

Comments on proposed draft amendments to WAC 172-441 - GHG emissions inventory

Thank you for the opportunity to provide informal comments on your initial draft of the GHG emissions calculations for the Climate Commitment Act. The two main areas that have attracted my interest are the definition of emissions from the combustion of fuels and the extended section on the electric power industry. While I was a CARB certified Third Party Auditor and did conduct several audits before I retired, I was not certified in the electric power industry specialty and am not qualified to comment on that section. However, on reading it I can see that it is far from its final form and can be quite confusing to even the learned reader. In finishing this section I urge you to work closely with folks at BPA, who I am sure do completely understand the system in the northwest and can keep you from making any serious mistakes.

With regards to combustion of fuels, I do not feel that your simple statement in the last sentence of 441-020 (1)(i), "Fuel Products" is sufficient to cover all the instances of combustion-oxidation and use of fuels. Specifically, here and elsewhere you have ignored the possibility of incomplete combustion and the fugitive emissions of fuels, which would have their own GHG potentials. In the sections on suppliers and distributors of fossil gas it appears you have assumed all the gas which enters the system is eventually fully combusted to CO₂. We are all aware that numerous studies of the distribution systems have established that they can have leaks that release methane to the atmosphere. Somehow, perhaps by a mass balance across portions of their system or by an Ecology assumption of transmission losses, it is necessary to account for these emissions and the global warming potential of methane must be fully accounted for. Similarly there are leaks of volatile organics in the petroleum refinery plants that must be accounted for. There are even NSPS and MACS that require the measurement of these leaks. The compounds that have significant global warming potential should be separately accounted for and reported.

This has further implications for calculating threshold emissions. For example, in 441-030(2)(b) you ask for reporters to "calculate the total annual emissions of each GHG . . . using the methodologies in" -122. But from -122(a) and (b) the instruction is to compute emissions from "the complete combustion" of the various covered products. There is no mention of methane that may have leaked from the system that should be accounted for separately. This can result in significant errors in computing the total liability for CO₂e.

Working down through the proposal:

Following new subsection (n) of 441-120(1) you have labeled the next subsection "Product data" as (i) when it should have been (o) [at the top of page 8]. This means the subsequent section should be (p) and the following section is also designated incorrectly.

In -050(2)(b)(iii)(A) you have changed Facilities to Reporters and have thus seemingly created a conflict with (B), which has specific requirements for Suppliers and Electric Power entities that are different. If there is no conflict then some language needs to be added so others will not be as confused as I am.

In Table -050(1) the entry for 3251xx Basic Chemical Manufacturing only asks for "Metric Tons

of Chemical Produced”. This global total may not sufficiently account for the situation at a plant that produces multiple chemicals with different units that may have widely varying GHG emissions. In fact, there might be few GHG emissions from the line that provides the bulk of the plants production. It would be more useful to report the total chemical produced that account for a major fraction of the reported GHG emissions.

In Table -050(1) the entry for 562213 Solid Waste Combustors and Incinerators assumes the facility is producing electricity. There are active proposals for the use of pyrolysis in the disposal of solid waste that produce either a gas or liquid fuel for direct sale. Because the EPA definition of incineration is so broad, they may be included in this category.

In -085(4)(a)(v) the threshold for significance of the change is, and has been, set at 25%. This is simply too large. This threshold should be lowered, at least below 15%.

In -085(4)(b)(iv)(B) you have used the construction “Looking at”. This is sufficiently without any criteria for action by the auditor that it should be replaced with “Reviewing and evaluating”, which would imply more careful consideration by the auditor.

In -120(1) Table 120-1 you have deleted the reference to 40CFR98 subpart JJ, Manure Management and its replacement in (2)(d)(iii) _c. While I agree that the CFR calculation process is burdensome, I note that the only exemption for agriculture provided in HR 1586-S2 PL is for agricultural uses of fuels (see, for example, Section 10(7)(e)). Manure management can be a significant source of GHG emissions and should be retained as a reporting source. The modifications by Ecology make reporting a much more manageable task.

Perhaps I’m missing something, but I don’t see Municipal Sewage Treatment facilities in 40CFR98 or in -120. I do not find any exemption in HR 1586-S2 PL. They most certainly are not an EITE source. They are certainly a significant source of GHG emissions. In addition the practice of spreading sewage sludge on forest and agricultural lands is also a significant source of GHG emissions, mostly N₂O. So my question is, why are these sources not provided with any assistance in -120 how they should make their calculations?

In -122(2)(a) you have assumed that the product of a biomass fuel facility is a liquid fuel. Some biomass fuels are produced as solid fuel, such as sewage sludge pellets or “urban wood” waste chips. Should not such facilities also be treated as biomass facilities?

In -122(2)(c) you have invented the term “enterer”. It is unclear to me how this is different to an importer as subsequently defined. Perhaps some more information would be helpful, perhaps saying what it is not.

In -124(2)(a)(vii) you reference subsection (f). That does not seem to be the correct reference.

In -124(2)(d)(ii) I would recommend adding to the end of the sentence “if reported as emissions in the linked jurisdiction.”