trend analysis. Additional clarifying examples of defining organizational boundaries in complex situations could be helpful.

Section 4
Page 25
While use of the Scopes terminology as defined by WRI/WBCSD for consistency is a logical approach, the greater community of GHG protocol developers (WRI, WBCSD, CCAR, ICLEI, TCR, etc) should consider revising the Scopes terminology to increase policy relevance to local governments and other organizations performing GHG emissions analyses. In particular, the definition of Scope 2 emissions should be expanded to include emissions related to solid waste decomposition of materials consumed by the entity being analyzed, as well as employee business travel by the entity being analyzed.

This revision would be consistent philosophically with the inclusion of emissions related to consumed electricity and steam as Scope 2 emissions. In the case of electricity, the entity being analyzed has control over consumption, while (typically) another entity controls the facility at which the electricity is being produced and therefore also has some degree of impact on the resulting emissions associated with any given level of consumption. In the case of waste disposal, the entity being analyzed has control over the volume and type of materials and products disposed as waste, while (typically) another entity (i.e., the entity hosting the landfill or other disposal facility) controls the operations of the facility at which the waste is disposed and therefore also has the ability to control the emissions from waste disposal. In other words, the entity being analyzed has control over whether certain materials become wastes and therefore must be disposed. Thus they have the ability to reduce or prevent the need for waste disposal in

the first place. Another entity has the ability reduce landfill methane emissions if and when they receive waste from the entity being analyzed. For example, a local jurisdiction which has policies and programs for plant debris composting or which prohibits plant debris from being used as landfill alternative daily cover (ADC) can exercise its span of control to reduce the amount of methane-generating organic materials deposited in a landfill in the first place.

Likewise, employee business travel on behalf of the organization being analyzed should also be considered a Scope 2 emission source, in which the organization is consuming services where another entity has influence over the operational efficiency of the vehicles used. The exclusion of waste-related emissions and employee business travel emissions from the Scope 2 category seems philosophically out of step with the intent of the Scope 2 definition. Emissions associated with these categories can be significant and local governments should be more formally encouraged to address these emissions by this switch in categorization.

Section 4.5
Page 27
Include mention of Scope 3 emission sources in the discussion of the use of scopes to avoid double counting. This issue does not pertain exclusively to Scopes 1 and 2. Consider re-ordering the sections to facilitate this.

Section 4.6
Page 27
Provide more clarity on which Scope biogenic sources fall into. The text suggests that biogenic emissions are distinct from Scope 1 emissions from other sources, but does not clearly say whether or not biogenic emissions are themselves also a type of Scope 1 emissions.

Section 6.2.1
Page 40
The Protocol instructs California local governments to use the California Grid Average Electricity Emission Factors instead of eGRID. Won't this make it more difficult to do comparative reporting with non-CA local governments if the entire rest of the country is being told to use eGRID? Why is this guidance provided here instead of under the Program-Specific Reporting Requirements for CA? It might be wise to at least also summarize it in the latter section if this is intended to be a summary of all advice that is special to CA local governments.

Section 6.2.4
Page 45
Clarify that in the event that local governments have installed clean energy systems or are purchasing green power, only the portion of their electricity consumption not covered by these green power purchases or generation should be multiplied by the utility-specific or eGRID emission factors to determine Scope 2 emissions.

Section 6.2.5 and 6.3
Page 46
Transmissions and distribution (t&d) losses associated with consumption of electricity and steam should be treated the same way, but the Protocol seems to indicate that t&d losses associated with consumed electricity should be ignored from the end-user perspective while t&d losses associated with consumed steam should be accounted for. Given that t&d losses are part of the

system of delivering the electricity or steam in either case, these losses should be treated as part of the Scope 2 emissions responsibility of the end-user in each case. These losses are no different than other variations in generation efficiency that can be achieved under the control of the generator. Section 6.2.5 should be adjusted and emissions factors provided that include t&d losses for electricity.

Chapter 9
Page 84
Adjust the text in the front of this section to acknowledge that industrial-scale compost facilities, which do generate small amounts of methane, are excluded from analysis as described in section 9.4.

GHG emissions can also result from incinerators. Please include guidance for this waste disposal methodology.

Also, please clarify up front that this section only deals with estimating emissions associated with waste disposal facilities that meet the chosen control definition and that guidance on estimating emissions associated with waste disposed by the local government (regardless of whether or not that waste is going to a facility under the local government's control) is provided in another section (for many local governments, this is the only waste emissions methodology they have followed in the past).

