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Clerk of the Board, Air Resources Board

<http://www.arb.ca.gov/lispub/comm/bclist.php>

Mandatory GHG Reporting Staff:

Thank you for the opportunity to participate in the Workshop and for the availability and assistance of your staff. Several months ago we sent a letter to your staff expressing our concerns about instrument accuracy and had two meeting with them to discuss the concerns.

In the latest draft, it is apparent that Staff has been responsive to our concerns and we wish to thank all those involved for these changes.

We still have a few subjects, for which we would like to suggest some additional minor changes.

**Instrument Accuracy:**

1. Section 95103(k)(6)(A) specifies a minimum of three calibration points spanning the normal operating conditions.  We would like to suggest the following change that provides a clear definition of the required calibration points:  “…*(A) Perform all mass and volume measurement device calibration as specified in 40 CFR §98.3(i)(2)-(3) except that a minimum of three calibrations points must be used spanning the device’s rated operating range. The meter calibration points must include at least one sample at or near the zero point, at least one sample at or near the upscale point, and at least one sample at or near the mid-point of the device’s rated operating range.  The instrument must be capable of reading across the entire range. Additionally…”*
2. Section 95103(k)(4)(E) reads “*…to relieve the operator from having to comply with provision (D) of this subparagraph…”.* Should this section read as follows:  “*… to relieve the operator from having to comply with provision (A)-(C) of this subparagraph…”?*

**Accuracy Verification:**

We previously expressed the opinion that independent third party verification of instrument accuracy would be critical to assure that the data is meaningful. We understand that the program requires that the reporting entity must use an independent third party verification contractor. But we have not seen where the standard required the contractor to verify that the instrument accuracy is verified by the 3rd party verification contractor.

We would like to suggest that a new §95131 (b)(1)(A)(5) be added which says *“The plan shall include a description of the methodology to be used to assure that the monitoring instruments comply with the requirements of §95103 (k).”*

**Certification:**

Our primary concern relates to the need for independent 3rd party certification and how it is accomplished. The Draft Standard requires compliance with 40 CFR §98.3(i):

***§ 95103(k) Measurement Accuracy Requirement.*** *The operator or supplier subject to the requirements of 40 CFR §98.3(i) must meet those requirements. In addition, the operator or supplier with a compliance obligation under the Cap-and-Trade Regulation …*

And the CFR section requires certification:

***40 CFR §98.3(i) Calibration accuracy requirements****. The owner or operator of a facility or supplier that is subject to the requirements of this part must meet the applicable flow meter calibration and accuracy requirements of this paragraph (i).*

Appended to this letter is a summary of instrument certification requirements in 40 CFR 98.

§98.3(i) calls for certification if monitoring instruments for “fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this part.”, while §98.34(c) on Only addresses CO2. Certification is not addressed in other relevant section such as Sub-part W, X, Y, NN, PP and others. The EPA specifically allows states to create their own certification procedures as shown in:

*§98.34(c)(1)(iii) The provisions of an applicable State continuous monitoring program.*

The EPA does not define a certification procedure and does not specifically call for independent 3rd party certification. We feel that is critical for an effective QA/QC program.

Kurz feels that the following section should be added to §95103(k).

***Monitoring Instrument Certification***

*For instruments used for monitoring the GHG emissions or other process fluids (e.g. fuels) used to calculate GHG, user must obtain certification using an independent 3rd party test contractor, approved by the CARB to do an initial compliance test within the first 60 days of operation. The certification must demonstrate that the instrument is suitable for the application and meets the requirements of §95103(k).*

If you have questions or want to discuss these comments, please call me.

Sincerely



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**Appendix**

**Certification of Monitoring Instruments**

The following are excerpts from 40 CFR 98 which is the US EPA regulation on Mandatory GHG Reporting. Compliance with Part 98 is specifically called for in the CARB draft MRR. But, with no real definition of what Certification means, I don’t think it means much. CARB could put a statement in the MRR Draft that defines what they want under certification, including independent 3rd party certification.

**98.3 (g)(6)**

(6) The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this part.

**98.34 (c)** [GENERAL STATIONARY FUEL COMBUSTION SOURCES](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=ac5ee89c96913bfd07ca927566fc992f&rgn=div6&view=text&node=40:21.0.1.1.3.3&idno=40)

(c) For the Tier 4 Calculation Methodology, the CO2, flow rate, and (if applicable) moisture monitors must be certified prior to the applicable deadline specified in §98.33(b)

(c)(1) For initial certification, you may use any one of the following three procedures in this paragraph.

(i) §§75.20(c)(2), (c)(4), and (c)(5) through (c)(7) of this chapter and appendix A to part 75 of this chapter.

(ii) The calibration drift test and relative accuracy test audit (RATA) procedures of Performance Specification 3 in appendix B to part 60 of this chapter (for the CO2concentration monitor) and Performance Specification 6 in appendix B to part 60 of this chapter (for the continuous emission rate monitoring system (CERMS)).

(iii) The provisions of an applicable State continuous monitoring program.(4) For the purposes of this part, the stack gas volumetric flow rate monitor RATAs required by appendix B to part 75 of this chapter and the annual RATAs of the CERMS required by appendix F to part 60 of this chapter need only be done at one operating level, representing normal load or normal process operating conditions, both for initial certification and for ongoing quality assurance.

**No mention of certification:**

[Subpart W—Petroleum and Natural Gas Systems](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=17efbf43609402d50b18f62afb051122;rgn=div6;view=text;node=40%3A21.0.1.1.3.23;idno=40;cc=ecfr)

[Subpart X—Petrochemical Production](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=d4693906bfb1a133996c574d4dc716bc;rgn=div6;view=text;node=40%3A21.0.1.1.3.24;idno=40;cc=ecfr) -

[Subpart Y—Petroleum Refineries](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=60b263bbe4e479aa0ce6fc10fb95df58;rgn=div6;view=text;node=40%3A21.0.1.1.3.25;idno=40;cc=ecfr)  -

[Subpart HH—Municipal Solid Waste Landfills](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=656250628d83257f6c5660ed97699b4d;rgn=div6;view=text;node=40%3A21.0.1.1.3.34;idno=40;cc=ecfr)

[Subpart NN--SUPPLIERS OF NATURAL GAS AND NATURAL GAS LIQUIDS](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=ac5ee89c96913bfd07ca927566fc992f&rgn=div6&view=text&node=40:21.0.1.1.3.40&idno=40)

And others