Local Government Protocol Comments
City of Sacramento
Keith Roberts

The City of Sacramento has the following comments on the Local governments Operations Protocol, dated June 19, 2008.

Most of the comments have to do with City's verification of ghg's under CCAR's protocols and specifically how our:

- Closed landfill and
- Current outsourced waste process and
- Future potential municipal waste-to-energy and green waste-to-energy plants

should be reported.

One comment is to request the development of user friendly tables that can be used to by cities to:

- Make work easier for cities
- Collect and process data in a consistent fashion

As a 4 year reporter to the CCAR, it has amazed me how many specialized spreadsheets I've had to develop to process raw data into a format that could be input into CARROT; all with the thought of trying to make the process easily traceable for our third party verifier. I believe there are many tables that might be developed to improve the flow of data.

1. General: Put Chapter number and title in footer.

2. Chapter 6.2, Electricity Use, page 39: #2 I believe "waste and waste water treatment" should read "water and waste water treatment".

3. Chapter 7.1.3, Mobile Combustion, Page 67: Would recommend providing a user friendly table that cities can use to put together requested data in a consistent format… In this case for calculating CH4 and N2O from mobile emissions sources, consider taking Table C-10 and add 4 columns to it; Column 1 would be # of vehicles in this class (not necessary for calcs, but good check) and number 2 column would be total miles driven per year for this class. The third and fourth columns would be gram/year of CH4 and N2O.

4. Chapter 8, Power Generation: Clarify if emergency generators are part of this.

5. Chapter 9, Solid Waste, Page 84: Background: The City of Sacramento operates a closed landfill (closed in 1997) at 28th and C Streets. The closed landfill has a comprehensive landfill gas recovery system. On an annual basis, approximately 60% of the landfill gas is sold to a nearby business as boiler fuel. Per contract with the business, they have rights to 100% of the gas. The unsold gas is currently flared at the closed landfill site.

The City currently contracts with a third party to have City solid waste transported 110 miles one-way to a landfill in Nevada. The City has no operational or financial control of the solid waste once transferred to a long haul truck. This is clearly a scope 3 emission under the LGOP protocol.

The City is considering contracting with a third party to have the third party, build, own and operate a municipal solid waste-to-energy plant, theoretically located in the Sacramento area. This would also clearly be a scope 3 emission under the LGOP protocol.

Some of the following questions can be better understood by knowing City background.

6. Chapter 9, Solid Waste, Page 84: This paragraph indicates to see other chapters on the reporting of CO2. It is not clear to me whether the following sources of CO2 should be reported as scope 1, scope 2 or scope 3 or anthropogenic or biogenic
    - CO2 that is emitted by the boiler stack after combustion of landfill gas in the boiler
    - CO2 that is emitted by the flare after combustion of landfill gas on site
    - CO2 that is a fugitive emission from the surface of the landfill

7. Chapter 9, Solid Waste, Page 84: Clarify how emissions would be affected if solid waste is used to produce energy. I'm guessing that the solid waste emissions would NOT change, but that we COULD offset utility MARGINAL? or AVERAGE? emissions with ZERO emission produced electricity.

8. Chapter 9.1, Organizational Boundary, Page 84: The City's internal operations generated(/s) about 1% to 3% of the solid waste produced within the City of Sacramento; residents and businesses making up the rest. THE ACTUAL AMOUNT IS UNKNOWN (1%?, 2%, 3%?) BECAUSE THIS ISNT TRACKED. It has never been clear to me whether 1% to 3% of the emissions of the landfill should be included in the internal operations greenhouse gas inventory and 97% to 99% included in community greenhouse gas inventory, or whether 100% of the data should be included in the internal operations inventory. Clearly the City takes control of the solid waste and I believe that it is 100% internal operations. Please clarify.

9. Chapter 9.3.2, Landfills With Comprehensive LFG Systems, Page 91: Although not reported to the CCAR, the City has calculated greenhouse gas emissions for the closed landfill since 2004. Based on feedback from the local AQMD, the City has used a standard collection efficiency of 85%. Is it better to try and use data from the best available source (i.e. AQMD) instead of using default values of 75%?

10. Chapter 9.3.2, Landfills With Comprehensive LFG Systems, Page 91: Please define open flare and closed flare.

11. Chapter 9.4, Composting, Page 94: Background: The City of Sacramento had historically composted local green waste and made it available to local residents.

    The City currently contracts with third parties to have City green waste transported out of the county. The third parties apparently use "wind Row" composting methods to transform the green waste into compost which is then sold or used as alternative daily cover in landfills. The City has no operational or financial control of the green waste once transferred to a long haul truck. This is clearly a scope 3 emission under the LGOP protocol.

    The City is considering construction of an in-county green waste composting facility. It is unclear at this time how the green waste will be processed, and/or whether the green waste will be processed for use in an energy plant.

12. Chapter 9.4, Composting, Page 94: For composting processes that are under a cities control, it is not clear to me whether cities should be reporting the CO2 emissions from compost as it degrades. Please clarify.

13. Chapter 9.4, Composting, Page 94: Clarify how emissions would be affected if green waste is used to produce energy. I'm guessing that the green waste emissions would NOT change, but that we COULD offset utility MARGINAL? or AVERAGE? emissions with ZERO emission produced electricity.

14. Chapter 12: Scope 3 Emissions Sources, Page 106: At a minimum cities that have Exemplary Recycling programs should be able to claim scope 3 offsets for their efforts. Define Exemplary Recycling… perhaps 5 percentage points over state law?

15. Chapter 15.4, Establishing Baselines, Page 135: The City of Sacramento is now in its fourth year (CY 2007) of reporting greenhouse gases to the CCAR and will begin reporting landfill fugitive emissions which are in the neighborhood of 500 short tons of methane per year (@ 85% collection efficiency) which is approximately 10,000 metric tons of CO2e. This new source will increase City internal operations total emissions by approximately 20% from 60,000 to 70,000 metric tons per year. Please describe how this would be handled in baseline… FYI landfill fugitive emissions in 2004 (our baseline year) were approximately 525 short tons, but this was not required to be reported, so it wasn't reported.

16. Chapter 17, Glossary, Page 143: Define biogenic and anthropogenic emissions. It has never been clear to me what percentage of landfill waste or green waste is bio or anthro. It seems to me that it should be 100% anthro. Sacramento was grasslands before humans moved in… there were very few trees in the area…. I can understand that man may have planted trees that temporarily sequestered CO2 as the tree grew and then exhaled the CO2 as the green waste composed and therefore the net is zero, but I don't even know if that is a good def of bio and the 2 definitions shown don't help me.