Also, does this methodology apply to both open and closed landfills? For how many years after a landfill has been closed must emissions from the landfill be estimated using this methodology?

Section 9.3
Page 85
Note that the composition of the waste sent to landfill, not just the amount, is also an important factor in determining the amount of methane produced.

Section 9.3.1
Page 85
Define the acronym FOD

Section 9.3.1
Page 87
Note that alternative daily cover material (ADC) should be included when estimating the quantity and composition of waste in the landfill, including organics and sewage sludge used as alternative daily cover.
Rationale: In California, organic materials such as biosolids (i.e., wastewater treatment plant sewage sludge) and plant debris (i.e., 'green waste') are used extensively as 'alternative daily cover' (ADC) at landfills to cover the working face of the landfill at the end of each day. Although the these ADC materials are not considered disposal and are not counted as disposal tonnages in the state's Disposal Reporting System (DRS), they do in fact remain in the landfill, decompose, and generate methane.

Thus, regardless of whether biosolids and plant debris are place into the landfill and counted as disposal tonnages (which they sometimes are), or are instead placed onto the landfill as ADC and

not counted as disposal tonnages, they do in fact remain in the landfill generating methane as they decompose. Therefore, methane-generating biosolids and plant debris should be included when determining annual waste landfilled.

Also, note in Step 1 that waste composition is needed in addition to quantity disposed.

Section 9.3.2
Page 91
Given the reported collection efficiencies range of 60-85%, it would seem that assuming a 60% methane recovery rate would be more in line with Protocol's principles of conservative estimation. Furthermore, studies have shown that certain types of waste, e.g., food, can release most of their methane prior to capture systems being in place. Until there is a better system for determining how much methane is lost through lateral cracks, leaks in methane gas capture system wells and piping, and prior to and after the active phase of the methane collection system, the standard capture efficiency number should be at the more conservative lower end of the range of EPA's AP 42 guidelines, which is 60%.

Section 12.2.1
Page 107
Per a comment provided above, emissions associated with the decomposition of waste generated by the local government and employee business travel on behalf of the government can be significant and can be significantly controlled by the local government. These emission sources should not be optional from a reporting standpoint. Ideally, these emission sources should be classified as Scope 2 emissions under a revised definition of the Scope 2 terminology, as they are philosophically most similar to emissions associated with electricity or steam consumption. At minimum, they should be considered required elements of the set of Scope 3 emissions.

Section 12.2.2
Page 108
Guidance should be provided on estimating emissions associated with the decomposition of waste generated by the local government. This is a policy-relevant source of emissions for all local governments and many local governments have been including an estimate of these emissions in previous GHG emission inventories. The EPA's WARM model has been the standard for this in the U.S. to date.

Section 13.1.1
Page 110
How will annual budget information be used? This may need to be broken out in more detail to be useful as a reporting metric given the diversity of services offered by local governments and changes within individual local governments over time.

Section 13.1.2.1
Page 111
Consider renaming Water Facilities to Water Delivery Facilities

Section 13.1.2.1
Page 112

All local governments should report all emissions associated with electricity consumption as Scope 2 emissions, even if they are supplying this electricity from a municipally owned power plant where they are also reporting emissions as Scope 1. This consumption-based emissions number is significant and policy-relevant for all local governments and should be reported by all. Reporting electricity consumption as an information item as the text is currently worded is insufficient for providing perspective on the policy relevance of this consumption-based emissions number. The nature of the scopes framework prevents the addition of Scope 1 and Scope 2 emissions and enables this Scope 2 emissions story to be told without worry of double-counting.

Section 13.1.2.4
Page 113
We support this method of presenting information on carbon offsets and renewable energy credits in the context of the emissions inventory.

Chapter 14
Page 129
The text of this chapter implies that ARB is providing this protocol as a suggested methodology for local governments to use if they voluntarily choose to develop GHG emissions inventories. Specific language should be inserted if ARB intends to require all local governments to use this protocol to demonstrate compliance with AB 32 or other policies in the future.

Chapter 16
Page 142
ICLEI should adopt the same de minimis definition contained in Chapter 15. This definition of de minimis should be moved into the main body of the Protocol where only the third party verification aspects are separately defined in Chapters 14-16.

Table C.8
Page 159
The recommendation that local governments developing emissions inventories for any inventory year between 1990 and 2004 should use year 2000 emissions factors for electricity would seem to require all local governments that have developed inventories in the past for one of these years to revise their calculations in order for their inventories to be considered accurate and valid. Additional context and guidance should be provided explaining how this might be done.